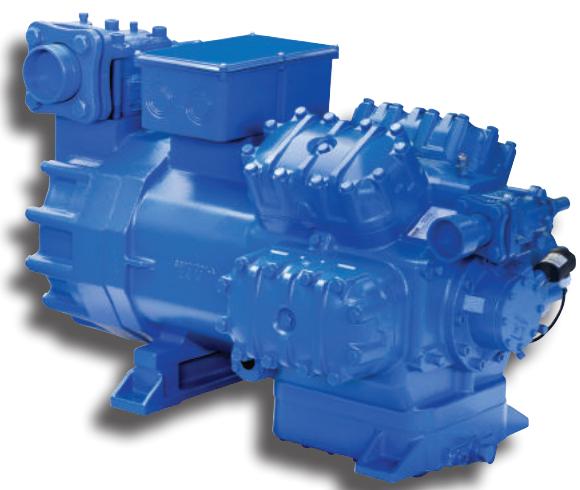
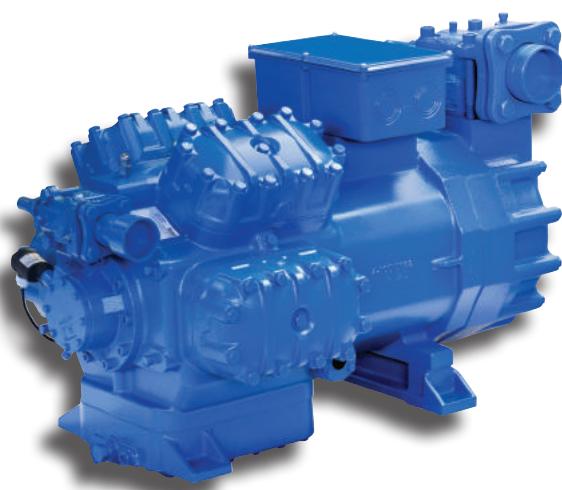


**frascold**<sup>®</sup>

## Semi-hermetic reciprocating compressors



v9

FCAT100.6-EN  
Product Selection Catalogue  
Version 50 Hz

## Catalogue index

- |   |              |
|---|--------------|
| • Index - General information                   | Pag. 2       |
| • General information                           | Pag. 3 - 5   |
| • Range of models                               | Pag. 6       |
| • Special features                              | Pag. 7       |
| • Technical specifications                      | Pag. 8 - 9   |
| • Multifunctional device Kriwan INT69 ®Diagnose | Pag. 10      |
| • Standard equipment and optional accessories   | Pag. 11      |
| • Operating limits                              | Pag. 12 - 15 |
| • Performance [50 Hz]                           | Pag. 16 - 57 |
| • Dimensional drawings                          | Pag. 58 - 67 |
| • ATEX compressors                              | Pag. 68 - 69 |
| • Compressors in TWIN configuration             | Pag. 70 - 71 |
| • Two-stage compressors                         | Pag. 72 - 73 |
| • Frascold Selection Software                   | Pag. 74      |
| • Frascold                                      | Pag. 75      |

## General information

Frascold produces a wide range of semi-hermetic reciprocating single- and two-stage compressors with displacement ranging from 4 to 240 m<sup>3</sup>/h at 50Hz and electrical ratings from 0.50 to 80 HP.

Suitable for conventional HFC-based refrigerants, new low-GWP refrigerants, HFO, natural refrigerants.

The compressors are suitable for use in a wide range of retail and industrial cooling applications, process chillers and AC, heat pumps; in single, multi-compressor systems and cascade systems. A long list of accessories multiplies their application versatility.

All models can work with inverter.

The range stands out for its high efficiency and ensuing operating cost savings. The design also assures sturdiness, low noise and compact overall dimensions.

The protection system integrated in the compressors is the most advanced on the market.

In addition to standard models, the compressor range also includes the ECOinside models optimised for use with R134a and R1234ze, AXH, AXY and AXE models with ATEX configuration, VS models with integrated inverter, SK3 and TK models for applications with CO<sub>2</sub> in subcritical and transcritical cycle, two-stage models, twin configuration models.

The performance of most models is ASERCOM-certified.



## ASERCOM performance certification



Frascold is a member of ASERCOM, the Association which ensures the accuracy and reliability of compressor performance and that has set out the procedure for measuring the performance of compressors and their certification process. The certification of compressors certifies and guarantees that the performance published corresponds to that actually measured with reference to European standard EN12900.

The compressors with certified performance are marked with the Certified Product logo. Further details on [www.asercom.org](http://www.asercom.org).

## Data on compressor capacity

This catalogue indicates the data for compressors with R134a, R407A, R407F, R404A, R507A, R448A, R449A, R407C, R22, R1234ze. Data relating to other refrigerants are available on request.

The capacities are indicated in accordance with European EN12900 standard and at 50Hz operation. To calculate capacity in other conditions and at 60 Hz use the Frascold Selection Software.

## Operating limits

Compressor operation is possible within the application diagram; pay attention to the indications for the various areas of the diagram. The limits refer to the operation of the compressor at full load and with a power supply frequency of 50 Hz.

They also differ in terms of application in the 3 different motor sizes.

The diagrams published in this catalogue are to be considered as a general diagram for the full range of compressors. Check the diagram of every single compressor model on the Frascold Selection Software program.

## Motor version

Compressors can be fitted with three different electric motors:

- Size 1: for medium-high temperature applications
- Size 2: for low temperature applications
- Size 3: optimised for applications with R134a and R1234ze in medium temperatures

## Safety

Frascold compressors are constructed according to International safety standards. They may only be used if installed within systems complying with the operating instructions and conforming to the regulations in force.

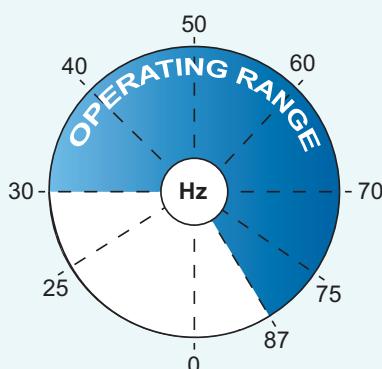
For the relevant standards please refer to the Manufacturer's Declaration, available or on the [www.frascold.it](http://www.frascold.it) website in the documentation section. They will be put into service by experienced staff, suitably documented in relation to the manufacturer's declarations and able to understand and apply the instructions contained in the installation manual supplied with the compressor or available on the [www.frascold.it](http://www.frascold.it) website.

## Application with variable frequency drive

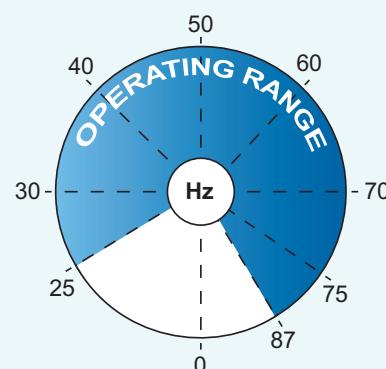
All compressors are constructed for use with inverter technology and are suitable for operation with variable frequency drive in a wide range of applications.

- 2 cylinder models: cooling capacity control from 60% to 174% (30Hz - 87Hz)
- 4 cylinder models with centrifugal lubrication: cooling capacity control from 50% to 174% (25Hz - 87Hz)
- 4 cylinder models with forced lubrication: cooling capacity control from 60% to 140% (30Hz - 70Hz)
- 6 and 8 cylinder models: cooling capacity control from 60% to 140% (30Hz - 70Hz)

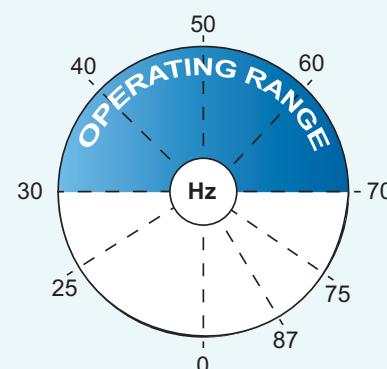
A-B-D Series



Q-S Series



V-Z-W Series



For 400V motors, in certain application conditions there might be a narrowing of the frequency range. Always check on the Frascold Selection Software. For capacity data at the various frequencies see the Frascold Selection Software.

## Protection of compressors series A - B - D

All models are supplied with protection consisting of a chain of PTC thermistors inserted in the electric motor stator and connected to the INT69 electronic control module inside the electrical box.

The INT69 device is triggered and stops the compressor in the event of thermal overload due to electric motor or mechanical issues.

## Protection of compressors series Q - S - V - Z - W with Diagnose technology

Frascold equips semi-hermetic reciprocating compressors with Diagnose technology, which enables a significant step forward in the compressor protection system and adds new diagnostic and communication functions.

### Increased protection

Frascold compressors are even more reliable. Diagnose technology monitors the system conditions and stops the compressor in the event of incorrect functional parameters.

### Lower costs

Quick identification of the cause of the malfunction. The information stored in Diagnose devices allow technicians to accurately and quickly diagnose the past and present state of the cooling system, ensuring fast and cost-effective servicing, with short system downtime.

### More information

The communication systems supported by Diagnose technology allow you to monitor and download system operating data in real time; technicians can then intervene improving the efficiency and reliability of the system, diagnosing any required maintenance in advance.

## Safety device to control discharge temperature

The discharge temperature, in certain extreme conditions (such as high condensing temperatures, low evaporator pressures or extremely high compression ratios), may reach values that can damage the compressor.

All V - Z and W series models are supplied complete with a safety device which, in combination with the electronic control module, stops the compressor in the event that the discharge temperature exceed the set safety limit.

## Electronic safety device to control lubrication

Frascold compressors in the V - Z and W series are supplied complete with an electronic pressure switch to control lubrication. It efficiently monitors the differential pressure in the lubrication system and stops the compressor in the event of any detected measurement that does not comply with the set safety values. The device is attached directly to the compressor's oil pump and does not require additional fittings.

## Unloaded start

In Frascold compressors, the compressor can be started unloaded through the US device integrated in the head (available on request). The device equalises the suction and discharge pressure, thus reducing the starting torque on the compressor reducing absorption peaks from the electrical mains. Note: a check valve, not supplied by Frascold, must be installed after the discharge valve.

## Capacity control with RSH system

The thermal load of many applications can change considerably and a refrigerating system should be able to adapt to the mutated conditions. The maximum number of start stop cycles and the minimum running time of the compressor impose some limitations, therefore the simple start-stop regulation may not be the most efficient method to follow precisely the system load fluctuations. These limitations determine the minimum and maximum pressure reached in the evaporator. The higher is the pressure difference, the higher is the amount of energy wasted.

The exclusive RSH capacity control system developed by Frascold allows the system designer to reduce substantially the total energy consumption of the system. The new RSH system solves completely the problems of the traditional capacity control system based on a permanent or pulsing choke of the suction of the cylinder head, avoiding the overheat of the valve plates and the accumulation of oil in the cylinder head, therefore it can be used for long periods of time in a wide range of operating conditions without damaging the compressor. The RSH system reduces by 50% the capacity of each cylinder head where is installed, therefore the possible capacity control steps are:

2 cylinder compressors	4 cylinder compressors
50% - 100%	1 x RSH: 75% - 100% 2 x RSH: 50% - 75% - 100%
6 cylinder compressors	8 cylinder compressors
1 x RSH: 83% - 100% 2 x RSH: 66% - 83% - 100% 3 x RSH: 50% - 66% - 83% - 100%	1 x RSH: 87,5% - 100% 2 x RSH: 75% - 87,5% - 100% 3 x RSH: 62,5% - 75% - 87,5% - 100% 4 x RSH: 50% - 62,5% - 75% - 87,5% - 100%

Compared to a traditional CC capacity control system, the new RSH system offers the possibility to regulate the capacity with more steps and without time limitation, therefore it is able to follow the fluctuations of the system load more effectively and improve the total system efficiency substantially.

### Features and advantages

- Enhanced system efficiency and reliability
- Greater reduction of compressor on-off cycles
- Enhanced suction pressure stability
- Greater number of regulating steps
- No time operation limit
- No increase in vibration and noise compared to full load operation
- No overheating on discharge
- No oil carry-over

## Standard capacity control

Through the CC device, available on request, on Frascold 4, 6 and 8-cylinder compressors, capacity may be adjusted by choking the heads in order to adapt the cooling capacity of the system to the actual thermal demand. This reduces the start-up frequency and the stress on the compressor mechanics and electric motor.

Possible control stages:

- 4-cylinder models: 50% - 100% (2 steps)
- 6-cylinder models: 33% - 66% - 100% (2 or 3 steps)
- 8-cylinder models: 50% - 66% - 100% (2 or 3 steps)

## Lubricating oil

All compressors are supplied filled with oil with specific features for refrigerants.  
Oil viscosity assures, perfect lubrication within the application limits of the compressors.

## Accessories

Frascold has selected and developed a comprehensive range of accessories for its compressors, suitable to assure efficiency and reliability in all intended operating conditions.

## General information

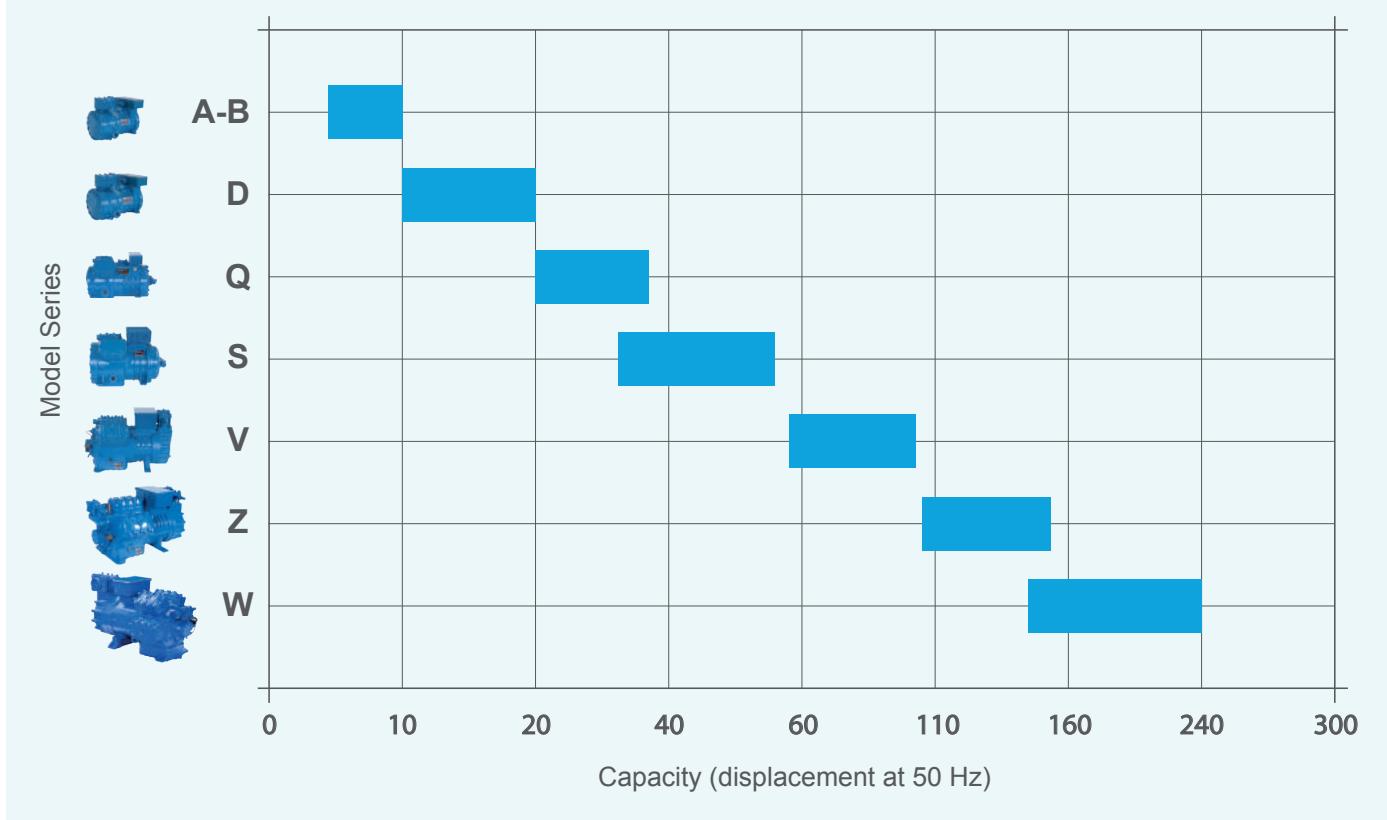
Frascold reserves ownership of this brochure FCAT100.6, no reproduction is allowed without our explicit consent. The data and information contained in the brochure were determined based on our current capabilities and do not exempt the user from his duty to check the suitability of the products for the intended application. Frascold reserves the right to change the content of the catalogue as a consequence of normal innovations and updates deemed necessary.

## Range of models

The range of Frascold semi-hermetic reciprocating compressors includes models with 2, 4, 6 and 8 cylinders for refrigeration in low and medium temperature, process cooling, air conditioning and heat pump applications. To select the right model, use this catalogue, the Frascold FSS3 selection software and the many publications available on the [www.frascold.it](http://www.frascold.it) website.

### Current range:

**7 series, 85 models with 38 capacity stages, from 3.95 to 239.00 m<sup>3</sup>/h (50 Hz)**



## Compressors for special applications



### Inverter Compressors

By varying the power supply frequency, Frascold inverter compressors ensure the modulation of the cooling capacity in order to optimise operation at low loads, while maximising efficiency.



### Two-stage Compressors

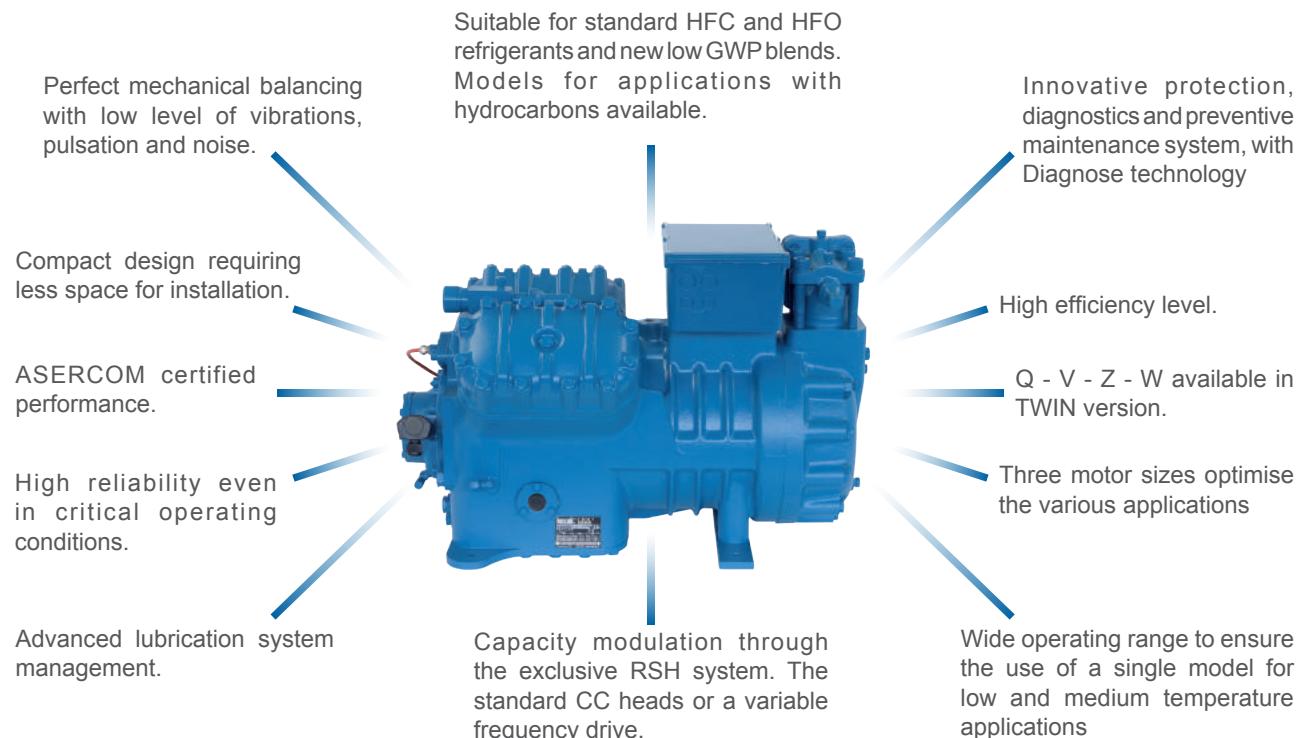
The Frascold range includes 4 and 6-cylinder two-stage compressors with a modern and innovative design, offering unique control and protection features



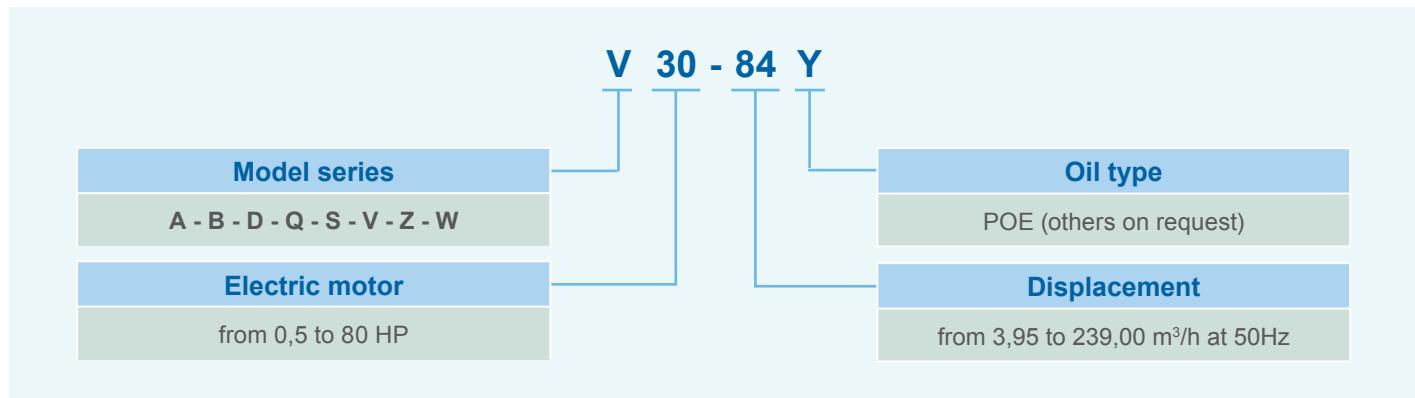
### ATEX Compressors

To meet the ATEX standards required in applications in explosive atmospheres, Frascold offers a wide range of models certified in accordance with directive 94/9/EC. All ATEX compressors made by Frascold are also approved for use with hydrocarbons (R290 and R1270).

## Special features

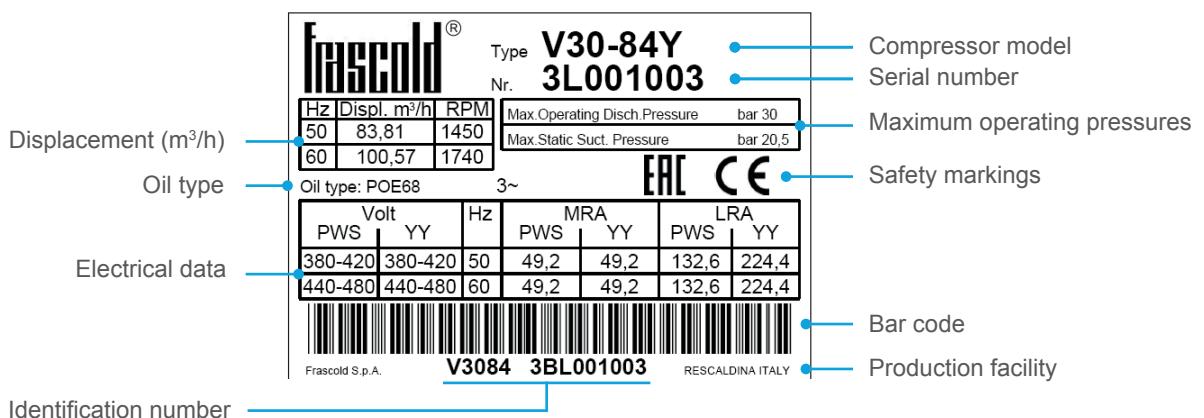


## Model names



## Compressor nameplate

All the important information to identify the compressor is displayed on the nameplate. The date of production is contained in the serial number. The indication of the type of refrigerant is the installer's responsibility.



# Semi-hermetic reciprocating compressors

## Technical specifications

Compressor	Cylinders Nr.	Displacement m <sup>3</sup> /h 50Hz	Oil Charge dm <sup>3</sup>	Net Weight kg	Electrical data								Pipe connections ⑩			
					Motor		Max operating current A ⑨		Max power consumption kW	Locked rotor current A ⑨		Suction		Discharge		
					Version	Connections	230V	400V		230V	400V	inch	mm	inch	mm	
							DOL	DOL	PWS	⑨	DOL	DOL	PWS			
A05-4Y	2	3,95	1	36	1	⑦	4,9	2,8		1,6	18,6	10,7	5/8	15,8	1/2	12,7
A05-5Y	2	4,93	1	36	2	⑦	4,7	2,7		1,5	18,6	10,7	5/8	15,8	1/2	12,7
A07-5Y	2	1	36	1	⑦	4,7	2,7			1,5	18,6	10,7	5/8	15,8	1/2	12,7
A07-6Y	2	5,47	1	36	2	⑦	4,9	2,8		1,6	18,6	10,7	5/8	15,8	1/2	12,7
A1-6Y	2	1	36	1	⑦	6,2	3,6			2,0	23,6	13,6	5/8	15,8	1/2	12,7
A1-7Y	2	6,91	1	36	2	⑦	6,4	3,7		2,1	23,6	13,6	5/8	15,8	1/2	12,7
A1.5-7Y	2	1	36	1	⑦	7,9	4,5			2,3	35,8	20,6	5/8	15,8	1/2	12,7
A1.5-8Y	2	7,65	1	36	1	⑦	8,4	4,8		2,3	35,8	20,6	5/8	15,8	1/2	12,7
B1.5-9.1Y	2	8,96	1	38	2	⑦	10,2	5,9		3,3	46,6	26,8	5/8	15,8	1/2	12,7
B1.5-10.1Y	2	9,88	1	38	2	⑦	9,5	5,5		3,1	46,6	26,8	5/8	15,8	1/2	12,7
B2-10.1Y	2	1	40	1	⑦	11,7	6,7			3,6	62,5	35,9	5/8	15,8	1/2	12,7
D2-11.1Y	2	11,26	1,1	45	1	⑦	12,4	7,1		4,1	62,5	35,9	7/8	22,2	5/8	15,8
D2-13.1Y	2	13,15	1,1	45	2	⑦	12,4	7,1		4,1	62,5	35,9	7/8	22,2	5/8	15,8
D3-13.1Y	2	1	49	1	⑦	15,3	8,8			4,8	79,9	43,7	1 1/8	28,6	5/8	15,8
D2-15.1Y	2	15,36	1,1	45	2	⑦	14,6	8,4		4,7	62,5	35,9	7/8	22,2	5/8	15,8
D3-15.1Y	2	1	49	1	⑦	17,5	10,1			5,7	75,9	43,7	1 1/8	28,6	5/8	15,8
D3-16.1Y	2	16,40	1,1	49	2	⑦	17,2	9,9		5,4	75,9	43,7	1 1/8	28,6	5/8	15,8
D4-16.1Y	2	1	51	1	⑦	20,1	11,6			6,2	90,3	52,0	1 1/8	28,6	3/4	19,0
D3-18.1Y	2	17,93	1,1	49	2	⑦	17,3	10,0		5,5	75,9	43,7	1 1/8	28,6	5/8	15,8
D4-18.1Y	2	1	51	1	⑦	21,7	12,5			6,7	90,3	52,0	1 1/8	28,6	3/4	19,0
D3-19.1Y	2	19,12	1,1	49	2	⑦	17,0	9,8		5,4	75,9	43,7	1 1/8	28,6	5/8	15,8
D4-19.1Y	2	1	51	1	⑦	20,5	11,8			6,4	90,3	52,0	1 1/8	28,6	3/4	19,0
Q4-20.1E	4	19,77	1,6	74	3	⑦	10,6	6,1		3,1	97,8	56,3	1 1/8	28,6	3/4	19,0
Q4-20.1Y	4	1,6	74	2	⑦	17,5	10,1			5,7	92,6	53,2	1 1/8	28,6	3/4	19,0
Q4-21.1Y	4	21,18	1,6	79	2	⑦	17,3	10,0		5,7	92,6	53,2	1 1/8	28,6	3/4	19,0
Q5-21.1Y	4	1,6	79	1	⑦	20,1	11,6			6,6	109,7	63,1	1 1/8	28,6	3/4	19,0
Q4-24.1E	4		1,6	79	3	⑦	12,5	7,2		4,0	97,8	56,3	1 1/8	28,6	3/4	19,0
Q4-24.1Y	4	23,91	1,6	79	2	⑦	20,3	11,7		6,8	92,6	53,2	1 1/8	28,6	3/4	19,0
Q5-24.1Y	4	1,6	79	1	⑦	23,9	13,8			7,9	109,7	63,1	1 1/8	28,6	7/8	22,2
Q4-25.1Y	4	24,69	1,6	77	2	⑦	19,1	11,0		7,0	92,6	53,2	1 1/8	28,6	3/4	19,0
Q5-25.1Y	4	1,6	79	2	⑦	22,1	12,7			8,5	109,7	63,1	1 1/8	28,6	7/8	22,2
Q7-25.1Y	4	1,6	79	1	⑦	26,8	15,4			8,4	151,8	87,3	1 1/8	28,6	7/8	22,2
Q5-28.1E	4		1,6	79	3	⑦	13,7	7,9		4,7	95,1	54,7	1 1/8	35,0	7/8	22,2
Q5-28.1Y	4	28,02	1,6	79	2	⑦	24,3	14,0		8,2	109,7	63,1	1 1/8	35,0	7/8	22,2
Q7-28.1Y	4	1,6	79	1	⑦	30,7	17,6			9,5	151,8	87,3	1 1/8	35,0	1 1/6	28,6
Q5-33.1E	4		1,6	79	3	⑦	16,2	9,3		5,6	95,1	54,7	1 1/8	35,0	1 1/6	28,6
Q5-33.1Y	4	32,66	1,6	79	2	⑦	25,0	14,4		8,3	109,7	63,1	1 1/8	35,0	1 1/6	28,6
Q7-33.1Y	4	1,6	79	1	⑦	34,7	20,0			11,2	151,8	87,3	1 1/8	35,0	1 1/6	28,6
Q5-36.1E	4	35,86	1,6	79	3	⑦	20,5	11,8		6,9	109,7	63,1	1 1/8	35,0	1 1/6	28,6
Q7-36.1Y	4	1,6	79	1	⑦	33,6	19,4			10,8	151,8	87,3	1 1/8	35,0	1 1/6	28,6

① Conversion factor for 60Hz = 1,2.

② Lubricant charge.

③ Including valves, oil charge and rubber dampers.

④ Motor size.

⑤ Connection alternatives.

⑥ Tolerance ±10% based on mean value of voltage range. Other voltages upon request.

⑦ 220-240V Δ / 380-420V λ / 3 / 50Hz

265-290V Δ / 440-480V λ / 3 / 60Hz

⑧ 380V-420V λ/λ/λ / 3 / 50Hz

440V-480V λ/λ/λ / 3 / 60Hz

⑨ Referred to 50Hz operation. At 60 Hz the max operating current remains unchanged while the max power consumption should be multiplied by 1,2. The maximum operating current /max. power consumption must be considered for the selection of cables, fuses and contactors (AC3 category).

⑩ Valves with solder connections.

# Semi-hermetic reciprocating compressors

## Technical specifications

Compressor	Cylinders Nr.	Displacement m <sup>3</sup> /h 50Hz	Oil Charge dm <sup>3</sup>	Net Weight kg	Electrical data								Pipe connections ⑩					
					Motor		Max operating current A ⑨			Max power consumption kW	Locked rotor current A ⑨			Suction		Discharge		
					Version	Connections	230V	400V	DOL		DOL	PWS	⑨	DOL	DOL	PWS	inch	
					①	②	③	④	⑤ ⑥		⑧	⑨	⑧	⑧	⑧	⑧	mm	
<b>S5-33Y</b>	4	32,80	2,9	115	2	⑧				15,9	7,8		57,8	35,5	1 <sup>1</sup> / <sub>8</sub>	35,0	1 <sup>1</sup> / <sub>8</sub>	28,6
<b>S7-33Y</b>	4		2,9	117	1					20,4	11,1		75,0	47,0	1 <sup>1</sup> / <sub>8</sub>	35,0	1 <sup>1</sup> / <sub>8</sub>	28,6
<b>S8-42E</b>	4		2,9	117	3					12,8	7,3		90,3	52,7	1 <sup>1</sup> / <sub>8</sub>	35,0	1 <sup>1</sup> / <sub>8</sub>	28,6
<b>S8-42Y</b>	4	41,32	2,9	117	2	⑧				20,3	11,8		90,3	52,7	1 <sup>1</sup> / <sub>8</sub>	35,0	1 <sup>1</sup> / <sub>8</sub>	28,6
<b>S12-42Y</b>	4		2,9	120	1					22,4	12,9		102,3	59,1	1 <sup>1</sup> / <sub>8</sub>	35,0	1 <sup>1</sup> / <sub>8</sub>	28,6
<b>S10-52E</b>	4		2,9	120	3					14,7	8,4		102,7	59,5	1 <sup>1</sup> / <sub>8</sub>	35,0	1 <sup>1</sup> / <sub>8</sub>	28,6
<b>S10-52Y</b>	4	51,50	2,9	120	2	⑧				24,5	14,9		102,3	59,1	1 <sup>1</sup> / <sub>8</sub>	35,0	1 <sup>1</sup> / <sub>8</sub>	28,6
<b>S15-52Y</b>	4		2,9	126	1					32,4	17,8		117,1	74,8	1 <sup>5</sup> / <sub>8</sub>	42,0	1 <sup>1</sup> / <sub>8</sub>	28,6
<b>S12-56E</b>	4		2,9	130	3					16,1	9,0		102,7	59,5	1 <sup>5</sup> / <sub>8</sub>	42,0	1 <sup>1</sup> / <sub>8</sub>	28,6
<b>S15-56Y</b>	4	56,00	2,9	130	2	⑧				30,7	16,5		117,1	74,8	1 <sup>5</sup> / <sub>8</sub>	42,0	1 <sup>1</sup> / <sub>8</sub>	28,6
<b>S20-56Y</b>	4		2,9	132	1					38,4	19,6		136,2	87,5	1 <sup>5</sup> / <sub>8</sub>	42,0	1 <sup>1</sup> / <sub>8</sub>	28,6
<b>V15-59E</b>	4		4,0	170	3	⑧				17,5	10,2		102,7	59,5	1 <sup>5</sup> / <sub>8</sub>	42,0	1 <sup>1</sup> / <sub>8</sub>	28,6
<b>V15-59Y</b>	4	58,48	4,0	170	2	⑧				31,1	17,8		117,1	74,8	1 <sup>5</sup> / <sub>8</sub>	42,0	1 <sup>1</sup> / <sub>8</sub>	28,6
<b>V20-59Y</b>	4		4,0	174	1					35,3	19,6		180,5	106,6	1 <sup>5</sup> / <sub>8</sub>	42,0	1 <sup>1</sup> / <sub>8</sub>	28,6
<b>V15-71E</b>	4		4,0	174	3					20,2	12,0		102,7	59,5	1 <sup>5</sup> / <sub>8</sub>	42,0	1 <sup>1</sup> / <sub>8</sub>	28,6
<b>V15-71Y</b>	4	70,77	4,0	174	2	⑧				32,2	19,6		117,1	74,8	1 <sup>5</sup> / <sub>8</sub>	42,0	1 <sup>1</sup> / <sub>8</sub>	28,6
<b>V25-71Y</b>	4		4,0	184	1					43,5	23,6		202,7	118,3	2 <sup>1</sup> / <sub>8</sub>	54,0	1 <sup>1</sup> / <sub>8</sub>	35,0
<b>V20-84E</b>	4		4,0	180	3					27,2	14,2		173,0	103,0	1 <sup>5</sup> / <sub>8</sub>	42,0	1 <sup>1</sup> / <sub>8</sub>	28,6
<b>V20-84Y</b>	4	83,81	4,0	180	2	⑧				46,2	24,2		180,5	106,6	2 <sup>1</sup> / <sub>8</sub>	54,0	1 <sup>1</sup> / <sub>8</sub>	35,0
<b>V30-84Y</b>	4		4,0	187	1					49,2	28,4		224,4	132,6	2 <sup>1</sup> / <sub>8</sub>	54,0	1 <sup>1</sup> / <sub>8</sub>	35,0
<b>V25-93Y</b>	4	93,05	4,0	200	2	⑧				52,3	25,8		202,7	118,3	2 <sup>1</sup> / <sub>8</sub>	54,0	1 <sup>1</sup> / <sub>8</sub>	35,0
<b>V32-93Y</b>	4		4,0	192	1					53,1	30,9		239,2	144,5	2 <sup>1</sup> / <sub>8</sub>	54,0	1 <sup>1</sup> / <sub>8</sub>	35,0
<b>V25-103E</b>	4		4,0	204	3					29,9	16,9		210,3	122,7	2 <sup>1</sup> / <sub>8</sub>	54,0	1 <sup>1</sup> / <sub>8</sub>	35,0
<b>V25-103Y</b>	4	102,90	4,0	204	2	⑧				52,3	28,8		202,7	118,3	2 <sup>1</sup> / <sub>8</sub>	54,0	1 <sup>1</sup> / <sub>8</sub>	35,0
<b>V35-103Y</b>	4		4,0	207	1					61,0	38,5		239,2	144,5	2 <sup>1</sup> / <sub>8</sub>	54,0	1 <sup>1</sup> / <sub>8</sub>	35,0
<b>Z25-106E</b>	6		3,7	220	3					30,2	17,1		210,3	122,7	2 <sup>1</sup> / <sub>8</sub>	54,0	1 <sup>1</sup> / <sub>8</sub>	35,0
<b>Z25-106Y</b>	6	106,16	3,7	220	2	⑧				53,6	31,9		202,7	118,3	2 <sup>1</sup> / <sub>8</sub>	54,0	1 <sup>1</sup> / <sub>8</sub>	35,0
<b>Z35-106Y</b>	6		3,7	223	1					60,2	35,1		239,2	144,5	2 <sup>1</sup> / <sub>8</sub>	54,0	1 <sup>1</sup> / <sub>8</sub>	35,0
<b>Z30-126E</b>	6		7,2	229	3					33,8	19,7		212,5	122,7	2 <sup>1</sup> / <sub>8</sub>	54,0	1 <sup>1</sup> / <sub>8</sub>	35,0
<b>Z30-126Y</b>	6	125,72	7,2	229	2	⑧				55,7	35,0		224,4	132,6	2 <sup>1</sup> / <sub>8</sub>	54,0	1 <sup>1</sup> / <sub>8</sub>	35,0
<b>Z40-126Y</b>	6		7,2	240	1					71,9	40,7		273,0	159,2	2 <sup>1</sup> / <sub>8</sub>	67,0	1 <sup>1</sup> / <sub>8</sub>	42,0
<b>Z40-154E</b>	6		7,2	240	3					41,1	23,8		239,2	144,5	2 <sup>1</sup> / <sub>8</sub>	67,0	1 <sup>1</sup> / <sub>8</sub>	42,0
<b>Z40-154Y</b>	6	154,38	7,2	240	2	⑧				77,9	37,9		273,0	159,2	2 <sup>1</sup> / <sub>8</sub>	67,0	1 <sup>1</sup> / <sub>8</sub>	42,0
<b>Z50-154Y</b>	6		7,2	244	1					90,4	52,1		321,4	188,8	2 <sup>1</sup> / <sub>8</sub>	67,0	1 <sup>1</sup> / <sub>8</sub>	42,0
<b>W40-142Y</b>	8	141,50	7,7	295	2	⑧				89,3	42,3		298,0	215,0	2 <sup>1</sup> / <sub>8</sub>	67,0	1 <sup>1</sup> / <sub>8</sub>	42,0
<b>W40-168Y</b>	8	167,60	7,7	299	2	⑧				71,4	37,3		298,0	215,0	2 <sup>1</sup> / <sub>8</sub>	67,0	1 <sup>1</sup> / <sub>8</sub>	42,0
<b>W50-168Y</b>	8		7,7	305	1					94,8	55,2		367,0	258,0	3 <sup>1</sup> / <sub>8</sub>	79,4	1 <sup>1</sup> / <sub>8</sub>	42,0
<b>W50-187Y</b>	8	186,10	7,7	311	2	⑧				89,1	50,2		367,0	258,0	3 <sup>1</sup> / <sub>8</sub>	79,4	1 <sup>1</sup> / <sub>8</sub>	42,0
<b>W60-187Y</b>	8		7,7	315	1					103,5	59,9		455,0	326,0	3 <sup>1</sup> / <sub>8</sub>	79,4	1 <sup>1</sup> / <sub>8</sub>	42,0
<b>W60-206Y</b>	8		7,7	320	2	⑧				98,8	56,7		455,0	326,0	3 <sup>1</sup> / <sub>8</sub>	79,4	2 <sup>1</sup> / <sub>8</sub>	54,0
<b>W70-206Y</b>	8	205,80	7,7	328	1					116,8	66,8		548,0	390,0	3 <sup>1</sup> / <sub>8</sub>	79,4	2 <sup>1</sup> / <sub>8</sub>	54,0
<b>W70-228Y</b>	8	227,77	7,7	328	2	⑧				109,5	61,9		548,0	390,0	3 <sup>1</sup> / <sub>8</sub>	79,4	2 <sup>1</sup> / <sub>8</sub>	54,0
<b>W75-228Y</b>	8		7,7	328	1					128,4	74,2		584,0	417,0	3 <sup>1</sup> / <sub>8</sub>	79,4	2 <sup>1</sup> / <sub>8</sub>	54,0
<b>W75-240Y</b>	8		7,7	328	2	⑧				115,3	65,4		584,0	417,0	3 <sup>1</sup> / <sub>8</sub>	79,4	2 <sup>1</sup> / <sub>8</sub>	54,0
<b>W80-240Y</b>	8	239,02	7,7	328	1					135,7	78,9		584,0	417,0	3 <sup>1</sup> / <sub>8</sub>	79,4	2 <sup>1</sup> / <sub>8</sub>	54,0

## Kriwan INT69 ®Diagnose multifunctional device

Kriwan Diagnose devices are a step ahead in the protection of compressors.

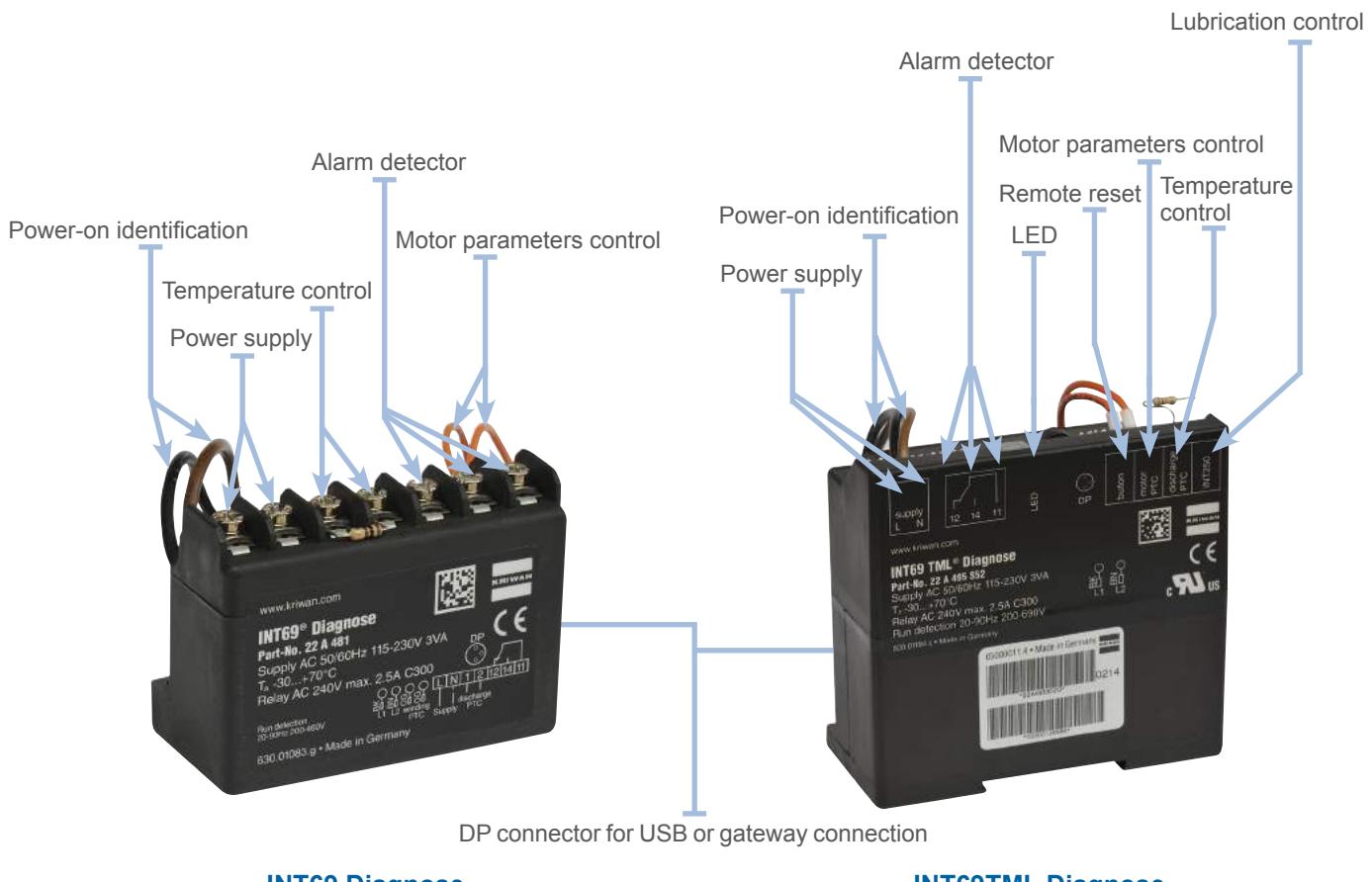
The Diagnose technology is not only limited to protecting the compressor, but also offers diagnosis and system optimisation features; providing detailed information to technicians in order to promptly diagnose system problems; it even makes it possible to prevent malfunctioning before it occurs thanks to data analysis.

The additional protection features help extending the compressor's service life.

Through this technology applied to compressors, users will benefit from enhanced reliability of the cooling system and from the reduction in running and maintenance costs. Frascold was the first compressor manufacturer to adopt this innovative technology and today it is standard on all models in the Q - S - V - Z - W series.

### Advantages

- Guaranteed optimal operation throughout the compressor's entire life cycle
- Simple and straightforward operation
- Fast diagnosis and precise instructions for solving the problems causing errors and failures
- Specifically designed to satisfy the user's needs
- Intelligent monitoring of compressor operation
- Extends the operative life of cooling systems
- Improves compressor protection
- Reduces running and maintenance costs
- Automatic storage of operational data and errors in a memory
- Technical card with retrieval of stored data
- Display of compressor status through flash LED code (for TML version)
- Data download through USB connection
- Remote communication through DP-Modbus gateway to PLC (Modbus protocol RS485) or Modbus-LAN Gateway to the web (HTTP protocol)
- Applicable to previously installed compressors



INT69® Diagnose and INT69TML® Diagnose are intellectual property and trademarks ® of KRIWAN Industrie-Elektronik GmbH.

# Semi-hermetic reciprocating compressors

## Standard equipment and optional accessories

Frascold supplies its compressors equipped with standard components as shown here below. Optional accessories are available on request for other needs.

Description	Series						
	A - B	D	Q	S	V	Z	W
Semi-hermetic compressor with integrated electric motor, direct on line start and PTC sensor / AMS sensor 220-240V Δ / 380-420V Δ / 3 / 50 Hz 265-290V Δ / 440-480V Δ / 3 / 60 Hz	S PTC	S PTC	S AMS				
Semi-hermetic compressor with integrated electric motor, part winding start and AMS sensor / PTC sensor 380-420V Δ / 3 / 50 Hz 440-480V Δ / 3 / 60 Hz				S AMS	S AMS	S AMS	S PTC
Electric terminal box	S	S	S	S	S	S	S
Protection class	IP56	IP56	IP56	IP56	IP65	IP65	IP65
Control and protection device	S	S					
Multifunctional control, protection and diagnostics device	▲	▲	S	S	S	S	S
Discharge temperature sensor			▲	▲	S	S	S
Differential oil pressure switch					S	S	S
Reversible oil pump					S	S	S
Oil sight glass	S [x1]	S [x1]	S [x2]				
POE oil charge	S	S	S	S	S	S	S
Viscosity (cSt)	32	32	32	32	68	68	68
Liquid injection connection			S	S	S	S	S
Suction shut-off valve	S	S	S	S	S	S	S
Discharge shut-off valve	S	S	S	S	S	S	S
Nitrogen protective charge	S	S	S	S	S	S	S
Rubber dampers kit	S	S	S	S	S	S	S
Oil heater	▲	▲	▲	▲	▲	▲	▲
US unloader start head		▲	▲	▲	▲	▲	▲
RSH capacity control head		▲	▲	▲	▲	▲	▲
CC capacity control head			▲	▲	▲	▲	▲
Head cooling fan	▲	▲	▲	▲	▲	▲	▲
Water cooled head	▲	▲	▲	▲	▲	▲	▲
Electronic liquid injection kit			▲	▲	▲	▲	▲
Oil level switch	▲	▲	▲	▲	▲	▲	▲
Oil level regulator	▲	▲	▲	▲	▲	▲	▲
Flange and shut-off valve for oil equalization	▲	▲	▲	▲	▲	▲	▲
DP Modbus gateway			▲	▲	▲	▲	▲
INT-gateway cable			▲	▲	▲	▲	▲
Modbus-LAN gateway			▲	▲	▲	▲	▲
USB adapter cable			▲	▲	▲	▲	▲

S Included in the standard extent of delivery

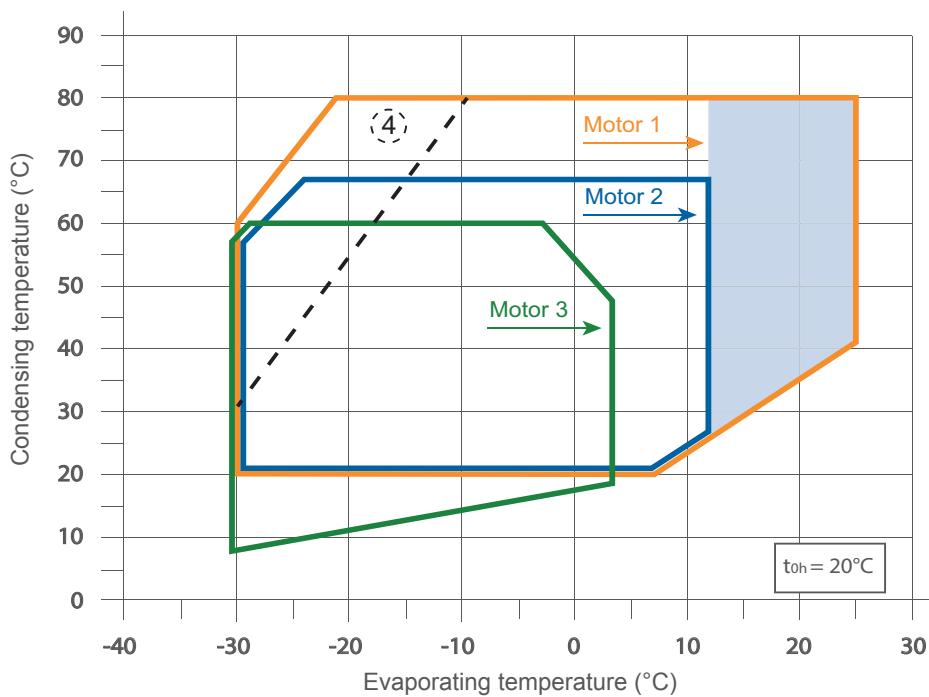
▲ Option available at an additional charge

## Operating limits

The compressors can operate within the range of the application diagrams; pay attention to the different areas. For the operating limits of each compressor refer to the Frascold Selection Software program (see page 74).

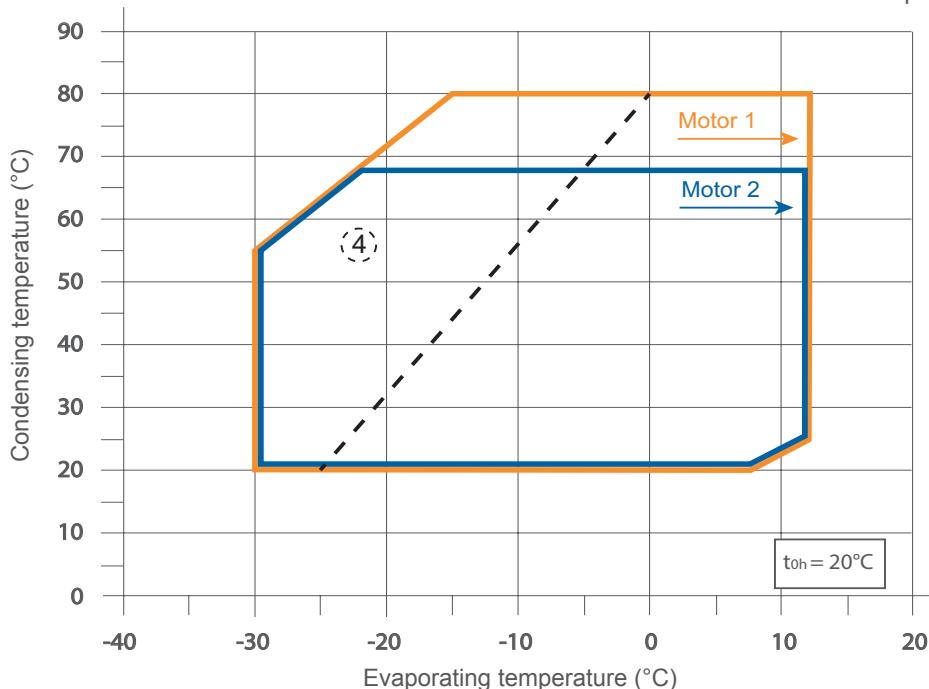
### R134a

Standard application diagram  
Motor size 1 - 2 - 3  
Check the diagram of every single compressor model on the Frascold Selection Software program



### R450A - R513A

Standard application diagram  
Motor size 1 - 2 - 3  
Check the diagram of every single compressor model on the Frascold Selection Software program



Compressor at 100% capacity

$t_{\text{oh}}$

Suction gas temperature =  $20^{\circ}\text{C}$

For operation in this area contact Frascold

(4)

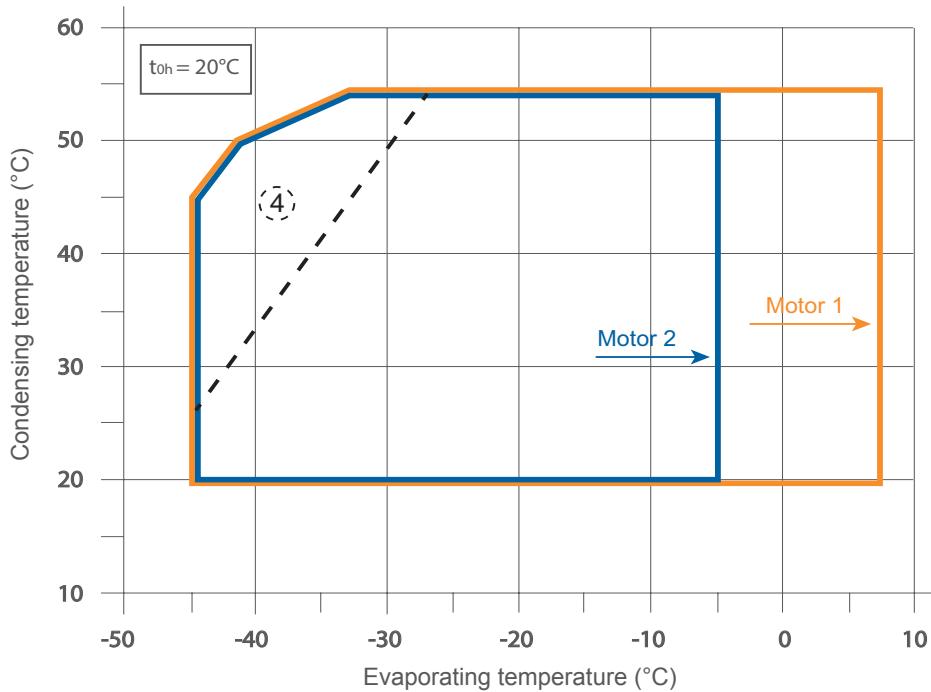
Additional cooling or superheat reduction, check on the Frascold Selection Software program

## Operating limits

The compressors can operate within the range of the application diagrams; pay attention to the different areas. For the operating limits of each compressor refer to the Frascold Selection Software program (see page 74).

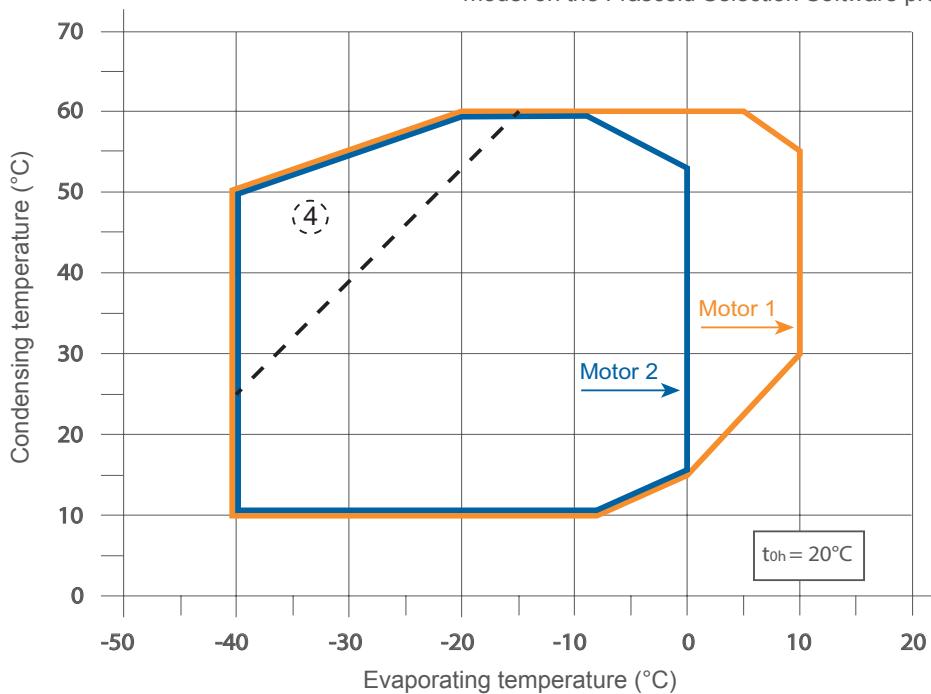
### R404A - R507A

Standard application diagram  
Motor size 1 - 2  
Check the diagram of every single compressor model on the Frascold Selection Software program



### R448A - R449A

Standard application diagram  
Motor size 1 - 2  
Check the diagram of every single compressor model on the Frascold Selection Software program



Compressor at 100% capacity

t<sub>oh</sub>  
(4)

Suction gas temperature = 20 ° C

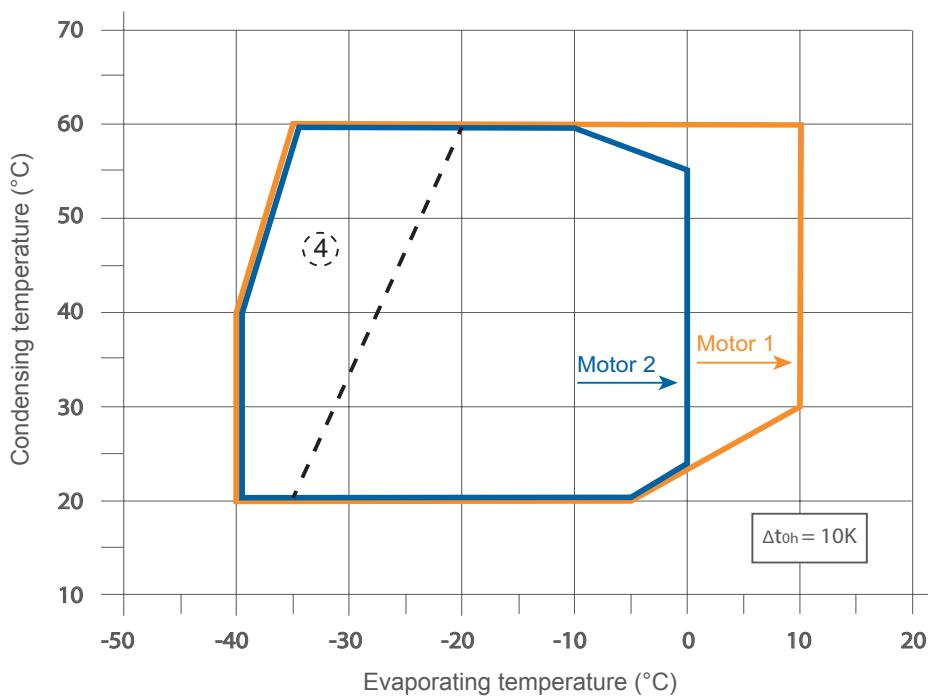
Additional cooling or superheat reduction, check on the Frascold Selection Software program

## Operating limits

The compressors can operate within the range of the application diagrams; pay attention to the different areas. For the operating limits of each compressor refer to the Frascold Selection Software program (see page 74).

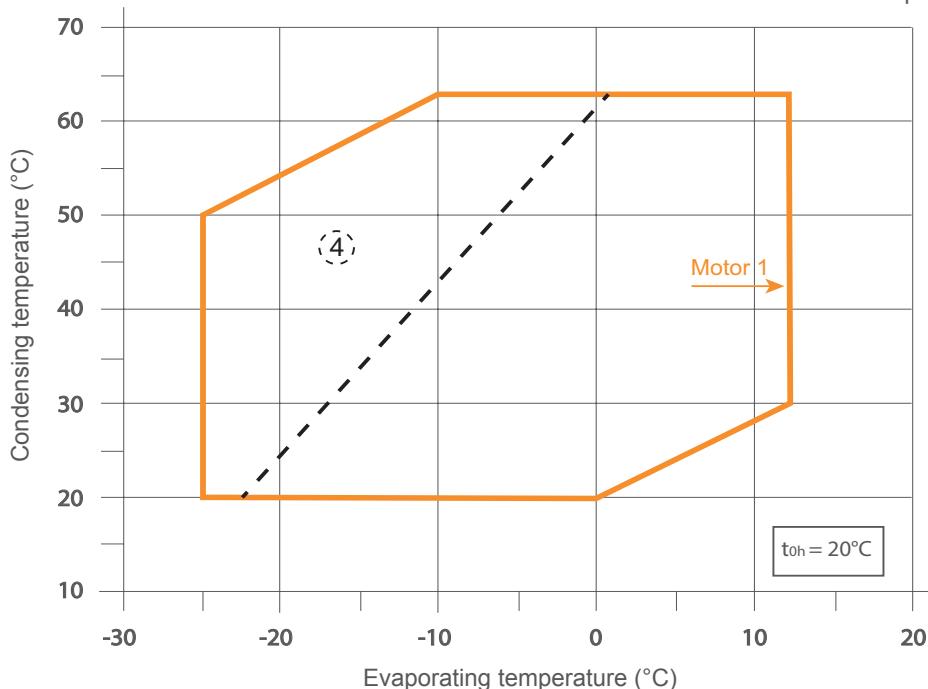
### R407F - R407A

Standard application diagram  
Motor size 1 - 2  
Check the diagram of every single compressor model on the Frascold Selection Software program



### R407C

Standard application diagram  
Motor size 1  
Check the diagram of every single compressor model on the Frascold Selection Software program



Compressor at 100% capacity

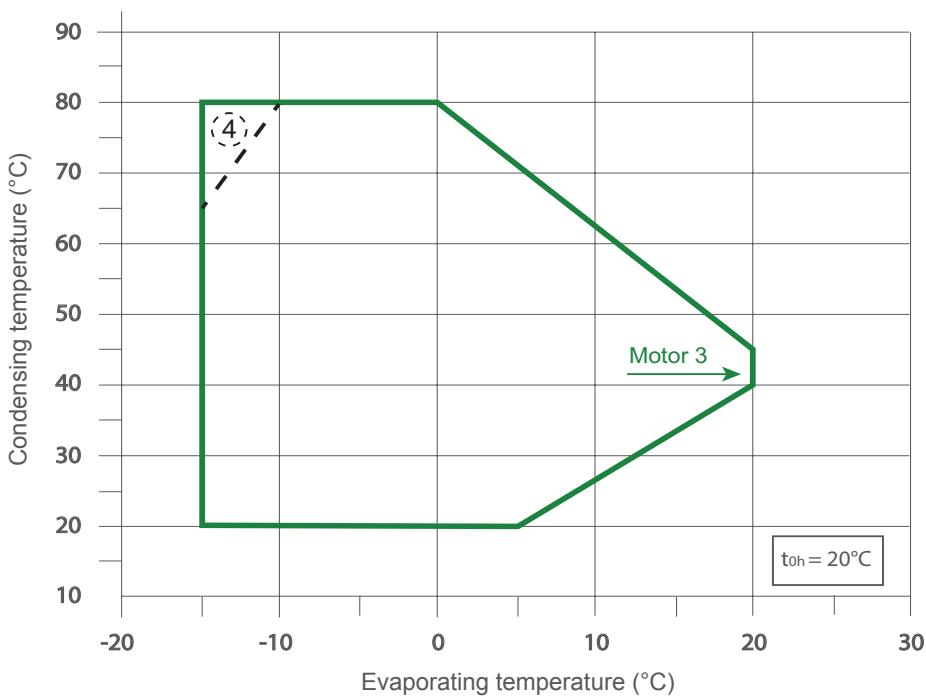
$t_{oh}$  Suction gas temperature = 20 ° C  
 $\Delta t_{oh}$  Superheat = 10K  
4 Additional cooling or superheat reduction, check on the Frascold Selection Software program

## Operating limits

The compressors can operate within the range of the application diagrams; pay attention to the different areas. For the operating limits of each compressor refer to the Frascold Selection Software program (see page 74).

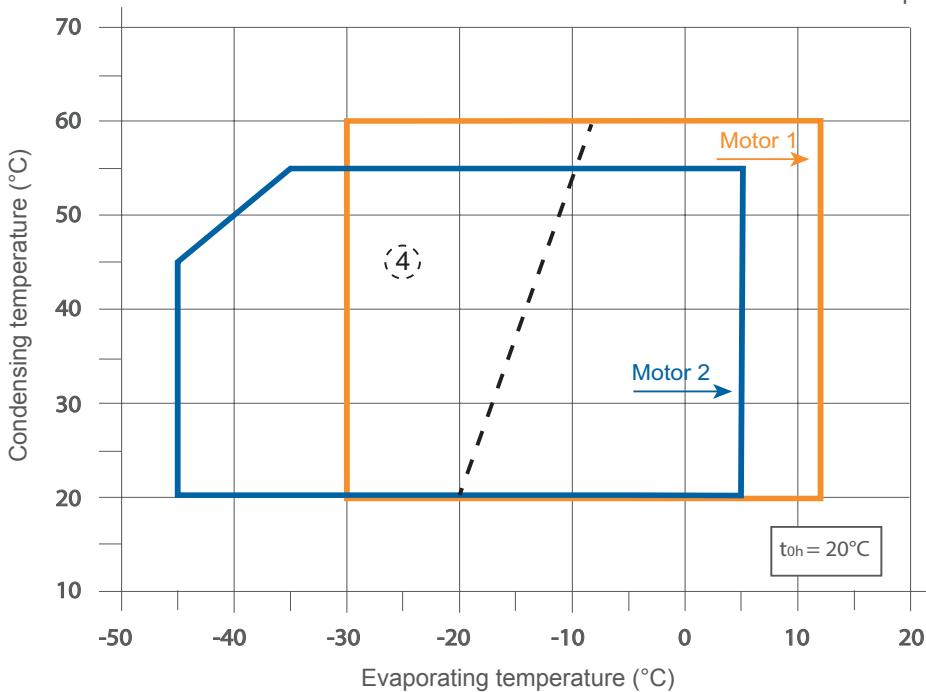
### R1234ze

Standard application diagram  
Motor size 3  
Check the diagram of every single compressor model on the Frascold Selection Software program



### R22

Standard application diagram  
Motor size 1 - 2  
Check the diagram of every single compressor model on the Frascold Selection Software program



Compressor at 100% capacity

$t_{oh}$   
(4)

Suction gas temperature = 20 ° C

Additional cooling or superheat reduction, check on the Frascold Selection Software program

## Performance R134a [50 Hz]

Compressor	Motor version	Cond. Temp. [°C]	Qo [W] = Cooling capacity Pe [kW] = Power consumption ①	Evaporating temperature [°C]										
				12,5	10	7,5	5	0	-5	-10	-15	-20	-25	-30
<b>A05-4Y</b>	1	30	Qo	3535	3204	2895	2607	2091	1648	1273	958	698	485	314
		40	Pe	0,61	0,59	0,57	0,55	0,51	0,84	0,44	0,40	0,36	0,31	0,26
		50	Qo	3128	2831	2554	22,96	1835	1439	1103	821	585	390	229
	2	30	Pe	0,70	0,68	0,66	0,63	0,59	0,55	0,50	0,45	0,39	0,33	0,26
		40	Qo	2745	2482	2237	2010	1602	1254	958	707	496	318	166
		50	Pe	0,81	0,78	0,75	0,72	0,67	0,61	0,56	0,49	0,42	0,34	0,24
<b>A05-5Y</b>	1	30	Qo	4379	3974	3595	3241	2604	2057	1591	1199	875	609	396
		40	Pe	0,76	0,73	0,71	0,68	0,64	0,60	0,55	0,50	0,45	0,39	0,32
		50	Qo	3873	3510	3170	2854	2284	1795	1379	1027	733	489	288
	2	30	Pe	0,88	0,85	0,82	0,79	0,74	0,68	0,62	0,56	0,49	0,41	0,32
		40	Qo	3399	3077	2777	2497	1995	1564	1196	884	620	397	208
		50	Pe	1,01	0,97	0,94	0,90	0,84	0,77	0,69	0,61	0,52	0,42	0,30
<b>A07-5Y</b>	1	50	Qo	3368	3047	2747	2467	1966	1536	1169	857	593	369	178
		60	Pe	0,99	0,96	0,93	0,90	0,83	0,76	0,69	0,61	0,52	0,42	0,31
		70	Qo	2911	2628	2366	2121	1685	1311	991	719	486	284	
	2	50	Pe	1,12	1,08	1,04	1,00	0,92	0,84	0,74	0,64	0,53	0,40	
		60	Qo	2465	2222	1996	1787	1414	1096	823	590	387		
		70	Pe	1,23	1,19	1,14	1,09	1,00	0,89	0,78	0,65	0,52		
<b>A07-6Y</b>	2	30	Qo	4755	4315	3904	3521	2835	2246	1745	1321	964	665	414
		40	Pe	0,79	0,77	0,76	0,74	0,70	0,67	0,62	0,57	0,51	0,43	0,35
		50	Qo	4161	3767	3399	3058	2447	1925	1481	1105	787	518	287
	1	40	Pe	0,92	0,90	0,88	0,86	0,81	0,76	0,69	0,62	0,54	0,45	0,33
		50	Qo	3614	3265	2940	2638	2101	1644	1255	925	645	404	192
		60	Pe	1,05	1,02	1,00	0,97	0,91	0,84	0,76	0,67	0,57	0,45	0,31
<b>A1-6Y</b>	1	50	Qo	3585	3246	2929	2633	2104	1648	1259	927	645	403	194
		60	Pe	1,04	1,01	0,98	0,96	0,90	0,83	0,75	0,66	0,55	0,43	0,30
		70	Qo	3101	2803	525	2266	1804	1408	1069	778	529	312	
	2	50	Pe	1,16	1,13	1,10	1,07	0,99	0,91	0,81	0,70	0,57	0,43	
		60	Qo	2636	2379	2140	1918	1523	1186	897	649	433		
		70	Pe	1,29	1,26	1,22	1,18	1,10	0,99	0,88	0,75	0,60		
<b>A1-7Y</b>	2	30	Qo	6223	5663	5141	4655	3785	3041	2411	1882	1442	1080	782
		40	Pe	0,91	0,90	0,89	0,88	0,85	0,82	0,78	0,73	0,67	0,61	0,53
		50	Qo	5494	4989	4520	4084	3305	2640	2077	1605	1209	879	602
	1	40	Pe	1,11	1,09	1,07	1,05	1,00	0,94	0,88	0,80	0,72	0,62	0,52
		50	Qo	4787	4338	3921	3534	2845	2258	1762	1344	992	693	435
		60	Pe	1,29	1,26	1,23	1,20	1,13	1,05	0,96	0,85	0,74	0,62	0,48
<b>A1.5-7Y</b>	1	50	Qo	4722	4289	3886	3510	2836	2258	1763	1343	986	681	418
		60	Pe	1,28	1,25	1,23	1,20	1,13	1,06	0,97	0,87	0,76	0,64	0,50
		70	Qo	4072	3689	3334	3003	2411	1905	1472	1103	787	513	
	2	50	Pe	1,44	1,40	1,37	1,33	1,24	1,14	1,03	0,90	0,76	0,61	
		60	Qo	3422	3090	2782	2496	1988	1554	1185	992	594		
		70	Pe	1,60	1,55	1,50	1,45	1,34	1,21	1,08	0,74	0,76		
<b>A1.5-8Y</b>	1	30	Qo	6715	6144	5607	5103	4186	3387	2698	2109	1614	1205	873
		40	Pe	1,00	0,99	0,98	0,96	0,93	0,88	0,83	0,76	0,69	0,60	
		50	Qo	5987	5468	4981	4523	3694	2972	2350	1820	1374	1004	702
	2	30	Pe	1,22	1,20	1,18	1,16	1,11	1,05	0,98	0,90	0,81	0,71	0,60
		40	Qo	5261	4795	4357	3947	3206	2593	2010	1540	1143	814	543
		50	Pe	1,43	1,40	1,36	1,33	1,25	1,16	1,06	0,95	0,84	0,71	0,58
<b>B1.5-9.1Y</b>	2	30	Qo	8072	7370	6713	6100	4999	4050	3241	2556	1983	1505	1110
		40	Pe	1,44	1,40	1,36	1,31	1,21	1,11	1,00	0,89	0,78	0,68	0,58
		50	Qo	7181	6547	5955	5403	4410	3554	2821	2197	1668	1218	835
	1	40	Pe	1,67	1,60	1,54	1,47	1,33	1,19	1,05	0,92	0,79	0,68	0,57
		50	Qo	6279	5715	5188	4697	3814	3052	2397	1834	1350	930	559
		60	Pe	1,86	1,77	1,68	1,59	1,41	1,24	1,08	0,93	0,79	0,67	0,57
<b>B1.5-10.1Y</b>	2	30	Qo	9101	8311	7572	6883	5644	4578	3669	2900	2257	1722	1280
		40	Pe	1,56	1,52	1,48	1,44	1,34	1,22	1,10	0,98	0,86	0,76	0,66
		50	Qo	8092	7381	6716	6096	4982	4023	3201	2502	1908	1404	974
	1	40	Pe	1,85	1,78	1,71	1,64	1,48	1,33	1,17	1,02	0,88	0,76	0,66
		50	Qo	7076	6444	5855	5305	4316	3464	2730	2100	1557	1085	668
		60	Pe	2,08	1,98	1,89	1,79	1,59	1,39	1,21	1,04	0,88	0,75	0,65
<b>B2-10.1Y</b>	1	50	Qo	6871	6261	5688	5152	4181	3339	2617	2004	1490	1065	720
		60	Pe	2,02	2,00	1,96	1,91	1,79	1,63	1,46	1,27	1,07	0,88	0,69
		70	Qo	5846	5313	4814	4347	3505	2776	2151	1620	1173	799	
	2	50	Pe	2,38	2,32	2,24	2,16	1,97	1,75	1,52	1,28	1,04	0,82	
		60	Qo	4832	4377	3951	3554	2840	2223	1695	1246	865		
		70	Pe	2,69	2,58	2,47	2,35	2,09	1,82	1,53	1,25	0,97		
<b>D2-11.1Y</b>	1	50	Qo	7846	7151	6493	5872	4743	3760	2913	2195	1593		
		60	Pe	2,15	2,11	2,06	2,01	1,87	1,72	1,56	1,38	1,20		
		70	Qo	6574	5980	5416	4883	3909	3056	2316	1681	1143		
	2	50	Pe	2,45	2,38	2,30	2,21	2,02	1,82	1,62	1,40	1,19		
		60	Qo	5327	4829	4356	3906	3080	2349	1710	1154	675		
		70	Pe	2,70	2,59	2,48	2,37	2,13	1,88	1,64	1,39	1,16		

① Suction gas temperature 20°C without liquid sub-cooling.

The performance refers to European standard EN12900 and with operation at 50Hz; conversion factor at 60Hz = 1.2.

To calculate the performance in different operating points refer to the Frascold Selection Software.

All published data is subject to change.

This field requires additional cooling or limitation of the suction temperature.



## Performance R134a [50 Hz]

Compressor	Motor version	Cond. Temp. [°C]	Qo [W] = Cooling capacity Pe [kW] = Power consumption ①	Evaporating temperature [°C]										
				12,5	10	7,5	5	0	-5	-10	-15	-20	-25	-30
<b>D2-13.1Y</b> 	2	30	Qo 12215 Pe 1,65	11137 1,70	10128 1,72	9187 1,73	7499 1,72	6054 1,65	4829 1,56	3800 1,44	2937 1,31			
		40	Qo 10750 Pe 2,17	9793 2,16	8897 2,13	8061 2,10	6560 2,00	5274 1,87	4183 1,72	3264 1,55	2491 1,39			
		50	Qo 9282 Pe 2,60	8447 2,55	7666 2,48	6935 2,40	5624 2,23	4500 2,04	3546 1,84	2742 1,65	2064 1,47			
		30	Qo 9370 Pe 2,61	8481 2,55	7651 2,48	6879 2,41	5504 2,23	4342 2,03	3373 1,83	2574 1,63	1922 1,44			
		60	Qo 7882 Pe 2,96	7114 2,86	6398 2,74	5732 2,63	4549 2,38	3553 2,13	2728 1,89	2055 1,66	1511 1,47			
<b>D3-13.1Y</b> 	1	70	Qo 6406 Pe 3,26	5764 3,11	5165 2,96	4609 2,81	3624 2,51	2799 2,22	2120 1,95	1574 1,71	1139 1,53			
		30	Qo 13790 Pe 2,60	12605 2,48	11496 2,36	10458 2,25	8586 2,02	6967 1,80	5578 1,59	4395 1,39	3396 1,21	2556 1,04	1854 0,89	
		40	Qo 12249 Pe 2,88	11179 2,73	10177 2,59	9240 2,44	7551 2,17	6088 1,91	4829 1,67	3750 1,45	2828 1,25	2041 1,08	1364 0,93	
		50	Qo 10688 Pe 3,11	9734 2,93	8840 2,76	8006 2,60	6502 2,29	5198 2,00	4072 1,73	3100 1,50	2258 1,29	1524 1,12	875 0,99	
		30	Qo 10714 Pe 2,92	9741 2,78	8832 2,64	7984 2,50	6458 2,24	5140 1,99	4006 1,75	3032 1,54	2195 1,35	1470 1,18	833 1,03	
<b>D3-15.1Y</b> 	1	60	Qo 9140 Pe 3,09	8284 2,93	7485 2,77	6741 2,62	5404 2,32	4247 2,05	3249 1,80	2383 1,58	1628 1,39	959 1,23		
		70	Qo 7554 Pe 3,23	6817 3,05	6131 2,88	5492 2,71	4346 2,39	3355 2,11	2494 1,86	1741 1,64	1071 1,45			
		30	Qo 14515 Pe 2,41	13238 2,38	12044 2,33	10931 2,28	8934 2,16	7217 2,01	5756 1,84	4522 1,65	3489 1,44	2629 1,23	1916 1,01	
		40	Qo 12860 Pe 2,87	11710 2,79	10637 2,70	9637 2,61	7841 2,41	6297 2,19	4977 1,96	3854 1,72	2901 1,48	2092 1,23	1398 1,00	
		50	Qo 11196 Pe 3,25	10175 3,12	9222 2,99	8335 2,86	6743 2,59	5371 2,31	4193 2,02	3182 1,74	2310 1,47	1551 1,20	878 0,95	
<b>D4-16.1Y</b> 	1	50	Qo 11383 Pe 3,56	10375 3,47	9431 3,38	8548 3,28	6963 3,07	5604 2,84	4448 2,59	3470 2,33	2642 2,04			
		60	Qo 9702 Pe 4,02	8837 3,89	8026 3,76	7267 3,63	5903 3,34	4732 3,05	3734 2,73	2890 2,40	2172 2,06			
		70	Qo 8052 Pe 4,46	7330 4,29	6653 4,12	6018 3,95	4876 3,60	3894 3,23	3056 2,85	2345 2,46	1740 2,06			
		30	Qo 16438 Pe 2,64	15008 2,63	13669 2,61	12420 2,58	10182 2,49	8268 2,37	6648 2,22	5288 2,06	4150 1,89			
		40	Qo 14527 Pe 3,26	13259 3,20	12072 3,14	10963 3,06	8974 2,89	7271 2,69	5827 2,48	4610 2,26	3587 2,04			
<b>D3-18.1Y</b>	2	50	Qo 12588 Pe 3,82	11483 3,71	10448 3,60	9481 3,48	7745 3,23	6257 2,96	4993 2,69	3927 2,42	3027 2,15			
		30	Qo 13431 Pe 3,40	12203 3,30	11059 3,19	9993 3,07	8084 2,82	6443 2,55	5035 2,27	3828 1,98	2788 1,69	1883 1,42	1079 1,16	
		60	Qo 11445 Pe 3,77	10371 3,63	9371 3,48	8441 3,32	6776 3,00	5342 2,67	4105 2,33	3034 2,00	2094 1,68	1252 1,38		
		70	Qo 9455 Pe 4,08	8535 3,90	7680 3,71	6887 3,52	5467 3,13	4243 2,74	3181 2,35	2247 1,98	1409 1,63			
		30	Qo 18611 Pe 2,91	16991 2,86	15475 2,81	14060 2,74	11516 2,58	9326 2,39	7459 2,18	5883 1,95	4567 1,71	3479 1,46	2587 1,22	
<b>D3-19.1Y</b>	2	40	Qo 16486 Pe 3,50	15033 3,39	13674 3,27	12406 3,15	10125 2,89	8158 2,62	6474 2,34	5042 2,06	3829 1,77	2804 1,50	1936 1,25	
		50	Qo 14354 Pe 3,99	13067 3,82	11865 3,65	10744 3,48	8726 3,13	6983 2,78	5483 2,44	4194 2,11	3085 1,80	2124 1,51	1279 1,25	
		50	Qo 13476 Pe 4,10	12299 4,01	11198 3,92	10169 3,80	8320 3,55	6729 3,27	5374 2,97	4235 2,67	3287 2,38			
		60	Qo 11428 Pe 4,67	10418 4,53	9475 4,38	8596 4,22	7019 3,88	5667 3,52	4517 3,16	3546 2,81	2734 2,50			
		70	Qo 9381 Pe 5,17	8540 4,98	7757 4,78	7030 4,57	5731 4,15	4622 3,72	3680 3,31	2883 2,93	2210 2,59			
<b>Q4-20.1Y</b>	2	30	Qo 14644 Pe 3,57	13347 3,51	12128 3,43	10983 3,34	8912 3,12	7115 2,87	5576 2,60	4275 2,30	3197 2,00	2322 1,70	1634 1,41	
		40	Qo 12582 Pe 4,19	11445 4,08	10377 3,95	9377 3,81	7567 3,50	6000 3,16	4657 2,81	3520 2,44	2571 2,08	1794 1,72	1170 1,38	
		50	Qo 10498 Pe 4,77	9526 4,60	8614 4,42	7762 4,23	6224 3,83	4895 3,41	3757 2,97	2792 2,54	1983 2,11			
		30	Qo 13132 Pe 1,68	10643 1,70	8520 1,68	7826 1,60	6125 1,51	4721 1,23	3595 1,18	2731 1,04				
		40	Qo 12193 Pe 2,31	9843 2,22	8266 2,08	7826 1,92	6125 1,74	5244 1,54	4363 1,33	3963 1,16	2930 1,04	2126 1,04		
<b>Q4-20.1E</b> <b>ECOinside</b>	3	50	Qo 8913 Pe 3,09	7079 2,82	5515 2,53	4203 2,24	3126 1,96	2264 1,68	1601 1,43					
		20	Qo 13132 Pe 1,68	10643 1,70	8520 1,68	7826 1,60	6125 1,51	4721 1,23	3595 1,18	2731 1,04				
		30	Qo 12193 Pe 2,31	9843 2,22	8266 2,08	7826 1,92	6125 1,74	5244 1,54	4363 1,33	3963 1,16	2930 1,04	2126 1,04		
		40	Qo 10752 Pe 2,79	8620 2,60	6790 2,38	5244 2,14	3963 1,90	3595 1,65	2731 1,41	2126 1,24				
		50	Qo 8913 Pe 3,09	7079 2,82	5515 2,53	4203 2,24	3126 1,96	2264 1,68	1601 1,43					

① Suction gas temperature 20°C without liquid sub-cooling.

The performance refers to European standard EN12900 and with operation at 50Hz; conversion factor at 60Hz = 1.2.

To calculate the performance in different operating points refer to the Frascold Selection Software.

All published data is subject to change.

This field requires additional cooling or limitation of the suction temperature.

## Performance R134a [50 Hz]

Compressor	Motor version	Cond. Temp. [°C]	Qo [W] = Cooling capacity Pe [kW] = Power consumption ①	Evaporating temperature [°C]											
				12,5	10	7,5	5	0	-5	-10	-15	-20	-25	-30	
Q4-21.1Y	2	30	Qo	19518	17709	16019	14444	11630	9236	7224	5552	4173			
		40	Pe	2,47	2,51	2,53	2,53	2,47	2,35	2,18	1,98	1,77			
		50	Qo	17212	15587	14068	12653	10125	7977	6174	4679	3450			
		30	Pe	3,25	3,20	3,14	3,07	2,87	2,64	2,38	2,11	1,84			
		40	Qo	14784	13355	12019	10775	8556	6675	5104	3809	2751			
		50	Pe	3,86	3,74	3,60	3,46	3,15	2,83	2,49	2,17	1,88			
Q5-21.1Y	1	50	Qo	14952	13498	12137	10871	8609	6692	5092	3774	2702			
		60	Pe	3,78	3,67	3,55	3,42	3,14	2,83	2,51	2,19	1,88			
		70	Qo	12641	11369	10179	9072	7100	5435	4054	2929	2028			
		30	Pe	4,26	4,09	3,92	3,74	3,36	2,97	2,58	2,21	1,86			
		40	Qo	10308	9229	8222	7284	5618	4219	3070	2146	1420			
		50	Pe	4,63	4,41	4,18	3,95	3,49	3,02	2,58	2,16	1,77			
Q4-24.1Y	2	30	Qo	21805	19829	17980	16255	13164	10524	8294	6428	4877			
		40	Pe	2,90	2,93	2,93	2,92	2,85	2,71	2,53	2,32	2,08			
		50	Qo	19092	17349	15718	14194	11462	9123	7144	5481	4090			
		30	Pe	3,68	3,64	3,58	3,50	3,31	3,06	2,79	2,48	2,18			
		40	Qo	16415	14903	13485	12161	9782	7744	6013	4555	3327			
		50	Pe	4,38	4,27	4,15	4,01	3,70	3,36	2,99	2,61	2,24			
Q4-24.1E <b>ECOinside</b>	3	20	Qo						15221	12329	9870	7800	6075	4651	3483
		30	Pe						2,30	2,24	2,15	2,02	1,86	1,69	1,50
		40	Qo						13503	10878	8656	6793	5245	3967	2916
		50	Pe						2,87	2,71	2,52	2,30	2,07	1,84	1,60
		30	Qo						11821	9459	7470	5810	4435	3301	2364
		40	Pe						3,35	3,09	2,82	2,52	2,23	1,93	1,65
Q5-24.1Y	1	20	Qo						10180	8078	6319	4859	3653	2659	1832
		30	Pe						3,76	3,40	3,04	2,68	2,32	1,97	1,64
		40	Qo												
		50	Pe												
		30	Qo	16817	15218	13722	12328	9835	7711	5920	4422	3171			
		40	Pe	4,33	4,20	4,05	3,90	3,58	3,23	2,87	2,51	2,16			
Q4-25.1Y	2	30	Qo	14181	12798	11503	10296	8137	6298	4748	3453	2374			
		40	Pe	4,90	4,71	4,51	4,30	3,87	3,43	3,00	2,58	2,18			
		50	Qo	11519	10359	9273	8259	6445	4902	3603	2521	1622			
		30	Pe	5,40	5,15	4,89	4,63	4,10	3,58	3,08	2,60	2,16			
		40	Qo	21889	19944	18119	16410	13323	10650	8360	6421	4800	3466	2385	
		50	Pe	2,92	2,93	2,92	2,90	2,81	2,67	2,48	2,26	2,01	1,76	1,50	
Q5-25.1Y	2	30	Qo	19181	17426	15783	14247	11480	9095	7059	5340	3906	2724	1763	
		40	Pe	3,76	3,69	3,61	3,52	3,29	3,03	2,73	2,42	2,09	1,77	1,45	
		50	Qo	16550	14984	13522	12159	9713	7615	5832	4333	3084	2055	1212	
		30	Pe	4,49	4,35	4,20	4,03	3,68	3,31	2,91	2,51	2,12	1,73	1,37	
		40	Qo	23014	21009	19139	17398	14281	11613	9350	7445	5854	4531	3432	
		50	Pe	2,85	2,91	2,94	2,95	2,91	2,80	2,65	2,46	2,26	2,04	1,84	
Q7-25.1Y	1	30	Qo	20508	18708	17030	15469	12676	10282	8244	6515	5051	3806	2735	
		40	Pe	3,78	3,76	3,72	3,66	3,49	3,28	3,02	2,75	2,47	2,19	1,94	
		50	Qo	17980	16385	14901	13521	11053	8936	7125	5574	4238	3073	2033	
		30	Pe	4,66	4,57	4,45	4,33	4,03	3,70	3,35	2,98	2,62	2,29	1,98	
		40	Qo	18412	16773	15246	13826	11285	9104	7240	5648	4283	3101	2057	
		50	Pe	4,79	4,70	4,60	4,48	4,21	3,89	3,54	3,18	2,81	2,45	2,11	
Q5-28.1Y	2	30	Qo	15888	14449	13111	11868	9646	7739	6103	4692	3463	2371	1372	
		40	Pe	5,56	5,41	5,25	5,07	4,67	4,25	3,81	3,36	2,91	2,49	2,09	
		50	Qo	13325	12089	10942	9879	7982	6355	4952	3730	2643	1647		
		30	Pe	6,28	6,06	5,83	5,59	5,08	4,55	4,01	3,48	2,96	2,47		
		40	Qo	25263	22987	20859	18878	15335	12319	9780	7660	5900			
		50	Pe	3,58	3,58	3,56	3,52	3,39	3,22	2,99	2,74	2,47			
Q5-28.1E <b>ECOinside</b>	3	30	Qo	22361	20332	18435	16667	13503	10807	8533	6631	5045			
		40	Pe	4,53	4,44	4,34	4,23	3,96	3,65	3,32	2,98	2,62			
		50	Qo	19394	17617	15954	14404	11629	9262	7265	5592	4195			
		30	Pe	5,37	5,20	5,02	4,83	4,43	4,00	3,57	3,13	2,71			
		40	Qo						17757	14379	11504	9089	7092	5469	4177
		50	Pe						2,69	2,62	2,50	2,35	2,16	1,97	1,76
Q7-28.1Y	1	30	Qo						15761	12699	10101	7924	6125	4660	3487
		40	Pe						3,35	3,16	2,94	2,69	2,42	2,15	1,88
		50	Qo						13789	11042	8720	6778	5174	3866	2811
		30	Pe						3,92	3,61	3,29	2,94	2,60	2,26	1,93
		40	Qo						11858	9424	7374	5666	4257	3104	2163
		50	Pe						4,38	3,97	3,55	3,12	2,70	2,30	1,92
<p>① Suction gas temperature 20°C without liquid sub-cooling.</p> <p>The performance refers to European standard EN12900 and with operation at 50Hz; conversion factor at 60Hz = 1.2.</p> <p>To calculate the performance in different operating points refer to the Frascold Selection Software.</p> <p>All published data is subject to change.</p> <p>This field requires additional cooling or limitation of the suction temperature.</p>															

# Semi-hermetic reciprocating compressors

## Performance R134a [50 Hz]

Compressor	Motor version	Cond. Temp. [°C]	Qo [W] = Cooling capacity Pe [kW] = Power consumption ①	Evaporating temperature [°C]											
				12,5	10	7,5	5	0	-5	-10	-15	-20	-25	-30	
<b>Q5-33.1Y</b> 	2	30	Qo 28870 Pe 4,38	26294 4,31	23894 4,24	21665 4,16	17691 3,97	14305 3,75	11429 3,48	8977 3,17	6860 2,81				
		40	Qo 25324 Pe 5,34	23075 5,20	20980 5,06	19032 4,91	15555 4,60	12583 4,27	10047 3,90	7870 3,49	5969 3,05				
		50	Qo 21931 Pe 6,29	19994 6,09	18188 5,88	16507 5,66	13500 5,23	10921 4,77	8707 4,29	6790 3,79	5095 3,25				
		20	Qo					20928	16951	13567	10720	8353	6411	4836	
		30	Pe					3,17	3,08	2,94	2,77	2,56	2,33	2,09	
		40	Qo					18570	14963	11906	9343	7217	5472	4052	
<b>Q5-33.1E</b> <b>ECOinside</b> 	3	30	Pe					3,95	3,72	3,45	3,16	2,85	2,53	2,22	
		40	Qo					16249	13008	10273	7989	6100	4548	3277	
		50	Pe					13983	11103	8687	6678	5020	3656	2531	
		20	Qo					5,17	4,68	4,18	3,68	3,19	2,72	2,28	
		30	Pe												
		40	Qo												
<b>Q7-33.1Y</b> 	1	50	Qo 22783 Pe 6,44	20740 6,29	18822 6,11	17029 5,91	13803 5,44	11029 4,92	8666 4,37	6666 3,82	4974 3,31				
		60	Qo 19398 Pe 7,25	17645 7,01	15999 6,75	14458 6,46	11682 5,87	9294 5,25	7258 4,64	5531 4,06	4067 3,55				
		70	Qo 15993 Pe 7,95	14538 7,63	13169 7,30	11887 6,96	9576 6,27	7585 5,59	5888 4,95	4448 4,38	3226 3,91				
		20	Qo					21457	17579	14233	11378	8971	6972	5338	
		30	Pe					3,58	3,49	3,34	3,14	2,90	2,64	2,37	
		40	Qo					19384	15834	12776	10170	7973	6144	4641	
<b>S5-33Y</b>	2	30	Pe					17177	13970	11216	8875	6903	5260	3904	
		40	Qo 27006 Pe 6,03	24658 5,88	22467 5,70	20426 5,51	16768 5,06	13627 4,59	10944 4,10	8664 3,65	6728 3,26	5081 2,95	3663 2,78		
		50	Qo 23724 Pe 7,06	21640 6,79	19697 6,52	17890 6,23	14651 5,63	11866 5,05	9477 4,50	7427 4,02	5660 3,64	4118 3,40	2744 3,32		
		20	Qo					20418	18562	16836	15233	12365	9901	7782	6029
		30	Pe					17059	15470	13996	12629	10187	8087	6271	4571
		40	Qo					7,99	7,64	7,28	6,90	6,13	5,34	4,55	3901
<b>Q5-36.1Y</b> <b>ECOinside</b> 	3	50	Pe					23743	21622	19646	17809	14521	11698	9283	7217
		60	Qo					20418	18562	16836	15233	12365	9901	7782	5442
		70	Pe					17059	15470	13996	12629	10187	8087	6271	3901
		20	Qo					23743	21622	19646	17809	14521	11698	9283	5335
		30	Pe					20418	18562	16836	15233	12365	9901	7782	4350
		40	Qo					17059	15470	13996	12629	10187	8087	6271	2919
<b>Q7-36.1Y</b>	1	50	Pe					7,99	7,64	7,28	6,90	6,13	5,34	4,55	1602
		60	Qo					17059	15470	13996	12629	10187	8087	6271	1,96
		70	Pe					14864	12016	9582	7520	5790	4348	3154	
		20	Qo					14864	12016	9582	7520	5790	4348	3154	
		30	Pe					6,02	5,43	4,83	4,23	3,66	3,12	2,62	
		40	Qo					14864	12016	9582	7520	5790	4348	3154	
<b>S8-42Y</b>	2	30	Pe					32386	29867	27470	25195	21001	17273	14000	11170
		40	Qo					6,44	6,03	5,69	5,40	4,99	4,72	4,53	4,08
		50	Pe					29174	26828	24598	22482	18586	15128	12097	9480
		20	Qo					7,13	6,66	6,25	5,91	5,37	4,98	4,66	3,97
		30	Pe					25985	23844	21812	19886	16350	13225	10498	8158
		40	Qo					8,02	7,50	7,05	6,66	6,03	5,54	5,12	4,24
<b>S8-42E</b> <b>ECOinside</b>	3	30	Pe					40831	37265	33932	30821	25232	20426	16333	12881
		40	Qo					5,60	5,72	5,77	5,76	5,59	5,24	4,77	4,22
		50	Pe					36822	33509	30416	27535	22373	17951	14198	11040
		20	Qo					32600	29548	26705	24063	19347	15326	11930	9086
		30	Pe					9,58	9,18	8,75	8,30	7,34	6,35	5,37	4,47
		40	Qo					29272	26614	24122	21790	17583	13950	10844	8222
<b>S12-42Y</b>	1	30	Pe					25144	22761	20533	18455	14722	11519	8801	6522
		40	Qo					8,09	7,78	7,44	7,10	6,38	5,64	4,88	4,12
		50	Pe					21034	18934	16978	15160	11916	9158	6841	4920
		20	Qo					9,02	8,61	8,19	7,76	6,88	5,99	5,11	4,23
		30	Pe					46921	42849	39048	35507	29159	23718	19096	15204
		40	Qo					6,72	6,72	6,69	6,60	6,33	5,93	5,45	4,92
<b>S10-52Y</b>	2	30	Pe					41766	38113	34704	31530	25842	20960	16796	13262
		40	Qo					8,59	8,42	8,22	7,98	7,43	6,79	6,12	5,43
		50	Pe					36593	33358	30344	27538	22511	18189	14485	11311
		20	Qo					10,24	9,91	9,55	9,17	8,37	7,53	6,69	5,89
		30	Pe												5,15
		40	Qo												4,01

① Suction gas temperature 20°C without liquid sub-cooling.

The performance refers to European standard EN12900 and with operation at 50Hz; conversion factor at 60Hz = 1.2.

To calculate the performance in different operating points refer to the Frascold Selection Software.

All published data is subject to change.

This field requires additional cooling or limitation of the suction temperature.

## Performance R134a [50 Hz]

Compressor	Motor version	Cond. Temp. [°C]	Qo [W] = Cooling capacity Pe [kW] = Power consumption <sup>①</sup>	Evaporating temperature [°C]										
				12,5	10	7,5	5	0	-5	-10	-15	-20	-25	-30
<b>S10-52E</b> <b>ECOinside</b>	3	20	Qo					35106	28055	21995	16899	12696	9288	6525
		30	Pe					4,82	4,74	4,55	4,24	3,83	3,37	2,87
		40	Qo					30841	24563	19205	14610	10849	7791	5316
		50	Pe					5,98	5,67	5,25	4,74	4,16	3,55	2,90
		20	Qo					26660	21119	16434	12373	8946	6207	4073
		30	Pe					6,94	6,42	5,79	5,09	4,34	3,57	2,79
<b>S15-52Y</b>	1	20	Qo					22345	17612	13541	10119	7170	4745	2825
		30	Pe					7,70	6,94	6,12	5,25	4,34	3,43	2,52
		40	Qo	36604	33327	30276	27439	22363	18008	14283	11099	8363	5984	3873
		50	Pe	8,65	8,49	8,30	8,08	7,57	6,97	6,30	5,59	4,84	4,09	3,34
		60	Qo	31463	28593	25926	23450	19024	15224	11960	9140	6675	4472	2442
		70	Pe	10,10	9,80	9,48	9,14	8,39	7,57	6,70	5,81	4,90	4,00	3,13
<b>S12-56E</b> <b>ECOinside</b>	3	20	Qo					37765	30053	23510	18020	13511	9874	6936
		30	Pe					5,19	5,10	4,87	4,52	4,06	3,53	2,95
		40	Qo					33093	26290	20529	15594	11572	8318	5694
		50	Pe					6,42	6,09	5,64	5,07	4,42	3,72	2,99
		20	Qo					28524	22586	17574	13224	9563	6655	4410
		30	Pe					7,46	6,90	6,21	5,43	4,58	3,74	2,90
<b>S15-56Y</b>	2	20	Qo					23888	18820	14483	10847	7711	5144	3127
		30	Pe					8,27	7,48	6,58	5,62	4,64	3,61	2,63
		40	Qo	51659	47184	43006	39111	32123	26126	21025	16723	13125	10136	7661
		50	Pe	8,59	8,54	8,43	8,28	7,87	7,32	6,68	5,97	5,24	4,52	3,83
		20	Qo	46068	42045	38290	34792	28517	23125	18520	14608	11292	8476	6066
		30	Pe	10,67	10,41	10,11	9,77	9,02	8,19	7,31	6,41	5,54	4,72	3,99
<b>S20-56Y</b>	1	20	Qo	40436	36865	33536	30436	24878	20095	15992	12473	9442	6804	4464
		30	Pe	12,45	11,99	11,50	11,00	9,94	8,86	7,77	6,71	5,73	4,84	4,10
		40	Qo	40994	37342	33938	30772	25102	20233	16065	12500	9440	6786	4439
		50	Pe	10,68	10,40	10,08	9,74	8,98	8,14	7,27	6,39	5,52	4,69	3,94
		20	Qo	35304	32103	29126	26359	21409	17154	13495	10334	7572	5110	2851
		30	Pe	12,15	11,71	11,25	10,77	9,76	8,72	7,66	6,63	5,64	4,73	3,93
<b>V15-59Y</b>	2	20	Qo	54947	50179	45727	41575	34128	27736	22297	17710	13873	10684	8041
		30	Pe	8,57	8,50	8,39	8,23	7,79	7,23	6,57	5,85	5,11	4,36	3,65
		40	Qo	48975	44687	40684	36955	30265	24516	19605	15431	11893	8889	6316
		50	Pe	10,59	10,31	10,00	9,65	8,89	8,04	7,14	6,23	5,34	4,50	3,75
		20	Qo	42957	39149	35599	32294	26366	21263	16885	13129	9894	7078	4580
		30	Pe	12,28	11,81	11,32	10,81	9,73	8,63	7,53	6,46	5,46	4,55	3,78
<b>V15-59E</b> <b>ECOinside</b>	3	20	Qo					41098	32894	25941	20178	15386	11420	8192
		30	Pe					5,63	5,54	5,32	4,99	4,58	4,09	3,57
		40	Qo					37157	29455	22935	17543	13160	9546	6576
		50	Pe					7,06	6,65	6,14	5,56	4,91	4,24	3,55
		20	Qo					32648	25533	19691	14860	10922	7688	5029
		30	Pe					8,28	7,57	6,79	5,97	5,12	4,27	3,44
<b>V20-59Y</b>	1	20	Qo	43798	39839	36150	32717	26565	21278	16752	12880	9556	6675	4132
		30	Pe	10,67	10,32	9,95	9,55	8,70	7,81	6,89	5,97	5,08	4,25	3,51
		40	Qo	37564	34090	30857	27852	22473	17847	13868	10431	7431	4761	2316
		50	Pe	11,97	11,48	10,97	10,44	9,36	8,27	7,18	6,14	5,16	4,27	3,50
		20	Qo	31268	28285	25514	22943	18348	14394	10975	7985	5320	2872	
		30	Pe	13,07	12,44	11,81	11,16	9,88	8,61	7,38	6,23	5,18	4,25	
<b>V15-71Y</b>	2	20	Qo	64862	59249	54008	49123	40362	32844	26447	21051	16533	12773	9648
		30	Pe	9,96	9,90	9,78	9,60	9,10	8,45	7,68	6,85	5,99	5,16	4,39
		40	Qo	57731	52698	48002	43627	35782	29041	23283	18386	14228	10690	7648
		50	Pe	12,46	12,14	11,78	11,38	10,48	9,47	8,41	7,35	6,31	5,35	4,52
		20	Qo	50581	46127	41975	38109	31179	25213	20091	15692	11894	8575	5614
		30	Pe	14,57	14,03	13,45	12,84	11,56	10,25	8,94	7,67	6,49	5,45	4,59
<b>V15-71E</b> <b>ECOinside</b>	3	20	Qo					47145	38124	30278	23627	18042	13399	9605
		30	Pe					6,50	6,43	6,19	5,81	5,32	4,75	4,12
		40	Qo					42762	33989	26562	20347	15285	11083	7651
		50	Pe					8,19	7,73	7,14	6,45	5,70	4,90	4,10
		20	Qo					37665	29532	22821	17284	12743	9022	6016
		30	Pe					9,62	8,81	7,91	6,96	5,98	5,00	4,05
<b>V15-71E</b> <b>ECOinside</b>	3	20	Qo					32593	25374	19429	14543	10575	7355	4747
		30	Pe					10,89	9,76	8,59	7,41	6,25	5,13	4,08

① Suction gas temperature 20°C without liquid sub-cooling.

The performance refers to European standard EN12900 and with operation at 50Hz; conversion factor at 60Hz = 1.2.

To calculate the performance in different operating points refer to the Frascold Selection Software.

All published data is subject to change.

This field requires additional cooling or limitation of the suction temperature.

## Performance R134a [50 Hz]

Compressor	Motor version	Cond. Temp. [°C]	Qo [W] = Cooling capacity Pe [kW] = Power consumption ①	Evaporating temperature [°C]										
				12,5	10	7,5	5	0	-5	-10	-15	-20	-25	-30
<b>V25-71Y</b>	1	50	Qo 50416 Pe 14,37	45814 13,89	41501 13,38	37467 12,85	30192 11,72	23908 10,52	18532 9,28	13983 8,03	10177 6,80	7033 5,61	4469 4,49	
		60	Qo 42548 Pe 15,87	38555 15,21	34822 14,52	31340 13,82	25084 12,39	19704 10,92	15120 9,45	11247 8,01	8005 6,61	5310 5,29	3081 4,07	
		70	Qo 35040 Pe 17,11	31650 16,28	28492 15,44	25556 14,59	20306 12,88	15820 11,17	12014 9,50	8807 7,88	6116 6,36	3858 4,94		
		30	Qo 76087 Pe 12,04	69392 11,87	63112 11,66	57234 11,41	46623 10,77	37447 10,00	29591 9,12	22943 8,17	17389 7,18	12815 6,17	9108 5,18	
		40	Qo 66637 Pe 14,41	60649 14,03	55044 13,62	49808 13,17	40387 12,17	32273 11,08	25352 9,93	19512 8,73	14638 7,53	10617 6,36	7336 5,24	
		50	Qo 57687 Pe 16,44	52395 15,87	47454 15,27	42851 14,65	34599 13,34	27527 11,97	21521 10,57	16468 9,17	12254 7,80	8766 6,50	5890 5,29	
<b>V20-84Y</b>	2	20	Qo					54741	44711	35849	27661	21750	15157	10970
		30	Pe					7,61	7,54	7,26	6,66	6,19	5,08	4,37
		40	Qo					49916	40152	31662	23951	18472	12532	8846
		50	Pe					9,63	9,08	8,38	7,37	6,56	5,13	4,20
		30	Qo					44318	35094	27362	20379	15354	10313	7192
		40	Pe					11,36	10,37	9,26	7,87	6,74	5,16	4,25
<b>V20-84E</b>	3	50	Qo					38677	30351	23347	17079	12538	8470	5850
		20	Pe					12,87	11,47	9,97	8,23	6,80	5,23	4,31
		30	Qo					57001	51914	47145	42682	34627	27655	21669
		40	Pe					16,15	15,66	15,13	14,58	13,40	12,14	10,83
		50	Qo					48767	44288	40097	36183	29137	23057	17846
		60	Pe					17,93	17,25	16,54	15,82	14,31	12,76	11,19
<b>V30-84Y</b>	1	70	Qo					40614	36745	33136	29774	23744	18562	14132
		30	Pe					19,39	18,53	17,66	16,77	14,96	13,13	9,52
		40	Qo					81620	75169	69026	63184	52389	42746	34216
		50	Pe					14,00	13,85	13,62	13,32	12,55	11,58	10,48
		30	Qo					73511	67539	61861	56470	46535	37695	29913
		40	Pe					17,25	16,77	16,23	15,64	14,34	12,93	11,45
<b>V25-93Y</b>	2	50	Qo					65085	59638	54469	49575	40590	32645	25703
		30	Pe					19,98	19,19	18,37	17,51	15,75	13,95	12,16
		40	Qo					86780	79531	72676	66208	54392	44004	34970
		50	Pe					13,81	13,83	13,75	13,58	13,02	12,20	11,19
		30	Qo					76401	69884	63735	57943	47392	38155	30157
		40	Pe					17,65	17,30	16,88	16,39	15,23	13,90	12,45
<b>V32-93Y</b>	1	50	Qo					66790	60990	55529	50396	41078	32960	25965
		30	Pe					20,89	20,30	19,55	18,75	17,05	15,24	13,40
		40	Qo					65978	59742	53894	48422	38556	30044	22786
		50	Pe					17,93	17,37	16,76	16,11	14,70	13,19	11,62
		30	Qo					55632	50138	45001	40207	31600	24220	17966
		40	Pe					19,63	18,85	18,03	17,17	15,40	13,56	11,70
<b>V25-103Y</b>	2	50	Qo					45538	40793	36373	32264	24933	18700	13464
		30	Pe					86780	79531	72676	66208	54392	44004	34970
		40	Qo					13,81	13,83	13,75	13,58	13,02	12,20	11,19
		50	Pe					76401	69884	63735	57943	47392	38155	30157
		30	Qo					66790	60990	55529	50396	41078	32960	25965
		40	Pe					20,99	20,30	19,55	18,75	17,05	15,24	13,40
<b>V25-103E</b>	3	20	Qo					67295	55141	44334	35100	27259	20655	15198
		30	Pe					10,05	9,76	9,26	8,60	7,82	6,95	6,03
		40	Qo					60506	48923	38962	30481	23462	17556	12618
		50	Pe					12,17	11,42	10,52	9,50	8,39	7,24	6,09
		30	Qo					52839	42326	33526	26013	19742	14426	9969
		40	Pe					13,97	12,79	11,51	10,15	8,76	7,36	6,00
<b>V35-103Y</b>	1	50	Qo					45372	36200	28444	21811	16218	11446	7426
		30	Pe					15,48	13,92	12,29	10,62	8,97	7,35	5,82
		40	Qo					71722	65372	59448	53930	44030	35508	28201
		50	Pe					20,12	19,45	18,73	17,97	16,34	14,63	12,87
		30	Qo					61592	56054	50894	46092	37478	30051	23646
		40	Pe					22,89	21,92	20,91	19,88	17,77	15,65	13,56
<b>Z25-106Y</b>	2	50	Qo					51381	46661	42270	38188	30873	24550	19057
		30	Pe					25,30	24,04	22,77	21,49	18,94	16,45	14,07
		40	Qo					97622	88968	80855	73266	59583	47778	37707
		50	Pe					16,05	15,81	15,51	15,15	14,29	13,26	12,10
		30	Qo					83812	76231	69144	62532	50661	40475	31830
		40	Pe					19,00	18,48	17,91	17,29	15,96	14,52	13,01

① Suction gas temperature 20°C without liquid sub-cooling.

The performance refers to European standard EN12900 and with operation at 50Hz; conversion factor at 60Hz = 1.2.

To calculate the performance in different operating points refer to the Frascold Selection Software.

All published data is subject to change.

This field requires additional cooling or limitation of the suction temperature.

## Performance R134a [50 Hz]

Compressor	Motor version	Cond. Temp. [°C]	Qo [W] = Cooling capacity Pe [kW] = Power consumption ①	Evaporating temperature [°C]										
				12,5	10	7,5	5	0	-5	-10	-15	-20	-25	-30
Z25-106E <b>ECOinside</b>	3	20	Qo					70873	57495	46141	36549	28458	21606	15732
		30	Pe					10,10	9,84	9,48	9,00	8,37	7,57	6,56
		40	Qo					64336	51850	41308	32447	25005	18722	13334
		50	Pe					12,56	11,73	10,88	9,97	8,98	7,88	6,65
		Qo						56301	44912	35385	27458	20869	15357	10660
		Pe						14,56	13,25	11,98	10,72	9,45	8,14	6,76
		Qo						47400	37311	29003	22213	16680	12143	8339
		Pe						16,19	14,47	12,87	11,34	9,87	8,43	6,99
Z35-106Y	1	50	Qo	75477	68770	62518	56700	46272	37306	29621	23039	17379	12460	8103
		60	Pe	18,43	17,83	17,18	16,50	15,02	13,45	11,84	10,24	8,70	7,27	6,01
		70	Qo	64877	59015	53559	48485	39399	31575	24835	18997	13882	9310	5101
		Pe	20,93	20,06	19,15	18,22	16,31	14,37	12,46	10,62	8,92	7,39	6,09	
		Qo	54178	49167	44513	40193	32462	25796	20013	14934	10379	6168		
Z30-126Y 	2	50	Pe	23,10	21,97	20,82	19,67	17,36	15,09	12,92	10,88	9,05	7,45	
		30	Qo	115255	105213	95794	86975	71054	57277	45473	35469	27093	20172	14535
		40	Pe	17,31	17,16	16,94	16,65	15,87	14,87	13,69	12,38	10,99	9,57	8,14
		50	Qo	101354	92322	83866	75964	61739	49475	38999	30139	22723	16579	11535
		Pe	21,12	20,64	20,09	19,48	18,12	16,60	14,95	13,24	11,50	9,78	8,12	
Z30-126E <b>ECOinside</b>	3	50	Qo	87864	79835	72335	65345	52803	42039	32878	25150	18682	13302	8837
		20	Pe	24,40	23,59	22,74	21,85	19,95	17,95	15,89	13,81	11,76	9,79	7,95
		30	Qo					85431	68684	54601	42863	33151	25146	18531
		40	Pe					12,35	11,96	11,34	10,55	9,62	8,60	7,54
		50	Qo					74905	59956	47438	37031	28417	21277	15293
Z40-126Y	1	40	Pe					15,00	14,06	12,94	11,70	10,38	9,03	7,69
		50	Qo					64690	51506	40520	31411	23862	17554	12168
		20	Pe					17,17	15,72	14,15	12,51	10,86	9,22	7,66
		30	Qo					54932	43481	33993	26150	19633	14123	9301
		50	Pe					18,89	16,98	15,02	13,04	11,10	9,23	7,50
W40-142Y 	2	50	Qo	89585	81551	74065	67100	54624	43901	34710	26830	20041	14122	8852
		60	Pe	22,81	22,10	21,34	20,51	18,71	16,77	14,74	12,69	10,67	8,75	6,99
		70	Qo	76694	69683	63160	57097	46242	36897	28841	21854	15714	10201	5094
		50	Pe	25,88	24,84	23,74	22,61	20,25	17,82	15,39	13,00	10,72	8,61	6,74
		60	Qo	63760	57776	52219	47062	37835	29875	22962	16874	11391	6291	
Z40-154Y 	2	70	Pe	28,50	27,12	25,72	24,30	21,42	18,55	15,74	13,06	10,56	8,30	
		50	Qo	101545	92241	83527	75384	60730	48116	37379	28357	20887	14806	9953
		60	Pe	27,82	27,19	26,49	25,72	24,00	22,09	20,07	18,00	15,94	13,96	12,12
		70	Qo	86613	78420	70768	63638	50862	39929	30677	22943	16564	11377	7221
		50	Pe	31,14	30,15	29,09	27,98	25,65	23,21	20,73	18,27	15,90	13,68	11,69
Z40-154E <b>ECOinside</b>	3	70	Qo	71910	64838	58260	52153	41277	32046	24300	17874	12608	8337	
		50	Pe	33,89	32,55	31,16	29,75	26,85	23,92	21,03	18,24	15,61	13,21	
		30	Qo	139527	127216	115688	104916	85532	68845	54634	42682	32769	24675	18182
		40	Pe	19,31	19,22	19,02	18,74	17,93	16,83	15,53	14,06	12,51	10,92	9,37
		50	Qo	122877	111831	101510	91885	74617	59807	47236	36686	27937	20770	14966
Z50-154Y 	1	50	Pe	24,39	23,84	23,21	22,50	20,91	19,13	17,22	15,23	13,24	11,31	9,48
		60	Qo	106046	96283	87184	78722	63602	50702	39804	30688	23136	16928	11846
		70	Pe	28,70	27,72	26,68	25,59	23,28	20,88	18,42	15,98	13,62	11,39	9,37
		20	Qo					98035	79207	63217	49787	38638	29492	22070
		30	Pe					14,30	14,00	13,35	12,43	11,34	10,15	8,96
Z40-154E <b>ECOinside</b>	3	40	Qo					87766	70603	56077	43908	33819	25530	18762
		50	Pe					17,71	16,70	15,41	13,94	12,36	10,78	9,26
		60	Qo					76968	61546	48559	37728	28774	21418	15382
		70	Pe					20,56	18,91	17,06	15,10	13,12	11,21	9,44
		50	Qo					65835	52231	40860	31442	23700	17354	12125
Z50-154Y	1	50	Pe					22,80	20,58	18,24	15,86	13,54	11,37	9,42
		60	Qo	108377	98551	89353	80759	65299	51988	40647	31095	23151	16634	11364
		70	Pe	28,51	27,59	26,60	25,55	23,31	20,94	18,48	16,02	13,60	11,30	9,18
		50	Qo	91619	83068	75089	67658	54351	42966	33322	25239	18537	13034	
		60	Pe	32,01	30,71	29,36	27,97	25,10	22,18	19,26	16,41	13,69	11,16	
Z40-154E <b>ECOinside</b>	3	70	Qo	74981	67734	61000	54758	43657	34251	26359	19799			
		50	Pe	34,78	33,13	31,45	29,75	26,33	22,93	19,61	16,44			
		60	Qo											
		70	Pe											

① Suction gas temperature 20°C without liquid sub-cooling.

The performance refers to European standard EN12900 and with operation at 50Hz; conversion factor at 60Hz = 1.2.

To calculate the performance in different operating points refer to the Frascold Selection Software.

All published data is subject to change.

 This field requires additional cooling or limitation of the suction temperature.

## Performance R134a [50 Hz]

Compressor	Motor version	Cond. Temp. [°C]	Qo [W] = Cooling capacity Pe [kW] = Power consumption <sup>①</sup>	Evaporating temperature [°C]										
				12,5	10	7,5	5	0	-5	-10	-15	-20	-25	-30
W40-168Y	2	30	Qo 154175 140760 128243 116585 95697 77789 62556 49691 38887 29840 22243 Pe 21,56 21,54 21,39 21,09 20,17 18,85 17,26 15,47 13,58 11,70 9,91											
		40	Qo 137734 125619 114326 103817 85000 68860 55093 43392 33451 24964 17624 Pe 27,40 26,83 26,15 25,37 23,55 21,46 19,21 16,89 14,59 12,41 10,45											
		50	Qo 121093 110285 100224 90872 74141 59786 47501 36980 27917 20005 12940 Pe 32,44 31,36 30,20 28,96 26,33 23,55 20,73 17,95 15,31 12,92 10,86											
		50	Qo 117573 107089 97270 88091 71550 57257 45006 34590 25800 18431 12274 Pe 30,07 29,26 28,37 27,41 25,28 22,96 20,50 17,97 15,42 12,92 10,53											
		60	Qo 99853 90648 82046 74021 59599 47175 36542 27491 19817 13312 Pe 33,78 32,60 31,35 30,04 27,27 24,37 21,38 18,38 15,42 12,58											
W50-168Y	1	70	Qo 82255 74332 66948 60079 47781 37229 28216 20536 Pe 36,70 35,15 33,56 31,92 28,54 25,08 21,60 18,16											
		30	Qo 172708 157507 143247 129895 105783 84904 66990 51775 38992 28376 19658 Pe 23,76 23,96 24,02 23,95 23,44 22,50 21,20 19,61 17,81 15,86 13,84											
		40	Qo 151891 138198 125376 113391 91800 73158 57200 43656 32262 22751 14855 Pe 29,50 29,17 28,73 28,17 26,74 24,97 22,92 20,67 18,28 15,82 13,38											
		50	Qo 131781 119586 108192 97563 78473 62049 48024 36132 26106 17680 10585 Pe 34,46 33,64 32,72 31,70 29,43 26,88 24,15 21,28 18,37 15,47 12,66											
		50	Qo 131008 118924 107604 97017 77929 61426 47272 35234 25078 16568 9470 Pe 33,65 32,64 31,53 30,33 27,73 24,88 21,87 18,75 15,61 12,50 9,50											
W60-187Y	2	60	Qo 110716 100209 90389 81226 64757 50566 38419 28081 19319 11898 Pe 37,71 36,23 34,68 33,07 29,68 26,13 22,50 18,84 15,23 11,74											
		70	Qo 91435 82493 74162 66411 52537 40634 30470 21810 Pe 41,15 39,24 37,29 35,29 31,18 27,00 22,81 18,68											
		30	Qo 190762 174146 158579 144024 117803 95187 75885 59602 46044 34919 25932 Pe 26,17 26,07 25,82 25,45 24,37 22,89 21,11 19,13 17,02 14,87 12,77											
		40	Qo 170121 154962 140787 127560 103801 83392 66039 51449 39327 29381 21316 Pe 32,64 31,99 31,23 30,37 28,37 26,07 23,58 20,97 18,34 15,77 13,34											
		50	Qo 149259 135582 122826 110953 89709 71559 56209 43364 32731 24017 16927 Pe 38,24 37,09 35,84 34,51 31,66 28,61 25,46 22,30 19,20 16,26 13,58											
W60-206Y	1	50	Qo 147748 134204 121544 109735 88540 70358 54928 41989 31280 22539 15506 Pe 38,07 36,98 35,78 34,49 31,68 28,65 25,49 22,30 19,17 16,21 13,51											
		60	Qo 125142 113426 102508 92355 74214 58742 45677 34758 25725 18315 Pe 42,44 40,88 39,24 37,54 33,98 30,30 26,60 22,98 19,53 16,35											
		70	Qo 102877 93005 83844 75362 60305 47572 36902 28034 Pe 45,92 43,94 41,91 39,84 35,63 31,42 27,29 23,34											
		30	Qo 208464 190058 172817 156701 127683 102678 81363 63414 48507 36318 26522 Pe 28,01 28,07 27,97 27,70 26,76 25,34 23,56 21,51 19,29 17,02 14,78											
		40	Qo 185643 168871 153192 138567 112315 89791 70672 54632 41348 30496 21752 Pe 35,18 34,60 33,89 33,04 31,03 28,66 26,04 23,27 20,46 17,70 15,11											
W70-228Y	2	50	Qo 162898 147780 133685 120572 97130 77129 60247 46159 34541 25070 17420 Pe 41,43 40,25 38,96 37,58 34,57 31,33 27,95 24,55 21,22 18,07 15,19											
		60	Qo 159842 144893 130936 117936 94659 74772 57986 44011 32558 23336 16057 Pe 40,16 38,99 37,71 36,33 33,31 30,06 26,68 23,29 19,99 16,91 14,14											
		70	Qo 135580 122516 110360 99076 78981 61942 47668 35870 26259 18544 Pe 45,65 43,87 42,03 40,08 36,08 31,98 27,90 23,95 20,24 16,87											
		30	Qo 223232 203865 185702 168702 138016 111461 88694 69371 53149 39683 28629 Pe 30,56 30,47 30,22 29,83 28,63 26,96 24,91 22,57 20,03 17,38 14,69											
		40	Qo 195689 178368 162156 147009 119741 96219 76099 59038 44691 32716 22767 Pe 37,72 37,03 36,20 35,25 33,00 30,39 27,51 24,42 21,24 18,04 14,91											
W75-228Y	1	50	Qo 169274 153969 139676 126353 102441 81891 64357 49497 36965 26419 17515 Pe 43,83 42,58 41,22 39,75 36,57 33,11 29,48 25,75 22,02 18,37 14,89											
		60	Qo 167659 152092 137551 123999 99713 78934 61362 46697 34639 24889 17146 Pe 44,81 43,66 42,38 41,00 37,96 34,66 31,22 27,73 24,33 21,12 18,21											
		70	Qo 142149 128553 115896 104141 83182 65377 50427 38030 27889 19702 Pe 49,93 48,19 46,35 44,44 40,45 36,34 32,21 28,18 24,37 20,89											
		30	Qo 117438 105816 95045 85087 67459 52632 40307 30183 Pe 54,11 51,82 49,48 47,10 42,27 37,45 32,75 28,29											
		40	Qo 117438 105816 95045 85087 67459 52632 40307 30183 Pe 54,11 51,82 49,48 47,10 42,27 37,45 32,75 28,29											
W80-240Y	1	50	Qo 167659 152092 137551 123999 99713 78934 61362 46697 34639 24889 17146 Pe 44,81 43,66 42,38 41,00 37,96 34,66 31,22 27,73 24,33 21,12 18,21											
		60	Qo 142149 128553 115896 104141 83182 65377 50427 38030 27889 19702 Pe 49,93 48,19 46,35 44,44 40,45 36,34 32,21 28,18 24,37 20,89											
		70	Qo 117438 105816 95045 85087 67459 52632 40307 30183 Pe 54,11 51,82 49,48 47,10 42,27 37,45 32,75 28,29											

① Suction gas temperature 20°C without liquid sub-cooling.

The performance refers to European standard EN12900 and with operation at 50Hz; conversion factor at 60Hz = 1.2.

To calculate the performance in different operating points refer to the Frascold Selection Software.

All published data is subject to change.

This field requires additional cooling or limitation of the suction temperature.

# Semi-hermetic reciprocating compressors

## Performance R404A - R507A [50 Hz]

Compressor	Motor version	Cond. Temp. [°C]	Qo [W] = Cooling capacity Pe [kW] = Power consumption ①	Evaporating temperature [°C]									
				5	0	-5	-10	-15	-20	-25	-30	-35	-40
A05-4Y	1	30	Qo 4293 3577 2945 2391 1910 1495 1141 842 591 384	Pe 0,80 0,78 0,76 0,74 0,71 0,67 0,62 0,56 0,49 0,40									
		40	Qo 3509 2912 2388 1930 1533 1190 896 645 432 250	Pe 0,95 0,92 0,88 0,83 0,78 0,72 0,64 0,56 0,46 0,35									
		50	Qo 2784 2301 1878 1510 1191 914 675 467 285 122	Pe 1,10 1,05 0,98 0,92 0,84 0,75 0,66 0,55 0,42 0,28									
	2	30	Qo 3754 3026 2402 1872 1429 1065 773 544 369	Pe 0,99 0,96 0,91 0,84 0,76 0,68 0,59 0,51 0,45									
		40	Qo 3054 2443 1922 1484 1121 824 586 398 254	Pe 1,14 1,07 0,98 0,88 0,78 0,68 0,58 0,50 0,43									
		50	Qo 2396 1899 1481 1132 846 615 429 282	Pe 1,27 1,16 1,04 0,92 0,80 0,68 0,58 0,50									
A07-5Y	1	30	Qo 5648 4658 3794 3048 2410 1871 1424 1059 766 538 366	Pe 0,97 0,99 0,98 0,95 0,90 0,84 0,76 0,68 0,60 0,52 0,45									
		40	Qo 4663 3818 3086 2459 1927 1483 1116 818 581 395 251	Pe 1,22 1,19 1,13 1,06 0,98 0,88 0,79 0,69 0,59 0,51 0,44									
		50	Qo 2421 1911 1484 1131 843 611 427 281	Pe 1,26 1,15 1,04 0,92 0,80 0,69 0,59 0,51									
	2	30	Qo 4043 3285 2635 2081 1613 1222 895 622 393	Pe 1,05 1,01 0,95 0,89 0,82 0,74 0,65 0,55 0,44									
		40	Qo 3347 2702 2152 1685 1291 959 678 439 229	Pe 1,22 1,15 1,06 0,97 0,87 0,76 0,64 0,51 0,37									
		50	Qo 2700 2162 1705 1317 989 710 468 254	Pe 1,38 1,27 1,15 1,03 0,89 0,75 0,60 0,44									
A07-6Y	1	30	Qo 6217 5190 4277 3472 2770 2165 1652 1226 880 610 410	Pe 1,08 1,10 1,09 1,05 1,00 0,92 0,84 0,75 0,66 0,57 0,49									
		40	Qo 5156 4285 3514 2836 2247 1742 1313 957 668 439 267	Pe 1,34 1,31 1,26 1,18 1,09 0,98 0,87 0,76 0,66 0,56 0,48									
		50	Qo 4106 3392 2763 2213 1738 1331 988 702 469 283	Pe 1,57 1,49 1,40 1,28 1,16 1,03 0,90 0,77 0,65 0,55									
	2	30	Qo 5400 4429 3587 2862 2244 1721 1280 912 604	Pe 1,52 1,44 1,35 1,25 1,14 1,01 0,89 0,75 0,61									
		40	Qo 4488 3659 2943 2329 1804 1358 979 656 377	Pe 1,73 1,61 1,48 1,33 1,18 1,02 0,86 0,69 0,52									
		50	Qo 3611 2919 2324 1815 1379 1005 683 400	Pe 1,91 1,75 1,57 1,38 1,19 1,00 0,79 0,59									
A1-6Y	1	30	Qo 8113 6743 5540 4493 3591 2823 2177 1642 1208 862	Pe 1,48 1,45 1,40 1,33 1,25 1,15 1,05 0,94 0,83 0,72									
		40	Qo 6816 5638 4611 3723 2963 2320 1782 1339 980 693	Pe 1,77 1,69 1,59 1,48 1,36 1,23 1,10 0,97 0,84 0,73									
		50	Qo 5587 4592 3730 2991 2363 1836 1397 1036 742 504	Pe 2,01 1,89 1,75 1,60 1,45 1,29 1,14 0,99 0,85 0,73									
	2	30	Qo 8418 7014 5794 4742 3841 3075 2428 1884 1425 1037 702	Pe 1,69 1,67 1,62 1,55 1,46 1,34 1,22 1,09 0,95 0,80 0,66									
		40	Qo 7171 5937 4872 3960 3185 2529 1977 1512 1118 779 478	Pe 2,02 1,95 1,84 1,72 1,58 1,43 1,28 1,11 0,95 0,79 0,63									
		50	Qo 5957 4893 3982 3208 2556 2008 1549 1162 830 539	Pe 2,32 2,18 2,03 1,87 1,69 1,51 1,32 1,13 0,95 0,77									
A1.5-7Y	1	30	Qo 9835 8180 6734 5483 4412 3505 2747 2123 1618 1217 904	Pe 2,08 2,02 1,93 1,83 1,70 1,57 1,43 1,29 1,15 1,02 0,91									
		40	Qo 8401 6953 5697 4617 3699 2927 2286 1762 1338 1000 733	Pe 2,53 2,39 2,24 2,07 1,89 1,71 1,54 1,37 1,21 1,07 0,95									
		50	Qo 6908 5674 4614 3713 2955 2326 1810 1392 1057 790	Pe 2,90 2,70 2,48 2,26 2,04 1,82 1,61 1,42 1,25 1,10									
	2	30	Qo 7300 6022 4902 3928 3089 2373 1767 1261 842	Pe 2,15 2,07 1,96 1,81 1,63 1,44 1,25 1,06 0,88									
		40	Qo 6145 5049 4093 3265 2553 1946 1431 997 633	Pe 2,46 2,31 2,13 1,93 1,71 1,49 1,27 1,07 0,88									
		50	Qo 5048 4132 3338 2654 2068 1567 1142 779	Pe 2,75 2,53 2,30 2,05 1,80 1,55 1,32 1,11									
B1.5-10.1Y	2	30	Qo 10763 9009 7463 6111 4939 3933 3081 2367 1778 1301	Pe 2,31 2,29 2,23 2,13 2,01 1,86 1,70 1,52 1,35 1,19									
		40	Qo 9107 7601 6280 5131 4140 3292 2575 1974 1476 1066	Pe 2,76 2,66 2,53 2,37 2,19 1,99 1,79 1,59 1,41 1,23									
		50	Qo 7508 6248 5151 4202 3389 2698 2113 1623 1213	Pe 3,17 3,00 2,80 2,58 2,35 2,11 1,88 1,67 1,47									
	1	30	Qo 12862 10744 8884 7265 5868 4672 3659 2809 2104 1525	Pe 2,48 2,46 2,40 2,29 2,16 1,99 1,82 1,63 1,44 1,26									
		40	Qo 10864 9050 7465 6089 4904 3891 3029 2301 1686 1166	Pe 3,01 2,90 2,76 2,58 2,38 2,16 1,94 1,71 1,50 1,31									
		50	Qo 8845 7337 6027 4896 3924 3094 2386 1779 1257	Pe 3,47 3,28 3,06 2,81 2,55 2,29 2,03 1,78 1,55									
D2-11.1Y	1	30	Qo 10763 9009 7463 6111 4939 3933 3081 2367 1778 1301	Pe 2,31 2,29 2,23 2,13 2,01 1,86 1,70 1,52 1,35 1,19									
		40	Qo 9107 7601 6280 5131 4140 3292 2575 1974 1476 1066	Pe 2,76 2,66 2,53 2,37 2,19 1,99 1,79 1,59 1,41 1,23									
		50	Qo 7508 6248 5151 4202 3389 2698 2113 1623 1213	Pe 3,17 3,00 2,80 2,58 2,35 2,11 1,88 1,67 1,47									

① Suction gas temperature 20°C without liquid sub-cooling.

The performance refers to European standard EN12900 and with operation at 50Hz; conversion factor at 60Hz = 1.2.

To calculate the performance in different operating points refer to the Frascold Selection Software.

All published data is subject to change.

This field requires additional cooling or limitation of the suction temperature.

## Performance R404A - R507A [50 Hz]

Compressor	Motor version	Cond. Temp. [°C]	Qo [W] = Cooling capacity Pe [kW] = Power consumption ①	Evaporating temperature [°C]										
				5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45
<b>D2-13.1Y</b> 	2	30	Qo			10326	8506	6919	5548	4378	3391	2571	1901	1366
		30	Pe		2,87	2,74	2,57	2,38	2,16	1,93	1,70	1,46	1,24	
		40	Qo		8762	7192	5831	4661	3668	2833	2141	1574	1118	
		40	Pe		3,28	3,08	2,85	2,60	2,33	2,06	1,80	1,54	1,30	
		50	Qo		7255	5933	4795	3824	3005	2320	1753	1288		
		50	Pe		3,74	3,47	3,17	2,87	2,55	2,24	1,95	1,66		
<b>D3-13.1Y</b> 	1	30	Qo	15124	12636	10454	8552	6906	5491	4282	3255			
		30	Pe	2,88	2,86	2,79	2,68	2,52	2,33	2,12	1,90			
		40	Qo	12705	10598	8756	7152	5764	4564	3530	2636			
		40	Pe	3,51	3,38	3,21	3,00	2,76	2,51	2,25	1,98			
		50	Qo	10390	8660	7152	5843	4706	3718	2854	2088			
		50	Pe	4,11	3,88	3,61	3,33	3,02	2,72	2,42	2,12			
<b>D2-15.1Y</b> 	2	30	Qo		11535	9512	7747	6221	4915	3811	2889	2130	1517	
		30	Pe		3,38	3,22	3,02	2,79	2,54	2,27	1,99	1,70	1,41	
		40	Qo		9672	7961	6475	5196	4103	3179	2405	1761	1229	
		40	Pe		3,86	3,62	3,36	3,07	2,76	2,43	2,10	1,77	1,44	
		50	Qo		7945	6533	5313	4266	3373	2615	1974	1431		
		50	Pe		4,32	4,01	3,68	3,33	2,96	2,59	2,21	1,83		
<b>D3-15.1Y</b> 	1	30	Qo	17155	14417	12010	9911	8096	6543	5227	4124			
		30	Pe	3,44	3,52	3,49	3,37	3,18	2,95	2,68	2,40			
		40	Qo	14526	12191	10147	8369	6834	5519	4400	3454			
		40	Pe	4,34	4,24	4,06	3,81	3,52	3,20	2,86	2,54			
		50	Qo	11831	9911	8240	6795	5551	4486	3576	2798			
		50	Pe	5,10	4,85	4,54	4,18	3,80	3,41	3,03	2,68			
<b>D3-16.1Y</b> 	2	30	Qo		12721	10514	8577	6893	5441	4200	3152	2275	1551	
		30	Pe		3,70	3,48	3,24	2,97	2,68	2,37	2,05	1,73	1,40	
		40	Qo	10777	8867	7197	5748	4500	3433	2527	1763	1120		
		40	Pe		4,33	4,01	3,65	3,28	2,90	2,51	2,12	1,74	1,36	
		50	Qo		8876	7260	5854	4638	3592	2697	1932	1277		
		50	Pe		4,93	4,49	4,03	3,56	3,09	2,62	2,16	1,72		
<b>D4-16.1Y</b> 	1	30	Qo	18799	15745	13058	10713	8679	6931	5441	4180			
		30	Pe	3,83	3,79	3,68	3,52	3,30	3,04	2,76	2,45			
		40	Qo	16131	13488	11169	9147	7394	5882	4584	3471			
		40	Pe	4,66	4,49	4,26	3,99	3,67	3,33	2,97	2,60			
		50	Qo	13396	11181	9246	7563	6106	4846	3756	2808			
		50	Pe	5,42	5,12	4,78	4,40	3,99	3,57	3,13	2,70			
<b>D3-18.1Y</b> 	2	30	Qo		13895	11541	9481	7693	6155	4847	3747	2832	2083	
		30	Pe		4,15	3,97	3,73	3,45	3,13	2,80	2,47	2,14	1,83	
		40	Qo		11790	9764	8000	6475	5168	4057	3121	2339	1689	
		40	Pe		4,86	4,52	4,15	3,75	3,34	2,94	2,54	2,17	1,85	
		50	Qo		9739	8040	6569	5305	4226	3311	2538	1887		
		50	Pe		5,50	5,02	4,53	4,03	3,53	3,06	2,62	2,22		
<b>D4-18.1Y</b> 	1	30	Qo	19831	16745	14012	11608	9508	7689	6125	4791			
		30	Pe	4,32	4,21	4,04	3,83	3,59	3,32	3,04	2,77			
		40	Qo	16916	14272	11937	9889	8102	6553	5216	4068			
		40	Pe	5,16	4,93	4,66	4,35	4,01	3,67	3,32	2,99			
		50	Qo	13909	11731	9820	8153	6705	5452	4368	3431			
		50	Pe	5,98	5,64	5,26	4,85	4,44	4,02	3,61	3,23			
<b>D3-19.1Y</b> 	2	30	Qo					10017	8173	6587	5237	4099	3150	2368
		30	Pe					4,05	3,76	3,42	3,07	2,71	2,36	2,03
		40	Qo					8508	6938	5590	4443	3472	2656	1972
		40	Pe					4,56	4,14	3,70	3,27	2,85	2,45	2,09
		50	Qo					6987	5695	4590	3651	2854	2176	
		50	Pe					4,98	4,45	3,93	3,43	2,95	2,52	
<b>D4-19.1Y</b> 	1	30	Qo		14880	12243	9975	8041	6409	5044	3912	2981	2215	
		30	Pe		4,29	4,11	3,88	3,62	3,33	3,04	2,75	2,48	2,24	
		40	Qo		12578	10347	8435	6806	5429	4268	3290	2462	1750	
		40	Pe		4,95	4,66	4,34	3,98	3,61	3,24	2,88	2,54	2,23	
		50	Qo		10357	8519	6948	5611	4474	3503	2666	1927		
		50	Pe		5,68	5,28	4,84	4,38	3,91	3,44	2,99	2,57		
<b>Q4-20.1Y</b> 	2	30	Qo		14773	12190	9934	7981	6308	4893	3712	2743	1963	
		30	Pe		3,94	3,71	3,44	3,16	2,85	2,54	2,22	1,92	1,63	
		40	Qo		12745	10452	8458	6741	5277	4044	3019	2179	1500	
		40	Pe		4,61	4,25	3,86	3,46	3,06	2,67	2,29	1,93	1,60	
		50	Qo		10651	8661	6943	5474	4232	3195	2337	1638		
		50	Pe		5,19	4,70	4,20	3,70	3,21	2,74	2,30	1,89		
<b>Q4-21.1Y</b> 	2	30	Qo		16354	13354	10755	8528	6640	5061	3759	2704	1864	
		30	Pe		4,10	3,91	3,66	3,36	3,03	2,67	2,32	1,97	1,66	
		40	Qo		13856	11228	8965	7038	5414	4062	2952	2051	1329	
		40	Pe		4,84	4,47	4,07	3,64	3,20	2,76	2,35	1,96	1,63	
		50	Qo		11230	8996	7092	5485	4146	3043	2145	1420		
		50	Pe		5,34	4,83	4,30	3,76	3,24	2,74	2,29	1,89		

① Suction gas temperature 20°C without liquid sub-cooling.

The performance refers to European standard EN12900 and with operation at 50Hz; conversion factor at 60Hz = 1.2.

To calculate the performance in different operating points refer to the Frascold Selection Software.

All published data is subject to change.

This field requires additional cooling or limitation of the suction temperature.

## Performance R404A - R507A [50 Hz]

Compressor	Motor version	Cond. Temp. [°C]	Qo [W] = Cooling capacity Pe [kW] = Power consumption ①	Evaporating temperature [°C]									
				5	0	-5	-10	-15	-20	-25	-30	-35	-40
Q5-21.1Y	1	30	Qo 23567 19812 16466 13502 10895 8618 6644 4948										
		40	Pe 4,16 4,18 4,11 3,95 3,71 3,40 3,04 2,61										
		50	Qo 19832 16633 13785 11262 9038 7086 5381 3895										
		30	Pe 5,07 4,95 4,75 4,46 4,10 3,67 3,19 2,66										
		40	Qo 16070 13429 11081 9001 7162 5538 4103 2830										
		50	Pe 5,82 5,57 5,24 4,83 4,35 3,81 3,21 2,57										
Q4-24.1Y	2	30	Qo 18258 15039 12223 9781 7683 5900 4402 3159 2143										
		40	Pe 4,81 4,52 4,19 3,83 3,45 3,05 2,65 2,25 1,87										
		50	Qo 15275 12534 10143 8074 6297 4782 3500 2421 1516										
		30	Pe 5,61 5,16 4,69 4,21 3,72 3,23 2,74 2,28 1,85										
		40	Qo 12383 10108 8130 6422 4953 3695 2617 1690										
		50	Pe 6,28 5,69 5,09 4,49 3,90 3,33 2,78 2,26										
Q5-24.1Y	1	30	Qo 27077 22624 18707 15286 12324 9781 7621 5804										
		40	Pe 5,03 4,94 4,77 4,53 4,23 3,88 3,50 3,09										
		50	Qo 22873 19060 15716 12801 10279 8109 6254 4676										
		30	Pe 6,11 5,85 5,52 5,13 4,70 4,24 3,75 3,26										
		40	Qo 18574 15425 12677 10292 8233 6459 4934 3618										
		50	Pe 7,10 6,67 6,19 5,66 5,10 4,53 3,94 3,36										
Q4-25.1Y	2	30	Qo 18778 15437 12512 9973 7794 5944 4396 3121 2090										
		40	Pe 4,89 4,59 4,24 3,85 3,44 3,01 2,58 2,15 1,74										
		50	Qo 15813 12913 10388 8207 6343 4767 3450 2364 1481										
		30	Pe 5,70 5,22 4,71 4,18 3,64 3,11 2,58 2,08 1,62										
		40	Qo 12924 10468 8343 6521 4974 3673 2589 1694										
		50	Pe 6,40 5,75 5,09 4,42 3,77 3,14 2,54 1,98										
Q5-25.1Y	1	30	Qo 27872 23293 19273 15771 12747 10159 7968 6134 4615 3370										
		40	Pe 5,17 5,09 4,94 4,72 4,44 4,10 3,73 3,32 2,88 2,44										
		50	Qo 23541 19641 16228 13262 10702 8507 6637 5051 3709 2571										
		30	Pe 6,34 6,08 5,76 5,38 4,95 4,48 3,98 3,46 2,93 2,40										
		40	Qo 19188 15968 13164 10735 8639 6838 5290 3954										
		50	Pe 7,37 6,93 6,44 5,90 5,33 4,73 4,12 3,49										
Q7-25.1Y	1	30	Qo 28897 23966 19659 15930 12738 10037 7783 5933 4443 3269										
		40	Pe 5,33 5,24 5,06 4,80 4,48 4,12 3,74 3,35 2,96 2,61										
		50	Qo 24066 19892 16270 13157 10508 8280 6429 4910 3681 2696										
		30	Pe 6,43 6,14 5,78 5,37 4,92 4,46 3,99 3,54 3,12 2,74										
		40	Qo 19537 16097 13139 10618 8490 6712 5240 4030										
		50	Pe 7,37 6,91 6,40 5,86 5,30 4,76 4,23 3,74										
Q5-28.1Y	2	30	Qo 21828 18036 14716 11833 9353 7241 5464 3987 2776										
		40	Pe 5,90 5,55 5,16 4,73 4,28 3,80 3,30 2,79 2,28										
		50	Qo 18419 15164 12325 9866 7755 5956 4435 3158 2092										
		30	Pe 6,79 6,28 5,75 5,18 4,60 4,01 3,41 2,81 2,23										
		40	Qo 15037 12320 9962 7928 6185 4699 3435 2358										
		50	Pe 7,54 6,88 6,21 5,51 4,82 4,12 3,43 2,75										
Q7-28.1Y	1	30	Qo 31964 26815 22280 18314 14870 11906 9374 7231										
		40	Pe 6,34 6,15 5,90 5,61 5,26 4,87 4,44 3,98										
		50	Qo 27134 22726 18856 15479 12550 10024 7855 6000										
		30	Pe 7,51 7,15 6,74 6,29 5,81 5,29 4,75 4,18										
		40	Qo 22283 18615 15409 12621 10205 8117 6310 4741										
		50	Pe 8,60 8,07 7,50 6,91 6,29 5,65 4,99 4,32										
Q5-33.1Y	2	30	Qo 25201 20904 17148 13892 11091 8703 6685 4994 3588										
		40	Pe 6,90 6,58 6,15 5,65 5,09 4,51 3,93 3,37 2,87										
		50	Qo 21309 17614 14401 11628 9251 7227 5514 4068 2847										
		30	Pe 8,22 7,61 6,93 6,22 5,49 4,76 4,07 3,44 2,90										
		40	Qo 11799 9500 7537 5868 4450 3240										
		50	Pe 7,63 6,72 5,83 4,98 4,20 3,51										
Q7-33.1Y	1	30	Qo 36974 30974 25708 21122 17162 13774 10905 8500										
		40	Pe 7,48 7,29 6,99 6,59 6,12 5,61 5,08 4,57										
		50	Qo 31368 26248 21766 17867 14497 11603 9130 7025										
		30	Pe 8,84 8,42 7,91 7,33 6,69 6,04 5,40 4,79										
		40	Qo 25698 21468 17778 14574 11804 9412 7344 5548										
		50	Pe 10,07 9,44 8,74 7,99 7,21 6,44 5,69 5,01										
S5-33Y	2	30	Qo 25844 21322 17467 14197 11429 9081 7071 5317 3737										
		40	Pe 6,30 6,15 5,89 5,54 5,11 4,63 4,11 3,57 3,03										
		50	Qo 22272 18313 14954 12113 9708 7657 5878 4229 2807										
		30	Pe 7,68 7,34 6,90 6,36 5,76 5,11 4,43 3,73 3,04										
		40	Qo 15270 12393 9968 7913 6145 4583 3145										
		50	Pe 8,48 7,83 7,10 6,31 5,47 4,60 3,72										
S7-33Y	1	30	Qo 36857 30862 25662 21178 17327 14029 11201 8763 6633 4730										
		40	Pe 6,82 6,80 6,64 6,35 5,95 5,48 4,95 4,39 3,82 3,27										
		50	Qo 31575 26422 21963 18114 14796 11926 9424 7207 5195 3307										
		30	Pe 8,60 8,31 7,89 7,37 6,77 6,11 5,43 4,73 4,05 3,42										
		40	Qo 26225 21915 18194 14981 12194 9752 7574 5578										
		50	Pe 10,20 9,64 8,97 8,23 7,43 6,60 5,76 4,94										

① Suction gas temperature 20°C without liquid sub-cooling.

The performance refers to European standard EN12900 and with operation at 50Hz; conversion factor at 60Hz = 1.2.

To calculate the performance in different operating points refer to the Frascold Selection Software.

All published data is subject to change.

This field requires additional cooling or limitation of the suction temperature.

## Performance R404A - R507A [50 Hz]

Compressor	Motor version	Cond. Temp. [°C]	Qo [W] = Cooling capacity Pe [kW] = Power consumption ①	Evaporating temperature [°C]										
				5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45
<b>Q7-36.1Y</b>	1	30	Qo			29191	24167	19770	15951	12666	9868	7511	5549	3936
			Pe			7,88	7,42	6,9	6,33	5,72	5,09	4,45	3,82	3,20
		40	Qo			24673	20325	16534	13256	10442	8048	6028	4334	2921
			Pe			9,10	8,40	7,65	6,88	6,10	5,31	4,54	3,79	3,08
		50	Qo			20173	16505	13328	10594	8258	6273	4594	3173	
<b>S8-42Y</b>	2	30	Qo			33430	27691	22663	18287	14504	11257	8487	6137	4147
			Pe			8,67	8,15	7,56	6,91	6,22	5,49	4,74	3,97	3,21
		40	Qo			28341	23401	19083	15328	12078	9276	6862	4778	2967
			Pe			9,93	9,17	8,35	7,50	6,62	5,73	4,83	3,94	3,07
		50	Qo			22954	18862	15302	12218	9550	7240	5230	3463	
<b>S12-42Y</b>	1	30	Qo	45911	38508	31958	26205	21195	16872	13181	10068			
			Pe	8,63	8,37	7,98	7,50	6,94	6,31	5,64	4,95			
		40	Qo	39041	32568	26869	21889	17573	13866	10713	8059			
			Pe	10,32	9,75	9,09	8,36	7,57	6,74	5,90	5,06			
		50	Qo	32203	26668	21829	17629	14016	10933	8325	6138			
<b>S10-52Y</b>	2	30	Qo			39744	32862	26979	21974	17724	14105	10995	8270	5809
			Pe			10,59	10,06	9,37	8,56	7,68	6,76	5,85	4,99	4,22
		40	Qo			34176	28191	23096	18767	15081	11915	9146	6651	4308
			Pe			12,48	11,61	10,62	9,54	8,42	7,30	6,22	5,23	4,35
		50	Qo			28585	23477	19147	15471	12327	9591	7142	4855	
<b>S15-52Y</b>	1	30	Qo	58615	49134	40907	33806	27703	22470	17979	14102			
			Pe	10,59	10,48	10,17	9,67	9,04	8,31	7,51	6,69			
		40	Qo	50269	42130	35080	28990	23731	19177	15200	11671			
			Pe	13,15	12,62	11,93	11,10	10,18	9,20	8,19	7,20			
		50	Qo	41797	35001	29128	24050	19638	15764	12301	9121			
<b>S15-56Y</b>	2	30	Qo			44655	36854	30178	24491	19660	15549	12024	8950	6192
			Pe			11,46	10,88	10,15	9,29	8,35	7,38	6,41	5,48	4,65
		40	Qo			38401	31601	25801	20867	16665	13059	9914	7097	4472
			Pe			13,35	12,43	11,37	10,23	9,04	7,85	6,70	5,63	4,69
		50	Qo			32058	26245	21309	17114	13527	10412	7635	5061	
<b>S20-56Y</b>	1	30	Qo	64238	53901	44920	37160	30483	24753	19832	15584			
			Pe	12,21	11,97	11,50	10,86	10,07	9,19	8,26	7,32			
		40	Qo	55173	46291	38587	31922	26161	21166	16801	12928			
			Pe	14,84	14,14	13,27	12,27	11,18	10,05	8,93	7,85			
		50	Qo	45928	38509	32087	26525	21687	17435	13632	10142			
<b>V15-59Y</b>	2	30	Qo			45831	37860	31040	25231	20293	16089	12478	9322	6482
			Pe			12,54	11,85	10,99	10,00	8,93	7,83	6,74	5,72	4,81
		40	Qo			39416	32480	26565	21532	17241	13554	10332	7435	4725
			Pe			14,55	13,47	12,25	10,95	9,61	8,27	6,99	5,82	4,80
		50	Qo			32917	26999	21972	17697	14036	10849	7997	5342	
<b>V20-59Y</b>	1	30	Qo			16,29	14,83	13,28	11,67	10,07	8,51	7,06	5,74	
			Pe			12,17	12,00	11,63	11,08	10,39	9,58	8,68	7,74	6,77
		40	Qo			57529	47884	39434	32083	25736	20300	15680	11781	8509
			Pe			14,89	14,27	13,48	12,55	11,51	10,39	9,23	8,06	5,79
		50	Qo			47184	39011	31899	25752	20476	15977	12159	8929	
<b>V15-71Y</b>	2	30	Qo			17,16	16,11	14,93	13,64	12,29	10,90	9,49	8,12	
			Pe			14,83	14,10	13,14	12,00	10,74	9,43	8,13	6,89	5,77
		40	Qo			46892	38600	31552	25571	20480	16100	12255	8767	5459
			Pe			17,42	16,22	14,82	13,29	11,68	10,06	8,48	7,01	5,71
		50	Qo						26046	20980	16646	12867	9466	6264
<b>V25-71Y</b>	1	30	Qo	81879	68373	56526	46781	38270	30897	24569	19190	14667	10904	7807
			Pe	15,78	15,34	14,68	13,83	12,84	11,73	10,54	9,31	8,08	6,87	
		40	Qo	69095	57486	47345	38552	30983	24517	19031	14405	10514	7238	
			Pe	18,55	17,65	16,58	15,35	14,01	12,60	11,15	9,70	8,28	6,92	
		50	Qo	56514	46784	38338	31053	24806	19475	14939	11076			
<b>V20-84Y</b>	2	30	Qo			20,85	19,53	18,07	16,50	14,85	13,17	11,48	9,83	
			Pe			17,65	16,55	15,30	13,95	12,52	11,04	9,55	8,08	6,65
		40	Qo			20,36	18,71	16,98	15,19	13,38	11,59	9,84	8,16	6,59
			Pe			43855	36042	29273	23454	18490	14288	10754	7794	
		50	Qo			22,36	20,24	18,10	15,96	13,86	11,83	9,90	8,10	

① Suction gas temperature 20°C without liquid sub-cooling.

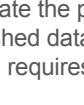
The performance refers to European standard EN12900 and with operation at 50Hz; conversion factor at 60Hz = 1.2.

To calculate the performance in different operating points refer to the Frascold Selection Software.

All published data is subject to change.

This field requires additional cooling or limitation of the suction temperature.

## Performance R404A - R507A [50 Hz]

Compressor	Motor version	Cond. Temp. [°C]	Qo [W] = Cooling capacity Pe [kW] = Power consumption ①	Evaporating temperature [°C]										
				5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45
<b>V30-84Y</b> 	1	30	Qo 97012 81353 67543 55454 44960 35934 28248 21777 16394 11971	Pe 18,42 18,09 17,45 16,54 15,42 14,12 12,71 11,24 9,74 8,28	Qo 82435 68860 56942 46556 37575 29872 23320 17793 13163 9303	Pe 21,62 20,75 19,60 18,25 16,73 15,09 13,39 11,67 9,99 8,39	Qo 67966 56493 46488 37825 30377 24017 18617 14053	Pe 24,77 23,35 21,72 19,92 18,02 16,05 14,06 12,12						
		40	Qo 82435 68860 56942 46556 37575 29872 23320 17793 13163 9303	Pe 21,62 20,75 19,60 18,25 16,73 15,09 13,39 11,67 9,99 8,39	Qo 60385 49539 40070 31864 24807 18783 13680 9381 5773	Pe 22,08 20,25 18,32 16,32 14,27 12,21 10,17 8,19 6,28	Qo 39869 31966 25150 19306 14321	Pe 21,59 19,24 16,86 14,47 12,12 9,83 7,62						
		50	Qo 107618 89777 74043 60276 48335 38082 29375 22075 16041 11133	Pe 20,68 20,15 19,29 18,16 16,81 15,29 13,66 11,96 10,26 8,60	Qo 90864 75419 61867 50068 39881 31167 23786 17597 12460 8236	Pe 24,26 23,02 21,52 19,81 17,95 15,99 13,98 11,97 10,02 8,18	Qo 74481 61445 50087 40268 31848 24686 18643 13578	Pe 27,22 25,33 23,25 21,03 18,71 16,37 14,04 11,78						
		30	Qo 78654 65632 53989 43660 34582 26689 19920 14208 9491	Pe 22,89 21,60 19,97 18,12 16,14 14,11 12,15 10,35 8,81	Qo 68233 56438 45967 36757 28742 21861 16047 11238 7369	Pe 26,46 24,51 22,30 19,93 17,50 15,11 12,84 10,81 9,10	Qo 46620 37433 29452 22613 16853	Pe 26,98 24,23 21,40 18,57 15,84 13,32 11,10						
		40	Qo 113342 95275 79413 65572 53568 43218 34337 26741 20246 14669	Pe 23,91 23,29 22,22 20,81 19,13 17,30 15,39 13,49 11,71 10,14	Qo 67121 55406 45211 36353 28646 21908 15955 10602	Pe 29,44 27,82 25,88 23,71 21,40 19,06 16,76 14,60 12,68 11,08	Qo 79234 66544 55425 45693 37165 29656 22982 16960	Pe 34,32 31,76 29,01 26,14 23,27 20,47 17,85 15,49						
		50	Qo 85968 70732 57390 45815 35877 27449 20401 14607 9936	Pe 21,98 20,98 19,64 18,03 16,23 14,31 12,35 10,42 8,59	Qo 72721 59543 48062 38147 29672 22507 16525 11597 7594	Pe 25,82 23,99 21,92 19,68 17,35 15,01 12,72 10,56 8,60	Qo 59331 48274 38714 30522 23571 17732 12876 8875	Pe 29,02 26,44 23,72 20,94 18,16 15,47 12,93 10,62						
<b>Z25-103Y</b> 	2	30	Qo 124926 104388 86345 70624 57057 45471 35697 27565 20902 15539	Pe 21,37 21,10 20,42 19,41 18,12 16,64 15,01 13,30 11,58 9,91	Qo 105423 87772 72352 58994 47526 37778 29579 22760 17148 12574	Pe 26,15 25,05 23,63 21,95 20,08 18,08 16,02 13,96 11,97 10,11	Qo 86184 71433 58651 47668 38314 30417 23808 18315	Pe 30,46 28,57 26,44 24,13 21,71 19,25 16,79 14,42						
		40	Qo 85968 70732 57390 45815 35877 27449 20401 14607 9936	Pe 21,98 20,98 19,64 18,03 16,23 14,31 12,35 10,42 8,59	Qo 72721 59543 48062 38147 29672 22507 16525 11597 7594	Pe 25,82 23,99 21,92 19,68 17,35 15,01 12,72 10,56 8,60	Qo 59331 48274 38714 30522 23571 17732 12876 8875	Pe 29,02 26,44 23,72 20,94 18,16 15,47 12,93 10,62						
		50	Qo 124926 104388 86345 70624 57057 45471 35697 27565 20902 15539	Pe 21,37 21,10 20,42 19,41 18,12 16,64 15,01 13,30 11,58 9,91	Qo 105423 87772 72352 58994 47526 37778 29579 22760 17148 12574	Pe 26,15 25,05 23,63 21,95 20,08 18,08 16,02 13,96 11,97 10,11	Qo 86184 71433 58651 47668 38314 30417 23808 18315	Pe 30,46 28,57 26,44 24,13 21,71 19,25 16,79 14,42						
		30	Qo 99297 81793 66481 53206 41816 32156 24074 17415 12026	Pe 24,72 23,44 21,86 20,03 18,03 15,91 13,74 11,59 9,51	Qo 83350 68385 55354 44102 34477 26323 19489 13820 9163	Pe 28,63 26,54 24,24 21,79 19,26 16,70 14,18 11,76 9,51	Qo 67440 55041 44317 35115 27280 20660 15100 10447	Pe 31,94 29,13 26,19 23,19 20,20 17,28 14,48 11,88						
		40	Qo 99297 81793 66481 53206 41816 32156 24074 17415 12026	Pe 24,72 23,44 21,86 20,03 18,03 15,91 13,74 11,59 9,51	Qo 83350 68385 55354 44102 34477 26323 19489 13820 9163	Pe 28,63 26,54 24,24 21,79 19,26 16,70 14,18 11,76 9,51	Qo 67440 55041 44317 35115 27280 20660 15100 10447	Pe 31,94 29,13 26,19 23,19 20,20 17,28 14,48 11,88						
<b>Z30-126Y</b> 	2	30	Qo 145126 121334 100364 82032 66153 52543 41017 31390 23477 17094	Pe 25,88 25,50 24,66 23,43 21,89 20,11 18,18 16,16 14,14 12,19	Qo 123218 102617 84557 68853 55319 43771 34026 25897 19200 13750	Pe 31,31 29,90 28,13 26,08 23,82 21,43 18,98 16,56 14,23 12,08	Qo 100631 83359 68345 55404 44352 35003 27174 20680	Pe 35,70 33,36 30,77 28,00 25,12 22,22 19,36 16,63						
		40	Qo 145126 121334 100364 82032 66153 52543 41017 31390 23477 17094	Pe 25,88 25,50 24,66 23,43 21,89 20,11 18,18 16,16 14,14 12,19	Qo 123218 102617 84557 68853 55319 43771 34026 25897 19200 13750	Pe 31,31 29,90 28,13 26,08 23,82 21,43 18,98 16,56 14,23 12,08	Qo 100631 83359 68345 55404 44352 35003 27174 20680	Pe 35,70 33,36 30,77 28,00 25,12 22,22 19,36 16,63						
		50	Qo 145126 121334 100364 82032 66153 52543 41017 31390 23477 17094	Pe 25,88 25,50 24,66 23,43 21,89 20,11 18,18 16,16 14,14 12,19	Qo 123218 102617 84557 68853 55319 43771 34026 25897 19200 13750	Pe 31,31 29,90 28,13 26,08 23,82 21,43 18,98 16,56 14,23 12,08	Qo 100631 83359 68345 55404 44352 35003 27174 20680	Pe 35,70 33,36 30,77 28,00 25,12 22,22 19,36 16,63						
		30	Qo 146740 121924 100318 81599 65447 51539 39553	Pe 29,44 28,99 27,96 26,44 24,54 22,34 19,95	Qo 126830 104956 85998 69634 55543 43402 32891	Pe 35,93 34,30 32,21 29,76 27,03 24,13 21,16	Qo 86292 70382 56772 45142 35168 26530	Pe 38,57 35,54 32,27 28,85 25,38 21,95						
		40	Qo 146740 121924 100318 81599 65447 51539 39553	Pe 29,44 28,99 27,96 26,44 24,54 22,34 19,95	Qo 126830 104956 85998 69634 55543 43402 32891	Pe 35,93 34,30 32,21 29,76 27,03 24,13 21,16	Qo 86292 70382 56772 45142 35168 26530	Pe 38,57 35,54 32,27 28,85 25,38 21,95						
<b>W40-142Y</b> 	2	30	Qo 120493 99607 81793 66655 53799 42826 33342 24950 17254	Pe 31,36 29,90 27,95 25,62 23,03 20,31 17,57 14,93 12,52	Qo 103000 85017 69718 56707 45588 35965 27441 19621 12108	Pe 37,07 34,59 31,71 28,55 25,23 21,86 18,57 15,47 12,70	Qo 70438 57532 46526 37022 28626 20941	Pe 38,67 34,89 30,91 26,87 22,87 19,04						
		40	Qo 120493 99607 81793 66655 53799 42826 33342 24950 17254	Pe 31,36 29,90 27,95 25,62 23,03 20,31 17,57 14,93 12,52	Qo 103000 85017 69718 56707 45588 35965 27441 19621 12108	Pe 37,07 34,59 31,71 28,55 25,23 21,86 18,57 15,47 12,70	Qo 70438 57532 46526 37022 28626 20941	Pe 38,67 34,89 30,91 26,87 22,87 19,04						
		50	Qo 120493 99607 81793 66655 53799 42826 33342 24950 17254	Pe 31,36 29,90 27,95 25,62 23,03 20,31 17,57 14,93 12,52	Qo 103000 85017 69718 56707 45588 35965 27441 19621 12108	Pe 37,07 34,59 31,71 28,55 25,23 21,86 18,57 15,47 12,70	Qo 70438 57532 46526 37022 28626 20941	Pe 38,67 34,89 30,91 26,87 22,87 19,04						
		30	Qo 120493 99607 81793 66655 53799 42826 33342 24950 17254	Pe 31,36 29,90 27,95 25,62 23,03 20,31 17,57 14,93 12,52	Qo 103000 85017 69718 56707 45588 35965 27441 19621 12108	Pe 37,07 34,59 31,71 28,55 25,23 21,86 18,57 15,47 12,70	Qo 70438 57532 46526 37022 28626 20941	Pe 38,67 34,89 30,91 26,87 22,87 19,04						
		40	Qo 120493 99607 81793 66655 53799 42826 33342 24950 17254	Pe 31,36 29,90 27,95 25,62 23,03 20,31 17,57 14,93 12,52	Qo 103000 85017 69718 56707 45588 35965 27441 19621 12108	Pe 37,07 34,59 31,71 28,55 25,23 21,86 18,57 15,47 12,70	Qo 70438 57532 46526 37022 28626 20941	Pe 38,67 34,89 30,91 26,87 22,87 19,04						
<b>Z40-154Y</b> 	2	30	Qo 120493 99607 81793 66655 53799 42826 33342 24950 17254	Pe 31,36 29,90 27,95 25,62 23,03 20,31 17,57 14,93 12,52	Qo 103000 85017 69718 56707 45588 35965 27441 19621 12108	Pe 37,07 34,59 31,71 28,55 25,23 21,86 18,57 15,47 12,70	Qo 70438 57532 46526 37022 28626 20941	Pe 38,67 34,89 30,91 26,87 22,87 19,04						
		40	Qo 120493 99607 81793 66655 53799 42826 33342 24950 17254	Pe 31,36 29,90 27,95 25,62 23,03 20,31 17,57 14,93 12,52	Qo 103000 85017 69718 56707 45588 35965 27441 19621 12108	Pe 37,07 34,59 31,71 28,55 25,23 21,86 18,57 15,47 12,70	Qo 70438 57532 46526 37022 28626 20941	Pe 38,67 34,89 30,91 26,87 22,87 19,04						
		50	Qo 120493 99607 81793 66655 53799 42826 33342 24950 17254	Pe 31,36 29,90 27,95 25,62 23,03 20,31 17,57 14,93 12,52	Qo 103000 85017 69718 56707 45588 35965 27441 19621 12108	Pe 37,07 34,59 31,71 28,55 25,23 21,86 18,57 15,47 12,70	Qo 70438 57532 46526 37022 28626 20941	Pe 38,67 34,89 30,91 26,87 22,87 19,04						
		30	Qo 120493 99607 81793 66655 53799 42826 33342 24950 17254	Pe 31,36 29,90 27,95 25,62 23,03 20,31 17,57 14,93 12,52	Qo 103000 85017 69718 56707 45588 35965 27441 19621 12108	Pe 37,07 34,59 31,71 28,55 25,23 21,86 18,57 15,47 12,70	Qo 70438 57532 46526 37022 28626 20941	Pe 38,67 34,89 30,91 26,87 22,87 19,04						
		40	Qo 120493 99607 81793 66655 53799 42826 33342 24950 17254	Pe 31,36 29,90 27,95 25,62 23,03 20,31 17,57 14,93 12,52	Qo 103000 85017 69718 56707 45588 35965 27441 19621 12108	Pe 37,07 34,59 31,71 28,55 25,23 21,86 18,57 15,47 12								

## Performance R404A - R507A [50 Hz]

Compressor	Motor version	Cond. Temp. [°C]	Qo [W] = Cooling capacity Pe [kW] = Power consumption ①	Evaporating temperature [°C]									
				5	0	-5	-10	-15	-20	-25	-30	-35	-40
<b>Z50-154Y</b> 	1	30	Qo 174579 146356 121442 99609 80630 64275 50316 38525 28674 20535 Pe 33,81 32,74 31,20 29,27 27,02 24,53 21,86 19,10 16,31 13,56										
		40	Qo 148915 124386 102824 84002 67691 53664 41691 31545 22997 15819 Pe 40,26 38,07 35,51 32,66 29,58 26,35 23,05 19,74 16,50 13,40										
		50	Qo 122548 101845 83769 68090 54582 43015 33161 24792 Pe 45,61 42,40 38,91 35,22 31,40 27,52 23,66 19,89										
		30	Qo 110488 89506 71187 55404 42028 30932 21988 Pe 31,39 29,16 26,72 24,09 21,27 18,26 15,07										
		40	Qo 93106 74989 59181 45552 33977 24327 16474 Pe 35,38 32,26 28,97 25,52 21,92 18,15 14,24										
<b>W40-168Y</b>	2	50	Qo 60541 47331 35946 26259 18143 Pe 34,65 30,50 26,22 21,81 17,28										
		30	Qo 197603 165215 136778 112000 90593 72266 56729 43692 Pe 33,80 33,50 32,55 31,06 29,12 26,83 24,30 21,63										
		40	Qo 168617 140687 116238 94980 76624 60879 47455 36063 Pe 41,70 40,05 37,88 35,29 32,39 29,28 26,05 22,80										
		50	Qo 138101 114875 94662 77171 62113 49197 38134 28633 Pe 48,26 45,37 42,10 38,55 34,81 30,98 27,17 23,48										
		30	Qo 149041 122022 98508 78232 60923 46312 34130 24108 15975 Pe 36,86 34,44 31,83 29,03 26,08 22,98 19,75 16,41 12,99										
<b>W50-168Y</b> 	1	40	Qo 125232 102014 81884 64574 49813 37333 26864 18136 Pe 41,84 38,45 34,92 31,25 27,46 23,58 19,62 15,60										
		50	Qo 102048 82551 65725 51299 39006 28575 19738 Pe 46,03 41,67 37,20 32,65 28,03 23,35 18,65										
		30	Qo 149041 122022 98508 78232 60923 46312 34130 24108 15975 Pe 36,86 34,44 31,83 29,03 26,08 22,98 19,75 16,41 12,99										
		40	Qo 125232 102014 81884 64574 49813 37333 26864 18136 Pe 41,84 38,45 34,92 31,25 27,46 23,58 19,62 15,60										
		50	Qo 102048 82551 65725 51299 39006 28575 19738 Pe 46,03 41,67 37,20 32,65 28,03 23,35 18,65										
<b>W60-187Y</b> 	2	30	Qo 217230 180960 149290 121880 98365 78405 61645 47733 Pe 39,24 38,37 36,85 34,80 32,34 29,57 26,61 23,58										
		40	Qo 184200 153140 126130 102810 82831 65836 51475 39398 Pe 47,46 45,07 42,20 38,94 35,43 31,76 28,06 24,44										
		50	Qo 150320 124620 102400 83297 66971 53068 41234 31120 Pe 54,23 50,46 46,36 42,03 37,59 33,16 28,84 24,75										
		30	Qo 165282 136066 110478 88268 69187 52986 39415 28226 19170 Pe 41,17 38,79 36,06 33,04 29,77 26,32 22,73 19,05 15,34										
		40	Qo 140019 114679 92593 73510 57182 43359 31792 22232 Pe 47,09 43,49 39,66 35,64 31,48 27,24 22,97 18,72										
<b>W60-206Y</b> 	2	50	Qo 114725 93351 74855 58988 45501 34145 Pe 51,96 47,25 42,40 37,48 32,54 27,61										
		30	Qo 236553 198055 164244 134768 109272 87404 68812 53142 Pe 42,40 41,61 40,10 37,99 35,40 32,43 29,19 25,80										
		40	Qo 201959 168599 139386 113969 91994 73108 56958 43192 Pe 51,02 48,73 45,86 42,52 38,83 34,89 30,81 26,72										
		50	Qo 167009 138897 114394 93147 74804 59011 45415 33664 Pe 58,39 54,71 50,58 46,11 41,41 36,60 31,79 27,08										
		30	Qo 178117 146921 119621 95947 75624 58381 43943 32039 22396 Pe 44,86 42,20 39,20 35,91 32,38 28,66 24,79 20,82 16,80										
<b>W70-228Y</b> 	2	40	Qo 151627 124421 100729 80278 62795 48007 35642 25427 Pe 51,07 47,21 43,09 38,77 34,29 29,71 25,06 20,41										
		50	Qo 125475 102297 82249 65058 50451 38157 Pe 56,53 51,50 46,31 41,00 35,62 30,22										
		30	Qo 256359 214290 177319 145065 117149 93188 72802 55609 Pe 48,66 47,27 45,15 42,42 39,19 35,57 31,69 27,65										
		40	Qo 217997 181780 150041 122400 98476 77887 60252 45192 Pe 57,75 54,74 51,16 47,10 42,70 38,05 33,28 28,51										
		50	Qo 178406 148286 122023 99239 79551 62579 47941 35257 Pe 65,17 60,71 55,80 50,57 45,14 39,61 34,11 28,75										
<b>W75-228Y</b> 	1	30	Qo 188831 154944 125511 100209 78720 60721 45892 33912 24460 Pe 46,77 44,19 41,10 37,61 33,86 29,95 26,02 22,19 18,56										
		40	Qo 160044 130583 105157 83446 65129 49885 37393 27332 Pe 53,83 49,69 45,21 40,53 35,76 31,03 26,45 22,15										
		50	Qo 132000 106959 85536 67411 52261 39767 Pe 59,70 54,14 48,43 42,70 37,07 31,65										
		30	Qo 265713 222270 184136 150917 122218 97646 76806 59305 Pe 50,95 49,45 47,21 44,36 41,01 37,30 33,36 29,31										
		40	Qo 226857 189061 155992 127254 102454 81197 63089 47736 Pe 60,70 57,45 53,62 49,33 44,70 39,87 34,96 30,09										
<b>W80-240Y</b> 	1	50	Qo 187191 155213 127379 103292 82560 64788 49582 36547 Pe 68,93 64,04 58,72 53,09 47,28 41,42 35,64 30,06										

① Suction gas temperature 20°C without liquid sub-cooling.

The performance refers to European standard EN12900 and with operation at 50Hz; conversion factor at 60Hz = 1.2.

To calculate the performance in different operating points refer to the Frascold Selection Software.

All published data is subject to change.

This field requires additional cooling or limitation of the suction temperature.

## Performance R448A [50 Hz]

Compressor	Motor version	Cond. Temp. [°C]	Qo [W] = Cooling capacity Pe [kW] = Power consumption ①	Evaporating temperature [°C]									
				5	0	-5	-10	-15	-20	-25	-30	-35	-40
A05-4Y	1	30	Qo	4126	3377	2730	2179	1712	1322	999	734	517	340
		40	Pe	0,71	0,7	0,69	0,66	0,64	0,6	0,55	0,5	0,45	0,38
		50	Qo	3456	2821	2277	1815	1426	1100	829	603	414	252
	2	30	Pe	0,86	0,84	0,8	0,76	0,71	0,66	0,59	0,52	0,45	0,37
		40	Qo	2829	2303	1856	1478	1160	894	669	477	309	156
		50	Pe	1,01	0,96	0,91	0,84	0,78	0,7	0,62	0,53	0,44	0,34
A05-5Y	1	30	Qo	4359	3479	2745	2141	1649	1254	938	685	478	
		40	Pe	0,9	0,89	0,86	0,81	0,74	0,67	0,6	0,54	0,49	
		50	Qo	3668	2907	2280	1770	1361	1036	778	570	396	
	2	30	Pe	1,09	1,04	0,98	0,89	0,81	0,72	0,64	0,57	0,53	
		40	Qo	3060	2406	1874	1447	1108	841	629	455	302	
		50	Pe	1,25	1,16	1,07	0,96	0,85	0,75	0,67	0,6	0,56	
A07-5Y	1	30	Qo	5450	4404	3515	2769	2150	1646	1242	924	678	491
		40	Pe	0,85	0,86	0,86	0,83	0,8	0,75	0,69	0,62	0,56	0,49
		50	Qo	4588	3694	2940	2312	1795	1376	1040	774	563	394
	2	30	Pe	1,09	1,07	1,03	0,98	0,92	0,84	0,76	0,68	0,59	0,51
		40	Qo	3772	3024	2398	1881	1459	1118	844	622	440	282
		50	Pe	1,32	1,26	1,18	1,09	0,99	0,88	0,77	0,66	0,55	0,45
A07-6Y	1	30	Qo	4667	3743	2976	2346	1833	1416	1076	792	545	
		40	Pe	0,98	0,94	0,9	0,85	0,79	0,73	0,66	0,59	0,53	
		50	Qo	3993	3187	2524	1984	1548	1195	906	660	436	
	2	30	Pe	1,18	1,12	1,05	0,97	0,89	0,8	0,71	0,62	0,53	
		40	Qo	3421	2713	2136	1669	1291	984	726	498	280	
		50	Pe	1,35	1,26	1,17	1,06	0,96	0,85	0,74	0,63	0,52	
A1-6Y	1	30	Qo	5975	4901	3968	3166	2485	1915	1446	1069	772	546
		40	Pe	0,97	0,99	0,98	0,95	0,89	0,82	0,74	0,67	0,6	0,55
		50	Qo	5078	4151	3351	2667	2089	1607	1212	893	639	442
	2	30	Pe	1,22	1,19	1,14	1,07	0,99	0,89	0,8	0,71	0,64	0,59
		40	Qo	4172	3394	2728	2163	1690	1298	978	718	510	343
		50	Pe	1,43	1,37	1,28	1,18	1,06	0,95	0,85	0,75	0,68	0,64
A1-7Y	1	30	Qo	6175	4997	4012	3195	2522	1971	1517	1136	807	
		40	Pe	1,42	1,36	1,29	1,2	1,11	1,01	0,91	0,81	0,71	
		50	Qo	5302	4272	3418	2716	2141	1671	1282	951	653	
	2	30	Pe	1,67	1,58	1,47	1,35	1,22	1,09	0,96	0,84	0,72	
		40	Qo	4529	3627	2884	2276	1780	1372	1028	725	439	
		50	Pe	1,88	1,75	1,6	1,45	1,29	1,13	0,97	0,82	0,68	
A1.5-7Y	1	30	Qo	7797	6370	5143	4098	3221	2495	1903	1430	1058	772
		40	Pe	1,32	1,31	1,27	1,2	1,12	1,02	0,93	0,84	0,75	0,69
		50	Qo	6719	5469	4401	3501	2752	2137	1641	1247	938	699
	2	30	Pe	1,6	1,54	1,45	1,35	1,23	1,12	1,01	0,91	0,82	0,77
		40	Qo	5677	4597	3685	2923	2296	1787	1381	1060	809	612
		50	Pe	1,84	1,73	1,6	1,47	1,33	1,19	1,07	0,97	0,89	0,84
A1.5-8Y	1	30	Qo	6624	5376	4323	3444	2717	2123	1640	1248	927	
		40	Pe	1,5	1,46	1,39	1,3	1,2	1,08	0,97	0,86	0,77	
		50	Qo	5765	4657	3729	2960	2331	1819	1405	1067	786	
	2	30	Pe	1,77	1,68	1,57	1,44	1,31	1,17	1,04	0,93	0,83	
		40	Qo	4906	3941	3141	2487	1957	1531	1189	909	671	
		50	Pe	2	1,87	1,72	1,56	1,4	1,25	1,11	0,99	0,89	
B1.5-9.1Y	1	30	Qo	9451	7731	6256	5005	3959	3097	2400	1847	1419	1095
		40	Pe	1,86	1,82	1,75	1,64	1,52	1,39	1,26	1,15	1,05	0,99
		50	Qo	8287	6751	5444	4345	3435	2693	2100	1635	1278	1009
	2	30	Pe	2,29	2,18	2,04	1,88	1,72	1,55	1,41	1,28	1,18	1,13
		40	Qo	7020	5684	4560	3628	2869	2262	1787	1425	1155	957
		50	Pe	2,66	2,47	2,27	2,07	1,87	1,68	1,52	1,39	1,3	1,26
B1.5-10.1Y	1	30	Qo	8294	6756	5457	4369	3463	2714	2091	1569	1118	
		40	Pe	1,96	1,93	1,86	1,75	1,61	1,45	1,29	1,14	1,01	
		50	Qo	7200	5848	4716	3776	3001	2364	1835	1387	993	
	2	30	Pe	2,34	2,24	2,11	1,95	1,76	1,58	1,4	1,25	1,12	
		40	Qo	6254	5067	4081	3271	2606	2060	1605	1212	855	
		50	Pe	2,66	2,51	2,32	2,12	1,91	1,7	1,52	1,37	1,26	
B2-10.1Y	1	30	Qo	10340	8511	6929	5576	4432	3478	2694	2061	1559	1169
		40	Pe	2,06	2,07	2,02	1,92	1,79	1,65	1,5	1,36	1,24	1,15
		50	Qo	8981	7376	5998	4828	3846	3032	2368	1834	1409	1076
	2	30	Pe	2,51	2,43	2,3	2,15	1,98	1,81	1,64	1,49	1,37	1,3
		40	Qo	7629	6256	5089	4108	3295	2629	2091	1662	1322	1052
		50	Pe	2,9	2,75	2,56	2,36	2,15	1,96	1,78	1,63	1,53	1,49
D2-11.1Y	1	30	Qo	12357	10147	8246	6627	5264	4130	3200	2447	1844	1366
		40	Pe	2,21	2,22	2,16	2,06	1,93	1,77	1,61	1,45	1,32	1,21
		50	Qo	10710	8780	7129	5730	4559	3587	2790	2140	1610	1176
	2	30	Pe	2,73	2,64	2,51	2,34	2,16	1,96	1,77	1,6	1,47	1,38
		40	Qo	8990	7348	5956	4788	3816	3016	2359	1821	1375	994
		50	Pe	3,17	3,01	2,8	2,58	2,35	2,12	1,91	1,74	1,61	1,55

① Suction gas temperature 20°C without liquid sub-cooling.

The performance refers to European standard EN12900 and with operation at 50Hz; conversion factor at 60Hz = 1.2.

To calculate the performance in different operating points refer to the Frascold Selection Software.

All published data is subject to change.

This field requires additional cooling or limitation of the suction temperature.

## Performance R448A [50 Hz]

Compressor	Motor version	Cond. Temp. [°C]	Qo [W] = Cooling capacity Pe [kW] = Power consumption ①	Evaporating temperature [°C]									
				5	0	-5	-10	-15	-20	-25	-30	-35	-40
D2-13.1Y	2	30	Qo 11756 Pe 2,66	9561	7711	6167	4891	3844	2987	2283	1691	1,55	1,41
		40	Qo 10291 Pe 3,13	8344	6719	5377	4281	3390	2667	2074	1570	1,62	1,57
		50	Qo 9007 Pe 3,62	7283	5857	4693	3750	2991	2376	1867	1426	2,02	1,89
	1	30	Qo 14527 Pe 2,57	11926	9693	7793	6192	4855	3748	2836	2085	1,60	1,39
		40	Qo 12520 Pe 3,18	10275	8357	6731	5362	4217	3261	2459	1776	1,69	1,57
		50	Qo 10561 Pe 3,75	8673	7070	5719	4585	3633	2828	2137	1525	1,92	1,84
D2-15.1Y	2	30	Qo 13122 Pe 3,16	10681	8623	6905	5483	4315	3358	2568	1901	1,82	1,63
		40	Qo 11327 Pe 3,69	9206	7435	5972	4773	3795	2995	2329	1755	2,06	1,86
		50	Qo 9814 Pe 4,17	7973	6451	5203	4187	3359	2677	2097	1575	2,29	2,1
	1	30	Qo 16480 Pe 3,08	13625	11157	9046	7264	5780	4565	3588	2820	2,23	1,81
		40	Qo 14331 Pe 3,93	11841	9701	7881	6350	5080	4041	3201	2533	2,06	1,86
		50	Qo 12027 Pe 4,66	9932	8149	6647	5398	4371	3537	2865	2326	1890	2,48
D3-16.1Y	2	30	Qo 14430 Pe 3,47	11772	9526	7644	6077	4779	3702	2798	2020	2,14	1,87
		40	Qo 12615 Pe 4,21	10258	8283	6640	5284	4165	3236	2449	1757	2,37	2,19
		50	Qo 11001 Pe 4,86	8911	7171	5734	4552	3577	2761	2057	1417	2,57	2,24
	1	30	Qo 18055 Pe 3,42	14864	12115	9768	7786	6129	4761	3641	2731	1,94	1,74
		40	Qo 15903 Pe 4,22	13085	10666	8609	6876	5427	4224	3230	2404	2,17	1,97
		50	Qo 13615 Pe 4,95	11196	9136	7397	5940	4726	3717	2874	2160	1536	2,37
D3-18.1Y	2	30	Qo 15707 Pe 3,84	12863	10461	8450	6781	5405	4272	3332	2536	2,25	2,05
		40	Qo 13741 Pe 4,68	11228	9125	7381	5949	4777	3817	3019	2333	2,43	2,29
		50	Qo 11991 Pe 5,4	9777	7942	6435	5207	4209	3390	2702	2095	3	2,72
	1	30	Qo 19048 Pe 3,86	15818	13011	10594	8535	6800	5356	4172	3214	2,45	2,22
		40	Qo 16686 Pe 4,68	13854	11405	9308	7529	6035	4795	3774	2941	2,63	2,57
		50	Qo 14134 Pe 5,46	11746	9703	7972	6520	5315	4324	3514	2852	2,37	2,17
D3-19.1Y	2	30	Qo 16432 Pe 4,14	13491	11007	8929	7205	5784	4616	3648	2830	2,47	2,27
		40	Qo 14414 Pe 5,07	11819	9648	7850	6373	5165	4177	3356	2651	3,04	2,8
		50	Qo 10264 Pe 5,46	8383	6842	5588	4571	3739	3042	2427	2,07	1,88	3,01
	1	30	Qo 16999 Pe 3,98	13782	11100	8889	7086	5625	4444	3478	2662	2,52	2,4
		40	Qo 14784 Pe 4,72	11982	9668	7779	6250	5017	4016	3184	2455	3,1	2,67
		50	Qo 12831 Pe 5,48	10400	8411	6799	5500	4451	3587	2844	2159	3,37	3,12
Q4-20.1Y	2	30	Qo 16781 Pe 3,72	13669	11044	8851	7035	5540	4312	3293	2430	2,26	2,03
		40	Qo 14975 Pe 4,49	12140	9768	7804	6194	4880	3809	2925	2172	3,04	2,8
		50	Qo 13279 Pe 5,15	10696	8553	6794	5364	4208	3270	2495	1827	3,04	2,89
	1	30	Qo 19183 Pe 4,02	15783	12840	10312	8157	6336	4805	3523	2450	2,39	2,17
		40	Qo 16860 Pe 4,88	13773	11117	8851	6934	5324	3979	2858	1919	2,43	2,16
		50	Qo 14508 Pe 5,63	11742	9383	7387	5715	4325	3174	2222	1427	3,01	2,47
Q4-21.1Y	2	30	Qo 16781 Pe 3,72	13669	11044	8851	7035	5540	4312	3293	2430	2,26	2,03
		40	Qo 14975 Pe 4,49	12140	9768	7804	6194	4880	3809	2925	2172	3,04	2,8
		50	Qo 13279 Pe 5,15	10696	8553	6794	5364	4208	3270	2495	1827	3,04	2,89

① Suction gas temperature 20°C without liquid sub-cooling.

The performance refers to European standard EN12900 and with operation at 50Hz; conversion factor at 60Hz = 1.2.

To calculate the performance in different operating points refer to the Frascold Selection Software.

All published data is subject to change.

This field requires additional cooling or limitation of the suction temperature.



## Performance R448A [50 Hz]

Compressor	Motor version	Cond. Temp. [°C]	Qo [W] = Cooling capacity Pe [kW] = Power consumption ①	Evaporating temperature [°C]									
				5	0	-5	-10	-15	-20	-25	-30	-35	-40
Q5-21.1Y	1	30	Qo 22631 Pe 3,69	18683 3,72	15253 3,66	12297 3,52	9770 3,31	7628 3,04	5826 2,71	4319 2,34	3062 1,94	2012 1,5	
		40	Qo 19524 Pe 4,61	16103 4,51	13140 4,32	10591 4,06	8411 3,75	6556 3,38	4980 2,96	3640 2,51	2491 2,04	1488 1,55	
		50	Qo 16330 Pe 5,39	13439 5,14	10946 4,82	8806 4,44	6976 4,02	5411 3,55	4065 3,04	2895 2,51	1856 1,97	902 1,42	
Q4-24.1Y	2	30	Qo 21375 Pe 4,35	17531 4,07	14183 3,79	11294 3,49	8831 3,19	6761 2,87	5048 2,53	3658 2,17	2557 1,79		
		40	Qo 18354 Pe 5,05	14989 4,67	12067 4,28	9555 3,89	7419 3,49	5624 3,08	4136 2,66	2921 2,23	1945 1,78		
		50	Qo 15529 Pe 5,64	12602 5,15	10069 4,66	7895 4,18	6046 3,69	4488 3,19	3186 2,69	2107 2,19	1216 1,67		
Q5-24.1Y	1	30	Qo 26009 Pe 4,48	21357 4,42	17351 4,28	13934 4,06	11051 3,78	8648 3,46	6667 3,11	5055 2,76	3755 2,42	2712 2,12	
		40	Qo 22540 Pe 5,58	18482 5,34	15003 5,03	12048 4,67	9561 4,28	7487 3,87	5771 3,46	4357 3,06	3190 2,71	2214 2,41	
		50	Qo 18881 Pe 6,57	15449 6,15	12532 5,69	10072 5,19	8015 4,69	6304 4,19	4886 3,72	3704 3,29	2702 2,92	1826 2,62	
Q4-25.1Y	2	30	Qo 21393 Pe 4,6	17378 4,39	13987 4,1	11149 3,78	8792 3,42	6845 3,05	5238 2,69	3899 2,35	2757 2,04		
		40	Qo 18621 Pe 5,57	15051 5,19	12061 5,03	9582 4,76	7542 4,3	5871 3,83	4496 3,37	3348 2,93	2355 2,53		
		50	Qo 16154 Pe 6,38	12977 5,84	10339 5,27	8169 4,7	6396 4,13	4950 3,58	3758 3,07	2751 2,63	1857 2,25		
Q5-25.1Y	2	30	Qo 26778 Pe 4,6	22001 4,56	17889 4,43	14385 4,22	11434 3,96	8981 3,65	6968 3,31	5342 2,96	4045 2,61	3022 2,28	
		40	Qo 23208 Pe 5,78	19056 5,55	15499 5,25	12482 4,89	9949 4,5	7844 4,09	6112 3,67	4697 3,26	3543 2,87	2594 2,52	
		50	Qo 19502 Pe 6,82	15993 6,39	13010 5,92	10498 5,41	8402 4,9	6665 4,38	5232 3,88	4047 3,41	3054 2,99	2197 2,63	
Q7-25.1Y	1	30	Qo 27777 Pe 4,75	22655 4,55	18263 4,3	14541 4	11430 3,66	8870 3,31	6801 2,98	5164 2,69	3898 2,47	2944 2,47	
		40	Qo 23733 Pe 5,87	19304 5,61	15539 5,27	12376 4,88	9757 4,47	7622 4,05	5910 3,66	4563 3,32	3519 3,06	2720 2,89	
		50	Qo 19851 Pe 6,82	16116 6,37	12978 5,87	10375 5,36	8248 4,86	6537 4,39	5183 3,98	4125 3,65	3304 3,43	2660 3,35	
Q5-28.1Y	2	30	Qo 25391 Pe 5,31	20948 5	17044 4,68	13647 4,33	10729 3,96	8259 3,56	6206 3,14	4540 2,7	3232 2,23		
		40	Qo 21981 Pe 6,05	18062 5,64	14627 5,21	11647 4,76	9092 4,3	6931 3,8	5135 3,29	3673 2,76	2515 2,2		
		50	Qo 18730 Pe 6,69	15302 6,17	12306 5,64	9712 5,09	7489 4,52	5607 3,94	4036 3,33	2746 2,71	1707 2,06		
Q7-28.1Y	1	30	Qo 30703 Pe 5,65	25322 5,51	20676 5,3	16703 5,02	13341 4,7	10528 4,33	8201 3,95	6299 3,55	4760 3,15	3521 2,77	
		40	Qo 26752 Pe 6,86	22048 6,53	18008 6,14	14568 5,72	11668 5,28	9244 4,82	7235 4,37	5578 3,92	4212 3,51	3075 3,13	
		50	Qo 22646 Pe 7,96	18642 7,44	15228 6,89	12343 6,33	9926 5,77	7913 5,23	6243 4,71	4853 4,22	3682 3,79	2668 3,43	
Q5-33.1Y	2	30	Qo 29408 Pe 6,1	24209 5,88	20498 5,57	17076 5,19	15840 4,74	12554 4,47	9788 4,26	7484 3,74	5584 3,2	4030 2,67	
		40	Qo 25606 Pe 7,3	20969 6,86	16975 6,35	13564 5,79	10680 5,18	8262 4,56	6253 3,92	4595 3,28	3229 2,67		
		50	Qo 22145 Pe 8,35	18018 7,7	14481 7,01	11474 6,28	8939 5,53	6818 4,77	5053 4,02	3585 3,3	2355 2,62		
Q7-33.1Y	1	30	Qo 35514 Pe 6,67	29255 6,55	23862 6,29	19265 5,91	15392 5,46	12171 4,98	9530 4,5	7398 4,07	5702 3,72	4372 3,5	
		40	Qo 30933 Pe 8,07	25478 7,7	20798 7,22	16823 6,66	13480 6,07	10697 5,49	8403 4,95	6526 4,5	4995 4,17	3737 4	
		50	Qo 26126 Pe 9,32	21511 8,71	17581 8,03	14262 7,31	11485 6,6	9177 5,93	7265 5,35	5680 4,9	4347 4,6	3198 4,51	
S5-33Y	2	30	Qo 29504 Pe 5,7	23921 5,69	19317 5,53	15559 5,27	12510 4,92	10037 4,53	8004 4,23	6276 3,75	4719 3,43		
		40	Qo 26275 Pe 7,19	21238 7	17124 6,69	13798 6,27	11126 5,8	8973 5,29	7204 4,79	5683 4,32	4278 3,92		
		50	Qo 23336 Pe 8,58	18777 8,22	15086 7,75	12126 7,19	9764 6,58	7865 5,96	6293 5,36	4913 4,81	3592 4,34		
S7-33Y	1	30	Qo 35388 Pe 6,07	29126 6,1	23796 5,96	19298 5,69	15534 5,31	12402 4,87	9803 4,4	7637 3,92	5803 3,47	4202 3,08	
		40	Qo 31134 Pe 7,85	25642 7,58	20984 7,19	17060 6,7	13770 6,15	11015 5,57	8693 4,99	6707 4,45	4954 3,97	3336 3,6	
		50	Qo 26670 Pe 9,43	21969 8,88	18003 8,24	14673 7,54	11879 6,82	9521 6,1	7498 5,43	5711 4,83	4060 4,33	2445 3,98	

① Suction gas temperature 20°C without liquid sub-cooling.

The performance refers to European standard EN12900 and with operation at 50Hz; conversion factor at 60Hz = 1.2.

To calculate the performance in different operating points refer to the Frascold Selection Software.

All published data is subject to change.

This field requires additional cooling or limitation of the suction temperature.

## Performance R448A [50 Hz]

Compressor	Motor version	Cond. Temp. [°C]	Qo [W] = Cooling capacity Pe [kW] = Power consumption ①	Evaporating temperature [°C]									
				5	0	-5	-10	-15	-20	-25	-30	-35	-40
<b>Q7-36.1Y</b>	1	30	Qo Pe	33076 7,43	27015 7,09	21898 6,65	17616 6,16	14060 5,62	11124 5,08	8698 4,55	6674 4,06	4945 3,65	
		40	Qo Pe	28867 8,85	23491 8,28	18990 7,65	15257 6,98	12183 6,29	9661 5,62	7582 5	5837 4,44	4320 3,98	
		50	Qo Pe	25017 10	20257 9,23	16306 8,41	13055 7,58	10396 6,77	8221 5,99	6421 5,29	4889 4,68	3516 4,2	
		30	Qo Pe	37860 8,17	30935 7,79	25091 7,3	20199 6,75	16127 6,14	12747 5,52	9927 4,91	7538 4,32	5450 3,79	
		40	Qo Pe	33072 9,64	26967 9,03	21856 8,35	17607 7,62	14092 6,87	11180 6,12	8741 5,4	6646 4,73	4763 4,14	
<b>S8-42Y</b>	2	30	Qo Pe	28357 10,76	23036 9,95	18620 9,1	14980 8,22	11985 7,34	9506 6,48	7412 5,68	5573 4,95	3859 4,33	
		40	Qo Pe	37860 9,64	30935 9,03	25091 8,35	20199 7,62	16127 6,87	12747 6,12	9927 5,4	7538 4,73	5450 3,98	
		50	Qo Pe	33072 10,76	26967 9,95	21856 9,1	17607 8,22	14092 7,34	11180 6,48	8741 5,68	6646 4,95	4763 4,33	
		30	Qo Pe	44093 7,67	36349 7,47	29889 7,14	19009 6,7	14917 6,19	11532 5,62	8770 5,02	6549 4,42	4785 3,85	
		40	Qo Pe	38486 9,41	31591 8,89	25657 8,28	20600 7,61	16339 6,89	12791 6,17	9872 5,45	7499 4,77	5590 4,16	
<b>S12-42Y</b>	1	30	Qo Pe	32735 10,89	26718 10,06	21585 9,18	17253 8,28	13639 7,37	10662 6,49	8237 5,67	6282 4,92	4714 4,28	
		40	Qo Pe	44093 9,41	36349 8,89	29889 8,28	19009 7,61	14917 6,89	11532 6,17	8770 5,42	6549 4,42	4785 3,85	
		50	Qo Pe	38486 10,89	31591 10,06	25657 9,18	20600 8,28	16339 7,37	12791 6,49	9872 5,67	7499 4,77	5590 4,16	
		30	Qo Pe	45279 9,82	36787 9,53	29772 9,02	24033 8,36	19365 7,61	15567 6,81	12434 6,04	9763 5,34	7353 4,79	
		40	Qo Pe	40181 11,97	32579 11,36	26358 10,57	21313 9,67	17242 8,72	13941 7,76	11209 6,87	8841 6,09	6634 5,5	
<b>S10-52Y</b>	2	30	Qo Pe	35542 13,81	28727 12,91	23195 11,87	18741 10,76	15163 9,63	12258 8,54	9822 7,54	7653 6,71	5548 6,1	
		40	Qo Pe	40181 13,81	32579 12,91	26358 11,87	21313 10,76	17242 9,63	13941 8,54	11209 7,54	8841 6,71	6634 6,1	
		50	Qo Pe	45279 14,29	36787 13,38	29772 12,36	24033 11,28	19365 10,19	15567 9,15	12434 8,2	9763 7,4	7353 6,45	
		30	Qo Pe	56279 9,43	46373 9,4	37935 9,13	30809 8,67	24837 8,07	19864 7,39	15734 6,67	12289 5,96	9373 5,33	
		40	Qo Pe	49572 12,01	40890 11,53	33519 10,88	27303 10,1	22085 9,24	17709 8,37	14018 7,53	10856 6,77	8067 6,14	
<b>S15-52Y</b>	1	30	Qo Pe	42505 14,29	35086 13,38	28822 12,36	23555 11,28	19129 10,19	15389 9,15	12178 8,2	9338 7,4	6715 6,45	
		40	Qo Pe	49572 14,29	40890 13,38	33519 12,36	27303 11,28	22085 10,19	17709 9,15	14018 8,2	10856 7,4	8067 6,45	
		50	Qo Pe	56279 14,29	46373 13,38	37935 12,36	30809 11,28	24837 10,19	19864 9,15	15734 8,2	12289 7,4	9373 6,45	
		30	Qo Pe	50931 10,63	41327 10,31	33386 9,76	26881 9,06	21584 8,25	17268 7,41	13706 6,59	10671 5,85	7936 5,26	
		40	Qo Pe	45215 12,82	36602 12,16	29543 11,32	23809 10,36	19174 9,35	15411 8,33	12292 7,38	9589 6,56	7077 5,92	
<b>S15-56Y</b>	2	30	Qo Pe	39949 14,68	32217 13,71	25928 12,6	20855 11,41	16771 10,21	13449 9,04	10661 7,99	8067 7,1	8181 6,43	
		40	Qo Pe	45215 14,68	36602 13,71	29543 12,6	23809 11,41	19174 10,21	15411 9,04	12292 7,99	9589 7,1	7077 6,43	
		50	Qo Pe	52236 15,84	42417 14,74	34299 13,54	27332 12,29	21883 11,06	17354 9,9	13579 8,88	10390 8,06	10671 7,49	
		30	Qo Pe	61677 11,67	50874 11,27	41660 10,62	33868 9,81	27332 8,99	21883 8,17	17354 7,33	13579 6,53	10390 5,83	
		40	Qo Pe	54411 13,55	44932 12,91	36872 12,09	30066 11,15	24344 10,15	19541 9,15	15490 8,2	12021 7,37	8969 6,73	
<b>V15-59Y</b>	1	30	Qo Pe	46706 15,84	38602 14,74	31748 13,54	25978 12,29	21124 11,06	17018 9,9	13494 8,88	10384 8,06	7522 7,23	
		40	Qo Pe	52236 14,01	42417 13,24	34299 12,27	27332 11,18	21883 10,02	17354 8,87	13579 7,79	10390 6,85	10671 6,11	
		50	Qo Pe	61677 15,99	50874 14,86	41660 13,59	33868 12,23	27332 10,86	21883 9,54	17354 8,34	13579 7,32	10390 6,55	
		30	Qo Pe	64929 10,83	53362 10,76	43393 10,44	34888 9,93	27709 9,27	21721 8,52	16789 7,71	12777 6,9	9548 6,14	
		40	Qo Pe	56706 13,58	46445 13,02	37653 12,28	30194 11,41	23932 10,46	18730 9,47	14454 8,49	10967 7,57	8133 6,76	
<b>V20-59Y</b>	1	30	Qo Pe	47965 15,87	39083 14,85	31538 13,71	25197 12,51	19922 11,28	15578 10,08	12028 9,84	9138 7,93	6771 7,09	
		40	Qo Pe	56706 15,87	46445 14,85	37653 13,71	30194 12,51	23932 11,28	18730 10,08	14454 9,84	10967 8,34	8133 7,09	
		50	Qo Pe	64929 15,87	53362 14,85	43393 13,71	34888 12,51	27709 11,28	21721 10,08	16789 9,47	12777 8,34	9548 7,09	
		30	Qo Pe	62466 13,71	50668 13,33	40942 12,64	32996 11,73	26543 10,66	21292 9,54	16954 8,43	13239 7,42	9857 6,59	
		40	Qo Pe	55243 16,68	44700 15,86	36087 14,78	29116 13,51	23496 12,16	18730 10,78	14454 9,47	10967 8,31	8133 7,09	
<b>V15-71Y</b>	2	30	Qo Pe	59287 17,95	31642 16,49	325498 14,91	20565 13,27	16554 11,67	13176 10,18	10140 8,88	7157 7,86		
		40	Qo Pe	62466 17,32	50668 16,28	40942 15,16	32996 13,97	26543 12,76	21292 11,54	16954 10,36	13239 9,23	9857 8,18	
		50	Qo Pe	55243 19,97	44700 18,31	36087 16,65	29116 15,05	23496 13,51	18730 12,07	14454 10,76	10967 9,61	8133 8,65	
		30	Qo Pe	78657 13,99	64565 13,6	52446 13,02	42130 12,28	33449 11,41	26233 10,44	20314 9,39	15522 8,31	11687 7,2	
		40	Qo Pe	68119 17,32	55771 16,28	45216 15,16	36284 13,97	22612 12,76	17534 11,54	13402 10,36	10047 9,23	7301 8,18	
<b>V25-71Y</b>	1	30	Qo Pe	57449 19,97	46873 18,31	37908 16,65	30385 15,05	24136 13,51	18991 12,07	14780 10,76	11335 9,61	8487 8,65	
		40	Qo Pe	73801 16,69	60257 15,86	48789 14,83	39164 13,65	22612 12,4	17534 11,11	13402 9,87	10047 8,72	7301 7,73	
		50	Qo Pe	63991 19,87	52147 18,53	42215 17,04	33962 15,48	27154 13,9	21560 12,35	16945 10,91	13077 9,63	11435 8,57	
		30	Qo Pe	54161 22,19	43979 20,41	35545 18,56	28626 16,68	22988 14,86	18399 13,14	14626 11,59	11435 10,26	8594 9,22	
		40	Qo Pe	63991 19,87	52147 18,53	42215 17,04	33962 15,48	27154 13,9	21560 12,35	16945 10,91	13077 9,63	11435 8,57	

① Suction gas temperature 20°C without liquid sub-cooling.

The performance refers to European standard EN12900 and with operation at 50Hz; conversion factor at 60Hz = 1.2.

To calculate the performance in different operating points refer to the Frascold Selection Software.

All published data is subject to change.

This field requires additional cooling or limitation of the suction temperature.

## Performance R448A [50 Hz]

Compressor	Motor version	Cond. Temp. [°C]	Qo [W] = Cooling capacity Pe [kW] = Power consumption ①	Evaporating temperature [°C]									
				5	0	-5	-10	-15	-20	-25	-30	-35	-40
V30-84Y	1	30	Qo 93182 Pe 16,31	76821 16,03	62679 15,47	50574 14,68	40330 13,7	31766 12,57	24703 11,33	18963 10,02	14366 8,69	10732 7,37	
		40	Qo 81287 Pe 20,2	66820 19,13	54391 17,92	43820 16,61	34928 15,22	27536 13,82	21465 12,43	16536 11,11	12570 9,88	9388 8,8	
		50	Qo 69084 Pe 23,72	56594 21,88	45961 20,01	37006 18,17	29550 16,39	23414 14,72	18418 13,19	14384 11,84	11132 10,73	8483 9,89	
	2	30	Qo 81957 Pe 18,78	66787 17,75	53970 16,52	43233 15,15	34302 13,69	26903 12,2	20764 10,73	15609 9,35	11166 8,1		
		40	Qo 70837 Pe 21,54	57470 20,08	46273 18,45	36973 16,73	29295 14,97	22968 13,21	17716 11,53	13266 9,97	9345 8,59		
		50	Qo 60950 Pe 23,69	49178 21,81	39394 19,82	31323 17,78	24693 15,73	19228 13,74	14657 11,86	10704 10,16	7096 8,67		
V32-93Y	1	30	Qo 103387 Pe 18,31	84749 17,83	68673 17,08	59495 16,1	43351 14,93	33677 13,61	25710 12,18	19234 10,67	14036 9,13	9901 7,58	
		40	Qo 89543 Pe 22,64	73116 21,22	59039 19,67	47097 18,04	37077 16,36	28763 14,67	21943 13,01	16402 11,42	11926 9,92	8300 8,57	
		50	Qo 75695 Pe 26,08	61526 23,75	49494 21,45	39385 19,2	30985 17,05	24078 15,02	18453 13,16	13893 11,51	10186 10,11	7117 8,99	
	2	30	Qo 88203 Pe 21,36	72720 20,59	59439 19,37	48119 17,83	38523 16,1	30410 14,32	23543 12,61	17681 11,1	12586 9,93		
		40	Qo 79289 Pe 25,46	64933 24,07	52726 22,32	42427 20,32	33799 18,22	26601 16,15	20595 14,22	15541 12,58	11201 11,36		
		50	Qo 46043 Pe			36659 24,7	28892 22,32	22503 19,9	17252 17,59	12900 15,52	9209 13,81	12,6	
V25-103Y	1	30	Qo 108836 Pe 21,22	89931 20,67	73660 19,73	59779 18,48	48047 17	38221 15,38	30058 13,69	23316 12,02	17753 10,45	13126 9,05	
		40	Qo 94491 Pe 27,51	78129 25,68	64097 23,67	52150 21,57	42046 19,47	33544 17,43	26400 15,55	20373 13,9	15219 12,57	10697 11,63	
		50	Qo 80562 Pe 32,82	66675 29,75	54811 26,72	44729 23,82	36185 21,13	28937 18,73	22744 16,7	17362 15,13	12548 14,08	8062 13,65	
	2	30	Qo 97877 Pe 20,28	79572 19,76	64105 18,81	51154 17,53	40399 16,03	31520 14,41	24195 12,79	18104 11,28	12926 9,97		
		40	Qo 85450 Pe 24,83	69203 23,51	55600 21,86	44321 19,99	35044 18	27450 16,01	21217 14,13	16025 12,45	11553 11,1		
		50	Qo 73887 Pe 28,5	59538 26,47	47641 24,22	37874 21,85	29916 19,48	23448 17,21	18148 15,15	13696 13,41	9771 12,1		
Z25-106Y	1	30	Qo 120035 Pe 18,92	98635 18,69	80183 18,11	64447 17,23	51193 16,11	40189 14,8	31200 13,36	23993 11,85	18334 10,33	13992 8,83	
		40	Qo 103975 Pe 24,43	85197 23,11	69123 21,61	55518 19,98	44151 18,28	34786 16,56	27191 14,88	21133 13,29	16378 11,85	12692 10,61	
		50	Qo 87591 Pe 29,15	71550 26,77	57967 24,37	46608 22,01	37240 19,75	29629 17,64	23542 15,74	18746 14,09	15008 12,77	12093 11,81	
	2	30	Qo 112990 Pe 23,03	91925 22,23	74138 21,02	59257 19,51	46911 17,8	36731 16,01	28345 14,22	21382 12,55	15473 11,09		
		40	Qo 97794 Pe 27,64	79315 26,06	63857 24,18	51048 22,1	40518 19,93	31896 17,77	24812 15,72	18893 13,88	13771 12,36		
		50	Qo 83791 Pe 31,4	67678 29,14	54328 26,68	43371 24,13	34435 21,58	27151 19,15	21146 16,92	16052 15,01	11496 13,53		
Z35-106Y	1	30	Qo 139439 Pe 22,93	114617 22,61	93174 21,88	74845 20,8	59363 19,45	46462 17,89	35876 16,18	27338 14,4	20582 12,61	15341 10,88	
		40	Qo 121482 Pe 29,24	99556 27,59	80743 25,74	64778 23,75	51395 21,69	40326 19,62	31306 17,62	24068 15,75	18346 14,08	13874 12,68	
		50	Qo 102257 Pe 34,19	83460 31,28	67511 28,38	54144 25,55	43092 22,85	34090 20,36	26870 18,14	21166 16,25	16712 14,77	13242 13,77	
	2	30	Qo 167811 Pe 26,01	138129 26,31	112749 25,92	91219 24,97	73082 23,56	57883 21,8	45169 19,79	34484 17,64	25373 15,46	17382 13,35	
		40	Qo 149591 Pe 35,1	122992 33,54	100379 31,6	81299 29,38	65296 26,99	51915 24,53	40702 22,12	31202 19,86	22960 17,85	15521 16,21	
		50	Qo 128640 Pe 42,21	105417 38,97	85865 35,62	69528 32,29	55953 29,07	44683 26,08	35266 23,42	27244 21,2	20164 19,53	13571 18,52	
Z40-154Y	2	30	Qo 137361 Pe 28,95	111527 28,22	90237 26,83	72855 24,95	58740 22,77	47254 20,44	37759 18,15	29615 16,05	22184 14,32		
		40	Qo 121056 Pe 35,44	98172 33,74	79480 31,51	64340 28,9	52113 26,09	42162 23,25	33846 20,56	26528 18,17	19568 16,27		
		50	Qo 106378 Pe 41,03	86071 38,43	69601 35,4	56329 32,11	45616 28,74	36824 25,45	29315 22,41	22448 19,79	15586 17,77		
	1	30	Qo 167687 Pe 29,95	138179 28,97	112672 27,62	90834 25,95	72335 24,01	56844 21,84	44031 19,5	33564 17,04	25114 14,5	18350 11,93	
		40	Qo 146799 Pe 37,57	120650 35,09	98176 32,46	79045 29,73	62927 26,96	49491 24,18	38407 21,45	29343 18,82	21970 16,34	15957 14,04	
		50	Qo 124548 Pe 43,66	101990 39,73	82779 35,88	66586 32,15	53080 28,59	41930 25,26	32805 22,19	25376 19,44	19310 17,06	14279 15,09	

① Suction gas temperature 20°C without liquid sub-cooling.

The performance refers to European standard EN12900 and with operation at 50Hz; conversion factor at 60Hz = 1.2.

To calculate the performance in different operating points refer to the Frascold Selection Software.

All published data is subject to change.

This field requires additional cooling or limitation of the suction temperature.

## Performance R448A [50 Hz]

Compressor	Motor version	Cond. Temp. [°C]	Qo [W] = Cooling capacity Pe [kW] = Power consumption ①	Evaporating temperature [°C]									
				5	0	-5	-10	-15	-20	-25	-30	-35	-40
W40-168Y	2	30	Qo	152579	124241	100117	79770	62765	48666	37036	27440	19442	
		Pe	31,59	29,97	28,09	26,01	23,76	21,42	19,03	16,64	14,31		
		40	Qo	133149	108118	86941	69182	54405	42175	32056	23611	16405	
	50	Pe	37,26	34,87	32,25	29,47	26,58	23,63	20,67	17,76	14,95		
		Qo		93258	74735	59270	46429	35776	26874	19287	12580		
		Pe		38,85	35,5	32,01	28,46	24,89	21,36	17,91	14,61		
W50-168Y	1	30	Qo	189814	156020	126930	102144	81262	63884	49612	38043	28778	21419
		Pe	29,94	29,7	28,88	25,88	23,87	21,64	19,28	16,89	14,55		
		40	Qo	166230	136494	111018	89402	71246	56150	43716	33541	25226	18372
	50	Pe	38,96	36,96	34,65	32,13	29,48	26,79	24,17	21,68	19,44	17,51	
		Qo	140369	115056	93558	75476	60410	47960	37726	29309	22308	16323	
		Pe	46,19	42,52	38,81	35,16	31,66	28,4	25,46	22,94	20,94	19,53	
W50-187Y	2	30	Qo	170541	137962	110579	87783	68963	53511	40816	30268	21258	
		Pe	35,03	33,06	30,83	28,39	25,81	23,18	20,55	18	15,6		
		40	Qo	147900	119189	95263	75513	59328	46101	35221	26077	18061	
	50	Pe	40,84	38,05	35,05	31,89	28,66	25,42	22,25	19,21	16,38		
		Qo	127776	102448	81496	64308	50277	38791	29242	21020	13514		
		Pe	45,66	42,04	38,25	34,36	30,46	26,6	22,87	19,32	16,04		
W60-187Y	1	30	Qo	208709	170957	138601	111178	88225	69276	53871	41542	31828	24265
		Pe	34,78	34,02	32,69	30,89	28,73	26,3	23,7	21,02	18,37	15,84	
		Qo	181631	148641	120515	96790	77001	60685	47379	36618	27938	20876	
	50	Pe	44,33	41,6	38,61	35,46	32,25	29,08	26,05	23,26	20,8	18,77	
		Qo	152807	124852	101229	81474	65123	51711	40777	31855	24482	18195	
		Pe	51,92	47,31	42,75	38,34	34,18	30,37	27,01	24,19	22,01	20,57	
W60-206Y	2	30	Qo	188083	152973	123306	98465	77830	60782	46703	34973	24975	
		Pe	38,75	36,98	34,75	32,17	29,37	26,44	23,53	20,74	18,19		
		Qo	164499	133259	107099	85399	67541	52906	40875	30829	22150		
	50	Pe	45,73	42,85	39,63	36,19	32,63	29,08	25,66	22,48	19,67		
		Qo	142854	115145	92151	73253	57832	45271	34948	26247	18548		
		Pe	51,31	47,43	43,33	39,12	34,92	30,86	27,04	23,59	20,62		
W70-206Y	1	30	Qo	227171	186963	152351	122851	97978	77246	60170	46266	35047	26029
		Pe	37,54	36,85	35,54	33,71	31,46	28,86	26,01	23	19,93	16,87	
		Qo	199123	163598	133156	107309	85574	67465	52497	40185	30043	21587	
	50	Pe	47,64	44,94	41,94	38,72	35,36	31,97	28,63	25,43	22,47	19,83	
		Qo	169799	139192	113151	91191	72827	57573	44946	34458	25626	17965	
		Pe	55,91	51,28	46,63	42,07	37,69	33,56	29,79	26,47	23,67	21,51	
W70-228Y	2	30	Qo	188083	152973	123306	98465	77830	60782	46703	34973	24975	
		Pe	38,75	36,98	34,75	32,17	29,37	26,44	23,53	20,74	18,19		
		Qo	164499	133259	107099	85399	67541	52906	40875	30829	22150		
	50	Pe	45,73	42,85	39,63	36,19	32,63	29,08	25,66	22,48	19,67		
		Qo	142854	115145	92151	73253	57832	45271	34948	26247	18548		
		Pe	51,31	47,43	43,33	39,12	34,92	30,86	27,04	23,59	20,62		
W75-228Y	1	30	Qo	246232	202283	164464	132236	105059	82393	63700	48439	36072	26059
		Pe	43,1	41,83	39,97	37,61	34,82	31,68	28,27	24,67	20,97	17,23	
		Qo	214848	176285	143249	115201	91601	71909	55588	42096	30895	21445	
	50	Pe	53,89	50,45	46,76	42,88	38,91	34,91	30,98	27,18	23,61	20,33	
		Qo	181347	148520	120617	97100	77427	61060	47461	36088	26402	17865	
		Pe	62,4	56,89	51,45	46,17	41,11	36,35	31,99	28,09	24,75	22,03	
W75-240Y	2	30	Qo	215742	174824	140436	111845	88313	69107	53491	40727	30083	
		Pe	43,77	42,05	39,61	36,67	33,42	30,05	26,76	23,76	21,24		
		Qo	189025	152442	122004	96976	76622	60208	46996	36253	27242		
	50	Pe	52,23	49,01	45,27	41,23	37,07	33	29,21	25,91	23,28		
		Qo	165271	132564	105615	83691	66055	51972	40706	31523	23686		
		Pe	59,04	54,48	49,61	44,63	39,73	35,12	31	27,56	25		
W80-240Y	1	30	Qo	255174	209818	170795	137561	109571	86281	67147	51623	39166	29230
		Pe	45,14	43,79	41,82	39,34	36,43	33,2	29,74	26,14	22,5	18,91	
		Qo	223665	183462	149032	119830	95312	74933	58150	44417	33190	23924	
	50	Pe	56,67	52,98	49,03	44,92	40,73	36,56	32,51	28,68	25,15	22,03	
		Qo	190339	155576	126026	101144	80385	63206	49061	37406	27696	19388	
		Pe	66	60,03	54,15	48,45	43,03	37,98	33,39	29,37	26,01	23,4	

① Suction gas temperature 20°C without liquid sub-cooling.

The performance refers to European standard EN12900 and with operation at 50Hz; conversion factor at 60Hz = 1.2.

To calculate the performance in different operating points refer to the Frascold Selection Software.

All published data is subject to change.

This field requires additional cooling or limitation of the suction temperature.

## Performance R449A [50 Hz]

Compressor	Motor version	Cond. Temp. [°C]	Qo [W] = Cooling capacity Pe [kW] = Power consumption ①	Evaporating temperature [°C]									
				5	0	-5	-10	-15	-20	-25	-30	-35	-40
A05-4Y	1	30	Qo 4155 Pe 0,71	3408	2761	2205	1732	1336	1007	738	521	349	
		40	Qo 3471 Pe 0,87	2845	2305	1843	1450	1118	841	609	415	251	0,38
		50	Qo 2842 Pe 1,01	2330	1888	1510	1187	912	677	473	294	130	0,37
	2	30	Qo 4686 Pe 1,08	3674	2845	2177	1651	1244	937	709	539		
		40	Qo 3807 Pe 1,15	2970	2292	1752	1330	1004	755	561	402		
		50	Qo 3075 Pe 1,27	2395	1851	1422	1087	825	616	439	273		0,54
A07-5Y	1	30	Qo 5468 Pe 0,86	4442	3560	2812	2186	1671	1255	928	678	493	
		40	Qo 4614 Pe 1,11	3733	2981	2347	1821	1390	1043	770	558	398	
		50	Qo 3802 Pe 1,32	3061	2434	1910	1477	1126	843	619	441	298	
	2	30	Qo 5074 Pe 1,19	3971	3080	2374	1823	1399	1072	816	601		
		40	Qo 4217 Pe 1,25	3285	2541	1957	1504	1155	880	650	438		
		50	Qo 3556 Pe 1,41	2765	2138	1648	1266	962	709	478	241		
A07-6Y	1	30	Qo 6017 Pe 0,97	4947	4012	3204	2515	1936	1459	1076	779	559	
		40	Qo 5099 Pe 1,22	4187	3392	2707	2124	1634	1229	901	641	442	
		50	Qo 4192 Pe 1,44	3433	2775	2210	1729	1325	988	711	485	302	
	2	30	Qo 6682 Pe 1,71	5297	4162	3246	2520	1953	1514	1174	901		
		40	Qo 5517 Pe 1,76	4366	3432	2683	2090	1621	1247	937	660		
		50	Qo 4555 Pe 1,92	3610	2847	2235	1745	1345	1006	696	386		
A1-6Y	1	30	Qo 6017 Pe 0,97	4947	4012	3204	2515	1936	1459	1076	779	559	
		40	Qo 5099 Pe 1,22	4187	3392	2707	2124	1634	1229	901	641	442	
		50	Qo 4192 Pe 1,44	3433	2775	2210	1729	1325	988	711	485	302	
	2	30	Qo 6682 Pe 1,71	5297	4162	3246	2520	1953	1514	1174	901		
		40	Qo 5517 Pe 1,76	4366	3432	2683	2090	1621	1247	937	660		
		50	Qo 4555 Pe 1,92	3610	2847	2235	1745	1345	1006	696	386		
A1-7Y	1	30	Qo 7852 Pe 1,32	6429	5199	4147	3259	2521	1919	1440	1068	791	
		40	Qo 6747 Pe 1,6	5515	4455	3555	2799	2173	1665	1258	941	698	
		50	Qo 5704 Pe 1,85	4650	3748	2986	2349	1824	1395	1050	774	553	
	2	30	Qo 6685 Pe 1,51	5435	4374	3483	2744	2140	1651	1259	947		
		40	Qo 5814 Pe 1,78	4715	3786	3011	2370	1845	1418	1071	785		
		50	Qo 4964 Pe 2,03	4010	3210	2545	1996	1546	1177	869	605		
A1.5-7Y	1	30	Qo 7852 Pe 1,32	6429	5199	4147	3259	2521	1919	1440	1068	791	
		40	Qo 6747 Pe 1,6	5515	4455	3555	2799	2173	1665	1258	941	698	
		50	Qo 5704 Pe 1,85	4650	3748	2986	2349	1824	1395	1050	774	553	
	2	30	Qo 6685 Pe 1,51	5435	4374	3483	2744	2140	1651	1259	947		
		40	Qo 5814 Pe 1,78	4715	3786	3011	2370	1845	1418	1071	785		
		50	Qo 4964 Pe 2,03	4010	3210	2545	1996	1546	1177	869	605		
B1.5-9.1Y	2	30	Qo 9517 Pe 1,87	7802	6323	5063	4004	3129	2420	1860	1432	1119	
		40	Qo 8321 Pe 2,3	6808	5511	4412	3493	2738	2130	1650	1282	1008	
		50	Qo 7055 Pe 2,67	5750	4639	3707	2935	2307	1804	1410	1108	880	
	2	30	Qo 9517 Pe 1,87	7802	6323	5063	4004	3129	2420	1860	1432	1119	
		40	Qo 8321 Pe 2,3	6808	5511	4412	3493	2738	2130	1650	1282	1008	
		50	Qo 7055 Pe 2,67	5750	4639	3707	2935	2307	1804	1410	1108	880	
B1.5-10.1Y	2	30	Qo 8975 Pe 2,35	7157	5657	4438	3461	2690	2088	1617	1241		
		40	Qo 7492 Pe 2,45	5976	4735	3733	2932	2296	1786	1366	999		
		50	Qo 6297 Pe 2,71	5048	4032	3213	2554	2018	1567	1164	772		
	2	30	Qo 10413 Pe 2,07	8590	7005	5641	4483	3513	2716	2075	1573	1195	
		40	Qo 9018 Pe 2,51	7439	6073	4902	3911	3083	2402	1851	1414	1075	
		50	Qo 7668 Pe 2,92	6330	5178	4197	3369	2678	2109	1644	1268	963	
B2-10.1Y	1	30	Qo 12444 Pe 2,22	10242	8336	6705	5324	4172	3226	2463	1861	1396	
		40	Qo 10755 Pe 2,73	8855	7217	5818	4635	3647	2829	2159	1616	1175	
		50	Qo 9035 Pe 3,19	7434	6061	4891	3903	3074	2382	1803	1314	894	
	1	30	Qo 12444 Pe 2,22	10242	8336	6705	5324	4172	3226	2463	1861	1396	
		40	Qo 10755 Pe 2,73	8855	7217	5818	4635	3647	2829	2159	1616	1175	
		50	Qo 9035 Pe 3,19	7434	6061	4891	3903	3074	2382	1803	1314	894	

① Suction gas temperature 20°C without liquid sub-cooling.

The performance refers to European standard EN12900 and with operation at 50Hz; conversion factor at 60Hz = 1.2.

To calculate the performance in different operating points refer to the Frascold Selection Software.

All published data is subject to change.

■ This field requires additional cooling or limitation of the suction temperature.

## Performance R449A [50 Hz]

Compressor	Motor version	Cond. Temp. [°C]	Qo [W] = Cooling capacity Pe [kW] = Power consumption ①	Evaporating temperature [°C]									
				5	0	-5	-10	-15	-20	-25	-30	-35	-40
D2-13.1Y	2	30	Qo	12708	10122	7991	6263	4887	3812	2984	2352	1864	
		Pe	3,16	2,83	2,54	2,29	2,07	1,89	1,75	1,64	1,56		
		40	Qo	10695	8522	6747	5319	4187	3298	2601	2043	1573	
		Pe	3,28	3,01	2,76	2,53	2,32	2,12	1,95	1,79	1,65		
	1	50	Qo	9064	7257	5792	4617	3681	2933	2319	1788	1289	
		Pe	3,69	3,43	3,17	2,91	2,65	2,4	2,14	1,89	1,64		
		30	Qo	14630	12039	9801	7886	6264	4905	3779	2855	2105	1497
		Pe	2,58	2,59	2,54	2,43	2,27	2,09	1,89	1,7	1,53	1,4	
D3-13.1Y	1	40	Qo	12573	10364	8461	6834	5452	4286	3306	2481	1782	1178
		Pe	3,19	3,1	2,96	2,77	2,55	2,32	2,09	1,87	1,7	1,57	
		50	Qo	10614	8775	7194	5842	4688	3702	2855	2116	1455	842
		Pe	3,78	3,59	3,37	3,11	2,83	2,56	2,3	2,07	1,89	1,77	
	2	30	Qo	14177	11304	8935	7013	5481	4281	3354	2643	2090	
		Pe	3,76	3,35	2,99	2,69	2,43	2,22	2,05	1,92	1,81		
		40	Qo	11780	9406	7468	5908	4668	3691	2919	2294	1759	
		Pe	3,87	3,54	3,25	2,98	2,74	2,51	2,3	2,09	1,9		
D2-15.1Y	2	50	Qo	9883	7946	6376	5116	4107	3292	2613	2013	1433	
		Pe	4,25	3,95	3,66	3,37	3,08	2,78	2,47	2,14	1,79		
		30	Qo	16593	13750	11277	9151	7346	5837	4601	3611	2843	2272
		Pe	3,09	3,19	3,17	3,06	2,87	2,64	2,39	2,15	1,95	1,82	
	1	40	Qo	14392	11946	9825	8005	6460	5167	4099	3232	2542	2004
		Pe	3,95	3,9	3,75	3,52	3,24	2,95	2,65	2,4	2,2	2,09	
		50	Qo	12091	10054	8296	6794	5521	4454	3567	2836	2235	1740
		Pe	4,68	4,5	4,23	3,9	3,55	3,2	2,88	2,62	2,44	2,36	
D3-16.1Y	2	30	Qo	15636	12480	9877	7762	6071	4737	3697	2885	2237	
		Pe	4,16	3,66	3,24	2,88	2,59	2,35	2,15	1,98	1,85		
		40	Qo	13128	10481	8314	6563	5162	4047	3152	2414	1766	
		Pe	4,43	3,98	3,59	3,24	2,93	2,64	2,37	2,12	1,86		
	1	50	Qo	11075	8876	7084	5636	4465	3507	2697	1970	1261	
		Pe	4,98	4,52	4,1	3,69	3,29	2,9	2,51	2,09	1,66		
		30	Qo	18181	15003	12248	9883	7875	6191	4798	3665	2756	2041
		Pe	3,43	3,43	3,35	3,19	2,97	2,73	2,46	2,2	1,96	1,75	
D4-16.1Y	1	40	Qo	15969	13197	10800	8742	6992	5517	4284	3260	2412	1708
		Pe	4,23	4,12	3,93	3,68	3,39	3,08	2,76	2,45	2,18	1,96	
		50	Qo	13684	11329	9297	7556	6073	4815	3751	2845	2067	1383
		Pe	4,98	4,75	4,45	4,11	3,74	3,36	2,98	2,63	2,33	2,09	
	2	30	Qo	18298	14236	11032	8558	6688	5296	4254	3435	2714	
		Pe	5,33	4,44	3,77	3,29	2,95	2,71	2,53	2,38	2,21		
		40	Qo	15604	12090	9359	7282	5735	4589	3718	2996	2295	
		50	Qo	10328	8023	6297	5025	4079	3333	2660	1933		
D4-18.1Y	1	30	Qo	19180	15965	13154	10718	8631	6867	5399	4199	3242	2501
		Pe	3,87	3,82	3,68	3,48	3,23	2,97	2,71	2,49	2,32	2,24	
		40	Qo	16755	13976	11551	9454	7658	6136	4863	3810	2951	2260
		Pe	4,7	4,54	4,3	4,01	3,69	3,37	3,08	2,82	2,64	2,56	
	2	50	Qo	14209	11890	9877	8145	6665	5412	4358	3477	2743	2127
		Pe	5,49	5,23	4,9	4,53	4,14	3,77	3,43	3,15	2,96	2,87	
		30	Qo	14645	11563	9125	7230	5779	4671	3806	3082		
		Pe	4,71	4,06	3,58	3,23	2,98	2,8	2,64	2,48			
D3-19.1Y	2	40	Qo	12595	9956	7889	6294	5071	4119	3339	2629		
		Pe	5,23	4,57	4,06	3,67	3,37	3,11	2,87	2,62			
		50	Qo	8487	6778	5469	4461	3652	2942	2232			
		Pe	5,22	4,6	4,09	3,66	3,25	2,85					
	1	30	Qo	18356	14582	11501	9028	7082	5580	4439	3577	2911	
		Pe	4,72	4,24	3,82	3,46	3,15	2,92	2,75	2,65	2,63		
		40	Qo	15352	12233	9709	7698	6118	4885	3918	3135	2451	
		Pe	4,93	4,54	4,19	3,86	3,56	3,29	3,05	2,86	2,71		
D4-19.1Y	1	50	Qo	12900	10359	8318	6694	5405	4368	3500	2719	1942	
		Pe	5,57	5,2	4,82	4,44	4,05	3,67	3,28	2,91	2,54		
		30	Qo	18186	14492	11451	8988	7025	5490	4306	3397	2690	
		Pe	4,44	3,9	3,45	3,07	2,75	2,49	2,29	2,15	2,05		
	2	40	Qo	15564	12395	9804	7715	6054	4745	3713	2882	2178	
		Pe	4,72	4,24	3,81	3,42	3,08	2,78	2,52	2,28	2,07		
		50	Qo	13354	10653	8455	6686	5269	4130	3194	2384	1627	
		Pe	5,26	4,76	4,29	3,85	3,42	3,02	2,62	2,23	1,84		
Q4-20.1Y	2	30	Qo	20280	16033	12549	9738	7512	5780	4454	3444	2660	
		Pe	4,56	4,07	3,64	3,26	2,93	2,65	2,42	2,24	2,11		
		40	Qo	17091	13473	10531	8174	6315	4862	3728	2823	2057	
		Pe	4,92	4,45	4,01	3,61	3,24	2,91	2,61	2,34	2,11		
	1	50	Qo	14273	11229	8774	6817	5270	4043	3047	2192	1390	
		Pe	5,41	4,9	4,41	3,93	3,48	3,04	2,62	2,22	1,83		
		30	Qo	18186	14492	11451	8988	7025	5490	4306	3397	2690	
		Pe	4,44	3,9	3,45	3,07	2,75	2,49	2,29	2,15	2,05		
Q4-21.1Y	2	40	Qo	15564	12395	9804	7715	6054	4745	3713	2882	2178	
		Pe	4,72	4,24	3,81	3,42	3,08	2,78	2,52	2,28	2,07		
		50	Qo	13354	10653	8455	6686	5269	4130	3194	2384	1627	
		Pe	5,26	4,76	4,29	3,85	3,42	3,02	2,62	2,23	1,84		

① Suction gas temperature 20°C without liquid sub-cooling.

The performance refers to European standard EN12900 and with operation at 50Hz; conversion factor at 60Hz = 1.2.

To calculate the performance in different operating points refer to the Frascold Selection Software.

All published data is subject to change.

This field requires additional cooling or limitation of the suction temperature.

## Performance R449A [50 Hz]

Compressor	Motor version	Cond. Temp. [°C]	Qo [W] = Cooling capacity Pe [kW] = Power consumption ①	Evaporating temperature [°C]									
				5	0	-5	-10	-15	-20	-25	-30	-35	-40
Q5-21.1Y	1	30	Qo 22793 Pe 3,71	18862 3,76	15425 3,71	12445 3,56	9885 3,35	7707 3,06	5874 2,73	4348 2,36	3091 1,96	2067 1,55	
		40	Qo 19609 Pe 4,59	16243 4,53	13303 4,37	10751 4,12	8550 3,8	6662 3,42	5049 2,99	3673 2,53	2499 2,04	1487 1,54	
		50	Qo 16409 Pe 5,35	13593 5,17	11134 4,89	8993 4,53	7133 4,1	5517 3,61	4107 3,07	2866 2,51	1756 1,92	740 1,33	
Q4-24.1Y	2	30	Qo 22480 Pe 5,43	17903 4,77	14130 4,2	11066 3,73	8617 3,34	6691 3,02	5193 2,76	4031 2,56	3110 2,41		
		40	Qo 18647 Pe 5,76	14855 5,16	11753 4,63	9250 4,16	7251 3,75	5662 3,38	4391 3,04	3344 2,74	2426 2,45		
		50	Qo 15483 Pe 6,36	12380 5,76	9858 5,19	7822 4,66	6178 4,15	4834 3,66	3696 3,36	2670 2,69	1663 2,2		
Q5-24.1Y	1	30	Qo 26192 Pe 4,5	21558 4,47	17542 4,33	14098 4,1	11179 3,81	8735 3,48	6721 3,13	5088 2,78	3789 2,45	2776 2,17	
		40	Qo 22635 Pe 5,55	18641 5,36	15189 5,09	12232 4,74	9722 4,34	7611 3,92	5852 3,49	4398 3,08	3200 2,71	2212 2,4	
		50	Qo 18974 Pe 6,53	15630 6,19	12751 5,77	10289 5,29	8197 4,79	6428 4,27	4933 3,76	3666 3,28	2579 2,86	1623 2,51	
Q4-25.1Y	2	30	Qo 23156 Pe 5,53	18416 4,85	14505 4,26	11326 3,77	8785 3,35	6785 3,01	5230 2,72	4026 2,49	3077 2,3		
		40	Qo 19374 Pe 5,88	15379 5,25	12110 4,68	9471 4,18	7365 3,72	5699 3,31	4375 2,93	3299 2,58	2374 2,24		
		50	Qo 16260 Pe 6,53	12925 5,87	10212 5,25	8027 4,66	6272 4,09	4854 3,54	3675 3	2641 2,45	1656 1,89		
Q5-25.1Y	2	30	Qo 26964 Pe 4,62	22206 4,6	18085 4,48	14554 4,27	11565 4	9071 3,68	7025 3,33	5377 2,98	4080 2,64	3088 2,34	
		40	Qo 23305 Pe 5,75	19220 5,58	15693 5,31	12674 4,96	10118 4,57	7975 4,14	6199 3,7	4741 3,27	3555 2,87	2591 2,52	
		50	Qo 19601 Pe 6,77	16182 6,43	13239 6	10726 5,52	8593 5	6794 4,46	5281 3,92	4006 3,4	2920 2,93	1978 2,52	
Q7-25.1Y	1	30	Qo 27972 Pe 4,78	22864 4,75	18461 4,6	14711 4,35	11561 4,04	8960 3,69	6857 3,33	5199 3	3934 2,72	3010 2,53	
		40	Qo 23829 Pe 5,84	19467 5,64	15729 5,33	12565 4,96	9923 4,54	7750 4,11	5995 3,7	4606 3,34	3531 3,06	2717 2,88	
		50	Qo 19949 Pe 6,77	16304 6,4	13205 5,96	10600 5,47	8437 4,96	6664 4,47	5230 4,02	4082 3,64	3169 3,37	2439 3,23	
Q5-28.1Y	2	30	Qo 26813 Pe 6,65	21405 5,84	16945 5,16	13321 4,6	10425 4,13	8146 3,74	6374 3,44	5000 3,19	3914 2,98		
		40	Qo 22421 Pe 6,93	17911 6,24	14221 5,63	11242 5,1	8864 4,62	6976 4,18	5469 3,78	4233 3,4	3158 3,02		
		50	Qo 18743 Pe 7,58	15034 6,91	12019 6,28	9588 5,68	7631 5,1	6037 4,52	4698 3,93	4082 3,32	3504 2,67		
Q7-28.1Y	1	30	Qo 30918 Pe 5,67	25559 5,56	20904 5,36	16899 5,08	13494 4,74	10634 4,37	8267 3,97	6341 3,57	4802 3,19	3599 2,84	
		40	Qo 26864 Pe 6,82	22240 6,56	18234 6,21	14793 5,81	11865 5,36	9397 4,89	7336 4,41	5630 3,95	4606 3,51	3531 3,12	
		50	Qo 22762 Pe 7,91	18863 7,48	15497 7	12610 6,46	10150 5,89	8064 5,32	6299 4,75	4803 4,21	3524 3,72	2408 3,29	
Q5-33.1Y	2	30	Qo 31575 Pe 7,71	24922 6,84	19585 6,08	15376 5,43	12107 4,89	9589 4,44	7633 4,08	6050 3,8	4653 3,59		
		40	Qo 27170 Pe 8,52	21337 7,63	16719 6,84	13129 6,13	10376 5,51	8273 4,96	6632 4,48	5263 4,07	4226 3,71		
		50	Qo 18621 Pe 8,93	14593 7,97	11490 7,07	9125 6,23	7308 5,45	5851 4,72	4566 4,03	3264 3,38			
Q7-33.1Y	1	30	Qo 35761 Pe 6,7	29527 6,61	24124 6,36	19491 5,97	15567 5,51	12293 5,01	9606 4,53	7445 4,09	5751 3,76	4462 3,58	
		40	Qo 31062 Pe 8,03	25700 7,74	21061 7,3	17085 6,76	13710 6,17	10876 5,57	8522 5,01	6588 4,53	5011 4,17	3733 3,99	
		50	Qo 26261 Pe 9,26	21770 8,76	17894 8,14	14573 7,46	11746 6,74	9353 6,04	7331 5,41	5621 4,89	4162 4,51	2892 4,34	
S5-33Y	2	30	Qo 34082 Pe 7,98	26371 6,75	20339 5,83	15734 5,16	12304 4,7	9797 4,39	7963 4,18	6549 4,03	5304 3,87		
		40	Qo 29578 Pe 8,77	22817 7,65	17590 6,78	13643 6,12	10726 5,61	8588 5,19	6976 4,83	5639 4,47	4325 4,05		
		50	Qo 20555 Pe 9,29	18324 8,26	15908 7,38	12397 6,59	9770 6,04	7776 5,85	6163 5,11	4680 4,31	3074 3,4		
S7-33Y	1	30	Qo 35634 Pe 6,1	29399 6,16	24059 6,03	19526 5,75	15711 5,37	12525 4,91	9879 4,42	7685 3,94	5853 3,51	4295 3,16	
		40	Qo 31265 Pe 7,81	25867 7,62	21250 7,27	17325 6,8	14004 6,25	11196 5,65	8814 5,04	6769 4,47	4971 3,97	3332 3,59	
		50	Qo 26809 Pe 9,37	22234 8,93	18324 8,36	14991 7,69	12146 6,96	9701 6,21	7566 5,48	5653 4,82	3873 4,25	2137 3,82	

① Suction gas temperature 20°C without liquid sub-cooling.

The performance refers to European standard EN12900 and with operation at 50Hz; conversion factor at 60Hz = 1.2.

To calculate the performance in different operating points refer to the Frascold Selection Software.

All published data is subject to change.

This field requires additional cooling or limitation of the suction temperature.

## Performance R449A [50 Hz]

Compressor	Motor version	Cond. Temp. [°C]	Qo [W] = Cooling capacity Pe [kW] = Power consumption ①	Evaporating temperature [°C]									
				5	0	-5	-10	-15	-20	-25	-30	-35	-40
Q7-36.1Y	1	30	Qo	35826	28633	22704	17890	14047	11028	8686	6874	5447	
		Pe	8,87	7,81	6,9	6,14	5,51	5,01	4,61	4,3	4,07		
		40	Qo	30029	23997	19064	15084	11908	9392	7389	5751	4334	
		Pe	9,31	8,37	7,53	6,79	6,13	5,54	5,01	4,52	4,06		
	2	50	Qo	25166	20170	16109	12834	10201	8062	6272	4683	3149	
		Pe	10,22	9,27	8,38	7,54	6,73	5,94	5,16	4,37	3,56		
S8-42Y	2	30	Qo	41031	32797	26017	20513	16111	12637	9913	7767	6022	
		Pe	9,78	8,59	7,58	6,73	6,03	5,44	4,97	4,58	4,25		
		40	Qo	34416	27551	21940	17406	13775	10872	8521	6548	4777	
		Pe	10,16	9,13	8,22	7,41	6,68	6,02	5,41	4,82	4,23		
	1	50	Qo	28538	22937	18390	14722	11758	9322	7239	5334	3432	
		Pe	11	9,99	9,06	8,16	7,29	6,42	5,54	4,62	3,65		
S12-42Y	1	30	Qo	44402	36689	29968	24171	19228	15069	11625	8828	6607	4892
		Pe	7,71	7,54	7,22	6,78	6,25	5,66	5,05	4,45	3,89	3,42	
		40	Qo	38646	31862	25976	20916	16616	13004	10012	7570	5608	4059
		Pe	9,36	8,93	8,37	7,72	7	6,25	5,51	4,8	4,16	3,63	
	2	50	Qo	32899	27030	21963	17627	13954	10874	8319	6217	4501	3101
		Pe	10,81	10,11	9,31	8,44	7,53	6,62	5,73	4,91	4,18	3,59	
S10-52Y	2	30	Qo	49053	39000	30867	24397	19335	15427	12418	10051	8072	
		Pe	11,76	10,49	9,35	8,34	7,46	6,72	6,12	5,65	5,34		
		40	Qo	41719	33247	26451	21079	16874	13580	10944	8709	6621	
		Pe	12,59	11,47	10,41	9,42	8,5	7,65	6,89	6,2	5,6		
	1	50	Qo	35682	28591	22937	18463	14916	12039	9578	7277	4881	
		Pe	14,14	12,99	11,84	10,7	9,57	8,46	7,36	6,28	5,22		
S15-52Y	1	30	Qo	56669	46808	38355	31172	25120	20061	15856	12367	9454	6980
		Pe	9,48	9,5	9,24	8,77	8,15	7,44	6,7	6	5,39	4,94	
		40	Qo	49779	41250	33946	27729	22460	18001	14213	10957	8095	5489
		Pe	11,94	11,58	11	10,25	9,39	8,49	7,61	6,8	6,15	5,69	
	2	50	Qo	42729	35511	29355	24064	19557	15678	12286	9244	6413	3654
		Pe	14,19	13,45	12,53	11,5	10,4	9,31	8,28	7,38	6,67	6,21	
S15-56Y	2	30	Qo	55188	43823	34619	27290	21549	17111	13689	10996	8747	
		Pe	12,72	11,35	10,12	9,04	8,1	7,31	6,67	6,19	5,86		
		40	Qo	46956	37356	29647	23543	18757	15003	11995	9447	7072	
		Pe	13,48	12,28	11,14	10,09	9,11	8,22	7,41	6,68	6,03		
	1	50	Qo	40114	32064	25634	20540	16494	13209	10401	7782	5067	
		Pe	15,01	13,78	12,56	11,35	10,15	8,96	7,79	6,63	5,49		
S20-56Y	1	30	Qo	62104	51350	42120	34267	27642	22099	17489	13665	10479	7784
		Pe	10,93	10,84	10,45	9,84	9,08	8,23	7,37	6,57	5,9	5,43	
		40	Qo	54639	45328	37343	30536	24759	19864	15705	12133	9001	6161
		Pe	13,48	12,97	12,23	11,32	10,31	9,28	8,29	7,42	6,73	6,3	
	2	50	Qo	46953	39071	32315	26540	21596	17336	13613	10279	7186	4186
		Pe	15,73	14,82	13,73	12,53	11,29	10,08	8,97	8,04	7,34	6,97	
V15-59Y	2	30	Qo	56602	44977	35563	28069	22200	17663	14164	11410	9107	
		Pe	13,98	12,42	11,02	9,79	8,72	7,82	7,08	6,52	6,12		
		40	Qo	48146	38343	30473	24242	19358	15525	12452	9843	7406	
		Pe	14,77	13,38	12,08	10,87	9,75	8,73	7,8	6,97	6,24		
	1	50	Qo	41125	32922	26372	21182	17058	13707	10836	8150	5356	
		Pe	16,36	14,94	13,92	12,75	11,51	10,79	9,45	8,13	6,84	5,58	
V20-59Y	1	30	Qo	65382	53860	43872	35300	28029	21943	16926	12861	9633	7125
		Pe	10,88	10,86	10,56	10,04	9,36	8,58	7,76	6,95	6,21	5,59	
		40	Qo	56942	46844	38121	30657	24336	19042	14658	11070	8160	5812
		Pe	13,52	13,09	12,42	11,58	10,63	9,61	8,59	7,62	6,76	6,08	
	2	50	Qo	48203	39538	32090	25743	20382	15889	12149	9046	6463	4285
		Pe	15,78	14,94	13,92	12,75	11,51	10,26	9,04	7,91	6,95	6,19	
V15-71Y	2	30	Qo	68254	53844	42339	33317	26353	21023	16905	13573	10604	
		Pe	16,74	14,72	13	11,55	10,34	9,34	8,51	7,82	7,24		
		40	Qo	58562	46142	36336	28720	22870	18362	14773	11679	8656	
		Pe	18,38	16,4	14,66	13,13	11,78	10,58	9,5	8,5	7,55		
	1	50	Qo	31799	25272	20220	16219	12843	9671	6277			
		Pe				16,97	15,02	13,2	11,47	9,8	8,15	6,5	
V25-71Y	1	30	Qo	79207	65167	53022	42626	33833	26499	20478	15623	11790	8832
		Pe	14,11	13,86	13,31	12,52	11,57	10,51	9,42	8,36	7,4	6,61	
		40	Qo	68402	56250	45779	36841	29293	22989	17782	13528	10080	7293
		Pe	16,83	16,18	15,27	14,17	12,94	11,66	10,38	9,18	8,12	7,26	
	2	50	Qo	57737	47423	38575	31046	24692	19367	14925	11221	8109	5443
		Pe	19,17	18,12	16,85	15,43	13,92	12,4	10,94	9,59	8,42	7,5	
V20-84Y	2	30	Qo	79791	63790	50559	39782	31139	24316	18994	14856	11585	
		Pe	19,92	17,48	15,39	13,62	12,16	10,96	9,99	9,23	8,64		
		40	Qo	66555	53276	42396	33598	26565	20979	16524	12882	9736	
		Pe	20,94	18,73	16,78	15,05	13,52	12,16	10,93	9,81	8,76		
	1	50	Qo	54530	43810	35118	28137	22550	18040	14289	10980	7796	
		Pe	22,69	20,5	18,47	16,57	14,76	13,01	11,3	9,6	7,86		

① Suction gas temperature 20°C without liquid sub-cooling.

The performance refers to European standard EN12900 and with operation at 50Hz; conversion factor at 60Hz = 1.2.

To calculate the performance in different operating points refer to the Frascold Selection Software.

All published data is subject to change.

This field requires additional cooling or limitation of the suction temperature.

## Performance R449A [50 Hz]

Compressor	Motor version	Cond. Temp. [°C]	Qo [W] = Cooling capacity Pe [kW] = Power consumption ①	Evaporating temperature [°C]									
				5	0	-5	-10	-15	-20	-25	-30	-35	-40
V30-84Y	1	30	Qo 93831 Pe 16,48	77537 16,36	63366 15,83	51167 14,98	40791 13,89	32086 12,66	24901 11,36	19087 10,09	14491 8,93	10965 7,97	
		40	Qo 81625 Pe 19,63	67398 19,02	55072 18,06	44497 16,84	35522 15,44	27997 13,95	21771 12,46	16693 11,05	12612 9,8	9378 8,81	
		50	Qo 69438 Pe 22,77	57266 21,66	46775 20,25	37812 18,63	30227 16,89	23871 15,11	18591 13,39	14238 11,81	10660 10,46	7707 9,41	
	2	30	Qo 88773 Pe 22,46	70800 19,6	55971 17,17	43918 15,13	34273 13,42	26667 12,01	20733 10,86	16103 9,91	12408 9,13		
		40	Qo 73741 Pe 22,77	58736 20,31	46458 18,15	36537 16,24	28607 14,52	22298 12,97	17242 11,53	13072 10,16	9419 8,82		
		50	Qo 61345 Pe 24,22	48965 21,88	38894 19,69	30762 17,61	24202 15,59	18846 13,6	14325 11,58	10271 9,49	6316 7,29		
V32-93Y	1	30	Qo 104116 Pe 18,47	85544 18,17	69432 17,45	55956 16,41	43855 15,14	34024 13,71	25921 12,22	19363 10,75	14167 9,39	10149 8,22	
		40	Qo 89914 Pe 21,99	73737 21,07	59764 19,82	47812 18,3	37698 16,6	29239 14,83	22253 13,05	16554 11,36	11962 9,84	8293 8,58	
		50	Qo 76064 Pe 25,03	62233 23,5	50350 21,7	40232 19,7	31696 17,59	24560 15,46	18640 13,39	13752 11,48	9715 9,81	6345 8,46	
	2	30	Qo 95904 Pe 25,49	77215 22,65	61646 20,08	48844 17,79	38455 15,8	30126 14,12	23502 12,77	18230 11,75	13956 11,08		
		40	Qo 66348 Pe 24,33	52911 21,98	41918 19,78	33018 17,75	25854 15,9	20075 14,25	15326 12,81	11253 11,59			
		50	Qo 45491 Pe 24,62	36031 22,18	28341 19,77	22067 17,42	16855 15,14	12351 12,94	8202 10,83				
V25-103Y	1	30	Qo 109599 Pe 21,4	90777 21,07	74475 20,18	60484 18,86	48597 17,25	38604 15,49	30297 13,73	23468 12,11	17908 10,76	13409 9,83	
		40	Qo 94890 Pe 26,72	78817 25,49	64911 23,83	52961 21,87	42760 19,74	34098 17,6	26769 15,58	20563 13,82	15271 12,46	10686 11,64	
		50	Qo 80982 Pe 31,53	67478 29,42	55784 27	45693 24,41	36996 21,78	29485 19,26	22951 16,98	17185 15,1	11980 13,74	7127 13,05	
	2	30	Qo 105878 Pe 24,37	84283 21,8	66456 19,51	51963 17,48	40371 15,72	31249 14,21	24161 12,95	18676 11,93	14361 11,15		
		40	Qo 88872 Pe 26,14	70703 23,74	55832 21,51	43826 19,44	34251 17,53	26675 15,77	20665 14,16	15788 12,68	11611 11,34		
		50	Qo 74384 Pe 29,14	59316 26,61	47077 24,14	37232 21,72	29349 19,36	22996 17,05	17738 14,77	13144 12,53	8780 10,31		
Z25-106Y	1	30	Qo 120870 Pe 19,12	99548 19,08	81057 18,53	65199 17,58	51778 16,33	40594 14,91	31451 13,4	24150 11,94	18494 10,62	14285 9,56	
		40	Qo 104404 Pe 23,74	85928 22,97	69985 21,78	56376 20,26	44905 18,54	35372 16,71	27581 14,9	21334 13,21	16432 11,74	12679 10,62	
		50	Qo 88035 Pe 27,99	72398 26,49	58994 24,64	47626 22,55	38096 20,34	30206 18,12	23759 15,99	18556 14,06	14401 12,45	11094 11,27	
	2	30	Qo 122172 Pe 27,58	97340 24,5	76848 21,8	60197 19,46	46889 17,46	36426 15,79	32307 14,4	22037 13,28	17116 12,41		
		40	Qo 101720 Pe 29,1	81041 26,32	64128 23,8	50483 21,5	39607 19,41	31002 17,5	24170 15,75	18612 14,14	13830 12,63		
		50	Qo 84350 Pe 32,1	67415 29,28	53673 26,59	42625 23,98	33773 21,45	26619 18,96	20664 16,5	15410 14,03	10358 11,54		
Z35-106Y	1	30	Qo 140414 Pe 23,14	115684 23,06	94196 22,38	75724 21,22	60046 19,72	46936 18,02	36169 16,23	31451 14,5	24150 12,96	18494 11,74	
		40	Qo 121985 Pe 28,42	100407 27,43	81744 25,94	65772 24,08	52265 22	41000 19,81	31752 17,66	24295 15,66	18406 13,96	13860 12,69	
		50	Qo 102766 Pe 32,82	84436 30,95	68695 28,7	55317 26,18	44078 23,55	34754 20,92	27121 18,43	20952 16,21	15424 14,39	12112 13,11	
	2	30	Qo 169325 Pe 26,15	139803 26,67	114333 26,34	92542 25,34	74057 23,83	58507 21,98	45519 19,95	34720 17,91	25739 16,02	20766 14,44	
		40	Qo 150410 Pe 33,63	124078 32,99	101452 31,63	82161 29,73	65831 27,45	52092 24,95	40570 22,41	30893 19,98	22688 17,83	15584 16,13	
		50	Qo 129008 Pe 39,99	106194 38,25	86742 35,93	70280 33,19	56436 30,21	44836 27,14	35110 24,15	26884 21,4	19786 19,06	13443 17,3	
Z40-154Y	2	30	Qo 149990 Pe 35,33	118514 31,11	93359 27,55	73611 24,57	58355 22,09	46677 20,03	37663 18,32	30399 16,87	23971 15,6		
		40	Qo 128005 Pe 39,16	101184 34,94	79975 31,27	63466 28,09	50742 25,31	40890 22,85	32994 20,63	26141 18,58	19417 16,6		
		50	Qo 87933 Pe 40,83	69908 36,37	55874 32,3	44919 28,52	36129 24,97	28587 21,56	21382 18,2	13599 14,84			
	1	30	Qo 168861 Pe 30,2	139473 29,52	113914 28,23	91906 26,46	73167 24,34	57421 22	44387 19,56	33787 17,16	25341 14,92	18770 12,98	
		40	Qo 147409 Pe 36,48	121690 34,84	99399 32,69	80259 30,15	63990 27,35	50312 24,43	38948 21,51	29618 18,72	22042 16,2	15941 14,06	
		50	Qo 125174 Pe 41,92	103187 39,31	84229 36,28	68022 32,97	54287 29,49	42744 25,98	33114 22,57	25118 19,39	18477 16,57	12912 14,23	

① Suction gas temperature 20°C without liquid sub-cooling.

The performance refers to European standard EN12900 and with operation at 50Hz; conversion factor at 60Hz = 1.2.

To calculate the performance in different operating points refer to the Frascold Selection Software.

All published data is subject to change.

This field requires additional cooling or limitation of the suction temperature.

## Performance R449A [50 Hz]

Compressor	Motor version	Cond. Temp. [°C]	Qo [W] = Cooling capacity Pe [kW] = Power consumption ①	Evaporating temperature [°C]										
				5	0	-5	-10	-15	-20	-25	-30	-35	-40	
W40-168Y	2	30	Qo	163497	130492	103123	80728	62646	48214	36768	27649	20191		
		Pe	37,43	32,73	28,92	25,84	23,3	21,11	19,11	17,11	14,93			
		40	Qo	141552	112170	88045	68517	52921	40598	30882	23113	16629		
	50	Pe	40,87	36,02	32	28,6	25,66	23	20,43	17,78	14,86			
		Qo	96494	75387	58497	45161	34718	26505	19860	14120				
		Pe	40,23	35,67	31,66	28,02	24,57	21,13	17,52	13,56				
W50-168Y	1	30	Qo	191137	157475	128325	103346	82194	64529	50009	38292	29035	21898	
		Pe	30,24	30,32	29,56	28,14	26,24	24,04	21,7	19,42	17,36	15,71		
		40	Qo	166922	137671	112404	90779	72453	57084	44333	33854	25309	18353	
	50	Pe	37,87	36,74	34,92	32,57	29,89	27,04	24,2	21,55	19,27	17,53		
		Qo	141077	116413	95203	77107	61781	48884	38075	29011	21351	14752		
		Pe	44,36	42,07	39,23	36,01	32,59	29,15	25,85	22,89	20,44	18,67		
W50-187Y	2	30	Qo	181499	144781	114298	89346	69224	53229	40655	30803	22967		
		Pe	41,12	36,08	31,87	28,36	25,42	22,9	20,68	18,62	16,58			
		40	Qo	153600	122011	96021	74928	58028	44620	33999	25463	18308		
	50	Pe	43,7	38,83	34,65	31,01	27,78	24,82	22,01	19,2	16,26			
		Qo	129494	102656	80782	63170	49116	37918	28872	21275	14425			
		Pe	47,55	42,53	38,05	33,95	30,11	26,4	22,66	18,78	14,62			
W60-187Y	1	30	Qo	210160	172542	140116	112480	89233	69974	54300	41812	32106	24783	
		Pe	35,09	34,68	33,43	31,51	29,13	26,49	23,77	21,17	18,88	17,11		
		40	Qo	182382	149917	122018	98283	78312	61702	48053	36963	28031	20855	
	50	Pe	43,07	41,32	38,89	35,95	32,71	29,36	26,1	23,12	20,62	18,79		
		Qo	153577	126328	103019	83249	66617	52721	41160	31532	23437	16472		
		Pe	49,85	46,8	43,22	39,3	35,23	31,22	27,45	24,13	21,44	19,58		
W60-206Y	2	30	Qo	200035	160465	127432	100227	78143	60473	46507	35540	26862		
		Pe	45,39	40,27	35,89	32,16	28,95	26,16	23,69	21,43	19,26			
		40	Qo	170783	136404	107966	84761	66080	51218	39464	30112	22454		
	50	Pe	48,83	43,7	39,2	35,23	31,68	28,44	25,41	22,47	19,53			
		Qo	144775	115393	91355	71955	56484	44234	34498	26567	19735			
		Pe	53,39	48	43,14	38,7	34,57	30,63	26,8	22,95	18,98			
W70-206Y	1	30	Qo	228753	188709	154028	124296	99098	78020	60647	46563	35354	26606	
		Pe	37,9	37,59	36,35	34,39	31,9	29,06	26,09	23,17	20,49	18,26		
		40	Qo	199951	165015	134825	108967	87027	68588	53238	40561	30142	21566	
	50	Pe	46,29	44,66	42,26	39,26	35,87	32,28	28,69	25,29	22,28	19,85		
		Qo	170667	140843	115149	93170	74491	58698	45375	34109	24484	16085		
		Pe	53,68	50,74	47,16	43,12	38,83	34,49	30,28	26,4	23,05	20,42		
W70-228Y	2	30	Qo	215141	172869	137575	108511	84930	66084	51224	39604	30476		
		Pe	49,51	43,86	39,05	34,96	31,47	28,45	25,79	23,36	21,04			
		40	Qo	184684	147749	117185	92242	72174	56233	43670	33738	25691		
	50	Pe	52,94	47,4	42,55	38,28	34,47	30,98	27,71	24,52	21,29			
		Qo	158079	126246	100173	79115	62323	49050	38547	30068	22864			
		Pe	57,97	52,23	47,03	42,27	37,81	33,54	29,33	25,07	20,62			
W75-228Y	1	30	Qo	247958	204181	166282	133800	106270	83229	64212	48757	36399	26675	
		Pe	43,46	42,63	40,86	38,36	35,31	31,91	28,36	24,85	21,58	18,74		
		40	Qo	215747	177806	145034	116968	93144	73098	56367	42487	30994	21425	
	50	Pe	52,33	50,1	47,09	43,48	39,47	35,27	31,06	27,04	23,41	20,36		
		Qo	182252	150260	122728	99190	79185	62247	47915	35722	25207	15905		
		Pe	59,9	56,29	52,04	47,34	42,39	37,39	32,54	28,02	24,04	20,78		
W75-240Y	2	30	Qo	228894	183165	145098	113883	88712	68776	53264	41368	32280		
		Pe	51,15	45,71	40,9	36,67	32,97	29,74	26,95	24,54	22,45			
		40	Qo	195899	155950	123024	96310	75001	58287	45358	35407	27623		
	50	Pe	55,67	49,95	44,8	40,17	36,02	32,29	28,93	25,89	23,12			
		Qo	167262	132821	104763	82279	64560	50797	40180	31900	25150			
		Pe	61,39	55,16	49,44	44,19	39,35	34,88	30,72	26,83	23,15			
W80-240Y	1	30	Qo	256948	211774	172673	139178	110825	87147	67678	51953	39505	29869	
		Pe	45,52	44,63	42,75	40,12	36,94	33,44	29,83	26,32	23,14	20,5		
		40	Qo	224597	185047	150896	121680	96931	76184	58974	44834	33298	23900	
	50	Pe	55,03	52,62	49,38	45,54	41,32	36,93	32,59	28,52	24,94	22,05		
		Qo	191306	157416	128252	103350	82242	64462	49546	37027	26439	17317		
		Pe	63,36	59,39	54,75	49,68	44,38	39,07	33,97	29,3	25,27	22,1		

① Suction gas temperature 20°C without liquid sub-cooling.

The performance refers to European standard EN12900 and with operation at 50Hz; conversion factor at 60Hz = 1.2.

To calculate the performance in different operating points refer to the Frascold Selection Software.

All published data is subject to change.

This field requires additional cooling or limitation of the suction temperature.

## Performance R407F [50 Hz]

Compressor	Motor version	Cond. Temp. [°C]	Qo [W] = Cooling capacity Pe [kW] = Power consumption ①	Evaporating temperature [°C]								
				0	-5	-10	-15	-20	-25	-30	-35	-40
A05-5Y	2	30	Qo 4498 Pe 1,008	3676 0,965	2967 0,902	2361 0,822	1844 0,731	1405 0,634	1032 0,537	714 0,443	438 0,359	
		40	Qo 3925 Pe 1,185	3181 1,105	2543 1,007	2000 0,896	1540 0,777	1150 0,655	820 0,535	537 0,422	289 0,321	
		50	Qo 3343 Pe 1,316	2678 1,201	2113 1,071	1635 0,931	1233 0,786	894 0,641	608 0,501	362 0,371		
A07-6Y	2	30	Qo 5099 Pe 1,122	4189 1,075	3394 1,01	2705 0,931	2115 0,841	1614 0,744	1195 0,643	847 0,543	563 0,446	
		40	Qo 4469 Pe 1,329	3650 1,243	2937 1,141	2323 1,029	1797 0,909	1352 0,784	979 0,66	669 0,538	414 0,423	
		50	Qo 3832 Pe 1,496	3106 1,372	2477 1,237	1937 1,093	1477 0,945	1089 0,796	763 0,649	492 0,508		
A1-7Y	2	30	Qo 6492 Pe 1,419	5365 1,36	4369 1,278	3498 1,178	2745 1,065	2104 0,944	1567 0,818	1127 0,692	778 0,57	
		40	Qo 5725 Pe 1,692	4696 1,582	3791 1,454	3004 1,313	2328 1,162	1756 1,006	1282 0,85	897 0,698	597 0,553	
		50	Qo 4963 Pe 1,921	4033 1,764	3220 1,593	2518 1,412	1920 1,226	1418 1,038	1007 0,855	679 0,679		
A1.5-8Y	1	30	Qo 7263 Pe 1,561	6000 1,504	4888 1,418	3917 1,311	3079 1,188	2365 1,055	1768 0,918	1278 0,783	887 0,657	
		40	Qo 6400 Pe 1,874	5256 1,759	4252 1,621	3379 1,466	2629 1,301	1993 1,13	1464 0,962	1031 0,8	687 0,652	
		50	Qo 5533 Pe 2,143	4510 1,972	3617 1,784	2845 1,584	2186 1,378	1631 1,173	1172 0,975	799 0,789		
B1.5-9.1Y	2	30	Qo 8223 Pe 1,772	6773 1,705	5520 1,604	4444 1,477	3526 1,332	2747 1,177	2086 1,019	1524 0,866	1041 0,727	
		40	Qo 7300 Pe 2,14	5978 2	4841 1,835	3870 1,651	3045 1,456	2347 1,258	1756 1,065	1253 0,885	817 0,726	
		50	Qo 6335 Pe 2,458	5147 2,25	4133 2,023	3272 1,785	2547 1,544	1936 1,308	1422 1,084	983 0,88		
B1.5-10.1Y	2	30	Qo 9330 Pe 2,051	7692 1,961	6267 1,837	5038 1,688	3986 1,522	3091 1,345	2336 1,166	1701 0,992	1169 0,83	
		40	Qo 8251 Pe 2,5	6760 2,326	5472 2,127	4366 1,91	3425 1,683	2630 1,454	1961 1,23	1401 1,019	930 0,829	
		50	Qo 7167 Pe 2,896	5826 2,641	4675 2,368	3694 2,085	2865 1,8	2170 1,521	1589 1,255	1105 1,01		
D2-11.1Y	1	30	Qo 10364 Pe 2,23	8467 2,129	6844 1,987	5465 1,813	4299 1,618	3318 1,41	2491 1,201	1788 0,998	1180 0,813	
		40	Qo 9105 Pe 2,674	7384 2,481	5920 2,256	4684 2,008	3645 1,747	2774 1,482	2041 1,223	1416 0,981	869 0,764	
		50	Qo 7873 Pe 3,036	6322 2,757	5013 2,453	3914 2,135	2997 1,812	2231 1,493	1587 1,19	1034 0,911		
D2-13.1Y	2	30	Qo 12275 Pe 2,668	10089 2,555	8191 2,393	6554 2,191	5155 1,962	3968 1,716	2967 1,465	2128 1,221	1426 0,995	
		40	Qo 10795 Pe 3,196	8810 2,982	7096 2,727	5628 2,442	4380 2,137	3327 1,825	2444 1,516	1706 1,222	1088 0,955	
		50	Qo 9315 Pe 3,625	7531 3,317	6002 2,976	4701 2,612	3604 2,239	2685 1,866	1920 1,505	1283 1,168		
D2-15.1Y	2	30	Qo 14210 Pe 3,138	11719 3,004	9545 2,809	7663 2,568	6045 2,295	4665 2,003	3496 1,706	2511 1,418	1684 1,153	
		40	Qo 12541 Pe 3,746	10264 3,499	8289 3,201	6588 2,866	5137 2,507	3907 2,138	2873 1,773	2007 1,426	1284 1,111	
		50	Qo 10872 Pe 4,224	8809 3,875	7032 3,483	5515 3,062	4230 2,627	3151 2,191	2252 1,767	1505 1,369		
D3-16.1Y	2	30	Qo 15333 Pe 3,31	12614 3,175	10260 2,979	8236 2,738	6509 2,464	5045 2,171	3811 1,873	2772 1,583	1896 1,315	
		40	Qo 13529 Pe 3,979	11058 3,72	8930 3,412	7113 3,07	5572 2,706	4275 2,333	3186 1,967	2273 1,619	1503 1,304	
		50	Qo 11728 Pe 4,541	9505 4,167	7604 3,755	5994 3,318	4641 2,871	3510 2,427	2568 2	1782 1,602		
D3-18.1Y	2	30	Qo 16522 Pe 3,63	13643 3,478	11137 3,26	8971 2,99	7112 2,686	5528 2,361	4185 2,031	3049 1,712	2088 1,419	
		40	Qo 14634 Pe 4,345	11997 4,067	9716 3,733	7758 3,358	6090 2,958	4679 2,548	3491 2,143	2493 1,76	1653 1,413	
		50	Qo 12751 Pe 4,927	10358 4,533	8303 4,094	6553 3,624	5076 3,14	3838 2,656	2806 2,188	1947 1,751		
D3-19.1Y	2	30	Qo 17410 Pe 3,871	14391 3,705	11761 3,467	9485 3,175	7529 2,846	5860 2,497	4443 2,144	3244 1,804	2229 1,495	
		40	Qo 15434 Pe 4,616	12663 4,323	10265 3,969	8203 3,569	6445 3,142	4956 2,703	3701 2,27	2648 1,86	1761 1,49	
		50	Qo 13473 Pe 5,202	10951 4,797	8784 4,34	6936 3,848	5375 3,336	4065 2,823	2973 2,326	2064 1,86		

① Suction gas temperature 20°C without liquid sub-cooling.

The performance refers to European standard EN12900 and with operation at 50Hz; conversion factor at 60Hz = 1.2.

To calculate the performance in different operating points refer to the Frascold Selection Software.

All published data is subject to change.

This field requires additional cooling or limitation of the suction temperature.

## Performance R407F [50 Hz]

Compressor	Motor version	Cond. Temp. [°C]	Qo [W] = Cooling capacity Pe [kW] = Power consumption ①	Evaporating temperature [°C]								
				0	-5	-10	-15	-20	-25	-30	-35	-40
Q4-20.1Y	2	30	Qo 18289 Pe 3,849	14902 3,691	12005 3,458	9545 3,168	7473 2,837	5737 2,484	4287 2,126	3072 1,781	2042 1,465	
		40	Qo 15995 Pe 4,585	12941 4,275	10343 3,904	8151 3,491	6314 3,051	4782 2,604	3503 2,167	2426 1,757	1502 1,392	
		50	Qo 13702 Pe 5,184	10986 4,732	8694 4,233	6775 3,706	5179 3,168	3856 2,636	2753 2,13	1821 1,665		
	2	30	Qo 19608 Pe 4,215	16071 4,028	13013 3,761	10388 3,432	8154 3,059	6265 2,662	4676 2,258	3343 1,866	2222 1,505	
		40	Qo 17194 Pe 5,039	13976 4,688	11213 4,271	8860 3,807	6871 3,314	5203 2,812	3811 2,318	2651 1,851	1677 1,429	
		50	Qo 14779 Pe 5,697	11886 5,193	9423 4,637	7345 4,049	5607 3,447	4165 2,851	2975 2,277	1991 1,745		
Q4-24.1Y	2	30	Qo 22469 Pe 4,841	18446 4,637	14983 4,331	12022 3,95	9507 3,517	7381 3,06	5588 2,603	4069 2,172	2769 1,791	
		40	Qo 19621 Pe 5,848	15986 5,433	12878 4,939	10238 4,392	8011 3,816	6140 3,237	4566 2,681	3235 2,173	2089 1,739	
		50	Qo 16820 Pe 6,686	13575 6,074	10822 5,404	8506 4,703	6567 3,996	4951 3,309	3600 2,667	2458 2,095		
	2	30	Qo 22876 Pe 4,823	18743 4,628	15185 4,344	12146 3,989	9569 3,584	7397 3,15	5574 2,705	4042 2,269	2747 1,864	
		40	Qo 20134 Pe 5,827	16370 5,424	13151 4,953	10419 4,434	8119 3,886	6193 3,329	4585 2,783	3238 2,269	2096 1,806	
		50	Qo 17399 Pe 6,679	14008 6,08	11131 5,433	8711 4,759	6691 4,079	5015 3,41	3626 2,775	2468 2,192		
Q5-25.1Y	2	30	Qo 26123 Pe 5,491	21451 5,282	17399 4,967	13913 4,569	10939 4,111	8422 3,613	6310 3,099	4546 2,592	3078 2,113	
		40	Qo 202947 Pe 6,6	18701 6,168	15042 5,652	11915 5,075	9267 4,458	7043 3,825	5190 3,198	3652 2,599	2377 2,049	
		50	Qo 17399 Pe 7,535	14008 6,89	11131 6,184	8711 5,438	6691 4,674	5015 3,916	3626 3,185	2468 2,504		
	2	30	Qo 30722 Pe 6,385	25257 6,14	20530 5,792	16473 5,358	13018 4,858	10095 4,311	7635 3,735	5571 3,149	3832 2,572	
		40	Qo 27088 Pe 7,65	22119 7,171	17848 6,609	14208 5,983	11130 5,313	8544 4,616	6383 3,912	4577 3,219	3057 2,556	
		50	Qo 23461 Pe 8,705	18993 8,008	15184 7,25	11967 6,45	9271 5,626	7029 4,797	5172 3,981	3630 3,199		
Q5-33.1Y	2	30	Qo 30898 Pe 6,101	24947 5,779	19917 5,396	15705 4,957	12208 4,467	9321 3,933	6942 3,36	4966 2,754	3291 2,121	
		40	Qo 26735 Pe 7,324	21484 6,763	17059 6,155	13358 5,507	10278 4,824	7714 4,111	5563 3,376	3721 2,624	2086 1,859	
		50	Qo 22655 Pe 8,369	18089 7,57	14256 6,74	11053 5,886	8375 5,012	6120 4,125	4183 3,231	2463 2,334		
	2	30	Qo 33655 Pe 6,963	27539 6,711	22318 6,339	17891 5,869	14161 5,326	11027 4,731	8392 4,109	6154 3,48	4216 2,87	
		40	Qo 29616 Pe 8,385	24090 7,855	19401 7,231	15451 6,537	12139 5,796	9367 5,03	7035 4,263	5045 3,518	3296 2,817	
		50	Qo 25567 Pe 9,614	20641 8,82	16495 7,959	13030 7,055	10146 6,131	7745 5,21	5727 4,314	3992 3,467		
S8-42Y	2	30	Qo 39640 Pe 7,825	32107 7,45	25725 6,978	20367 6,422	15905 5,797	12210 5,114	9155 4,387	6612 4,109	4452 3,628	
		40	Qo 34413 Pe 9,404	27680 8,709	22009 7,945	17270 7,124	13336 6,26	10078 5,365	5563 4,453	3721 3,536	2086 2,629	
		50	Qo 29298 Pe 10,808	23374 9,807	18420 8,764	14308 7,691	10910 6,6	8097 5,506	5743 4,422	3719 3,36		
	2	30	Qo 48634 Pe 9,446	39219 8,98	31264 8,382	24606 7,673	19080 6,874	14522 6,008	10767 5,095	7651 4,158	5010 3,217	
		40	Qo 41976 Pe 11,195	33619 10,348	26593 9,399	20732 8,372	15872 7,287	11849 6,167	8498 5,032	5656 3,904	3157 2,805	
		50	Qo 35488 Pe 12,674	28181 11,463	22073 10,183	17000 8,857	12797 7,505	9300 6,15	6344 4,812	3765 3,513		
S15-56Y	2	30	Qo 54118 Pe 10,595	43815 10,199	35083 9,553	27750 8,721	21642 7,767	16586 6,755	12408 5,749	8935 4,814	5994 4,012	
		40	Qo 46981 Pe 12,629	37812 11,79	30076 10,745	23601 9,56	18212 8,297	13736 7,021	10000 5,796	6831 4,686	4055 3,755	
		50	Qo 40001 Pe 14,321	31958 13,082	25210 11,682	19583 10,185	14905 8,656	11001 7,159	7699 5,757	4826 4,515		
	2	30	Qo 56642 Pe 11,18	45707 10,568	36541 9,82	28919 8,972	22616 8,058	17405 7,113	13061 6,171	9359 5,269	6073 4,44	
		40	Qo 49544 Pe 13,088	39685 12,111	31477 11,031	24696 9,883	19114 8,701	14507 7,521	10650 6,377	7315 5,304	4279 4,337	
		50	Qo 42528 Pe 14,71	33772 13,404	26549 12,028	20635 10,616	15802 9,203	11826 7,824	8481 6,513	5542 5,305		

① Suction gas temperature 20°C without liquid sub-cooling.

The performance refers to European standard EN12900 and with operation at 50Hz; conversion factor at 60Hz = 1.2.

To calculate the performance in different operating points refer to the Frascold Selection Software.

All published data is subject to change.

This field requires additional cooling or limitation of the suction temperature.

## Performance R407F [50 Hz]

Compressor	Motor version	Cond. Temp. [°C]	Qo [W] = Cooling capacity Pe [kW] = Power consumption ①	Evaporating temperature [°C]								
				0	-5	-10	-15	-20	-25	-30	-35	-40
V15-71Y	2	30	Qo 69338 Pe 13,793	56168 13,018	45040 12,11	35722 11,099	27981 10,018	21585 8,897	16301 7,766	11895 6,658	8137 5,603	
		40	Qo 60834 Pe 16,303	48960 15,057	38989 13,725	30690 12,336	23828 10,923	18173 9,516	13490 8,146	9547 6,844	6113 5,642	
		50	Qo 52345 Pe 18,517	41824 16,843	33067 15,129	25843 13,405	19918 11,703	15060 10,053	11036 8,487	7613 7,035		
V20-84Y	2	30	Qo 83519 Pe 16,824	67748 15,837	54460 14,739	43355 13,548	34133 12,285	26495 10,968	20143 9,617	14777 8,253	10097 6,894	
		40	Qo 73505 Pe 20,074	59290 18,499	47385 16,871	37489 15,208	29306 13,53	22534 11,856	16875 10,206	12029 8,6	7698 7,057	
		50	Qo 63514 Pe 23,036	50908 20,916	40439 18,799	31808 16,706	24716 14,655	18863 12,666	13951 10,759	9680 8,952		
V25-93Y	2	30	Qo 90015 Pe 17,716	72682 16,721	58129 15,522	46008 14,17	35972 12,72	27673 11,226	20763 9,74	14894 8,316	9718 7,008	
		40	Qo 78669 Pe 20,774	63058 19,213	50038 17,494	39263 15,669	30385 13,793	23056 11,919	16927 10,1	11651 8,39	6881 6,842	
		50	Qo 67426 Pe 23,371	53582 21,293	42143 19,103	32759 16,854	25084 14,601	18770 12,396	13469 10,293	8834 8,346		
V25-103Y	2	30	Qo 100541 Pe 19,973	81686 18,908	65778 17,639	52456 16,216	41358 14,689	32123 13,107	24389 11,52	17795 9,978	11979 8,529	
		40	Qo 89017 Pe 23,81	71846 22,068	57454 20,185	45478 18,211	35557 16,195	27329 14,186	20434 12,235	14508 10,391	9192 8,702	
		50	Qo - Pe -	61948 24,858	49149 22,414	38597 19,94	29931 17,487	22789 15,104	16810 12,84	11632 10,745		
Z25-106Y	2	30	Qo 103691 Pe 20,72	84092 19,493	67567 18,141	53740 16,678	42233 15,119	32670 13,479	24675 11,774	17870 10,017	11879 8,224	
		40	Qo 91507 Pe 24,683	73683 22,727	58754 20,714	46343 18,658	36075 16,575	27572 14,48	20458 12,386	14356 10,311	8890 8,267	
		50	Qo 79204 Pe 28,167	63231 25,533	49976 22,91	39061 20,313	30110 17,757	22746 15,256	16592 12,827	11271 10,483		
Z30-126Y	2	30	Qo 120978 Pe 24,679	99206 23,546	80465 22,016	64454 20,196	50873 18,189	39422 16,1	29799 14,034	21705 12,096	14840 10,391	
		40	Qo 106169 Pe 29,394	86634 27,423	69888 25,13	55629 22,619	43556 19,996	33370 17,364	24770 14,829	17454 12,496	11124 10,468	
		50	Qo - Pe -	73957 30,754	59274 27,771	46834 24,644	36338 21,477	27485 21,376	19975 15,445	13507 12,789		
Z40-154Y	2	30	Qo 149627 Pe 30,32	122889 29,026	99856 27,252	80159 25,125	63430 22,767	49300 20,307	37400 17,868	27362 15,576	18818 13,557	
		40	Qo 131640 Pe 35,892	107564 33,645	86917 31,001	69329 28,087	54432 25,027	41857 21,947	31236 18,973	22199 16,23	14379 13,843	
		50	Qo 113255 Pe 40,713	91974 37,612	73845 34,198	58498 30,597	45565 26,934	34677 23,335	25466 19,925	17563 16,83		

① Suction gas temperature 20°C without liquid sub-cooling.

The performance refers to European standard EN12900 and with operation at 50Hz; conversion factor at 60Hz = 1.2.

To calculate the performance in different operating points refer to the Frascold Selection Software.

All published data is subject to change.

This field requires additional cooling or limitation of the suction temperature.

## Performance R407A [50 Hz]

Compressor	Motor version	Cond. Temp. [°C]	Qo [W] = Cooling capacity Pe [kW] = Power consumption ①	Evaporating temperature [°C]								
				0	-5	-10	-15	-20	-25	-30	-35	-40
A05-5Y	2	30	Qo 4294 Pe 0,954	3506	2820	2228	1721	1292	934	639	399	
		40	Qo 3706 Pe 1,109	3005	2396	1872	1425	1048	732	471	256	0,34
		50	Qo 3113 Pe 1,222	2499	1969	1515	1130	805	534	308		0,3
				1,114	0,995	0,867	0,736	0,604	0,474	0,351		
	2	30	Qo 4845 Pe 1,064	3980	3221	2563	1997	1517	1116	786	521	
		40	Qo 4206 Pe 1,25	3436	2763	2181	1682	1260	906	615	379	0,424
		50	Qo 3560 Pe 1,398	2887	2302	1798	1367	1003	699	447		0,398
				1,284	1,158	1,024	0,885	0,745	0,608	0,476		
A1-7Y	2	30	Qo 6169 Pe 1,343	5088	4134	3300	2581	1970	1460	1046	721	
		40	Qo 5386 Pe 1,592	4417	3566	2825	2187	1648	1201	838	554	
		50	Qo 4603 Pe 1,796	3748	2999	2351	1797	1330	944	634		0,521
				1,653	1,494	1,326	1,151	0,975	0,802	0,637		
	1	30	Qo 6904 Pe 1,479	5693	4627	3699	2900	2221	1655	1191	824	
		40	Qo 6025 Pe 1,759	4948	4003	3182	2476	1877	1377	968	640	
		50	Qo 5137 Pe 1,996	4196	3373	2661	2051	1535	1104	750		0,614
				1,836	1,663	1,48	1,292	1,104	0,921	0,746		
B1.5-9.1Y	2	30	Qo 8070 Pe 1,727	6613	5358	4285	3376	2610	1968	1429	976	
		40	Qo 7045 Pe 2,073	5742	4626	3677	2877	2204	1640	1165	759	
		50	Qo 6029 Pe 2,369	4880	3904	3079	2387	1808	1322	910		
				1,955	1,729	1,5	1,274	1,058	0,859			
	2	30	Qo 8857 Pe 1,932	7320	5962	4772	3745	2871	2142	1551	1089	
		40	Qo 7752 Pe 2,329	6375	5162	4104	3194	2422	1782	1265	863	
		50	Qo 6647 Pe 2,673	5431	4365	3439	2647	1980	1429	988		0,78
				2,441	2,194	1,939	1,681	1,426	1,181	0,953		
D2-11.1Y	1	30	Qo 9971 Pe 2,105	8137	6558	5211	4069	3111	2310	1642	1084	
		40	Qo 8682 Pe 2,5	7029	5615	4416	3407	2564	1863	1279	787	
		50	Qo 7405 Pe 2,82	5933	4685	3635	2759	2032	1431	930		
				2,562	2,283	1,992	1,696	1,403	1,121	0,859		
	2	30	Qo 11667 Pe 2,518	9606	7788	6202	4834	3674	2710	1930	1322	
		40	Qo 10146 Pe 2,993	8303	6684	5276	4068	3048	2205	1527	1001	
		50	Qo 8631 Pe 3,374	7007	5587	4359	3312	2435	1714	1139		0,894
				3,085	2,768	2,433	2,089	1,746	1,412	1,096		
D2-15.1Y	2	30	Qo 13505 Pe 2,962	11158	9077	7251	5669	4320	3193	2277	1562	
		40	Qo 11785 Pe 3,509	9673	7807	6177	4772	3581	2593	1797	1182	
		50	Qo 10072 Pe 3,931	8196	6547	5115	3888	2857	2009	1335		1,04
				3,604	3,24	2,853	2,452	2,05	1,657	1,285		
	2	30	Qo 14568 Pe 3,126	12024	9776	7812	6118	4680	3484	2517	1765	
		40	Qo 12715 Pe 3,73	10438	8435	6691	5194	3929	2883	2041	1392	
		50	Qo 10866 Pe 4,227	8859	7102	5582	4283	3194	2299	1586		1,227
				3,882	3,503	3,102	2,691	2,281	1,883	1,51		
D3-18.1Y	2	30	Qo 15699 Pe 3,428	13005	10612	8509	6685	5128	3826	2769	1944	
		40	Qo 13752 Pe 4,074	11325	9177	7299	5677	4301	3158	2239	1531	
		50	Qo 11812 Pe 4,586	9654	7754	6102	4685	3492	2512	1733		
				4,224	3,82	3,389	2,943	2,496	2,06	1,65		
	2	30	Qo 16542 Pe 3,656	13718	11207	8997	7077	5436	4063	2947	2075	
		40	Qo 14503 Pe 4,328	11954	9695	7717	6008	4555	3349	2378	1631	
		50	Qo 12480 Pe 4,842	10207	8204	6459	4961	3699	2661	1837		
				4,469	4,05	3,598	3,127	2,653	2,19	1,753		

① Suction gas temperature 20°C without liquid sub-cooling.

The performance refers to European standard EN12900 and with operation at 50Hz; conversion factor at 60Hz = 1.2.

To calculate the performance in different operating points refer to the Frascold Selection Software.

All published data is subject to change.

This field requires additional cooling or limitation of the suction temperature.

## Performance R407A [50 Hz]

Compressor	Motor version	Cond. Temp. [°C]	Qo [W] = Cooling capacity Pe [kW] = Power consumption ①	Evaporating temperature [°C]								
				0	-5	-10	-15	-20	-25	-30	-35	-40
Q4-20.1Y	2	30	Qo 17446 Pe 3,692	14306	11544	9143	7084	5348	3917	2772	1894	
		40	Qo 15094 Pe 4,378	12298	9849	7730	5921	4403	3159	2169	1416	
		50	Qo 12777 Pe 4,918	10326	8191	6354	4795	3497	2440	1606	1,254	
	2	30	Qo 18624 Pe 3,977	15310	12388	9841	7650	5795	4257	3019	2060	
		40	Qo 16141 Pe 4,72	13181	10583	8328	6397	4772	3434	2363	1542	
		50	Qo 13670 Pe 5,298	11068	8796	6837	5170	3779	2642	1743	1,334	
Q4-24.1Y	2	30	Qo 21421 Pe 4,577	17515	14160	11301	8885	6856	5161	3744	2552	
		40	Qo 18540 Pe 5,494	15047	12068	9548	7432	5667	4198	2970	1929	
		50	Qo 15745 Pe 6,252	12664	10059	7876	6061	4558	3314	2274	1,626	
	2	30	Qo 21809 Pe 4,559	17797	14352	11418	8943	6871	5148	3719	2531	
		40	Qo 19025 Pe 5,473	15408	12324	9716	7532	5716	4214	2972	1935	
		50	Qo 16288 Pe 6,244	13069	10346	8067	6175	4617	3338	2283	1,689	
Q5-25.1Y	2	30	Qo 24794 Pe 5,198	20400	16536	13172	10281	7833	5800	4152	2862	
		40	Qo 21554 Pe 6,195	17616	14170	11185	8634	6488	4718	3294	2189	
		50	Qo 18331 Pe 7,013	14856	11833	9234	7028	5189	3687	2493	1,925	
	2	30	Qo 29141 Pe 6,01	24048	19552	15626	12242	9371	6987	5062	3568	
		40	Qo 25420 Pe 7,187	20870	16868	13388	10401	7881	5798	4126	2836	
		50	Qo 21719 Pe 8,16	17715	14211	11180	8595	6427	4649	3233	2,405	
Q5-33.1Y	2	30	Qo 29339 Pe 5,902	23652	18862	14861	11539	8788	6499	4562	2868	
		40	Qo 25518 Pe 6,995	20356	16046	12479	9546	7139	5147	3463	1977	
		50	Qo 21727 Pe 7,902	17105	13291	10174	7646	5598	3921	2506	1,833	
	2	30	Qo 32129 Pe 6,613	26241	21204	16930	13331	10317	7800	5691	3901	
		40	Qo 28048 Pe 7,934	22782	18305	14527	11361	8717	6507	4642	3033	
		50	Qo 23962 Pe 9,057	19329	15422	12152	9430	7167	5275	3665	2,648	
Q7-36.1Y	1	30	Qo 32129 Pe 6,613	26241	21204	16930	13331	10317	7800	5691	3901	
		40	Qo 28048 Pe 7,934	22782	18305	14527	11361	8717	6507	4642	3033	
		50	Qo 23962 Pe 9,057	19329	15422	12152	9430	7167	5275	3665	2,648	
	2	30	Qo 37619 Pe 7,604	30482	24448	19387	15168	11660	8733	6255	4096	
		40	Qo 32970 Pe 9,083	26467	21015	16484	12743	9660	7106	4949	3058	
		50	Qo 28322 Pe 10,382	22478	17632	13655	10416	7783	5625	3813	2,702	
S10-52Y	2	30	Qo 46247 Pe 9,189	37312	29767	23449	18195	13843	10229	7190	4564	
		40	Qo 40139 Pe 10,8	32070	25310	19698	15069	11262	8113	5460	3139	
		50	Qo 34104 Pe 12,152	26916	20958	16067	12080	8834	6166	3914	2,879	
	2	30	Qo 51060 Pe 10,219	41271	33030	26146	20428	15686	11727	8363	5400	
		40	Qo 44641 Pe 12,131	35742	28314	22166	17106	12944	9490	6551	3938	
		50	Qo 38285 Pe 13,766	30297	23702	18310	13929	10369	7439	4947	3,515	
S15-56Y	2	30	Qo 52718 Pe 10,718	42689	34224	27122	21181	16199	11974	8305	4989	
		40	Qo 46111 Pe 12,46	36959	29305	22947	17682	13310	9627	6433	3526	
		50	Qo 39644 Pe 13,936	31386	24558	18959	14386	10639	7514	4811	3,683	
	2	30	Qo 52718 Pe 10,718	42689	34224	27122	21181	16199	11974	8305	4989	
		40	Qo 46111 Pe 12,46	36959	29305	22947	17682	13310	9627	6433	3526	
		50	Qo 39644 Pe 13,936	31386	24558	18959	14386	10639	7514	4811	3,683	

① Suction gas temperature 20°C without liquid sub-cooling.

The performance refers to European standard EN12900 and with operation at 50Hz; conversion factor at 60Hz = 1.2.

To calculate the performance in different operating points refer to the Frascold Selection Software.

All published data is subject to change.

■ This field requires additional cooling or limitation of the suction temperature.

## Performance R407A [50 Hz]

Compressor	Motor version	Cond. Temp. [°C]	Qo [W] = Cooling capacity Pe [kW] = Power consumption ①	Evaporating temperature [°C]								
				0	-5	-10	-15	-20	-25	-30	-35	-40
V15-71Y	2	30	Qo 64324 Pe 13,223	52213 12,408	41983 11,488	33391 10,485	26196 9,424	20156 8,327	15028 7,218	10571 6,119	6542 5,055	
		40	Qo 56463 Pe 15,499	45409 14,26	36154 12,95	28456 11,593	22073 10,212	16764 8,829	12286 7,47	8398 6,156	4857 4,91	
		50	Qo 48770 Pe 17,489	38789 15,852	30527 14,178	23740 12,492	18188 10,816	13627 9,175	9817 7,59	6515 6,086		
		30	Qo 77523 Pe 16,257	63117 15,284	50940 14,181	40706 12,98	32127 11,714	24918 10,413	18791 9,111	13459 7,837	8636 6,625	
	2	40	Qo 68364 Pe 19,266	55206 17,762	44183 16,176	35005 14,54	27387 12,885	21042 11,243	15682 9,646	11021 8,127	6772 6,715	
		50	Qo 59402 Pe 22,008	47514 20,004	37663 17,966	29562 15,925	22923 13,912	17461 11,96	12889 10,1	8918 8,365		
V25-93Y	2	30	Qo 83775 Pe 17,011	67876 15,946	54440 14,741	43153 13,425	33699 12,026	25766 10,572	19039 9,093	13203 7,615	7944 6,169	
		40	Qo 73250 Pe 19,794	58755 18,189	46614 16,485	36513 14,71	28139 12,895	21176 11,066	15311 9,252	10229 7,482	5616 5,785	
		50	Qo 62943 Pe 22,149	49875 20,035	39053 17,865	30163 15,666	22891 13,466	16922 11,295	11943 9,18	7639 7,151		
		30	Qo 92862 Pe 19,18	75511 18,057	60841 16,762	48508 15,336	38170 13,823	29482 12,265	22103 10,706	15689 9,188	9898 7,754	
V25-103Y	2	40	Qo 81678 Pe 22,61	65844 20,875	52573 19,017	41522 17,08	32349 15,106	24709 13,139	18261 11,22	12661 9,394	7565 7,702	
		50	Qo 70731 Pe 25,671	56437 23,352	44590 20,961	34846 18,541	26861 16,135	20294 13,787	14800 11,538	10037 9,432		
		30	Qo 96462 Pe 19,887	78330 18,608	63001 17,229	50116 15,762	39318 14,215	30249 12,598	22551 10,92	15866 9,191	9836 7,421	
		40	Qo 84652 Pe 23,427	68112 21,487	54251 19,504	42711 17,488	33135 15,447	25165 13,391	18443 11,33	12610 9,273	7310 7,23	
Z25-106Y	2	50	Qo 73090 Pe 26,553	58166 23,98	45799 21,419	35630 18,88	27302 16,372	20456 13,905	14735 11,488	9780 9,131		
		30	Qo 112190 Pe 23,665	92124 22,452	74797 20,889	59922 19,07	47211 17,087	36376 15,032	27130 12,999	19185 11,081	12253 9,369	
		40	Qo 97936 Pe 27,86	79858 25,894	64348 23,636	51119 21,18	39881 18,616	30349 16,039	22234 13,542	15248 11,215	9105 9,154	
		50	Qo 83938 Pe 31,52	67859 28,845	54177 25,937	42603 22,886	32851 19,787	24632 16,731	17659 13,812	11644 11,122		
Z30-126Y	2	30	Qo 138311 Pe 29,136	113672 27,744	92396 25,926	74128 23,793	58516 21,455	45205 19,024	33842 16,612	24072 14,329	15542 12,288	
		40	Qo 120932 Pe 34,134	98731 31,883	79682 29,269	63431 26,404	49625 23,397	37909 20,362	27930 17,408	19334 14,647	11767 12,191	
		50	Qo 103867 Pe 38,509	84116 35,459	67307 32,109	53084 28,571	41096 24,956	30987 21,374	22404 17,938	14993 14,759		
		30	Qo 138311 Pe 29,136	113672 27,744	92396 25,926	74128 23,793	58516 21,455	45205 19,024	33842 16,612	24072 14,329	15542 12,288	
Z40-154Y	2	40	Qo 120932 Pe 34,134	98731 31,883	79682 29,269	63431 26,404	49625 23,397	37909 20,362	27930 17,408	19334 14,647	11767 12,191	
		50	Qo 103867 Pe 38,509	84116 35,459	67307 32,109	53084 28,571	41096 24,956	30987 21,374	22404 17,938	14993 14,759		
		30	Qo 138311 Pe 29,136	113672 27,744	92396 25,926	74128 23,793	58516 21,455	45205 19,024	33842 16,612	24072 14,329	15542 12,288	
		30	Qo 138311 Pe 29,136	113672 27,744	92396 25,926	74128 23,793	58516 21,455	45205 19,024	33842 16,612	24072 14,329	15542 12,288	

① Suction gas temperature 20°C without liquid sub-cooling.

The performance refers to European standard EN12900 and with operation at 50Hz; conversion factor at 60Hz = 1.2.

To calculate the performance in different operating points refer to the Frascold Selection Software.

All published data is subject to change.

This field requires additional cooling or limitation of the suction temperature.

## Performance R407C [50 Hz]

Compressor	Motor version	Cond. Temp. [°C]	Qo [W] = Cooling capacity Pe [kW] = Power consumption ①	Evaporating temperature [°C]									
				12,5	10	5	0	-5	-10	-15	-20	-25	-30
A05-4Y	1	30	Qo 5204 Pe 0,61	4733 0,64	3881 0,67	3143 0,69	2510 0,69	1973 0,68	1524 0,66	1153 0,63	853 0,60		
		40	Qo 4478 Pe 0,83	4057 0,83	3301 0,83	2649 0,81	2093 0,79	1625 0,75	1236 0,70	916 0,66	658 0,61		
		50	Qo 3757 Pe 1,01	3389 1,00	2729 0,96	2166 0,91	1689 0,86	1292 0,79	964 0,73	697 0,67	482 0,61		
		30	Qo 6667 Pe 0,83	6042 0,85	4920 0,86	3957 0,83	3140 0,79	2454 0,74	1888 0,74	1426 0,69	1056 0,63		
		40	Qo 5695 Pe 1,12	5147 1,11	4168 1,07	3332 1,02	2627 0,96	2038 0,88	1552 0,81	1157 0,73	838 0,66		
		50	Qo 4722 Pe 1,36	4252 1,32	3417 1,24	2710 1,15	2117 1,05	1627 0,95	1224 0,86	896 0,86	629 0,76		
A1-6Y	1	30	Qo 7352 Pe 0,88	6673 0,92	5447 0,95	4389 0,95	3484 0,93	2721 0,88	2086 0,81	1566 0,74	1148 0,66		
		40	Qo 6335 Pe 1,20	5731 1,20	4646 1,17	3715 1,12	2923 1,05	2260 0,97	1711 0,87	1264 0,78	906 0,69		
		50	Qo 5311 Pe 1,46	4785 1,43	3844 1,35	3044 1,26	2371 1,15	1812 1,04	1354 0,92	984 0,81	690 0,72		
		30	Qo 9393 Pe 1,26	8552 1,27	7033 1,28	5717 1,26	4589 1,21	3631 1,15	2828 1,08	2163 0,99	1622 0,91		
		40	Qo 8196 Pe 1,63	7447 1,61	6097 1,56	4932 1,48	3938 1,39	3097 1,29	2393 1,18	1811 1,07	1334 0,96		
		50	Qo 6990 Pe 1,95	6333 1,90	5156 1,79	4147 1,66	3291 1,53	2571 1,39	1971 1,25	1475 1,12	1067 0,99		
A1.5-7Y	1	30	Qo 10504 Pe 1,26	9541 1,27	7809 1,28	6318 1,26	5050 1,21	3983 1,15	3098 1,08	2374 0,99	1793 0,91		
		40	Qo 8196 Pe 1,63	7447 1,61	6097 1,56	4932 1,48	3938 1,39	3097 1,29	2393 1,18	1811 1,07	1334 0,96		
		50	Qo 6990 Pe 1,95	6333 1,90	5156 1,79	4147 1,66	3291 1,53	2571 1,39	1971 1,25	1475 1,12	1067 0,99		
		30	Qo 10504 Pe 1,42	9541 1,43	7809 1,43	6318 1,39	5050 1,34	3983 1,26	3098 1,17	2374 1,08	1793 0,98		
		40	Qo 9098 Pe 1,84	8246 1,81	6721 1,73	5417 1,64	4313 1,52	3391 1,40	2628 1,28	2007 1,15	1506 1,04		
		50	Qo 7754 Pe 2,21	7013 2,14	5692 2,00	4572 1,85	3631 1,68	2849 1,52	2207 1,37	1684 1,22	1261 1,09		
B2-10.1Y	1	30	Qo 12924 Pe 1,99	11811 2,01	9805 1,99	8070 1,92	6579 1,82	5308 1,69	4231 1,54	3322 1,38	2556 1,23		
		40	Qo 11328 Pe 2,54	10348 2,50	8584 2,40	7057 2,26	5743 2,09	4615 1,90	3648 1,70	2817 1,51	2096 1,34		
		50	Qo 9688 Pe 3,01	8843 2,93	7324 2,75	6009 2,54	4874 2,31	3892 2,08	3039 1,85	2289 1,64	1616 1,45		
		30	Qo 15698 Pe 2,39	14338 2,40	11885 2,37	9764 2,29	7943 2,16	6392 2,01	5079 1,83	3975 1,64	3049 1,45		
		40	Qo 13737 Pe 3,06	12536 3,01	10373 2,87	8504 2,68	6897 2,47	5521 2,25	4346 2,01	3342 1,78	2477 1,56		
		50	Qo 11741 Pe 3,65	10702 3,54	8832 3,29	7218 3,02	5827 2,74	4631 2,45	3597 2,16	2695 1,89	1894 1,65		
D2-11.1Y	1	30	Qo 17792 Pe 2,88	16261 2,85	13502 2,75	11116 2,62	9066 2,45	7315 2,26	5829 2,05	4569 1,85	3501 1,65		
		40	Qo 13737 Pe 3,06	12536 3,01	10373 2,87	8504 2,68	6897 2,47	5521 2,25	4346 2,01	3342 1,78	2477 1,56		
		50	Qo 11741 Pe 3,65	10702 3,54	8832 3,29	7218 3,02	5827 2,74	4631 2,45	3597 2,16	2695 1,89	1894 1,65		
		30	Qo 17792 Pe 3,51	16261 3,41	13502 3,20	11116 2,96	9066 2,71	7315 2,46	5829 2,21	4569 1,98	3501 1,77		
		40	Qo 15678 Pe 4,05	14315 3,90	11862 3,59	9742 3,27	7918 2,95	6356 2,64	5017 2,36	3867 2,12	2868 1,91		
		50	Qo 13515 Pe 4,05	12320 3,90	10175 3,59	8323 3,27	6729 2,95	5356 2,64	4168 2,36	3129 2,12	2202 1,91		
D3-13.1Y	1	30	Qo 20498 Pe 2,92	18714 2,94	15503 2,85	12732 2,62	10359 2,45	8338 2,26	6627 2,05	5182 1,85	3960 1,65		
		40	Qo 17961 Pe 3,77	16382 3,71	13546 3,56	11101 3,35	9003 3,12	7209 2,85	5674 2,59	4356 2,32	3211 2,07		
		50	Qo 15375 Pe 4,56	14004 4,43	11544 4,13	9426 3,81	7606 3,47	6039 3,13	4683 2,79	3493 2,48	2426 2,21		
		30	Qo 22082 Pe 3,35	20163 3,36	16708 3,33	13725 3,23	11168 3,08	8990 2,87	7143 2,64	5582 2,39	4259 2,14		
		40	Qo 19384 Pe 4,23	17682 4,16	14622 3,99	11983 3,76	9717 3,49	7778 3,19	6119 2,88	4694 2,58	3455 2,29		
		50	Qo 16622 Pe 5,01	15139 4,87	12478 4,56	10185 4,21	8215 3,84	6519 3,46	5052 3,09	3766 2,74	2615 2,43		
D4-16.1Y	1	30	Qo 24487 Pe 3,24	22369 3,29	18561 3,32	15278 3,27	12468 3,15	10079 2,99	8056 2,79	6347 2,58	4899 2,36		
		40	Qo 21537 Pe 4,22	19661 4,19	16293 4,07	13393 3,89	10908 3,66	8785 3,41	6971 3,14	5414 2,87	4060 2,62		
		50	Qo 18507 Pe 5,13	16876 5,02	13953 4,76	11441 4,47	9286 4,14	7436 3,81	5836 3,48	4435 3,17	3180 2,90		
		30	Qo 28126 Pe 3,16	25635 3,30	21127 3,46	17210 3,48	13839 3,38	10968 3,18	8553 2,93	6547 2,63	4906 2,31		
		40	Qo 24501 Pe 4,42	22289 4,44	18297 4,37	14845 4,19	11887 3,92	9379 3,59	7274 3,22	5528 2,83	4095 2,46		
		50	Qo 20801 Pe 5,53	18878 5,43	15426 5,16	12462 4,80	9941 4,39	7818 3,94	6047 3,48	4583 3,04	3380 2,63		
Q5-21.1Y	1	30	CERTIFIED PRODUCT ASERCOM										
		40											
		50											

① Suction gas temperature 20°C without liquid sub-cooling.

The performance refers to European standard EN12900 and with operation at 50Hz; conversion factor at 60Hz = 1.2.

To calculate the performance in different operating points refer to the Frascold Selection Software.

All published data is subject to change.

■ This field requires additional cooling or limitation of the suction temperature.

## Performance R407C [50 Hz]

Compressor	Motor version	Cond. Temp. [°C]	Qo [W] = Cooling capacity Pe [kW] = Power consumption ①	Evaporating temperature [°C]									
				12,5	10	5	0	-5	-10	-15	-20	-25	-30
<b>Q5-24.1Y</b> 	1	30	Qo 31934 29099 23984 19559 15769 12555 9859 7626 5797	Pe 3,62 3,78 3,96 3,98 3,87 3,66 3,38 3,05 2,70									
		40	Qo 27692 25196 20709 16844 13546 10757 8419 6475 4868	Pe 5,16 5,17 5,08 4,86 4,55 4,16 3,74 3,31 2,89									
		50	Qo 23622 21459 17586 14269 11451 9073 7079 5412 4014	Pe 6,48 6,35 6,01 5,58 5,08 4,56 4,02 3,50 3,04									
		30	Qo 32170 29401 24381 20005 16219 12972 10209 7876 5921	Pe 4,20 4,27 4,33 4,29 4,16 3,96 3,70 3,40 3,06									
		40	Qo 28243 25767 21286 17392 14029 11146 8687 6601 4832	Pe 5,59 5,54 5,39 5,15 4,85 4,49 4,10 3,67 3,24									
		50	Qo 24378 22195 18257 14845 11907 9388 7236 5397 3817	Pe 6,83 6,68 6,32 5,90 5,44 4,93 4,41 3,87 3,35									
<b>Q7-25.1Y</b> 	1	30	Qo 37384 34121 28217 23091 18678 14915 11738 9083 6887	Pe 4,99 5,04 5,04 4,95 4,76 4,50 4,18 3,79 3,37									
		40	Qo 32608 29743 24571 20092 16241 12955 10170 7822 5848	Pe 6,41 6,35 6,15 5,87 5,51 5,09 4,62 4,10 3,56									
		50	Qo 27977 25502 21046 17197 13891 11066 8656 6599 4830	Pe 7,71 7,54 7,15 6,69 6,16 5,58 4,96 4,32 3,66									
		30	Qo 43662 39906 33062 27070 21886 17465 13763 10736 8339	Pe 6,30 6,30 6,21 6,00 5,70 5,32 4,90 4,46 4,01									
		40	Qo 37663 34447 28597 23486 19068 15299 12136 9533 7446	Pe 7,81 7,72 7,43 7,05 6,58 6,06 5,50 4,93 4,37									
		50	Qo 32202 29478 24527 20201 16454 13242 10521 8246 6373	Pe 9,37 9,16 8,67 8,08 7,43 6,73 6,02 5,30 4,60									
<b>Q7-33.1Y</b> 	1	30	Qo 46476 42420 35119 28818 23419 18825 14939 11665 8904	Pe 5,37 5,50 5,64 5,63 5,48 5,22 4,87 4,46 4,01									
		40	Qo 40884 37264 30760 25157 20358 16265 12782 9810 7254	Pe 7,38 7,38 7,24 6,98 6,60 6,13 5,60 5,02 4,42									
		50	Qo 35130 31954 26264 21377 17194 13618 10553 7902 5567	Pe 9,31 9,16 8,76 8,24 7,63 6,95 6,23 5,48 4,73									
		30	Qo 48203 44197 36887 30472 24900 20121 16083 12735 10026	Pe 7,08 7,01 6,79 6,51 6,17 5,78 5,36 4,91 4,44									
		40	Qo 42089 38590 32224 26656 21835 17710 14231 11345 9002	Pe 8,97 8,78 8,35 7,86 7,32 6,75 6,14 5,52 4,90									
		50	Qo 36565 33520 27989 23159 18981 15402 12372 9840 7755	Pe 10,86 10,54 9,87 9,14 8,37 7,58 6,77 5,95 5,14									
<b>Q7-36.1Y</b>	1	30	Qo 58017 53096 44113 36214 29324 23369 18274 13966 10369	Pe 7,73 7,73 7,60 7,32 6,92 6,41 5,83 5,21 4,56									
		40	Qo 42089 38590 32224 26656 21835 17710 14231 11345 9002	Pe 8,97 8,78 8,35 7,86 7,32 6,75 6,14 5,52 4,90									
		50	Qo 36565 33520 27989 23159 18981 15402 12372 9840 7755	Pe 10,86 10,54 9,87 9,14 8,37 7,58 6,77 5,95 5,14									
		30	Qo 58017 53096 44113 36214 29324 23369 18274 13966 10369	Pe 7,73 7,73 7,60 7,32 6,92 6,41 5,83 5,21 4,56									
		40	Qo 50828 46363 38238 31121 24938 19614 15076 11248 8057	Pe 9,83 9,64 9,16 8,56 7,87 7,11 6,31 5,49 4,68									
		50	Qo 43521 39530 32294 25991 20547 15888 11938 8624 5871	Pe 11,66 11,30 10,48 9,58 8,62 7,62 6,61 5,62 4,67									
<b>S12-42Y</b>	1	30	Qo 70801 64647 53564 43993 35789 28805 22896 17917 13721	Pe 8,70 8,84 8,92 8,78 8,44 7,96 7,36 6,70 6,01									
		40	Qo 62309 56826 46968 38468 31180 24959 19659 15134 11239	Pe 11,59 11,50 11,15 10,62 9,93 9,15 8,29 7,42 6,55									
		50	Qo 53577 48775 40166 32761 26414 20980 16312 12266 8696	Pe 14,29 13,97 13,20 12,29 11,28 10,20 9,10 8,02 7,00									
		30	Qo 70801 64647 53564 43993 35789 28805 22896 17917 13721	Pe 8,70 8,84 8,92 8,78 8,44 7,96 7,36 6,70 6,01									
		40	Qo 62309 56826 46968 38468 31180 24959 19659 15134 11239	Pe 11,59 11,50 11,15 10,62 9,93 9,15 8,29 7,42 6,55									
		50	Qo 53577 48775 40166 32761 26414 20980 16312 12266 8696	Pe 14,29 13,97 13,20 12,29 11,28 10,20 9,10 8,02 7,00									
<b>S20-56Y</b>	1	30	Qo 77910 71213 59146 48720 39776 32159 25710 20273 15690	Pe 9,68 9,83 9,90 9,73 9,36 8,84 8,21 7,51 6,79									
		40	Qo 68920 62939 52182 42901 34939 28138 22343 17395 13139	Pe 12,76 12,66 12,27 11,70 10,98 10,16 9,28 8,39 7,54									
		50	Qo 59589 54342 44931 36831 29886 23939 18833 14410 10515	Pe 15,60 15,26 14,45 13,50 12,47 11,38 10,29 9,25 8,29									
		30	Qo 77608 70945 58859 48320 39202 31378 24720 19103 14399	Pe 10,01 10,14 10,21 10,05 9,68 9,16 8,50 7,73 6,90									
		40	Qo 67988 62040 51277 41918 33835 26901 20991 15976 11730	Pe 13,16 13,03 12,60 11,99 11,22 10,32 9,34 8,30 7,23									
		50	Qo 58530 53298 43859 35680 28633 22591 17428 13017 9230	Pe 15,95 15,57 14,67 13,64 12,48 11,25 9,97 8,67 7,39									
<b>V20-59Y</b> 	1	30	Qo 93977 85755 70894 58014 46958 37571 29695 23175 17854	Pe 12,11 12,24 12,27 12,02 11,55 10,9 10,12 9,25 8,34									
		40	Qo 81686 74479 61498 50299 40726 32622 25831 20196 15562	Pe 15,93 15,72 15,13 14,33 13,37 12,31 11,18 10,04 8,94									
		50	Qo 70261 64036 52872 43289 35134 28249 22477 17663 13651	Pe 19,37 18,86 17,7 16,41 15,03 13,62 12,21 10,86 9,61									
		30	Qo 115528 105739 87987 72515 59132 47652 37885 29644 22738	Pe 14,22 14,41 14,50 14,26 13,74 12,98 12,04 10,95 9,77									
		40	Qo 102008 93210 77290 63447 51492 41238 32495 25075 18790	Pe 18,72 18,54 17,96 17,10 16,01 14,74 13,34 11,86 10,34									
		50	Qo 88378 80580 66510 54315 43806 34796 27095 20516 14869	Pe 22,70 22,17 20,94 19,48 17,85 16,10 14,27 12,41 10,58									
<b>V30-84Y</b> 	1	30	Qo 115528 105739 87987 72515 59132 47652 37885 29644 22738	Pe 14,22 14,41 14,50 14,26 13,74 12,98 12,04 10,95 9,77									
		40	Qo 102008 93210 77290 63447 51492 41238 32495 25075 18790	Pe 18,72 18,54 17,96 17,10 16,01 14,74 13,34 11,86 10,34									
		50	Qo 88378 80580 66510 54315 43806 34796 27095 20516 14869	Pe 22,70 22,17 20,94 19,48 17,85 16,10 14,27 12,41 10,58									

① Suction gas temperature 20°C without liquid sub-cooling.

The performance refers to European standard EN12900 and with operation at 50Hz; conversion factor at 60Hz = 1.2.

To calculate the performance in different operating points refer to the Frascold Selection Software.

All published data is subject to change.

This field requires additional cooling or limitation of the suction temperature.

## Performance R407C [50 Hz]

Compressor	Motor version	Cond. Temp. [°C]	Qo [W] = Cooling capacity Pe [kW] = Power consumption ①	Evaporating temperature [°C]									
				12,5	10	5	0	-5	-10	-15	-20	-25	-30
V32-93Y	1	30	Qo 128091 117027 96959 79461 64323 51334 40282 30956 23146 Pe 16,20 16,32 16,27 15,85 15,12 14,12 12,91 11,55 10,08										
		40	Qo 112689 102729 84699 69015 55466 43842 33930 25521 18402 Pe 20,91 20,64 19,85 18,74 17,38 15,82 14,10 12,28 10,41										
		50	Qo 97201 88355 72387 58540 46604 36368 27621 20151 13748 Pe 25,01 24,36 22,85 21,09 19,12 17,01 14,80 12,55 10,32										
		30	Qo 139768 127899 106297 87381 70951 56813 44768 34621 26173 Pe 16,19 16,81 17,43 17,37 16,77 15,77 14,54 13,21 11,95										
		40	Qo 124224 113374 93705 76580 61802 49173 38498 29579 22218 Pe 22,47 22,46 21,94 20,88 19,45 17,78 16,03 14,34 12,87										
		50	Qo 107236 97494 79935 64779 51829 40888 31760 24246 18150 Pe 27,97 27,35 25,74 23,76 21,55 19,27 17,06 15,07 13,45										
Z35-106Y	1	30	Qo 146457 133580 110314 90162 72882 58231 45964 35840 27614 Pe 16,40 16,90 17,39 17,29 16,70 15,74 14,51 13,14 11,72										
		40	Qo 127556 116089 95456 77690 62545 49780 39151 30415 23328 Pe 22,72 22,61 22,00 20,92 19,50 17,85 16,07 14,28 12,58										
		50	Qo 108960 98921 80957 65609 52634 41790 32833 25519 19607 Pe 28,20 27,54 25,91 23,97 21,82 19,57 17,34 15,24 13,37										
		30	Qo 171216 156424 129601 106229 86034 68739 54068 41746 31497 Pe 19,98 20,40 20,76 20,53 19,80 18,65 17,17 15,45 13,57										
		40	Qo 149873 136771 113057 92437 74633 59370 46372 35364 26070 Pe 27,04 26,85 26,05 24,78 23,11 21,13 18,93 16,60 14,21										
		50	Qo 127713 116347 95837 78061 62743 49606 38375 28776 20530 Pe 33,35 32,56 30,65 28,37 25,81 23,04 20,16 17,25 14,40										
Z40-126Y	1	30	Qo 199701 182220 150560 123035 99320 79093 62030 47809 36105 Pe 24,65 25,21 25,78 25,67 25,00 23,87 22,39 20,66 18,78										
		40	Qo 175042 159452 131303 106930 86009 68217 53230 40724 30378 Pe 32,57 32,42 31,67 30,38 28,67 26,63 24,38 22,01 19,63										
		50	Qo 151152 137452 112814 91593 73465 58107 45195 34405 25416 Pe 39,60 38,79 36,82 34,46 31,81 28,97 26,05 23,15 20,39										
		30	Qo 209564 191549 158874 130388 105744 84598 66603 51416 38690 Pe 27,67 27,79 27,54 26,72 25,42 23,70 21,66 19,38 16,95										
		40	Qo 182691 166718 137823 112708 91028 72438 56591 43144 31751 Pe 35,62 35,05 33,51 31,51 29,14 26,48 23,61 20,62 17,58										
		50	Qo 156770 142826 117682 95919 77166 61103 47377 35642 25553 Pe 42,61 41,39 38,64 35,56 32,22 28,71 25,11 21,50 17,97										
W50-168Y	1	30	Qo 234600 214261 177378 145228 117420 93559 73255 56115 41746 Pe 27,34 27,86 28,27 27,94 26,98 25,47 23,53 21,25 18,75										
		40	Qo 205892 187707 154806 126205 101512 80334 62279 46955 33969 Pe 36,35 36,13 35,17 33,58 31,47 28,94 26,09 23,02 19,84										
		50	Qo 177870 161842 132930 107885 86315 67827 52029 38528 26933 Pe 44,34 43,43 41,18 38,42 35,25 31,78 28,11 24,34 20,57										
		30	Qo 258495 236185 195711 160415 129872 103657 81344 62510 46729 Pe 30,40 30,83 31,09 30,63 29,52 27,84 25,69 23,14 20,27										
		40	Qo 228189 208166 171913 140365 113097 89684 69702 52725 38329 Pe 39,91 39,61 38,48 36,71 34,39 31,60 28,42 24,93 21,22										
		50	Qo 196412 178789 146982 119408 95642 75258 57832 42939 30154 Pe 48,32 47,31 44,82 41,79 38,30 34,43 30,26 25,87 21,36										
W70-206Y	1	30	Qo 284549 259978 215437 176628 143070 114281 89779 69081 51706 Pe 36,26 36,56 36,48 35,58 33,98 31,80 29,15 26,15 22,91										
		40	Qo 250481 228461 188640 154043 124189 98594 76778 58258 42552 Pe 46,55 45,99 44,30 41,92 38,99 35,60 31,89 27,96 23,92										
		50	Qo 217121 197662 162582 132218 106087 83708 64599 48277 34261 Pe 55,66 54,30 51,09 47,34 43,17 38,68 34,00 29,24 24,51										
		30	Qo 302664 276804 229922 189072 153749 123448 97667 75900 57644 Pe 38,78 39,24 39,34 38,48 36,80 34,46 31,60 28,38 24,95										
		40	Qo 267390 244188 202218 165741 134253 107250 84228 64682 48109 Pe 50,10 49,55 47,77 45,22 42,04 38,39 34,42 30,28 26,12										
		50	Qo 232468 211940 174915 142845 115226 91553 71324 54033 39176 Pe 60,06 58,58 55,08 51,00 46,50 41,72 36,81 31,92 27,20										
W80-240Y	1	30	Qo 329627 301013 249200 204160 165356 132253 104315 81006 61791 Pe 42,99 43,02 42,42 41,04 38,99 36,41 33,42 30,15 26,72										
		40	Qo 292621 266820 220223 179852 145171 115645 90737 69913 52635 Pe 54,27 53,42 51,16 48,26 44,85 41,05 36,99 32,79 28,59										
		50	Qo 253254 230441 189410 154058 123850 98250 76723 58732 43743 Pe 64,38 62,68 58,84 54,50 49,80 44,85 39,79 34,74 29,83										

① Suction gas temperature 20°C without liquid sub-cooling.

The performance refers to European standard EN12900 and with operation at 50Hz; conversion factor at 60Hz = 1.2.

To calculate the performance in different operating points refer to the Frascold Selection Software.

All published data is subject to change.

This field requires additional cooling or limitation of the suction temperature.

## Performance R22 [50 Hz]

Compressor	Motor version	Cond. Temp. [°C]	Qo [W] = Cooling capacity Pe [kW] = Power consumption ①	Evaporating temperature [°C]									
				10	5	0	-5	-10	-15	-20	-25	-30	-35
<b>A05-4Y</b>	1	30	Qo 4657 Pe 0,60	3878 0,64	3196 0,66	2604 0,65	2095 0,64	1661 0,61	1296 0,57	991 0,53	739 0,47	534 0,42	368 0,37
		40	Qo 4124 Pe 0,82	3422 0,82	2809 0,80	2279 0,76	1825 0,72	1439 0,66	1114 0,60	843 0,54	618 0,47	433 0,41	279 0,35
		50	Qo 3588 Pe 1,06	2962 1,01	2420 0,95	1953 0,88	1555 0,80	1217 0,72	934 0,63	698 0,55	500 0,46	335 0,39	195 0,31
	2	30	Qo Pe			3265 0,81	2634 0,78	2098 0,75	1647 0,70	1272 0,64	961 0,57	705 0,50	493 0,43
		40	Qo Pe			2867 0,98	2300 0,91	1821 0,84	1419 0,75	1084 0,67	807 0,58	578 0,50	385 0,42
		50	Qo Pe			2471 1,15	1967 1,04	1545 0,93	1192 0,81	900 0,70	658 0,59	455 0,48	282 0,39
<b>A07-5Y</b>	1	30	Qo 5801 Pe 0,73	4839 0,78	3997 0,80	3266 0,80	2637 0,78	2101 0,74	1648 0,69	1270 0,64	956 0,57	699 0,51	489 0,44
		40	Qo 5125 Pe 1,02	4263 1,02	3511 1,00	2861 0,95	2303 0,90	1828 0,83	1426 0,75	1090 0,66	809 0,58	574 0,50	377 0,42
		50	Qo 4440 Pe 1,35	3680 1,29	3020 1,21	2451 1,21	1966 1,12	1553 1,02	1205 0,91	912 0,80	665 0,69	455 0,58	272 0,48
	2	30	Qo Pe			3601 0,89	2905 0,87	2315 0,82	1819 0,76	1407 0,69	1067 0,62	788 0,54	558 0,46
		40	Qo Pe			3161 1,09	2535 1,01	2006 0,93	1565 0,83	1199 0,74	898 0,64	649 0,54	442 0,45
		50	Qo Pe			2733 1,28	2174 1,16	1706 1,03	1317 0,90	996 0,77	731 0,64	512 0,53	326 0,42
<b>A1-6Y</b>	1	30	Qo 6473 Pe 0,81	5401 0,86	4462 0,89	3647 0,89	2945 0,87	2347 0,83	1841 0,78	1419 0,71	1070 0,65	783 0,57	548 0,50
		40	Qo 5742 Pe 1,11	4776 1,11	3933 1,09	3204 1,05	2578 0,99	2045 0,91	1596 0,83	1219 0,74	905 0,65	644 0,57	425 0,48
		50	Qo 5008 Pe 1,45	4148 1,39	3403 1,31	2760 1,22	2211 1,12	1745 1,00	1352 0,89	1022 0,77	745 0,65	510 0,54	307 0,45
	2	30	Qo Pe			4655 1,13	3779 1,11	3035 1,06	2409 0,99	1886 0,91	1452 0,82	1092 0,72	794 0,63
		40	Qo Pe			4124 1,40	3337 1,32	2671 1,22	2112 1,11	1646 0,99	1258 0,87	934 0,74	660 0,63
		50	Qo Pe			3600 1,67	2900 1,53	2310 1,38	1817 1,22	1406 1,06	1062 0,90	772 0,75	522 0,61
<b>A1.5-7Y</b>	1	30	Qo 8294 Pe 1,02	6938 1,09	5754 1,12	4727 1,13	3844 1,11	3090 1,07	2452 1,01	1915 0,94	1466 0,86	1090 0,78	
		40	Qo 7423 Pe 1,40	6197 1,41	5129 1,39	4206 1,34	3413 1,34	2736 1,27	2162 1,19	1677 1,10	1266 1,00	916 0,90	
		50	Qo 6545 Pe 1,83	5449 1,77	4498 1,68	3679 1,57	2977 1,46	2379 1,33	1870 1,20	1436 1,06	1064 0,93	740 0,80	
	2	30	Qo 9460 Pe 1,22	7883 1,31	6517 1,34	5342 1,34	4340 1,31	3492 1,24	2778 1,16	2179 1,16	1676 1,06	1251 0,94	883 0,83
		40	Qo 8437 Pe 1,70	7011 1,70	5781 1,67	4727 1,60	3832 1,50	3075 1,39	2438 1,26	1902 1,12	1448 0,97	1055 0,83	706 0,70
		50	Qo 7409 Pe 2,20	6133 2,12	5039 2,01	4107 1,87	3319 1,71	2655 1,54	2096 1,36	1623 1,17	1216 0,99	858 0,82	528 0,67
<b>B1.5-9.1Y</b>	2	30	Qo 9243 Pe 1,22	7656 1,31	6291 1,34	5127 1,34	4142 1,31	3315 1,24	2623 1,16	2045 1,06	1560 0,94	1144 0,83	
		40	Qo 8211 Pe 2,05	6781 2,00	5557 1,92	4517 1,80	3640 1,66	2903 1,50	2286 1,33	1766 1,22	1321 1,16	931 0,99	
		50	Qo 7193 Pe 2,54	5917 2,40	4830 2,23	3911 2,04	3138 1,83	2489 1,62	1943 1,40	1477 1,18	1071 1,08	702 0,98	
	2	30	Qo 7064 Pe 1,56	7656 1,61	6291 1,61	5127 1,57	4142 1,49	3315 1,39	2623 1,26	2045 1,13	1560 0,99	1144 0,85	
		40	Qo 6273 Pe 2,05	6781 2,00	5557 1,92	4517 1,80	3640 1,66	2903 1,50	2286 1,33	1766 1,22	1321 1,16	931 0,99	
		50	Qo 5505 Pe 2,54	4440 2,40	3548 2,23	3548 2,04	2806 1,83	2188 1,62	1669 1,40	1224 1,18	829 1,08		
<b>B1.5-10.1Y</b>	2	30	Qo 7064 Pe 1,79	7656 1,76	6291 1,84	5127 1,88	4142 1,85	3315 1,79	2623 1,67	2045 1,52	1560 1,32	1144 1,05	
		40	Qo 6273 Pe 2,15	6781 2,21	5557 2,21	4517 2,16	3640 2,06	2903 1,92	2286 1,75	1766 1,53	1321 1,28	931 0,93	
		50	Qo 5505 Pe 2,49	4440 2,30	3548 2,09	3548 1,85	2806 1,61	2188 1,36	1669 1,12	1224 1,09	829 0,90		
	1	30	Qo 12391 Pe 1,61	10394 1,76	8648 1,84	7131 1,88	5821 1,85	4695 1,79	3732 1,67	2910 1,52	2207 1,32		
		40	Qo 11006 Pe 2,16	9210 2,21	7645 2,21	6290 2,16	5122 2,06	4121 1,92	3263 1,75	2526 1,53	1890 1,28		
		50	Qo 9611 Pe 2,67	8019 2,63	6639 2,54	5450 2,41	4430 2,24	3556 2,03	2807 1,79	2161 1,51	1596 1,22		
<b>D2-11.1Y</b>	1	30	Qo 13995 Pe 1,96	11703 2,10	9703 2,16	7970 2,09	6479 1,97	5206 1,82	4126 1,63	3214 1,43	2446 1,22	1797 1,12	
		40	Qo 12465 Pe 2,54	10417 2,57	8635 2,54	7094 2,44	5770 2,29	4637 2,10	3671 1,88	2848 1,65	2142 1,40	1529 1,15	
		50	Qo 10971 Pe 3,06	9164 3,00	7595 2,88	6242 2,71	5079 2,49	4082 2,24	3226 1,97	2486 1,69	1838 1,41	1257 1,14	
	1	30	Qo 12391 Pe 1,61	10394 1,76	8648 1,84	7131 1,88	5821 1,85	4695 1,79	3732 1,67	2910 1,52	2207 1,32		
		40	Qo 11006 Pe 2,16	9210 2,21	7645 2,21	6290 2,16	5122 2,06	4121 1,92	3263 1,75	2526 1,53	1890 1,28		
		50	Qo 9611 Pe 2,67	8019 2,63	6639 2,54	5450 2,41	4430 2,24	3556 2,03	2807 1,79	2161 1,51	1596 1,22		

① Suction gas temperature 20°C without liquid sub-cooling.

The performance refers to European standard EN12900 and with operation at 50Hz; conversion factor at 60Hz = 1.2.

To calculate the performance in different operating points refer to the Frascold Selection Software.

All published data is subject to change.

This field requires additional cooling or limitation of the suction temperature.

## Performance R22 [50 Hz]

Compressor	Motor version	Cond. Temp. [°C]	Qo [W] = Cooling capacity Pe [kW] = Power consumption ①	Evaporating temperature [°C]										
				10	5	0	-5	-10	-15	-20	-25	-30	-35	-40
D2-13.1Y	2	30	Qo	13960	11610	9586	7843	6354	5091	4023	3120	2352	1688	
		40	Pe	2,29	2,42	2,47	2,44	2,35	2,21	2,02	1,79	1,54	1,28	
		50	Qo	12330	10250	8444	6899	5581	4458	3502	2681	1967	1329	
	1	30	Pe	2,92	2,94	2,88	2,76	2,58	2,36	2,09	1,80	1,49	1,17	
		40	Qo	10730	8891	7310	5956	4799	3810	2958	2213	1545	924,5	
		50	Pe	3,51	3,43	3,27	3,05	2,79	2,48	2,14	1,77	1,40	1,03	
D3-13.1Y	2	30	Qo	16798	14042	9585	7817	6310	5030	3944	3016			
		40	Pe	2,16	2,32	2,40	2,34	2,22	2,06	1,86	1,64			
		50	Qo	14946	12470	10325	8477	6893	5537	4377	3378	2506		
	1	30	Pe	2,82	2,87	2,84	2,74	2,59	2,39	2,16	1,90	1,63		
		40	Qo	13109	10907	9004	7366	5960	4750	3703	2786	1963		
		50	Pe	3,46	3,40	3,26	3,08	2,84	2,58	2,28	1,97	1,66		
D2-15.1Y	2	30	Qo				10648	8679	7017	5620	4451	3468	2632	1903
		40	Pe				2,75	2,70	2,59	2,42	2,21	1,96	1,69	1,41
		50	Qo				9420	7647	6154	4902	3852	2964	2197	1512
	1	30	Pe				3,25	3,10	2,88	2,62	2,32	2,00	1,66	1,32
		40	Qo				8227	6637	5303	4185	3243	2437	1729	1077
		50	Pe				3,69	3,43	3,12	2,77	2,39	1,99	1,59	1,20
D3-15.1Y	1	30	Qo	15745	13055	10737	8752	7065	5637	4432	3413	2541		
		40	Pe	2,60	2,71	2,74	2,69	2,58	2,42	2,22	1,99	1,74		
		50	Qo	14003	11585	9505	7727	6213	4926	3829	2885	2057		
	2	30	Pe	3,27	3,26	3,18	3,03	2,83	2,58	2,30	2,01	1,70		
		40	Qo	12277	10124	8276	6697	5350	4198	3202	2327	1535		
		50	Pe	3,91	3,78	3,59	3,34	3,04	2,72	2,37	2,01	1,64		
D3-16.1Y	2	30	Qo	16561	13803	11418	9370	7621	6134	4870	3792	2862	2042	
		40	Pe	2,65	2,79	2,83	2,79	2,67	2,50	2,28	2,02	1,74	1,45	
		50	Qo	14642	12191	10077	8262	6710	5382	4240	3247	2366	1557	
	1	30	Pe	3,43	3,43	3,34	3,19	2,96	2,69	2,38	2,05	1,70	1,34	
		40	Qo	12747	10596	8745	7157	5794	4618	3591	2676	1835	1030	
		50	Pe	4,17	4,04	3,83	3,55	3,22	2,85	2,45	2,03	1,60	1,18	
D4-16.1Y	1	30	Qo	20075	16846	14041	11621	9543	7767	6252	4955	3837		
		40	Pe	2,50	2,72	2,84	2,88	2,83	2,73	2,56	2,35	2,09		
		50	Qo	17834	14949	12449	10294	8441	6849	5478	4286	3231		
	2	30	Pe	3,35	3,43	3,42	3,33	3,18	2,97	2,72	2,42	2,10		
		40	Qo	15556	13021	10831	8945	7322	5920	4698	3615	2630		
		50	Pe	4,15	4,09	3,95	3,75	3,49	3,19	2,85	2,49	2,11		
D3-18.1Y	2	30	Qo				12784	10448	8472	6809	5411	4230	3219	2331
		40	Pe				3,15	3,11	3,00	2,82	2,60	2,33	2,04	1,72
		50	Qo				11350	9235	7453	5954	4693	3621	2692	1856
	1	30	Pe				3,74	3,58	3,36	3,09	2,77	2,42	2,05	1,66
		40	Qo				9930	8027	6429	5087	3954	2982	2124	1332
		50	Pe				4,29	4,02	3,69	3,32	2,91	2,47	2,02	1,57
D4-18.1Y	1	30	Qo	22651	18945	15742	12992	10645	8650	6958	5520	4284		
		40	Pe	2,88	3,09	3,20	3,23	3,18	3,06	2,89	2,67	2,42		
		50	Qo	20260	16920	14041	11571	9461	7661	6121	4791	3621		
	2	30	Pe	3,81	3,85	3,81	3,70	3,53	3,32	3,06	2,78	2,48		
		40	Qo	17843	14867	12307	10115	8239	6630	5239	4014	2907		
		50	Pe	4,72	4,60	4,41	4,18	3,90	3,60	3,27	2,93	2,59		
D3-19.1Y	2	30	Qo				13222	10797	8752	7035	5596	4384	3348	2438
		40	Pe				3,48	3,39	3,23	3,00	2,72	2,41	2,08	1,75
		50	Qo				11675	9513	7696	6173	4893	3807	2863	2009
	1	30	Pe				4,27	4,02	3,70	3,34	2,95	2,54	2,12	1,72
		40	Qo				10115	8213	6622	5292	4170	3208	2353	1555
		50	Pe				5,04	4,62	4,15	3,66	3,14	2,63	2,13	1,65
D4-19.1Y	1	30	Qo	20373	16983	14012	11428	9201	7300	5694	4353	3244	2339	
		40	Pe	3,52	3,66	3,69	3,60	3,43	3,19	2,90	2,56	2,21	1,86	
		50	Qo	18291	15183	12467	10113	8088	6364	4907	3689	2678	1842	
	2	30	Pe	4,54	4,52	4,38	4,15	3,85	3,48	3,07	2,64	2,20	1,78	
		40	Qo	16191	13369	10912	8790	6972	5427	4124	3033	2122	1361	
		50	Pe	5,46	5,26	4,97	4,60	4,16	3,67	3,16	2,63	2,11	1,61	
Q4-20.1Y	2	30	Qo				13722	11242	9118	7316	5799	4531	3477	2600
		40	Pe				3,42	3,34	3,18	2,96	2,69	2,39	2,06	1,73
		50	Qo				12366	10121	8203	6575	5202	4048	3076	2251
	1	30	Pe				4,17	3,94	3,65	3,31	2,93	2,52	2,11	1,71
		40	Qo				11037	9031	7320	5870	4643	3604	2718	
		50	Pe				4,84	4,47	4,04	3,58	3,09	2,60	2,10	
Q4-21.1Y	2	30	Qo	19134	15854	12993	10517	8392	6584	5060	3784	2724		
		40	Pe	4,04	3,97	3,82	3,62	3,35	3,04	2,69	2,31	1,91		
		50	Qo	17163	14142	11516	9251	7313	5668	4281	3120	2150		
	1	30	Pe				5,09	4,81	4,48	4,09	3,68	3,23	2,76	2,28
		40	Qo				15148	12394	10011	7964	6219	4744	3503	2464
		50	Pe				6,09	5,60	5,07	4,52	3,94	3,35	2,76	2,18

① Suction gas temperature 20°C without liquid sub-cooling.

The performance refers to European standard EN12900 and with operation at 50Hz; conversion factor at 60Hz = 1.2.

To calculate the performance in different operating points refer to the Frascold Selection Software.

All published data is subject to change.

This field requires additional cooling or limitation of the suction temperature.

## Performance R22 [50 Hz]

Compressor	Motor version	Cond. Temp. [°C]	Qo [W] = Cooling capacity Pe [kW] = Power consumption ①	Evaporating temperature [°C]										
				10	5	0	-5	-10	-15	-20	-25	-30	-35	-40
Q5-21.1Y	1	30	Qo 26021 21804 18109 14895 12120 9744 7724 6021 4593	Pe 3,01 3,32 3,50 3,57 3,52 3,38 3,15 2,85 2,49										
		40	Qo 23312 19473 16117 13204 10692 8540 6708 5153 3835	Pe 4,20 4,33 4,34 4,23 4,03 3,75 3,39 2,96 2,49										
		50	Qo 20556 17101 14091 11486 9243 7323 5683 4284	Pe 5,43 5,36 5,18 4,90 4,54 4,09 3,59 3,03										
		30	Qo 20706 17134 14012 11307 8983 7006 5341 3955 2813	Pe 4,31 4,27 4,13 3,90 3,60 3,24 2,83 2,40 1,96										
		40	Qo 18479 15197 12339 9872 7762 5974 4473 3225 2195	Pe 5,44 5,17 4,81 4,39 3,92 3,42 2,89 2,35 1,82										
Q4-24.1Y	2	50	Qo 16243 13252 10661 8437 6543 4946 3611 2504 1590	Pe 6,49 5,98 5,42 4,81 4,17 3,51 2,86 2,21 1,60										
		30	Qo 29616 24814 20605 16942 13779 11070 8769 6831 5207	Pe 3,58 3,92 4,09 4,13 4,03 3,84 3,56 3,21 2,83										
		40	Qo 26582 22215 18395 15076 12212 9757 7665 5890 4386	Pe 5,00 5,11 5,06 4,89 4,61 4,24 3,81 3,33 2,82										
		50	Qo 23502 19575 16150 13182 10623 8428 6551 4945 3565	Pe 6,43 6,29 6,02 5,63 5,16 4,61 4,02 3,39 2,76										
		30	Qo 18202 14874 12037 9631 7599 5882 4420 3157	Pe 4,46 4,40 4,24 3,98 3,64 3,24 2,79 2,31										
Q4-25.1Y	2	40	Qo 16156 13129 10558 8386 6554 5004 3676 2512	Pe 5,26 5,02 4,68 4,27 3,79 3,27 2,71 2,14										
		50	Qo 14097 11371 9068 7130 5498 4115 2920 1857	Pe 5,99 5,56 5,05 4,48 3,87 3,22 2,56 1,89										
		30	Qo 25546 21450 17842 14683 11937 9565 7531 5797 4325 3078	Pe 4,04 4,25 4,33 4,28 4,12 3,88 3,55 3,17 2,75 2,30										
		40	Qo 22770 19051 15784 12931 10455 8318 6482 4911 3567 2412	Pe 5,23 5,23 5,10 4,87 4,54 4,14 3,68 3,18 2,65 2,10										
		50	Qo 20159 16801 13859 11295 9073 7155 5502 4078 2846 1767	Pe 6,43 6,21 5,87 5,45 4,95 4,39 3,78 3,14 2,49 1,83										
Q7-25.1Y	1	30	Qo 31308 26319 21943 18135 14846 12031 9642 7631 5953	Pe 3,76 4,10 4,27 4,30 4,20 4,00 3,72 3,37 2,98										
		40	Qo 28215 23647 19655 16192 13210 10663 8504 6686 5161	Pe 5,18 5,29 5,24 5,07 4,79 4,42 3,99 3,51 3,00										
		50	Qo 25104 20960 17353 14237 11565 9288 7362 5737 4369	Pe 6,58 6,45 6,18 5,8 5,33 4,80 4,21 3,59 2,97										
		30	Qo 23591 19438 15884 12864 10310 8154 6331 4773 3412	Pe 4,74 4,77 4,68 4,46 4,15 3,77 3,33 2,86 2,37										
		40	Qo 20972 17236 14050 11346 9057 7115 5455 4008 2709	Pe 5,92 5,71 5,38 4,97 4,47 3,93 3,35 2,75 2,17										
Q5-28.1Y	2	50	Qo 18379 15046 12212 9809 7769 6027 4514 3165 1911	Pe 7,10 6,63 6,07 5,43 4,74 4,02 3,29 2,57 1,87										
		30	Qo 36064 30175 25049 20617 16810 13559 10795 8450 6454	Pe 4,43 4,77 4,93 4,93 4,80 4,55 4,21 3,80 3,34										
		40	Qo 32223 26890 22260 18263 14831 11893 9383 7230 5366	Pe 5,83 5,94 5,89 5,69 5,37 4,95 4,45 3,90 3,31										
		50	Qo 28371 23594 19458 15896 12837 10213 7954 5993 4260	Pe 7,12 7,02 6,77 6,39 5,90 5,32 4,68 3,99 3,29										
		30	Qo 22299 18559 15280 12415 9919 7744 5844 4174	Pe 5,14 5,15 5,01 4,74 4,36 3,90 3,36 2,78										
Q5-33.1Y	2	40	Qo 20232 16805 13795 11156 8843 6808 5004 3387	Pe 6,37 6,21 5,90 5,46 4,92 4,29 3,59 2,84										
		50	Qo 17937 14818 12074 9657 7522 5623 3912 2344	Pe 7,50 7,15 6,65 6,03 5,31 4,49 3,61 2,68										
		30	Qo 39393 33090 27634 22943 18934 15524 12630 10171 8063	Pe 4,65 5,01 5,22 5,29 5,24 5,09 4,84 4,52 4,14										
		40	Qo 35627 29894 24945 20697 17066 13972 11329 9057 7072	Pe 6,28 6,38 6,36 6,22 5,99 5,68 5,30 4,86 4,40										
		50	Qo 31832 26665 22218 18408 15153 12369 9974 7885 6019	Pe 7,88 7,74 7,49 7,16 6,76 6,30 5,79 5,26 4,73										
S5-33Y	2	30	Qo 23632 19531 15942 12822 10128 7817 5847 4173	Pe 5,64 5,36 4,99 4,56 4,08 3,57 3,03 2,50										
		40	Qo 20835 17162 13945 11143 8711,8 6609 4790 3214	Pe 6,55 6,09 5,56 4,99 4,39 3,78 3,17 2,59										
		50	Qo 18055 14799 11946 9451 7273 5367 3692 2203	Pe 7,37 6,73 6,04 5,33 4,62 3,91 3,23 2,59										
		30	Qo 42461 36051 30286 25141 20590 16609 13170 10250 7822	Pe 5,63 5,73 5,69 5,52 5,26 4,90 4,48 4,01 3,51										
		40	Qo 37827 31927 26650 21970 17863 14302 11263 8719 6644	Pe 7,07 6,94 6,69 6,34 5,91 5,41 4,86 4,28 3,69										
S7-33Y	1	50	Qo 33252 27855 23060 18839 15168 12022 9375 7200 5474	Pe 8,42 8,08 7,64 7,12 6,53 5,89 5,23 4,56 3,89										

① Suction gas temperature 20°C without liquid sub-cooling.

The performance refers to European standard EN12900 and with operation at 50Hz; conversion factor at 60Hz = 1.2.

To calculate the performance in different operating points refer to the Frascold Selection Software.

All published data is subject to change.

This field requires additional cooling or limitation of the suction temperature.

## Performance R22 [50 Hz]

Compressor	Motor version	Cond. Temp. [°C]	Qo [W] = Cooling capacity Pe [kW] = Power consumption ①	Evaporating temperature [°C]											
				10	5	0	-5	-10	-15	-20	-25	-30	-35	-40	
Q7-36.1Y	1	30	Qo 43478 Pe 5,29	36863	31097	26100	21793	18096	14931	12217	9875				
		40	Qo 39677 Pe 7,25	33581	28282	23698	19751	16361	13448	10934	8737				
		50	Qo 35842 Pe 9,15	30257	25414	21233	17635	14541	11871	9545	7484				
	2	30	Qo Pe			30383	25143	20550	16552	13094	10123	7587	5430		
		40	Qo Pe			7,27	6,92	6,46	5,92	5,31	4,66	4,01	3,37		
		50	Qo Pe			26778	22052	17912	14305	11176	8473,2	6142	4129		
S8-42Y	1	30	Qo Pe			8,40	7,82	7,15	6,44	5,69	4,93	4,20	3,51		
		40	Qo Pe			23206	19014	15347	12150	9370	6954	4848	2998		
		50	Qo Pe			9,42	8,61	7,75	6,87	5,99	5,14	4,34	3,62		
	2	30	Qo Pe			54393	45470	37691	30958	25171	20232	16042	12501	9510	
		40	Qo Pe			48687	40599	33569	27495	22280	17825	14031	10798	8028	
		50	Qo Pe			42463	35286	29076	23737	19168	15270	11946	9095	6620	
S12-42Y	1	30	Qo Pe			10,70	10,30	9,78	9,14	8,41	7,62	6,79	5,94	5,09	
		40	Qo Pe			8,04	8,80	8,52	8,11	7,59	6,98	6,30	5,57	4,82	
		50	Qo Pe			10,70	10,30	9,78	9,14	8,41	7,62	6,79	5,94	5,09	
	2	30	Qo Pe			37065	30628	24992	20087	15840	12179	9033	6329		
		40	Qo Pe			8,85	8,44	7,89	7,22	6,46	5,65	4,82	3,99		
		50	Qo Pe			32627	26840	21781	17377	13557	10249	7381	4881		
S10-52Y	1	30	Qo Pe			28366	23217	18720	14805	11399	8431	5829	3520		
		40	Qo Pe			11,50	10,50	9,40	8,29	7,18	6,10	5,08	4,15		
		50	Qo Pe			68090	56986	47235	38739	31401	25124	19809	15360	11678	
	2	30	Qo Pe			8,76	8,87	8,78	8,53	8,13	7,60	6,96	6,23	5,44	
		40	Qo Pe			61134	51021	42161	34455	27807	22119	17293	13232	9839	
		50	Qo Pe			10,90	10,70	10,30	9,75	9,10	8,35	7,53	6,65	5,75	
S15-52Y	1	30	Qo Pe			53521	44501	36633	29820	23963	18966	14731	11161	8157	
		40	Qo Pe			13,00	12,40	11,70	10,90	10,00	9,09	8,10	7,10	6,10	
		50	Qo Pe			59380	49781	41359	34015	27654	22177	17486	13485	10077	7163
	2	30	Qo Pe			10,40	10,30	9,93	9,40	8,72	7,93	7,08	6,20	5,33	4,51
		40	Qo Pe			53467	44591	36830	30088	24267	19270	15000	11358	8248	5572
		50	Qo Pe			12,70	12,20	11,40	10,60	9,58	8,56	7,51	6,48	5,50	4,62
S20-56Y	1	30	Qo Pe			47385	39269	32208	26105	20863	16384	12571	9327	6553	4154
		40	Qo Pe			14,80	13,80	12,70	11,60	10,30	9,09	7,87	6,71	5,66	4,75
		50	Qo Pe			73345	61080	50718	41985	34607	28307	22813	17849	13141	
	2	30	Qo Pe			10,40	10,30	10,10	9,84	9,41	8,85	8,14	7,30	6,30	
		40	Qo Pe			65501	54319	44930	37057	30426	24763	19792	15240	10830	
		50	Qo Pe			12,80	12,40	11,90	11,30	10,50	9,71	8,76	7,69	6,49	
V15-59Y	1	30	Qo Pe			57426	47392	39036	32086	26265	21300	16915	12837	8790	
		40	Qo Pe			15,00	14,30	13,40	12,50	11,50	10,40	9,22	7,93	6,54	
		50	Qo Pe			61150	50984	42122	34454	27868	22250	17490	13475	10094	7233
	2	30	Qo Pe			11,10	10,70	10,20	9,53	8,78	7,93	7,00	6,02	4,99	3,92
		40	Qo Pe			55280	45840	37642	30573	24522	19377	15025	11355	8254	5612
		50	Qo Pe			13,40	12,70	11,90	11,00	9,98	8,90	7,76	6,57	5,35	4,11
V20-59Y	1	30	Qo Pe			49326	40642	33136	26696	21210	16566	12652	9357	6567	4171
		40	Qo Pe			15,60	14,60	13,60	12,40	11,20	9,91	8,56	7,18	5,77	4,36
		50	Qo Pe			74143	61505	50951	42159	34806	28572	23134	18170	13359	
	2	30	Qo Pe			10,50	10,30	9,95	9,58	9,13	8,58	7,89	7,07	6,07	
		40	Qo Pe			66783	55212	45610	37655	31025	25398	20453	15868	11320	
		50	Qo Pe			12,80	12,30	11,70	11,10	10,40	9,65	8,75	7,71	6,51	
V15-71Y	1	30	Qo Pe			59329	48844	40213	33114	27225	22225	17792	13603	9337	
		40	Qo Pe			15,00	14,30	13,50	12,60	11,70	10,70	9,61	8,36	6,96	
		50	Qo Pe			61150	50984	42122	34454	27868	22250	17490	13475	10094	7233
	2	30	Qo Pe			12,10	11,30	10,40	9,43	8,33	7,15	5,91	4,64		
		40	Qo Pe			43995	36061	29135	23120	17919	13434	9568	6224		
		50	Qo Pe			14,10	13,10	11,90	10,60	9,24	7,83	6,38	4,92		
V25-71Y	1	30	Qo Pe			71618	59029	48637	40064	32932	26864	21483	16411	11270	
		40	Qo Pe			18,20	17,20	16,30	15,30	14,20	12,90	11,60	10,00	8,27	
		50	Qo Pe			88669	73592	60980	50456	41643	34163	27638	21692	15946	
	2	30	Qo Pe			12,80	12,40	12,10	11,60	11,10	10,40	9,54	8,52	7,30	
		40	Qo Pe			79933	66125	54647	45123	37176	30426	24498	19014	13595	
		50	Qo Pe			15,40	14,80	14,20	13,40	12,60	11,70	10,60	9,30	7,83	
V20-84Y	1	30	Qo Pe			51990	42548	34418	27442	21461	16315	11847	18877	14058	9893
		40	Qo Pe			16,90	15,40	14,10	12,70	11,20	9,61	7,83	5,82		
		50	Qo Pe			46309	37798	30464	24149	18694	13939	9726	5896		
	2	30	Qo Pe			19,60	17,80	16,10	14,40	12,60	10,70	8,54	6,17		
		40	Qo Pe			58328	47860	38840	31109	24507	18877	14058	9893		
		50	Qo Pe			14,40	13,30	12,20	11,20	10,00	8,81	7,40	5,75		

① Suction gas temperature 20°C without liquid sub-cooling.

The performance refers to European standard EN12900 and with operation at 50Hz; conversion factor at 60Hz = 1.2.

To calculate the performance in different operating points refer to the Frascold Selection Software.

All published data is subject to change.

This field requires additional cooling or limitation of the suction temperature.

## Performance R22 [50 Hz]

Compressor	Motor version	Cond. Temp. [°C]	Qo [W] = Cooling capacity Pe [kW] = Power consumption ①	Evaporating temperature [°C]										
				10	5	0	-5	-10	-15	-20	-25	-30	-35	-40
<b>V30-84Y</b>	1	30	Qo 104180 Pe 15,50	86407 15,00	71562 14,50	59200 13,90	48871 13,20	40130 12,40	32529 11,40	25620 10,30	18955 8,94			
		40	Qo 93890 Pe 18,70	77608 17,90	64103 17,00	52928 16,10	43634 15,10	35774 14,00	28901 12,80	22568 11,50	16326 9,94			
		50	Qo 84052 Pe 22,10	69229 20,90	57029 19,70	47005 18,50	38710 17,20	31697 15,80	25518 14,30	19725 12,80	13871 11,00			
		30	Qo			64697	53238	43228	34542	27056	20644	15181	10541	
		40	Pe			15,70	14,70	13,60	12,30	10,80	9,28	7,66	5,99	
	2	30	Qo			57763	47339	38243	30350	23534	17670	12634	8300	
		40	Pe			18,40	17,00	15,40	13,80	12,00	10,20	8,25	6,31	
		50	Qo			50979	41579	33384	26271	20113	14786	10166	6126	
		30	Pe			21,00	19,30	17,40	15,40	13,30	11,20	8,99	6,80	
		40	Qo			116640	96815	80220	66367	54763	44918	36338	28532	21008
<b>V32-93Y</b>	1	30	Pe	16,60	16,20	15,70	15,10	14,40	13,50	12,40	11,10	9,56		
		40	Qo	105070	86916	71818	59282	48814	39925	32120	24910	17802		
		50	Pe	20,10	19,30	18,50	17,50	16,40	15,20	13,80	12,10	10,20		
		30	Qo	93346	76901	63330	52139	42837	34932	27933	21348	14684		
		40	Pe	23,70	22,50	21,20	19,90	18,40	16,90	15,10	13,10	11,00		
	2	30	Qo			69690	57718	47162	37911	29855	22882	16882	11743	
		40	Pe			17,40	16,30	15,00	13,60	12,00	10,40	8,60	6,80	
		50	Qo			62070	51234	41680	33297	25975	19602	14068	9262	
		30	Pe			20,20	18,70	17,00	15,20	13,30	11,30	9,24	7,15	
		40	Qo			54790	45048	36454	28898	22268	16455	11345	6830	
<b>V25-103Y</b>	1	30	Pe	18,30	17,90	17,40	16,90	16,30	15,40	14,30	12,90	11,10		
		40	Qo	116280	95121	78237	64788	53940	44858	36705	28647	19849		
		50	Pe	22,10	21,30	20,40	19,50	18,50	17,30	15,80	14,00	11,80		
		30	Qo	103220	83990	68821	56882	47335	39346	32079	24700	16373		
		40	Pe	25,90	24,70	23,40	22,10	20,70	19,10	17,30	15,10	12,60		
	2	30	Qo			74149	61241	49854	39880	31210	23736	17349	11941	
		40	Pe			18,20	17,00	15,70	14,20	12,50	10,80	8,92	7,06	
		50	Qo			66389	54605	44215	35111	27184	20327	14430	9385	
		30	Pe			21,40	19,80	18,00	16,00	14,00	11,80	9,66	7,50	
		40	Qo			48324	38888	30611	23386	17102	11653			
<b>Z25-106Y</b>	1	30	Qo	133810	111060	92031	76148	62843	51551	41702				
		40	Pe	19,40	18,90	18,30	17,60	16,80	15,80	14,50				
		50	Qo	120630	99794	82475	68100	56102	45912	36963				
		30	Pe	23,40	22,50	21,50	20,40	19,20	17,70	16,10				
		40	Qo	108080	89086	73405	60465	49698	40536	32413				
	2	30	Pe	27,50	26,10	24,70	23,20	21,50	19,60	17,60				
		40	Qo			85938	70924	57727	46218	36265	27739	20510	14448	
		50	Pe			21,30	19,80	18,20	16,50	14,70	12,70	10,50	8,20	
		30	Qo			76960	63314	51331	40882	31837	24066	17439	11825	
		40	Pe			25,10	23,20	21,10	18,90	16,60	14,10	11,40	8,56	
<b>Z40-126Y</b>	1	30	Qo			68477	56154	45341	35910	27729	20668	14599		
		40	Pe			29,00	26,60	24,10	21,40	18,70	15,70	12,60		
		50	Qo			159430	131310	108700	90263	74657	60547	46595		
		30	Pe	24,40	23,30	22,10	20,90	19,50	18,10	16,60				
		40	Qo	146600	119880	98613	81473	67118	54211	41414				
	2	30	Pe	29,80	28,00	26,20	24,40	22,50	20,70	18,80				
		40	Qo	133140	107980	88222	72544	59603	48063	36585				
		50	Pe	35,60	33,00	30,50	28,10	25,80	23,50	21,20				
		30	Qo	175734	146695	121682	100302	82164	66876	54047				
		40	Pe	23,25	24,56	24,91	24,44	23,33	21,71	19,75				
<b>Z40-142Y</b>	1	30	Qo			157939	131780	109291	90083	73764	59941	48224		
		40	Pe	30,71	30,82	30,09	28,67	26,72	24,38	21,82				
		50	Qo	140094	116774	96773	79698	65158	52762	42119				
		30	Pe	36,30	35,62	34,22	32,25	29,86	27,21	24,46				
		40	Qo			128360	105677	86385	70112	56489	45144	35707	27808	21077
	2	30	Pe			26,27	26,23	25,39	23,90	21,94	19,68	17,29	14,94	12,79
		40	Qo			114726	94361	77091	62547	50359	40155	31565	24220	17748
		50	Qo			101384	83260	67938	55048	44219	35080	27262	20394	
		30	Pe			37,36	35,25	32,56	29,46	26,13	22,73	19,43	16,41	
		40	Qo	187871	157360	130766	107762	88019	71207	56999				
<b>Z50-154Y</b>	1	30	Pe	23,29	25,16	25,95	25,81	24,92	23,42	21,48				
		40	Qo	168933	141375	117388	96643	78810	63563	50571				
		50	Pe	30,98	31,47	31,00	29,75	27,87	25,51	22,84				
		30	Qo	150091	125451	104035	85512	69556	55837	44027				
		40	Pe	38,47	37,72	36,14	33,91	31,17	28,09	24,82				

① Suction gas temperature 20°C without liquid sub-cooling.

The performance refers to European standard EN12900 and with operation at 50Hz; conversion factor at 60Hz = 1.2.

To calculate the performance in different operating points refer to the Frascold Selection Software.

All published data is subject to change.

This field requires additional cooling or limitation of the suction temperature.

## Performance R22 [50 Hz]

Compressor	Motor version	Cond. Temp. [°C]	Qo [W] = Cooling capacity Pe [kW] = Power consumption <sup>①</sup>	Evaporating temperature [°C]										
				10	5	0	-5	-10	-15	-20	-25	-30	-35	-40
W40-168Y	2	30	Qo				119638	98195	80111	64948	52271	41643	32628	24790
		40	Pe				29,28	28,03	26,19	23,96	21,49	18,98	16,60	14,53
		50	Qo				107856	88369	71977	58244	46733	37009	28635	21174
	1	30	Pe				35,11	32,62	29,70	26,55	23,33	20,23	17,43	15,09
		40	Qo						63715	51371	40987	32126	24352	
		50	Pe						32,79	28,87	25,05	21,50	18,42	
W50-168Y	1	30	Qo	211998	177122	147068	121365	99540	81122	65640				
		40	Pe	29,01	30,59	31,01	30,44	29,09	27,12	24,74				
		50	Qo	189187	158004	131189	108270	88775	72234	58174				
	2	30	Pe	39,55	39,38	38,19	36,18	33,53	30,42	27,06				
		40	Qo				114985	94873	77733	63090	50476			
		50	Pe				44,64	41,43	37,75	33,76	29,67			
W50-187Y	2	30	Qo				162942	134308	109918	89324	72078	57731	45836	35944
		40	Pe				33,64	33,21	31,91	29,93	27,49	24,80	22,06	19,48
		50	Qo				144994	119015	96993	78479	63027	50187	39511	30553
	1	30	Pe				41,78	39,63	36,81	33,54	30,01	26,45	23,04	20,02
		40	Qo				103841	84204	67789	54148	42832	33395	25387	
		50	Pe				45,71	41,47	36,99	32,47	28,12	24,14	20,75	
W60-187Y	1	30	Qo	237251	198393	164558	135325	110276	88992	71054				
		40	Pe	30,02	31,96	32,41	31,64	29,90	27,45	24,53				
		50	Qo	211763	176745	146285	119965	97366	78070	61657				
	2	30	Pe	41,12	41,24	40,03	37,73	34,60	30,89	26,87				
		40	Qo	185568	154436	127400	104041	83940	66679	51838				
		50	Pe	51,00	49,59	46,98	43,43	39,19	34,52	29,67				
W60-206Y	2	30	Qo				185162	153035	125104	101062	80600	63410	49183	37609
		40	Pe				36,49	36,21	34,64	32,10	28,88	25,29	21,63	18,21
		50	Qo				165114	135974	110708	89007	70562	55066	42209	31683
	1	30	Pe				45,60	43,64	40,58	36,72	32,35	27,80	23,36	19,33
		40	Qo				144853	118774	96246	76959	60606	46877	35465	26060
		50	Pe				54,06	50,57	46,15	41,11	35,75	30,37	25,29	20,80
W70-206Y	1	30	Qo				261472	220332	183937	151971	124119	100065	79494	
		40	Pe				31,12	34,10	35,35	35,13	33,73	31,40	28,43	
		50	Qo				233794	196925	164234	135404	110121	88069	68932	
	2	30	Pe				43,26	44,44	43,96	42,08	39,09	35,24	30,81	
		40	Qo				205356	172817	143887	118251	95595	75602	57958	
		50	Pe				55,40	54,79	52,60	49,07	44,50	39,14	33,26	
W70-228Y	2	30	Qo				204997	169221	138114	111338	88558	69438	53641	40832
		40	Pe				40,34	40,02	38,26	35,41	31,82	27,82	23,75	19,97
		50	Qo				182730	150153	121916	97681	77113	59876	45633	34049
	1	30	Pe				50,20	47,97	44,51	40,18	35,31	30,24	25,32	20,88
		40	Qo				160632	131293	105964	84309	65992	50676	38027	17,26
		50	Pe				59,70	55,68	50,63	44,92	38,88	32,84	27,16	
W75-228Y	1	30	Qo				289394	243846	203581	168239	137461	110889		
		40	Pe				34,53	37,84	39,25	39,06	37,56	35,04		
		50	Qo				258694	217975	181888	150076	122178	97836		
	2	30	Pe				47,95	49,21	48,66	46,60	43,32	39,10		
		40	Qo				226728	190907	159069	130856	105908	83866		
		50	Pe				61,52	60,71	58,19	54,24	49,15	43,24		
W75-240Y	2	30	Qo				213234	176683	144817	117316	93860	74131	57807	57807
		40	Pe				42,00	41,61	39,90	37,16	33,69	29,79	25,74	25,74
		50	Qo				191247	157845	128814	103834	82585	64748	50002	50002
	1	30	Pe				52,67	50,44	47,07	42,85	38,08	33,06	28,08	28,08
		40	Qo				169102	138922	112798	90410	71439	55566	42470	19,46
		50	Pe				62,93	58,93	53,97	48,35	42,36	36,29	30,46	
W80-240Y	1	30	Qo	303321	255556	213354	176334	144113	116310					
		40	Pe	36,30	39,81	41,29	41,07	39,44	36,72					
		50	Qo	270934	228233	190416	157102	127908	102453					
	2	30	Pe	50,32	51,75	51,23	49,08	45,61	41,12					
		40	Qo	237571	199954	166543	136955	110809	87722					
		50	Pe	64,08	63,48	61,01	56,98	51,71	45,51					

① Suction gas temperature 20°C without liquid sub-cooling.

The performance refers to European standard EN12900 and with operation at 50Hz; conversion factor at 60Hz = 1.2.

To calculate the performance in different operating points refer to the Frascold Selection Software.

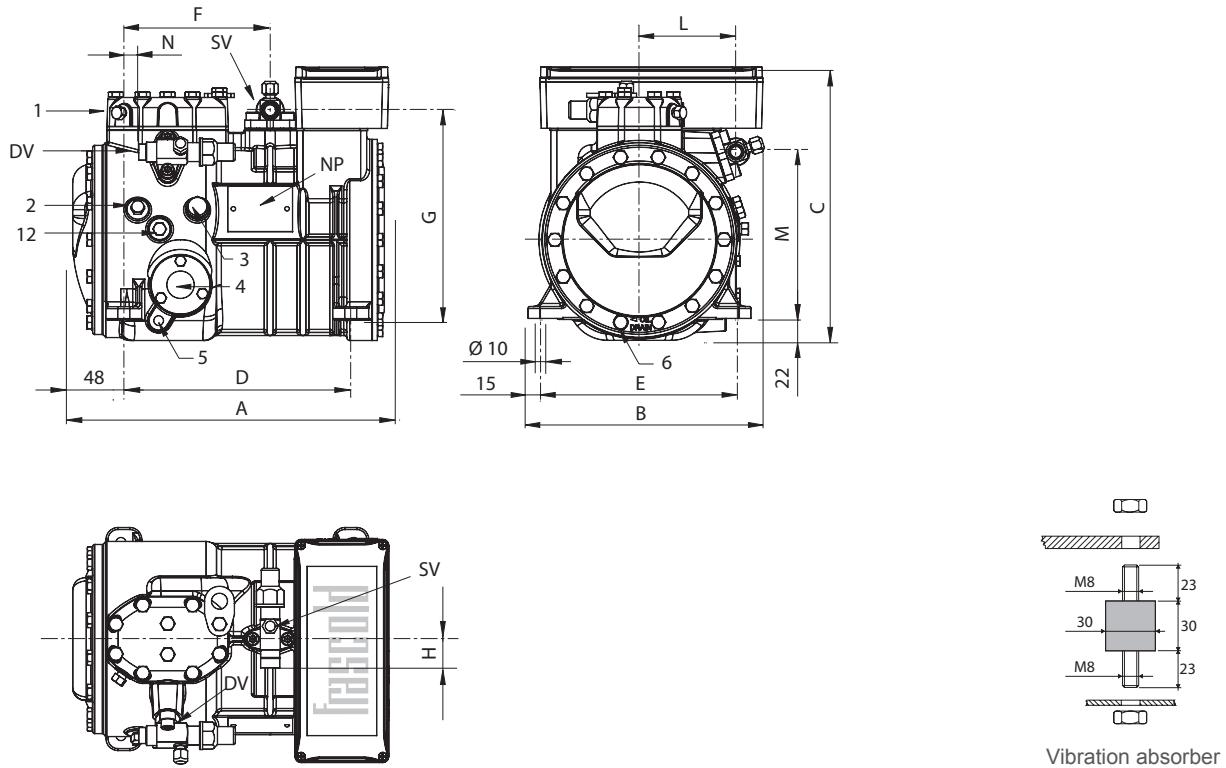
All published data is subject to change.

This field requires additional cooling or limitation of the suction temperature.

# Semi-hermetic reciprocating compressors

## Dimensional drawing

Series **A**

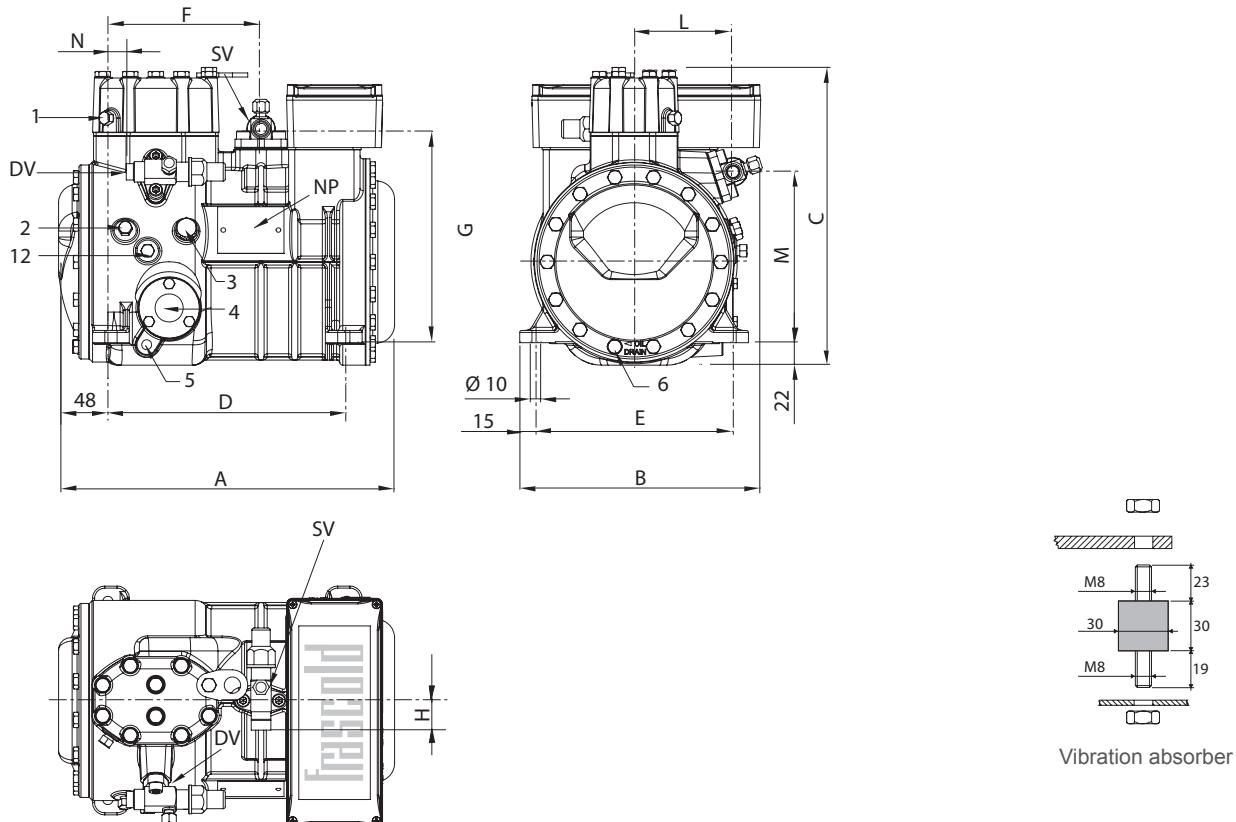


1	High pressure plug	$\frac{1}{8}$ " NPT
2	Low pressure plug	$\frac{1}{8}$ " NPT
3	Oil charge plug	$\frac{1}{4}$ " GAS
4	Oil level sight glass	
5	Crankcase heater seat	
6	Oil drain plug	M8 x 22 ISO4017
12	Oil return plug	$\frac{1}{8}$ " NPT
DV	Discharge valve	
SV	Suction valve	
NP	Nameplate	

Compressor	Valves				Valves position					Compressor					
	Suction		Discharge		Suction		Discharge			Length	Width	Height	Base mounting		
	Ø "	Ø mm	Ø "	Ø mm	F mm	G mm	H mm	L mm	M mm	N mm	A mm	B mm	C mm	D mm	E mm
<b>A05-4Y</b>	$\frac{5}{8}$	15,8	$\frac{1}{2}$	12,7	150	209	29	97	167	18	317	237	275	234	194
<b>A05-5Y</b>	$\frac{5}{8}$	15,8	$\frac{1}{2}$	12,7	150	209	29	97	167	18	317	237	275	234	194
<b>A07-5Y</b>	$\frac{5}{8}$	15,8	$\frac{1}{2}$	12,7	150	209	29	97	167	18	317	237	275	234	194
<b>A07-6Y</b>	$\frac{5}{8}$	15,8	$\frac{1}{2}$	12,7	150	209	29	97	167	18	317	237	275	234	194
<b>A1-6Y</b>	$\frac{5}{8}$	15,8	$\frac{1}{2}$	12,7	150	209	29	97	167	18	317	237	275	234	194
<b>A1-7Y</b>	$\frac{5}{8}$	15,8	$\frac{1}{2}$	12,7	150	209	29	97	167	18	317	237	275	234	194
<b>A1.5-7Y</b>	$\frac{5}{8}$	15,8	$\frac{1}{2}$	12,7	150	209	29	97	167	18	317	237	275	234	194
<b>A1.5-8Y</b>	$\frac{5}{8}$	15,8	$\frac{1}{2}$	12,7	150	209	29	97	167	18	317	237	275	234	194

## Dimensional drawing

Series **B**

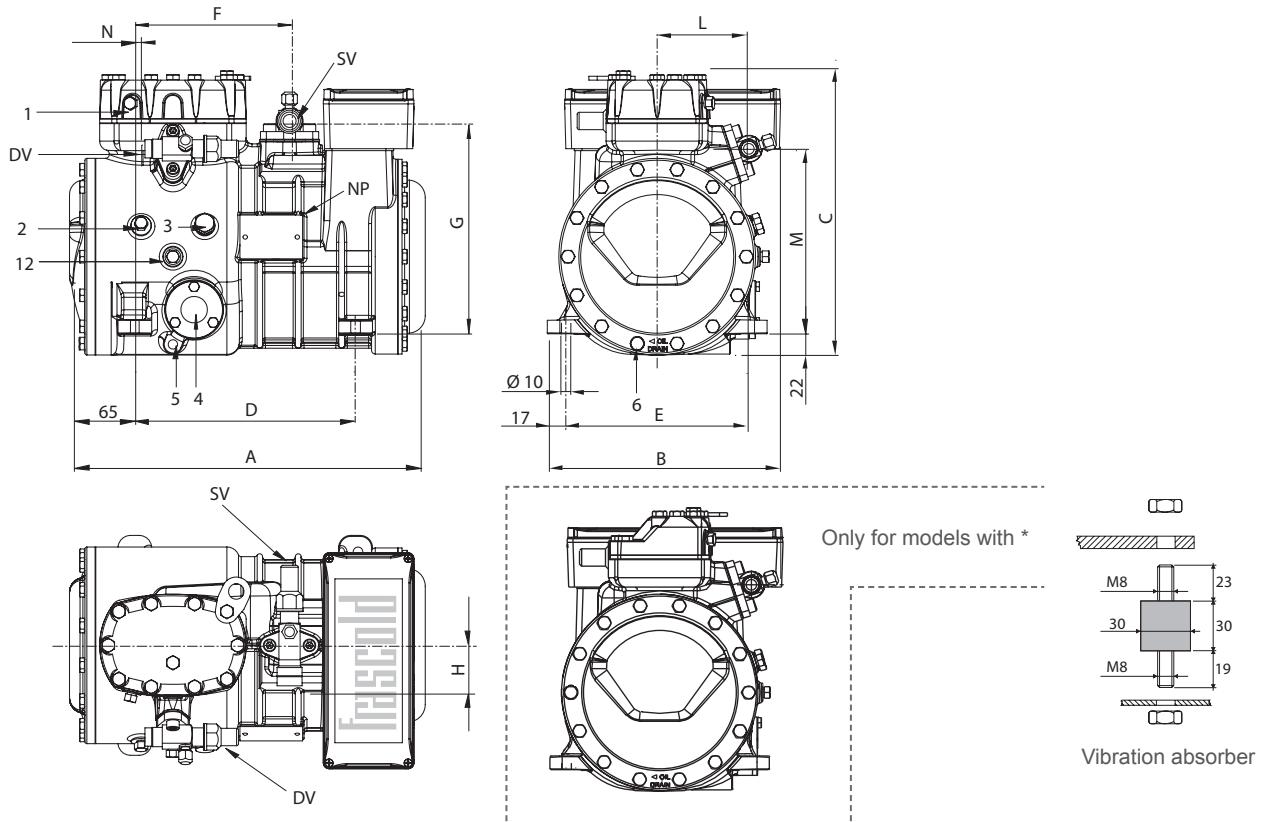


1	High pressure plug	$\frac{1}{8}$ " NPT
2	Low pressure plug	$\frac{1}{8}$ " NPT
3	Oil charge plug	$\frac{1}{4}$ " GAS
4	Oil level sight glass	
5	Crankcase heater seat	
6	Oil drain plug	M8 x 22 ISO4017
12	Oil return plug	$\frac{1}{8}$ " NPT
DV	Discharge valve	
SV	Suction valve	
NP	Nameplate	

Compressor	Valves				Valves position						Compressor					
	Suction		Discharge		Suction			Discharge			Length	Width	Height	Base mounting		
	$\emptyset$ "	$\emptyset$ mm	$\emptyset$ "	$\emptyset$ mm	F	G	H	L	M	N	mm	mm	mm	C	D	E
<b>B1.5-9.1Y</b>	$\frac{5}{8}$	15,8	$\frac{1}{2}$	12,7	150	209	29	97	167	18	329	237	292	234	194	
<b>B1.5-10.1Y</b>	$\frac{5}{8}$	15,8	$\frac{1}{2}$	12,7	150	209	29	97	167	18	329	237	292	234	194	
<b>B2-10.1Y</b>	$\frac{3}{4}$	19,0	$\frac{5}{8}$	15,8	150	209	31	97	167	18	334	237	292	234	194	

## Dimensional drawing

Series **D**

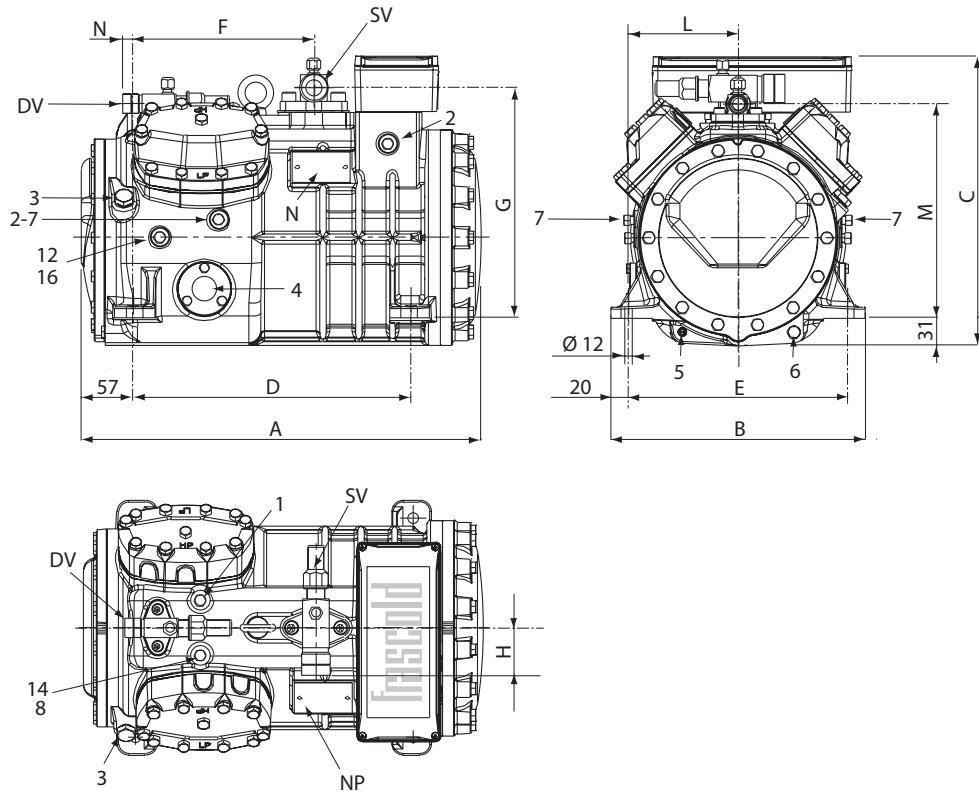


1	High pressure plug	$\frac{1}{8}$ " NPT
2	Low pressure plug	$\frac{1}{8}$ " NPT
3	Oil charge plug	$\frac{1}{4}$ " GAS
4	Oil level sight glass	
5	Crankcase heater seat	
6	Oil drain plug	M8 x 22 ISO4017
12	Oil return plug	$\frac{1}{8}$ " NPT
DV	Discharge valve	
SV	Suction valve	
NP	Nameplate	

Compressor	Valves				Valves position					Compressor					
	Suction		Discharge		Suction		Discharge			Length	Width	Height	Base mounting		
	$\emptyset$ "	$\emptyset$ mm	$\emptyset$ "	$\emptyset$ mm	F mm	G mm	H mm	L mm	M mm	N mm	A mm	B mm	C mm	D mm	E mm
D2-11.1Y*	$\frac{7}{8}$	22,2	$\frac{5}{8}$	15,8	165	221	42	94	192	13	369	242	294	234	194
D2-13.1Y*	$\frac{7}{8}$	22,2	$\frac{5}{8}$	15,8	165	221	42	94	192	13	369	242	294	234	194
D3-13.1Y	$1\frac{1}{8}$	28,6	$\frac{5}{8}$	15,8	165	225	53	94	192	13	374	242	317	234	194
D2-15.1Y*	$\frac{7}{8}$	22,2	$\frac{5}{8}$	15,8	165	221	42	94	192	13	369	242	294	234	194
D3-15.1Y	$1\frac{1}{8}$	28,6	$\frac{5}{8}$	15,8	165	225	53	94	192	13	374	242	317	234	194
D3-16.1Y	$1\frac{1}{8}$	28,6	$\frac{5}{8}$	15,8	165	225	53	94	192	13	374	242	317	234	194
D4-16.1Y	$1\frac{1}{8}$	28,6	$\frac{3}{4}$	19,0	165	225	53	94	192	5	401	242	317	234	194
D3-18.1Y	$1\frac{1}{8}$	28,6	$\frac{5}{8}$	15,8	165	225	53	94	192	13	374	242	317	234	194
D4-18.1Y	$1\frac{1}{8}$	28,6	$\frac{3}{4}$	19,0	165	225	53	94	192	5	401	242	317	234	194
D3-19.1Y	$1\frac{1}{8}$	28,6	$\frac{5}{8}$	15,8	165	225	53	94	192	13	374	242	317	234	194
D4-19.1Y	$1\frac{1}{8}$	28,6	$\frac{3}{4}$	19,0	165	225	53	94	192	5	401	242	317	234	194

# Dimensional drawing

# Series Q

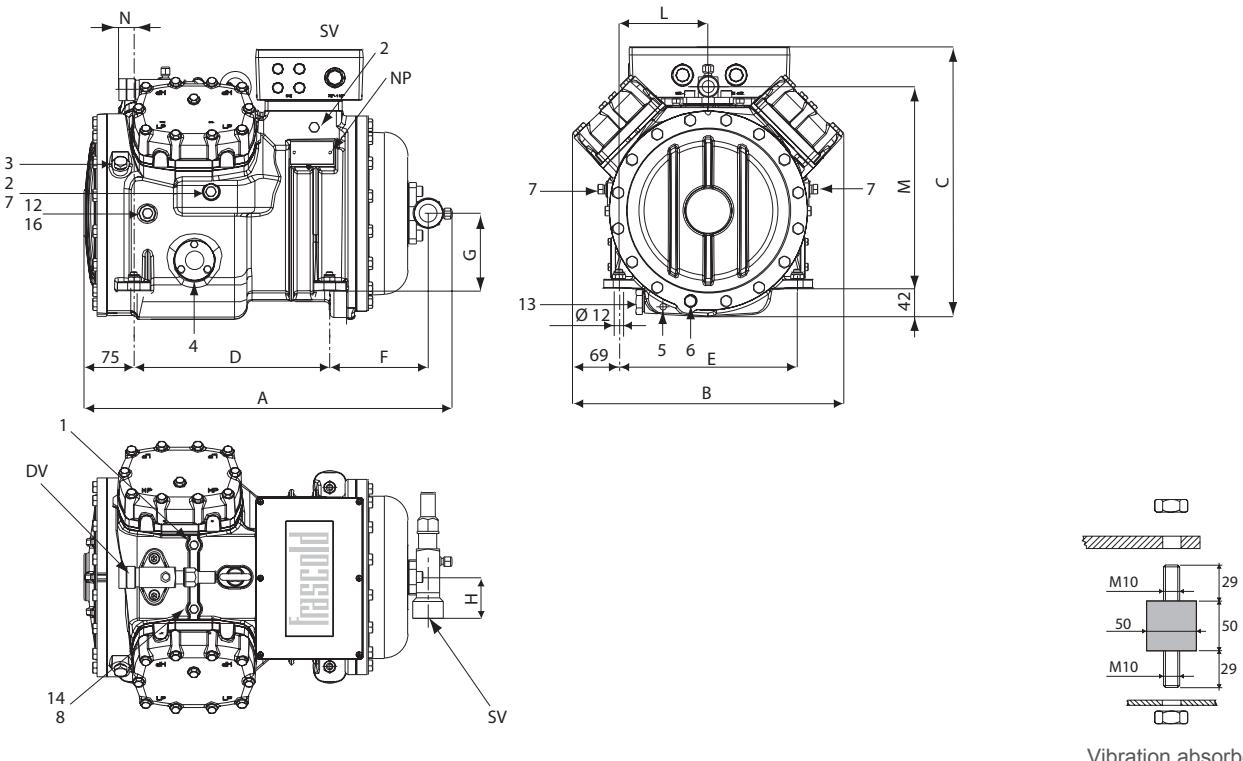


1	High pressure plug	$\frac{1}{8}$ " NPT
2	Low pressure plug	$\frac{1}{8}$ " NPT
3	Oil charge plug	$\frac{1}{4}$ " GAS
4	Oil level sight glass	
5	Crankcase heater seat	
6	Oil drain plug	M8 x 22 ISO4017
7	Liquid injection valve plug	$\frac{1}{8}$ " NPT
8	Liquid injection sensor plug	$\frac{1}{8}$ " NPT
12	Oil return plug	$\frac{1}{8}$ " NPT
14	Max.discharge temperature sensor	$\frac{1}{8}$ " NPT
16	Crankcase pressure plug	$\frac{1}{8}$ " NPT
DV	Discharge valve	
SV	Suction valve	
NP	Nameplate	

Compressor	Valves				Valves position						Compressor				
	Suction		Discharge		Suction			Discharge			Length	Width	Height	Base mounting	
	Ø	Ø	Ø	Ø	F	G	H	L	M	N	A	B	C	D	E
	"	mm	"	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
Q4-20.1E	1 1/8	28,6	3/4	19,0	203	258	53	123	239	12	449	286	325	312	246
Q4-20.1Y	1 1/8	28,6	3/4	19,0	203	258	53	123	239	12	449	286	325	312	246
Q4-21.1Y	1 1/8	28,6	3/4	19,0	203	258	53	123	239	12	449	286	325	312	246
Q5-21.1Y	1 1/8	28,6	3/4	19,0	203	258	53	123	239	12	449	286	325	312	246
Q4-24.1E	1 1/8	28,6	3/4	19,0	203	258	53	123	239	12	449	286	325	312	246
Q4-24.1Y	1 1/8	28,6	3/4	19,0	203	258	53	123	239	12	449	286	325	312	246
Q5-24.1Y	1 1/8	28,6	7/8	22,2	203	258	53	123	239	17	449	286	325	312	246
Q4-25.1Y	1 1/8	28,6	3/4	19,0	203	258	53	123	239	17	449	286	325	312	246
Q5-25.1Y	1 1/8	28,6	7/8	22,2	203	258	53	123	239	17	449	286	325	312	246
Q7-25.1Y	1 1/8	28,6	7/8	22,2	203	258	53	123	239	17	449	286	325	312	246
Q5-28.1E	1 3/8	35,0	7/8	22,2	203	261	58	123	239	17	449	286	328	312	246
Q5-28.1Y	1 3/8	35,0	7/8	22,2	203	261	58	123	239	17	449	286	325	312	246
Q7-28.1Y	1 3/8	35,0	1 1/8	28,6	203	261	58	123	239	28	449	286	328	312	246
Q5-33.1E	1 3/8	35,0	1 1/8	28,6	203	261	58	123	239	28	449	286	328	312	246
Q5-33.1Y	1 3/8	35,0	1 1/8	28,6	203	261	58	123	239	28	449	286	328	312	246
Q7-33.1Y	1 3/8	35,0	1 1/8	28,6	203	261	58	123	239	28	449	286	328	312	246
Q5-36.1Y	1 3/8	35,0	1 1/8	28,6	203	261	58	123	239	28	449	286	328	312	246
Q7-36.1Y	1 3/8	35,0	1 1/8	28,6	203	261	58	123	239	28	449	286	328	312	246

## Dimensional drawing

Series **S**



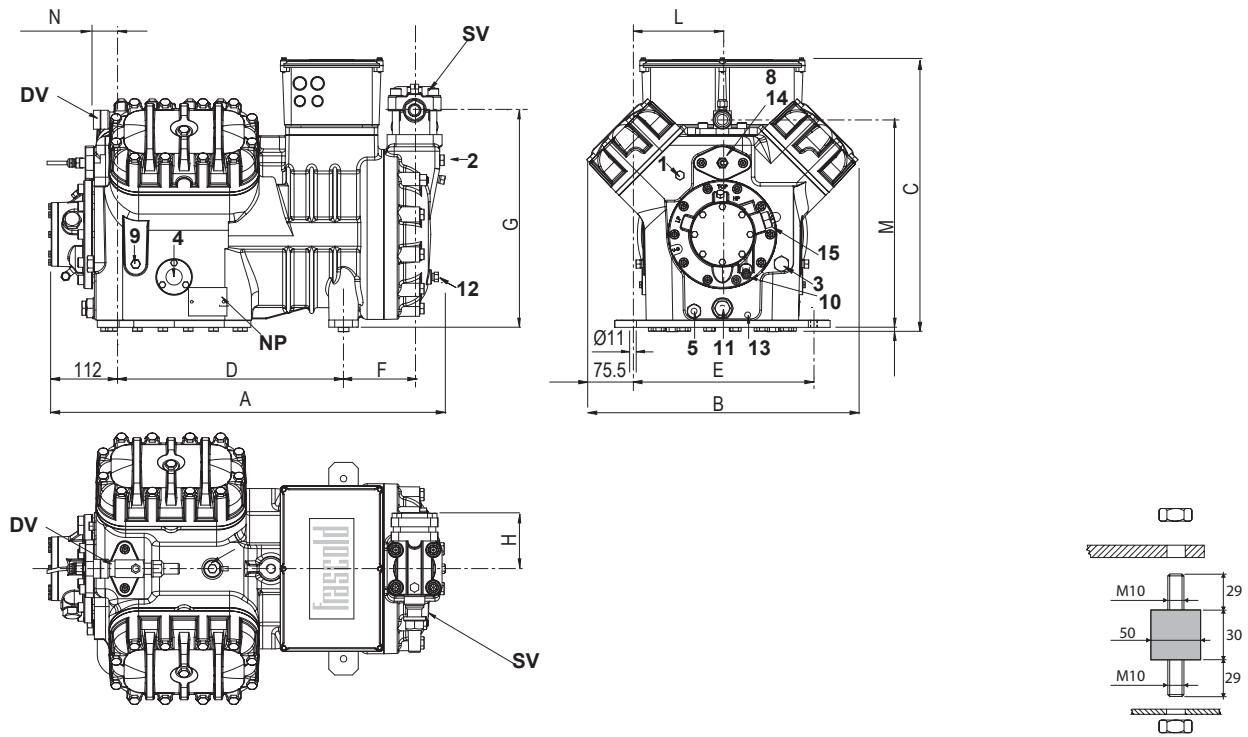
Vibration absorber

1	High pressure plug	$\frac{1}{8}$ " NPT
2	Low pressure plug	$\frac{1}{8}$ " NPT
3	Oil charge plug	$\frac{1}{4}$ " GAS
4	Oil level sight glass	
5	Crankcase heater seat	
6	Oil drain plug	M10 x 30 ISO4017
7	Liquid injection valve plug	$\frac{1}{4}$ " NPT
8	Liquid injection sensor plug	$\frac{1}{8}$ " NPT
12	Oil return plug	$\frac{1}{4}$ " NPT
13	Magnetic plug	$\frac{1}{2}$ " GAS
14	Max. discharge temperature sensor	$\frac{1}{8}$ " NPT
16	Crankcase pressure plug	$\frac{1}{4}$ " NPT
DV	Discharge valve	
SV	Suction valve	
NP	Nameplate	

Compressor	Valves				Valves position					Compressor					
	Suction		Discharge		Suction		Discharge			Length	Width	Height	Base mounting		
	$\varnothing$ "	$\varnothing$ mm	$\varnothing$ "	$\varnothing$ mm	F	G	H	L	M	N	A	B	C	D	E
<b>S5-33Y</b>	1 $\frac{3}{8}$	35,0	1 $\frac{1}{8}$	28,6	147	115	58	133	298	23	550	405	405	292	266
<b>S7-33Y</b>	1 $\frac{3}{8}$	35,0	1 $\frac{1}{8}$	28,6	147	115	58	133	298	23	550	405	405	292	266
<b>S8-42E</b>	1 $\frac{3}{8}$	35,0	1 $\frac{1}{8}$	28,6	147	115	58	133	298	23	550	405	405	292	266
<b>S8-42Y</b>	1 $\frac{3}{8}$	35,0	1 $\frac{1}{8}$	28,6	147	115	58	133	298	23	550	405	405	292	266
<b>S12-42Y</b>	1 $\frac{3}{8}$	35,0	1 $\frac{1}{8}$	28,6	147	115	58	133	298	23	550	405	405	292	266
<b>S10-52E</b>	1 $\frac{3}{8}$	35,0	1 $\frac{1}{8}$	28,6	147	115	58	133	298	23	550	405	405	292	266
<b>S10-52Y</b>	1 $\frac{3}{8}$	35,0	1 $\frac{1}{8}$	28,6	147	115	58	133	298	23	550	405	405	292	266
<b>S15-52Y</b>	1 $\frac{5}{8}$	42,0	1 $\frac{1}{8}$	28,6	147	115	61	133	298	23	550	405	405	292	266
<b>S12-56E</b>	1 $\frac{3}{8}$	35,0	1 $\frac{1}{8}$	28,6	147	115	58	133	298	23	550	405	405	292	266
<b>S15-56Y</b>	1 $\frac{5}{8}$	42,0	1 $\frac{1}{8}$	28,6	147	115	61	133	298	23	550	405	405	292	266
<b>S20-56Y</b>	1 $\frac{5}{8}$	42,0	1 $\frac{1}{8}$	28,6	147	115	61	133	298	23	550	405	405	292	266

## Dimensional drawing

Series **V**



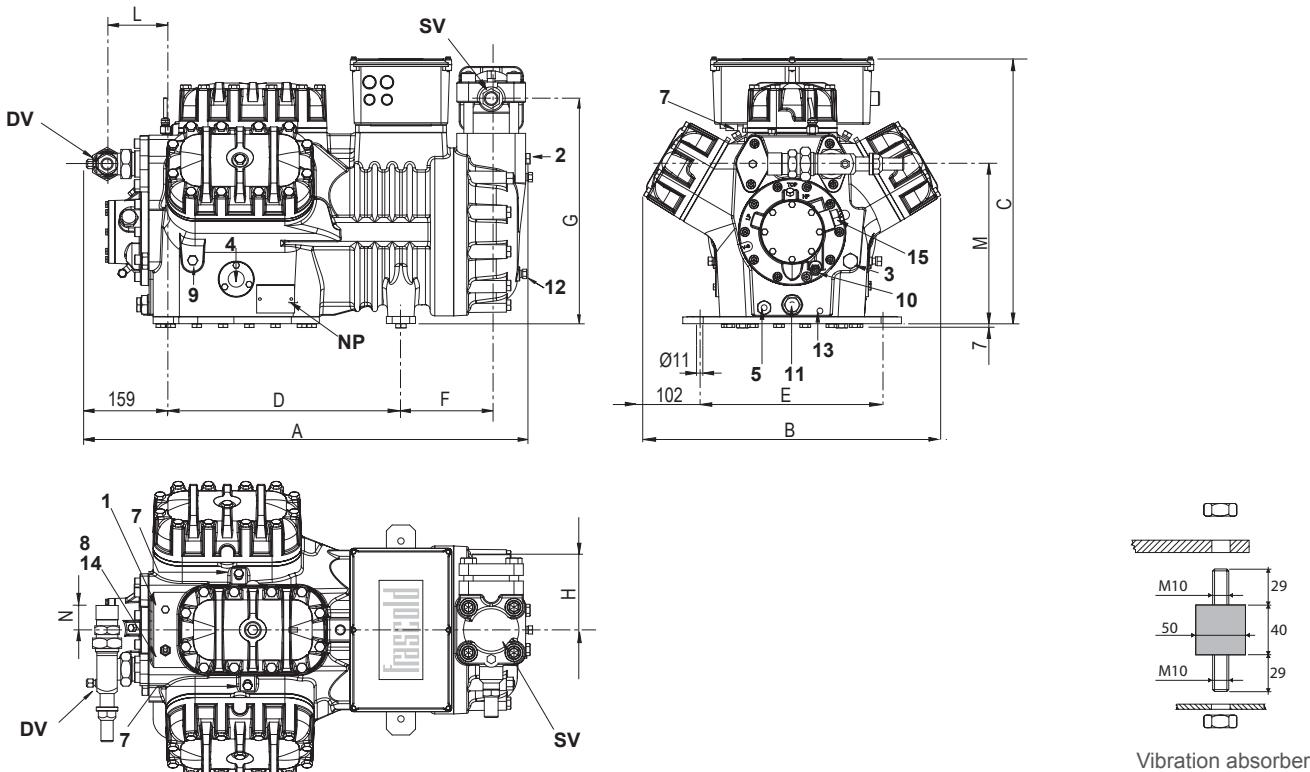
Vibration absorber

1	High pressure plug	$\frac{1}{8}$ " NPT
2	Low pressure plug	$\frac{1}{4}$ " NPT
3	Oil charge plug	$\frac{3}{8}$ " GAS
4	Oil level sight glass	
5	Crankcase heater seat	
7	Liquid injection valve plug	$\frac{1}{8}$ " NPT
8	Liquid injection sensor plug	$\frac{1}{8}$ " NPT
9	Oil pressure switch connection (l.p.)	$\frac{1}{4}$ " NPT
10	Oil pressure switch connection (h.p.)	$\frac{1}{4}$ " SAE
11	Oil filter	
12	Oil return plug	$\frac{1}{8}$ " NPT
13	Oil drain plug	$\frac{3}{8}$ " GAS
14	Max.discharge temperature sensor	
15	Electronic oil pressure switch connection	$\frac{3}{4}$ " UNF
DV	Discharge valve	
SV	Suction valve	
NP	Nameplate	

Compressor	Valves				Valves position					Compressor					
	Suction		Discharge		Suction			Discharge		Length	Width	Height	Base mounting		
	$\emptyset$	"	$\emptyset$	"	F	G	H	L	M	N	A	B	C	D	E
V15-59E	1 $\frac{5}{8}$	42,0	1 $\frac{1}{8}$	28,6	120	367	95	152	352	43	672	460	463	381	305
V15-59Y	1 $\frac{5}{8}$	42,0	1 $\frac{1}{8}$	28,6	120	367	95	152	352	43	672	460	463	381	305
V20-59Y	1 $\frac{5}{8}$	42,0	1 $\frac{1}{8}$	28,6	120	367	95	152	352	43	672	460	463	381	305
V15-71E	1 $\frac{5}{8}$	42,0	1 $\frac{1}{8}$	28,6	120	367	95	152	352	43	672	460	463	381	305
V15-71Y	1 $\frac{5}{8}$	42,0	1 $\frac{1}{8}$	28,6	120	367	95	152	352	43	672	460	463	381	305
V25-71Y	2 $\frac{1}{8}$	54,0	1 $\frac{3}{8}$	35,0	133	389	130	152	352	48	703	460	463	381	305
V20-84E	2 $\frac{1}{8}$	54,0	1 $\frac{1}{8}$	28,6	133	389	130	152	352	48	703	460	463	381	305
V20-84Y	1 $\frac{5}{8}$	42,0	1 $\frac{1}{8}$	28,6	120	367	95	152	352	43	672	460	463	381	305
V30-84Y	2 $\frac{1}{8}$	54,0	1 $\frac{3}{8}$	35,0	133	389	130	152	352	48	703	460	463	381	305
V25-93Y	2 $\frac{1}{8}$	54,0	1 $\frac{3}{8}$	35,0	133	389	130	152	352	48	703	460	463	381	305
V32-93Y	2 $\frac{1}{8}$	54,0	1 $\frac{3}{8}$	35,0	158	389	130	152	352	48	743	460	463	381	305
V25-103Y	2 $\frac{1}{8}$	54,0	1 $\frac{3}{8}$	35,0	133	389	130	152	352	48	703	460	463	381	305
V35-103Y	2 $\frac{1}{8}$	54,0	1 $\frac{3}{8}$	35,0	158	389	130	152	352	48	743	460	463	381	305
V25-103E	2 $\frac{1}{8}$	54,0	1 $\frac{3}{8}$	35,0	133	389	130	152	352	48	703	460	463	381	305

## Dimensional drawing

Series Z

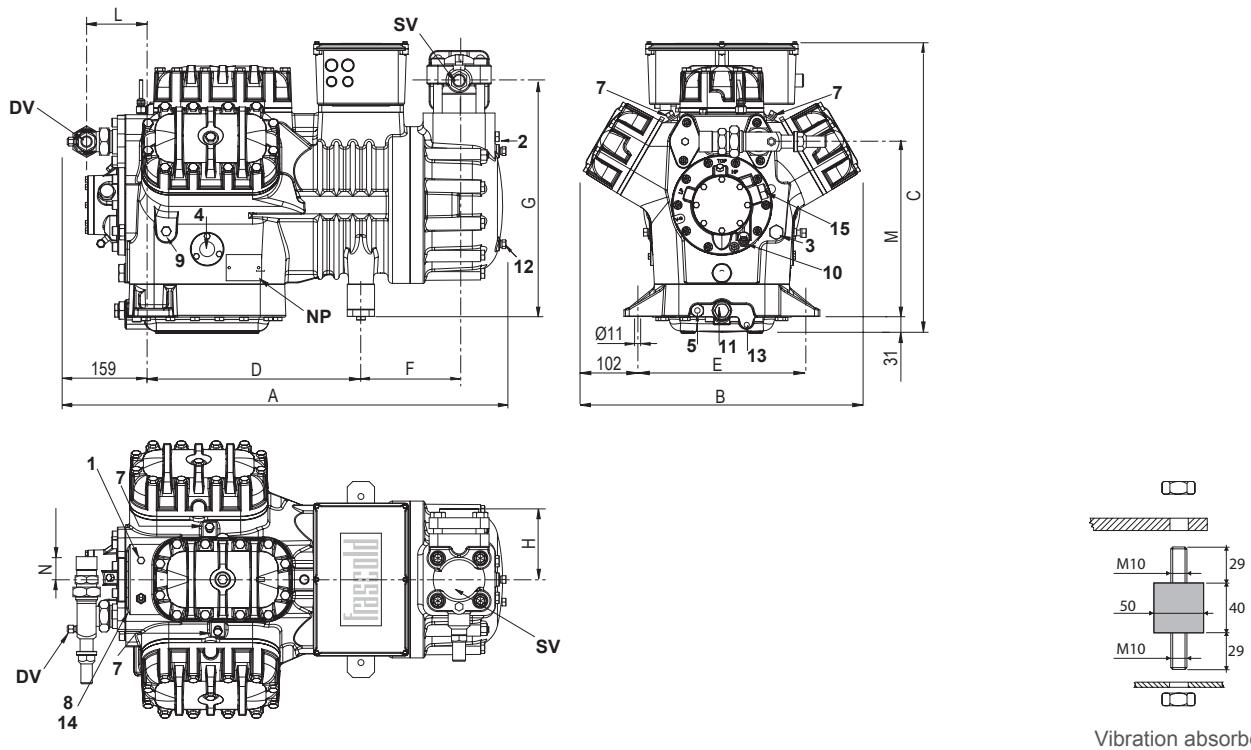


1	High pressure plug	$\frac{1}{8}$ " NPT
2	Low pressure plug	$\frac{1}{4}$ " NPT
3	Oil charge plug	$\frac{3}{8}$ " GAS
4	Oil level sight glass	
5	Crankcase heater seat	
7	Liquid injection valve plug	$\frac{1}{8}$ " NPT
8	Liquid injection sensor plug	
9	Oil pressure switch connection (l.p.)	$\frac{1}{4}$ " SAE
10	Oil pressure switch connection (h.p.)	$\frac{1}{4}$ " SAE
11	Oil filter	$\frac{3}{8}$ " GAS
12	Oil return plug	$\frac{1}{4}$ " NPT
13	Oil drain plug	$\frac{3}{8}$ " GAS
14	Max. discharge temperature sensor	
15	Electronic oil pressure switch connection	
DV	Discharge valve	
SV	Suction valve	
NP	Nameplate	

Compressor	Valves				Valves position					Compressor					
	Suction		Discharge		Suction			Discharge		A	B	C	Base mounting		
	$\emptyset$	"	$\emptyset$	"	F	G	H	L	M	N	mm	mm	mm	D	E
Z25-106E	2 $\frac{1}{8}$	54,0	1 $\frac{3}{8}$	35,0	155	386	130	123	274	42	765	509	457	381	305
Z25-106Y	2 $\frac{1}{8}$	54,0	1 $\frac{3}{8}$	35,0	155	386	130	123	274	42	765	509	457	381	305
Z35-106Y	2 $\frac{1}{8}$	54,0	1 $\frac{3}{8}$	35,0	180	386	130	123	274	42	806	509	457	381	305

## Dimensional drawing

Series Z



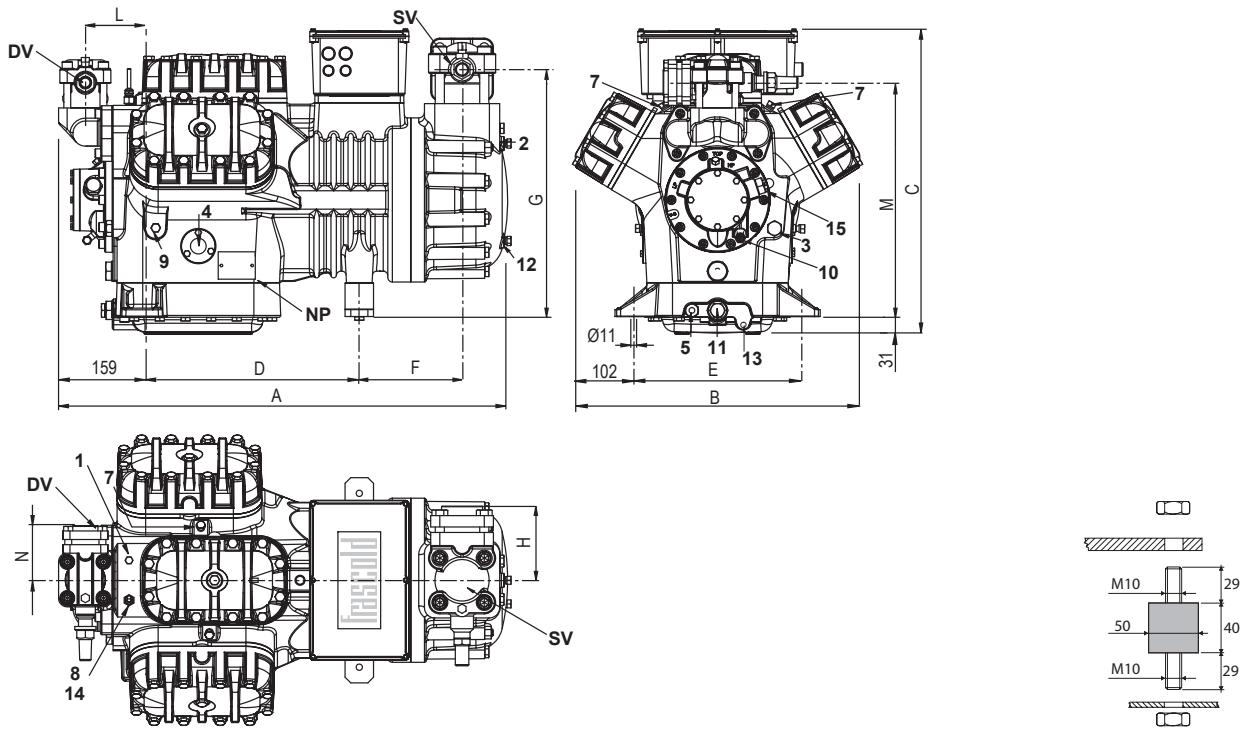
Vibration absorber

1	High pressure plug	$\frac{1}{8}$ " NPT
2	Low pressure plug	$\frac{1}{4}$ " NPT
3	Oil charge plug	$\frac{3}{8}$ " GAS
4	Oil level sight glass	
5	Crankcase heater seat	
7	Liquid injection valve plug	$\frac{1}{8}$ " NPT
8	Liquid injection sensor plug	
9	Oil pressure switch connection (l.p.)	$\frac{1}{4}$ " SAE
10	Oil pressure switch connection (h.p.)	$\frac{1}{4}$ " SAE
11	Oil filter	$\frac{3}{8}$ " GAS
12	Oil return plug	$\frac{1}{4}$ " NPT
13	Oil drain plug	$\frac{3}{8}$ " GAS
14	Max.discharge temperature sensor	
15	Electronic oil pressure switch connection	
DV	Discharge valve	
SV	Suction valve	
NP	Nameplate	

Compressor	Valves				Valves position					Compressor					
	Suction		Discharge		Suction			Discharge		Length	Width	Height	Base mounting		
	$\emptyset$	"	$\emptyset$	"	F	G	H	L	M	N	A	B	C	D	E
Z30-126E	2 $\frac{1}{8}$	54,0	1 $\frac{3}{8}$	35,0	155	433	130	123	321	42	765	509	536	381	305
Z30-126Y	2 $\frac{1}{8}$	54,0	1 $\frac{3}{8}$	35,0	155	433	130	123	321	42	765	509	536	381	305
Z40-126Y	2 $\frac{5}{8}$	67,0	1 $\frac{5}{8}$	42,0	180	433	130	123	321	42	806	509	536	381	305

## Dimensional drawing

Series Z



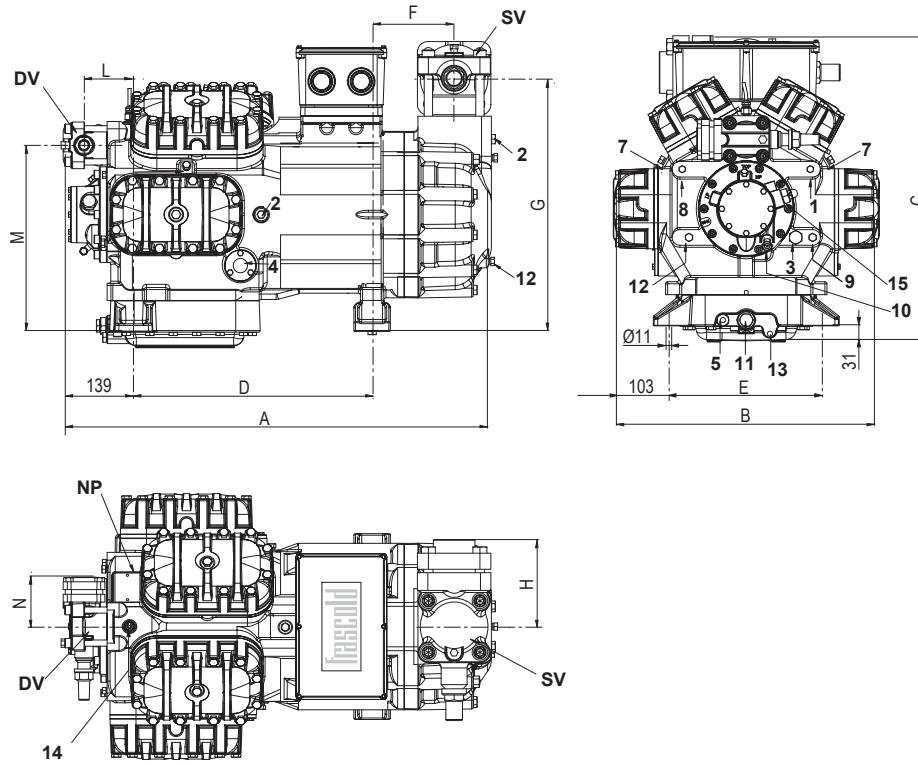
Vibration absorber

1	High pressure plug	$\frac{1}{8}$ " NPT
2	Low pressure plug	$\frac{1}{4}$ " NPT
3	Oil charge plug	$\frac{3}{8}$ " GAS
4	Oil level sight glass	
5	Crankcase heater seat	
7	Liquid injection valve plug	$\frac{1}{8}$ " NPT
8	Liquid injection sensor plug	
9	Oil pressure switch connection (l.p.)	$\frac{1}{4}$ " SAE
10	Oil pressure switch connection (h.p.)	$\frac{1}{4}$ " SAE
11	Oil filter	$\frac{3}{8}$ " GAS
12	Oil return plug	$\frac{1}{4}$ " NPT
13	Oil drain plug	$\frac{3}{8}$ " GAS
14	Max.discharge temperature sensor	
15	Electronic oil pressure switch connection	
DV	Discharge valve	
SV	Suction valve	
NP	Nameplate	

Compressor	Valves				Valves position					Compressor					
	Suction		Discharge		Suction			Discharge		A	B	C	Base mounting		
	$\emptyset$	"	$\emptyset$	"	F	G	H	L	M	N	mm	mm	mm	D	E
Z40-154E	$2\frac{5}{8}$	67,0	$1\frac{5}{8}$	42,0	180	433	130	100	411	95	794	509	536	381	305
Z40-154Y	$2\frac{5}{8}$	67,0	$1\frac{5}{8}$	42,0	180	433	130	100	411	95	794	509	536	381	305
Z50-154Y	$2\frac{5}{8}$	67,0	$1\frac{5}{8}$	42,0	180	433	130	100	411	95	794	509	536	381	305

## Dimensional drawing

Series **W**



Vibration absorber

1	High pressure plug	$\frac{1}{8}$ " NPT
2	Low pressure plug	$\frac{1}{4}$ " NPT
3	Oil charge plug	$\frac{3}{8}$ " GAS
4	Oil level sight glass	
5	Crankcase heater seat	
7	Liquid injection valve plug	$\frac{1}{8}$ " NPT
8	Liquid injection sensor plug	
9	Oil pressure switch connection (l.p.)	$\frac{1}{4}$ " SAE
10	Oil pressure switch connection (h.p.)	$\frac{1}{4}$ " SAE
11	Oil filter	$\frac{3}{8}$ " GAS
12	Oil return plug	$\frac{1}{4}$ " NPT
13	Oil drain plug	$\frac{3}{8}$ " GAS
14	Max.discharge temperature sensor	
15	Electronic oil pressure switch connection	
DV	Discharge valve	
SV	Suction valve	
NP	Nameplate	

Compressor	Valves				Valves position					Compressor					
	Suction		Discharge		Suction			Discharge		Length	Width	Height	Base mounting		
	$\emptyset$	"	$\emptyset$	"	F	G	H	L	M	N			A	B	
W40-142Y	2 $\frac{5}{8}$	67,0	1 $\frac{5}{8}$	42,0	158	486	160	95	358	95	838	511	588	458	305
W40-168Y	2 $\frac{5}{8}$	67,0	1 $\frac{5}{8}$	42,0	158	486	160	95	358	95	838	511	588	458	305
W50-168Y	3 $\frac{1}{8}$	79,4	1 $\frac{5}{8}$	42,0	158	486	160	95	358	95	838	511	588	458	305
W50-187Y	3 $\frac{1}{8}$	79,4	1 $\frac{5}{8}$	42,0	158	486	160	95	358	95	838	511	588	458	305
W60-187Y	3 $\frac{1}{8}$	79,4	1 $\frac{5}{8}$	42,0	158	486	160	95	358	95	838	511	588	458	305
W60-206Y	3 $\frac{1}{8}$	79,4	2 $\frac{1}{8}$	54,0	158	486	160	95	358	95	838	511	588	458	305
W70-206Y	3 $\frac{1}{8}$	79,4	2 $\frac{1}{8}$	54,0	190	486	160	95	358	162	864	511	588	458	305
W70-228Y	3 $\frac{1}{8}$	79,4	2 $\frac{1}{8}$	54,0	190	486	160	95	358	162	864	519	588	458	305
W75-228Y	3 $\frac{1}{8}$	79,4	2 $\frac{1}{8}$	54,0	190	486	160	95	358	162	864	519	588	458	305
W75-240Y	3 $\frac{1}{8}$	79,4	2 $\frac{1}{8}$	54,0	190	486	160	95	358	162	864	519	588	458	305
W80-240Y	3 $\frac{1}{8}$	79,4	2 $\frac{1}{8}$	54,0	190	486	160	95	358	162	864	519	588	458	305

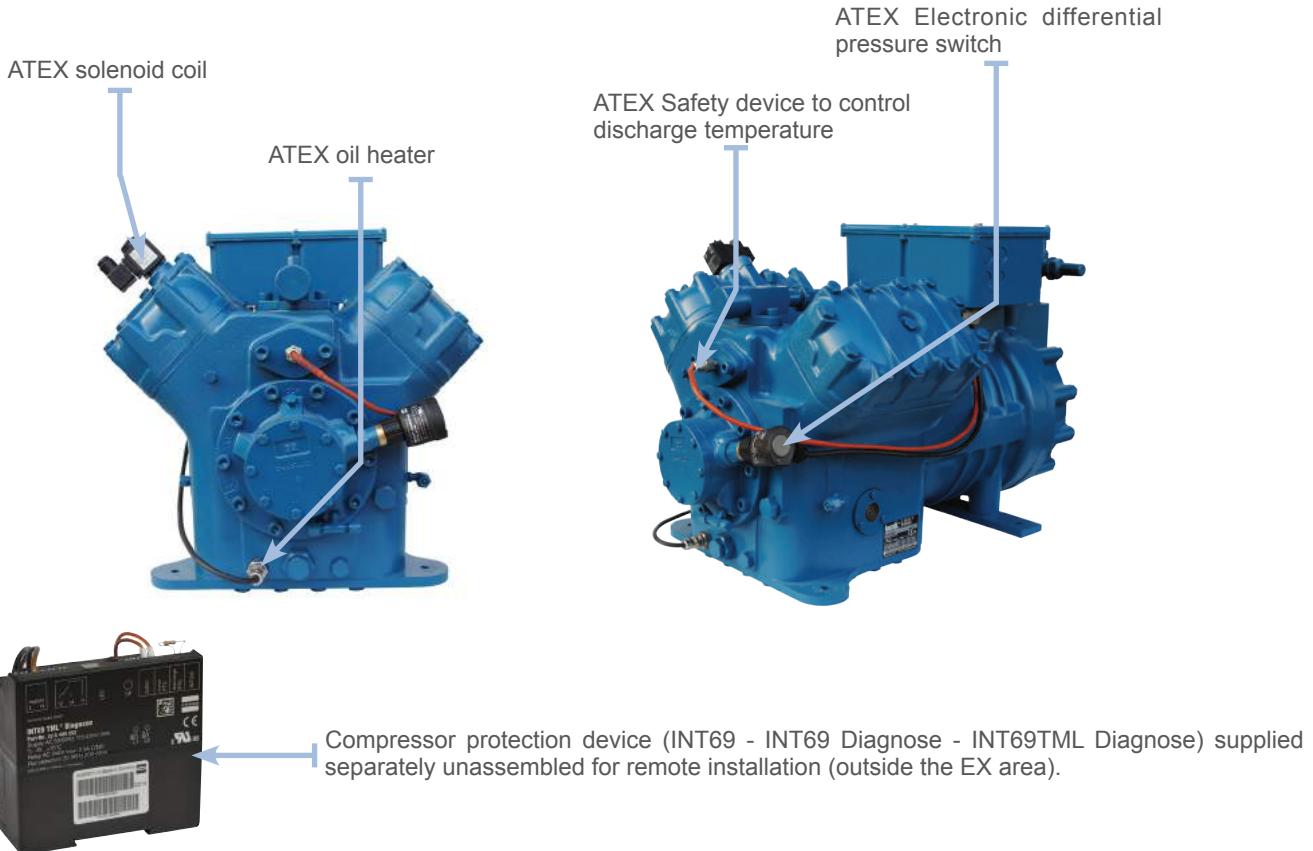
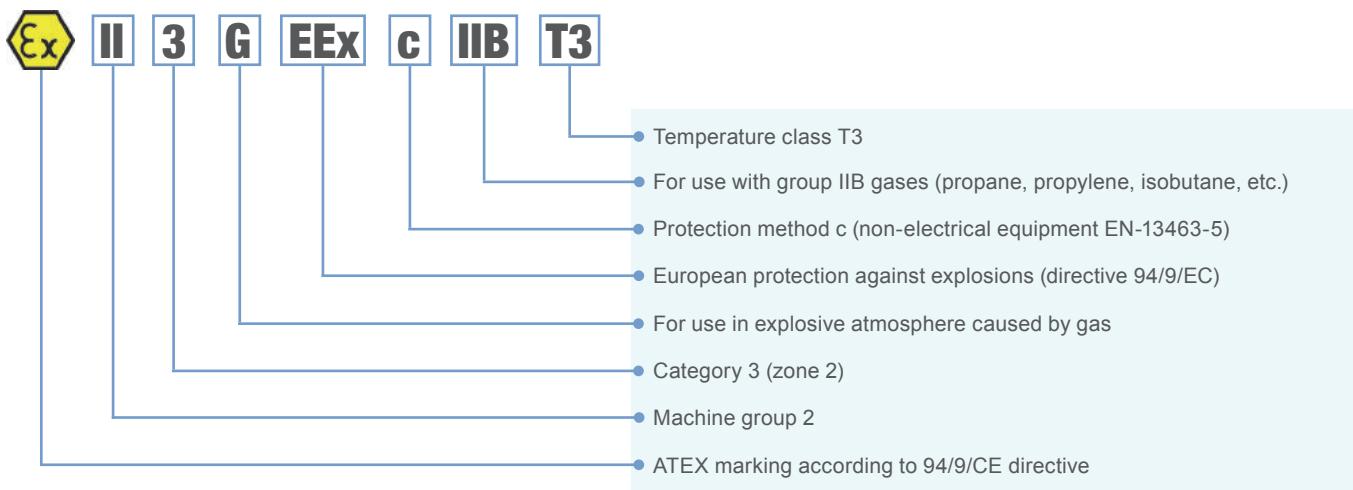
## ATEX Compressors

Within the European Union, mechanical and electrical equipment used in explosive atmospheres must comply with ATEX requirements. Frascold was among the first compressor manufacturers to offer a comprehensive range of ATEX-certified compressors. All ATEX compressors produced by Frascold are approved also for use with hydrocarbons R290 and R1270. Please contact Frascold when interested to run the compressor with other hydrocarbons.

## Construction concepts

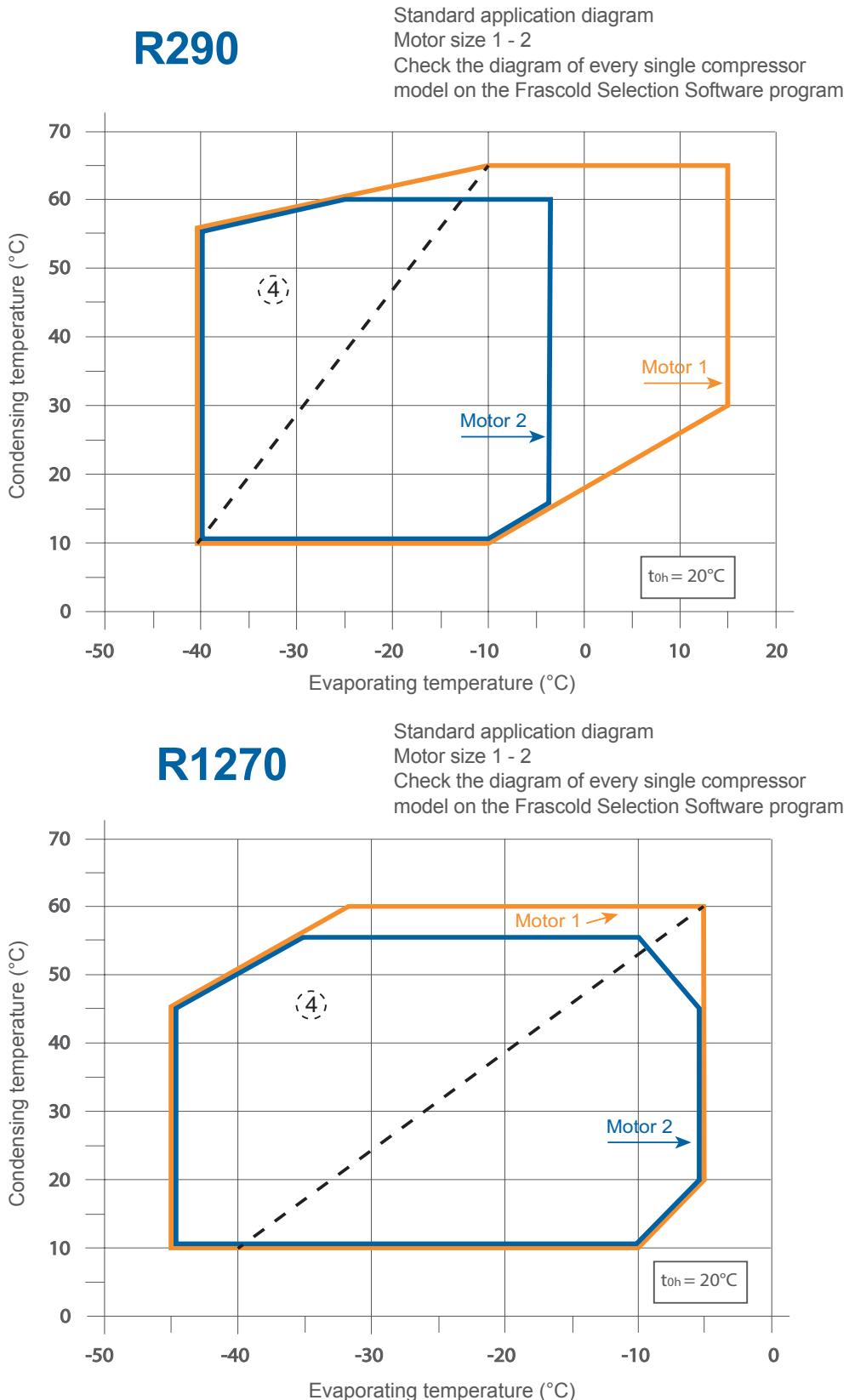
ATEX compressors are designed in accordance with safety requirements set forth for use in hazardous areas due to presence of flammable gases in Category 3 and Zone 2, according to the ATEX directive 94/9/EC and use mechanical and electrical components complying with this directive (with the exception of the electronic protection device INT69, INT69 Diagnose, INT69TML Diagnose).

## ATEX Certification



## Operating limits

The compressors can operate within the range of the application diagrams; pay attention to the different areas. For the operating limits of each compressor refer to the Frascold Selection Software program (see page 74).



Compressor at 100% capacity

t<sub>oh</sub>  
(4)

Suction gas temperature = 20 ° C

Additional cooling or superheat reduction, check on the Frascold Selection Software program

# Semi-hermetic reciprocating TWIN compressors

## Compressors in TWIN configuration

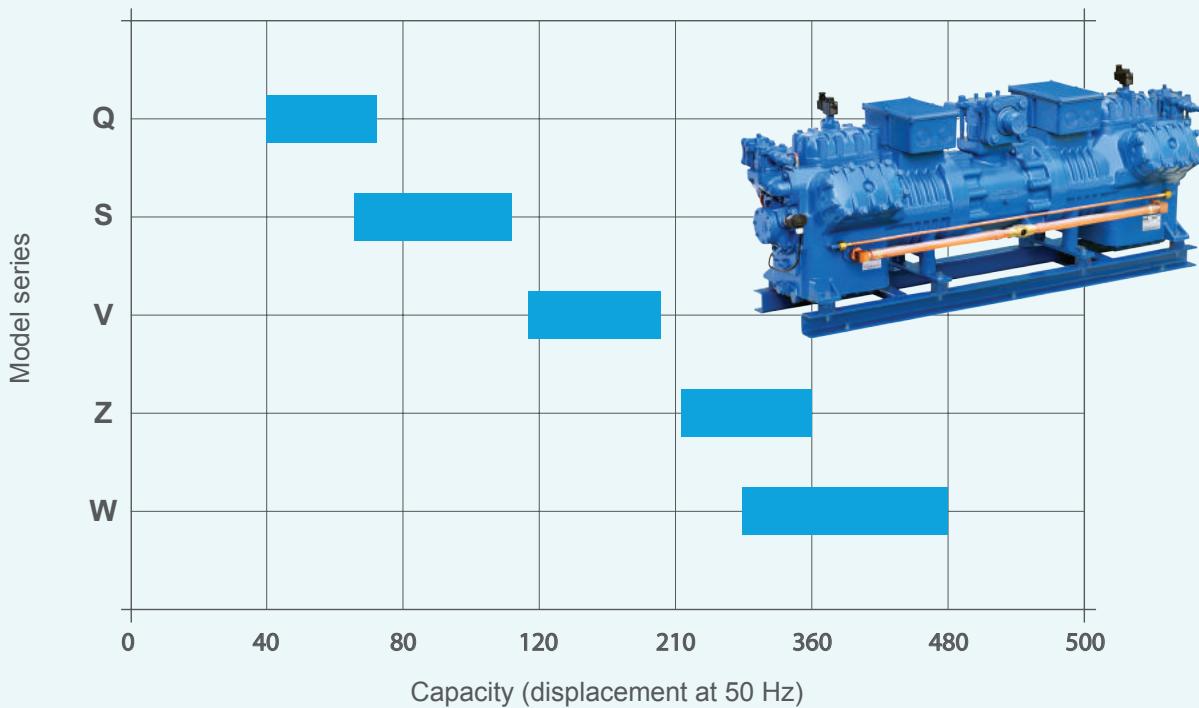
All compressor models Q, S, V, Z and W are also available in TWIN version; two compressors with the same volume displaced are coupled together through a common intake flange. The TWIN configuration is the easiest way to connect 2 compressors in parallel. Starting or stopping one of the compressors ensures easy capacity adjustment and higher efficiency.

In addition all models can also be equipped with the RSH system for adjusting the capacity, or with the standard CC heads. Especially for applications with large load fluctuations, operation at full or partial load thus becomes more efficient.

## Range of models

**Current range:**

**5 series, 64 models with 26 capacity stages, from 39.50 to 478.00 m<sup>3</sup>/h (50 Hz)**



## Technical specifications

Compressor	Cylinders Nr.	Displacement m <sup>3</sup> / 50Hz	Oil Charge dm <sup>3</sup>	Net Weight kg	Electrical data								Pipe connections ⑩				
					Motor		Max operating current A [x2] ⑨ ⑪		Max power consumption kW [x2]	Locked rotor current A [x2] ⑨ ⑪		Suction [x1]		Discharge [x2]			
					Version	Connections	230V	400V		230V	400V	230V	400V	inch	mm	inch	mm
					④	⑤ ⑥	DOL	DOL		⑨ ⑪	DOL	DOL	PWS	④	⑤ ⑥	④	⑤ ⑥
①	②	③	⑦	⑧	⑨	⑩	⑪	⑫	⑬	⑭	⑮	⑯	⑰	⑱	⑲	⑳	⑳
TWIN Q4-20.1E	4+4	39,54	3,2	151	3	⑦	10,6	6,1		3,1	97,8	56,3		1 1/8	28,6	3/4	19,0
TWIN Q4-20.1Y	4+4		3,2	151	2		17,5	10,1		5,7	92,6	53,2		1 1/8	28,6	3/4	19,0
TWIN Q4-21.1Y	4+4	42,36	3,2	161	2	⑦	17,3	10,0		5,7	92,6	53,2		1 1/8	28,6	3/4	19,0
TWIN Q5-21.1Y	4+4		3,2	161	1		20,1	11,6		6,6	109,7	63,1		1 1/8	28,6	3/4	19,0
TWIN Q4-24.1E	4+4		3,2	161	3		12,5	7,2		4,0	97,8	56,3		1 1/8	28,6	3/4	19,0
TWIN Q4-24.1Y	4+4	47,82	3,2	161	2	⑦	20,3	11,7		6,8	92,6	53,2		1 1/8	28,6	3/4	19,0
TWIN Q5-24.1Y	4+4		3,2	161	1		23,9	13,8		7,9	109,7	63,1		1 1/8	28,6	3/4	19,0
TWIN Q4-25.1Y	4+4		3,2	161	2		19,1	11,0		7,0	92,6	53,2		1 1/8	28,6	3/4	19,0
TWIN Q5-25.1Y	4+4	49,38	3,2	161	2	⑦	22,1	12,7		8,5	109,7	63,1		1 1/8	28,6	3/4	19,0
TWIN Q7-25.1Y	4+4		3,2	161	1		26,8	15,4		8,4	151,8	87,3		1 1/8	28,6	3/4	19,0

# Semi-hermetic reciprocating TWIN compressors

## Technical specifications

Compressor	Cylinders Nr.	Displacement m <sup>3</sup> /h 50Hz	Oil Charge dm <sup>3</sup>	Net Weight kg	Electrical data									Pipe connections ⑩						
					Motor		Max operating current A [x2] ⑨ ⑪			Max power consumption kW [x2]	Locked rotor current A [x2] ⑨ ⑪			Suction [x1]		Discharge [x2]				
					Version	Connections	230V	400V	DOL		DOL	PWS	230V	400V	inch	mm	inch	mm		
							④	⑤ ⑥	DOL		DOL	PWS	⑨ ⑪	DOL	DOL					
①	②	③	④	⑤ ⑥	⑦	⑧	⑨ ⑪	⑩	⑪	⑫	⑬	⑭	⑮ ⑯	⑯ ⑰	⑰ ⑱	⑱ ⑲	⑲ ⑳	⑳ ⑳		
TWIN Q5-28.1E	4+4		3,2	161	3		13,7	7,9			4,7	95,1	54,7		1" ½	35,0	1" ½	28,6		
TWIN Q5-28.1Y	4+4	56,04	3,2	161	2	⑦	24,3	14,0			8,2	109,7	63,1		1" ½	35,0	1" ½	28,6		
TWIN Q7-28.1Y	4+4		3,2	161	1		30,7	17,6			9,5	151,8	87,3		1" ½	35,0	1" ½	28,6		
TWIN Q5-33.1E	4+4		3,2	161	3		16,2	9,3			5,6	95,1	54,7		1" ½	35,0	1" ½	28,6		
TWIN Q5-33.1Y	4+4	65,32	3,2	161	2	⑦	25,0	14,4			8,3	109,7	63,1		1" ½	35,0	1" ½	28,6		
TWIN Q7-33.1Y	4+4		3,2	161	1		34,7	20,0			11,2	151,8	87,3		1" ½	35,0	1" ½	28,6		
TWIN Q5-36.1E	4+4		3,2	161	3		20,5	11,8			6,9	109,7	63,1		1" ½	35,0	1" ½	28,6		
TWIN Q7-36.1Y	4+4	71,72	3,2	161	1	⑦	33,6	19,4			10,8	151,8	87,3		1" ½	35,0	1" ½	28,6		
TWIN S5-33Y	4+4		5,8	235	2						15,9	7,8			57,8	35,5	1" ½	35,0	1" ½	28,6
TWIN S7-33Y	4+4	65,60	5,8	239	1	⑧					20,4	11,1			75,0	47,0	1" ½	35,0	1" ½	28,6
TWIN S8-42E	4+4		5,8	239	3						12,8	7,3			90,3	52,7	1" ½	35,0	1" ½	28,6
TWIN S8-42Y	4+4	82,64	5,8	239	2	⑧					20,3	11,8			90,3	52,7	1" ½	35,0	1" ½	28,6
TWIN S12-42Y	4+4		5,8	245	1						22,4	12,9			102,3	59,1	1" ½	35,0	1" ½	28,6
TWIN S10-52E	4+4		5,8	245	3						14,7	8,4			102,7	59,5	1" ½	35,0	1" ½	28,6
TWIN S10-52Y	4+4	103,00	5,8	245	2	⑧					24,5	14,9			102,3	59,1	1" ½	35,0	1" ½	28,6
TWIN S15-52Y	4+4		5,8	257	1						32,4	17,8			117,1	74,8	2" ½	42,0	1" ½	28,6
TWIN S12-56E	4+4		5,8	265	3						16,1	9,0			102,7	59,5	2" ½	42,0	1" ½	28,6
TWIN S15-56Y	4+4	112,00	5,8	265	2	⑧					30,7	16,5			117,1	74,8	2" ½	42,0	1" ½	28,6
TWIN S20-56Y	4+4		5,8	269	1						38,4	19,6			136,2	87,5	2" ½	42,0	1" ½	28,6
TWIN V15-59E	4+4		8,0	347	3						17,5	10,2			102,7	59,5	2" ½	42,0	1" ½	28,6
TWIN V15-59Y	4+4	116,96	8,0	347	2	⑧					31,1	17,8			117,1	74,8	2" ½	42,0	1" ½	28,6
TWIN V20-59Y	4+4		8,0	355	1						35,3	19,6			180,5	106,6	2" ½	42,0	1" ½	28,6
TWIN V15-71E	4+4		8,0	355	3						20,2	12,0			102,7	59,5	2" ½	42,0	1" ½	28,6
TWIN V15-71Y	4+4	141,54	8,0	355	2	⑧					32,2	19,6			117,1	74,8	2" ½	42,0	1" ½	28,6
TWIN V25-71Y	4+4		8,0	375	1						43,5	23,6			202,7	118,3	3" ½	54,0	1" ½	35,0
TWIN V20-84E	4+4		8,0	367	3						27,2	14,2			173,0	103,0	2" ½	42,0	1" ½	28,6
TWIN V20-84Y	4+4	167,62	8,0	367	2	⑧					46,2	24,2			180,5	106,6	3" ½	54,0	1" ½	35,0
TWIN V30-84Y	4+4		8,0	381	1						49,2	28,4			224,4	132,6	3" ½	54,0	1" ½	35,0
TWIN V25-93Y	4+4	186,10	8,0	407	2	⑧					52,3	25,8			202,7	118,3	3" ½	54,0	1" ½	35,0
TWIN V32-93Y	4+4		8,0	391	1						53,1	30,9			239,2	144,5	3" ½	54,0	1" ½	35,0
TWIN V25-103E	4+4		8,0	415	3						29,9	16,9			210,3	122,7	3" ½	54,0	1" ½	35,0
TWIN V25-103Y	4+4	205,8	8,0	415	2	⑧					52,3	28,8			202,7	118,3	3" ½	54,0	1" ½	35,0
TWIN V35-103Y	4+4		8,0	421	1						61,0	38,5			239,2	144,5	3" ½	54,0	1" ½	35,0
TWIN Z25-106E	6+6		7,4	451	3						30,2	17,1			210,3	122,7	2" ½	54,0	1" ½	35,0
TWIN Z25-106Y	6+6	212,32	7,4	451	2	⑧					53,6	31,9			202,7	118,3	2" ½	54,0	1" ½	35,0
TWIN Z35-106Y	6+6		7,4	457	1						60,2	35,1			239,2	144,5	2" ½	54,0	1" ½	35,0
TWIN Z30-126E	6+6		14,4	469	3						33,8	19,7			212,5	122,7	2" ½	54,0	1" ½	35,0
TWIN Z30-126Y	6+6	251,44	14,4	469	2	⑧					55,7	35,0			224,4	132,6	2" ½	54,0	1" ½	35,0
TWIN Z40-126Y	6+6		14,4	491	1						71,9	40,7			273,0	159,2	3" ½	67,0	1" ½	42,0
TWIN Z40-154E	6+6		14,4	491	3						41,1	23,8			239,2	144,5	3" ½	67,0	1" ½	42,0
TWIN Z40-154Y	6+6	308,76	14,4	491	2	⑧					77,9	37,9			273,0	159,2	3" ½	67,0	1" ½	42,0
TWIN Z50-154Y	6+6		14,4	499	1						90,4	52,1			321,4	188,8	3" ½	67,0	1" ½	42,0
TWIN W40-142Y	8+8	283,00	15,4	603	2	⑧					89,3	42,3			298,0	215,0	4" ½	67,0	1" ½	42,0
TWIN W40-168Y	8+8	335,20	15,4	611	2	⑧					71,4	37,3			298,0	215,0	4" ½	67,0	1" ½	42,0
TWIN W50-168Y	8+8		15,4	623	1						94,8	55,2			367,0	258,0	4" ½	79,4	2" ½	54,0
TWIN W50-187Y	8+8	372,20	15,4	635	2	⑧					89,1	50,2			367,0	258,0	4" ½	79,4	2" ½	54,0
TWIN W60-187Y	8+8		15,4	643	1						103,5	59,9			455,0	326,0	4" ½	79,4	2" ½	54,0
TWIN W60-206Y	8+8	411,60	15,4	653	2	⑧					98,8	56,7			455,0	326,0	4" ½	79,4	2" ½	54,0
TWIN W70-206Y	8+8		15,4	669	1						116,8	66,8			548,0	390,0	4" ½	79,4	2" ½	54,0
TWIN W70-228Y	8+8	455,54	15,4	669	2	⑧					109,5	61,9			548,0	390,0	4" ½	79,4	2" ½	54,0
TWIN W75-228Y	8+8		15,4	669	1						128,4	74,2			584,0	417,0	4" ½	79,4	2" ½	54,0
TWIN W75-240Y	8+8	478,04	15,4	669	2	⑧					115,3	65,4			584,0	417,0	4" ½	79,4	2" ½	54,0
TWIN W80-240Y	8+8		15,4	669	1						135,7	78,9			584,0	417,0	4" ½	79,4	2" ½	54,0

⑨ ⑪ Value referred to one compressor

See page 8 for other notes.

# Semi-hermetic reciprocating two-stage compressors

## Special features

The new Frascold two-stage compressor has been completely redesigned and re-engineered by eliminating the external manifolds of the interstage circuitry and including an additional liquid injection system. These new features provide the following benefits:

**Injection of liquid in the second stage intake conduit:** the amount of liquid injected is exactly what is required, therefore achieving the highest efficiency level.

The compressed gas and injected liquid mixing process is instantaneous and the liquid is not overheated as it does not go through the motor.

**Sub-cooler kit:** each model can be equipped with a sub-cooler (already installed and connected to the compressor or supplied already assembled but not mounted and connected).

**Compact:** thanks to the elimination of external conduits, the compressor features reduced dimensions. In addition the absence of welding and pipes eliminates possible refrigerant leaks and heat dissipation, which cause system inefficiency.



**Liquid injection on the motor side:** thanks to the exclusive Motor Cooling System, the exact amount of fluid required to cool the motor is injected. This exclusive system, only available on Frascold compressors, prevents the formation of ice on the compressor body eliminating ice formation in the electrical box and flooded start.

**Reliable and sturdy:** The new specially designed components make the compressor resistant to all operating conditions within its working range.

**Silent:** the optimisation of the centre of gravity and the homogeneous distribution of weights ensure low vibrations and low noise.

## Technical specifications

Compressor	Cylinders Nr.		Displacement m <sup>3</sup> /h 50Hz ②		Oil Charge dm <sup>3</sup>	Net Weight kg	Electrical data						Pipe connections ⑦					
							Motor	Max operating current A ⑥		Max power consumption kW ⑥	Locked rotor current A ⑥		Suction		Discharge			
	LP	HP	LP	HP				230V			400V		230V		400V			
	③	④	⑤	DOL				DOL	DOL		PWS	DOL	DOL	PWS				
<b>S5-26.16Y</b>	2	2	25,2	16,4	3,3	120	⑧			14,0	8,3		57,8	35,5	⅛	15,8	½	12,7
<b>S7-27.19Y</b>	2	2	26,9	19,1	3,3	122	⑧			18,0	9,5		75,0	47,0	⅛	15,8	½	12,7
<b>2V10-42.29Y</b>	2	2	41,9	29,4	4,5	173	⑧			23,0	13,0		87,6	53,9	⅛	15,8	½	12,7
<b>2Z15-60.30Y</b>	4	2	58,8	29,4	7,5	220	⑧			31,0	17,0		117	74,8	⅛	15,8	½	12,7
<b>2Z20-72.36Y</b>	4	2	70,8	35,4	7,5	225	⑧			37,0	20,9		181	107	⅛	15,8	½	12,7
<b>2Z25-84.42Y</b>	4	2	83,8	41,9	7,5	230	⑧			45,0	25,8		208	118	⅛	22,2	⅛	15,8
<b>2Z30-102.51Y</b>	4	2	102,9	51,5	7,5	239	⑧			53,0	30,9		224	133	1⅓	35,0	1⅓	28,6

② Conversion factor for 60Hz = 1,2.

③ POE 32 cSt oil charge. Carter heater is strongly recommended.

④ Including valves, oil charge and rubber dampers.

⑤ Tolerance ±10% based on mean value of voltage range. Other voltages upon request.

⑥ Referred to 50Hz operation. At 60 Hz the max operating current remains unchanged while the max power consumption should be multiplied by 1,2. The maximum operating current /max. power consumption must be considered for the selection of cables, fuses and contactors (AC3 category).

⑦ Valves with solder connections.

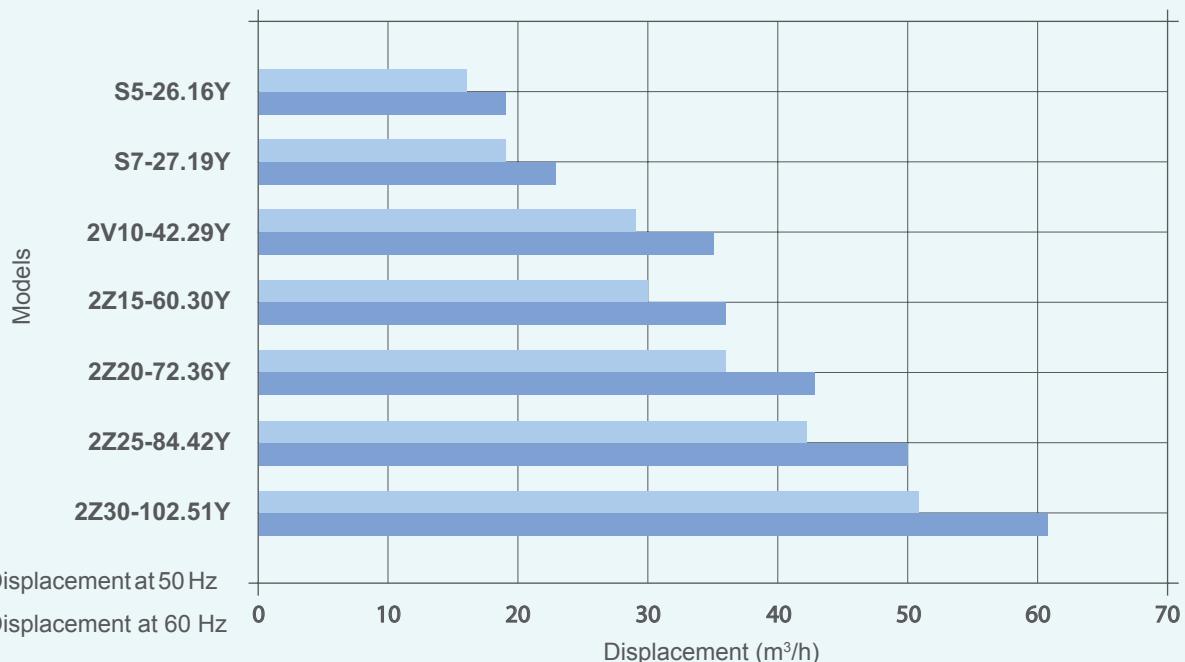
⑧ 380V-420V 1/1/1 / 3 / 50Hz

440V-480V 1/1/1 / 3 / 60Hz

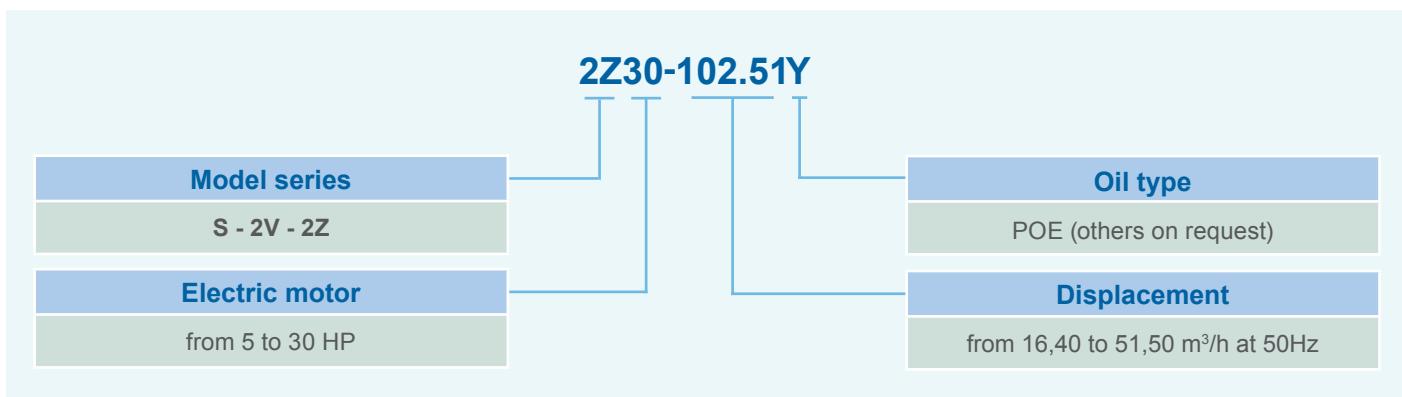
## Range of models

**Current range:**

**3 series, 7 models with 7 capacity stages, from 16 to 51 m<sup>3</sup>/h (50 Hz)**

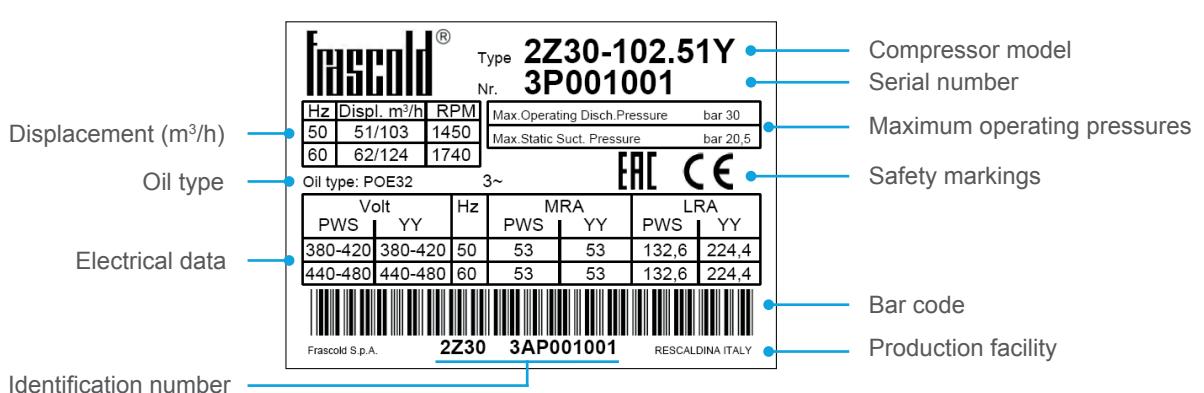


## Model names



## Compressor nameplate

All the important information to identify the compressor is displayed on the nameplate. The date of production is contained in the serial number. The indication of the type of coolant is the installer's responsibility.



## Frascold Selection Software FSS3

Frascold has released the FSS3 program, the new software dedicated to the processes in the refrigeration, air conditioning and heat pumps industry.

The software was developed by the Frascold technical research and development team, based on many years of experience in the production of compressors and their application in systems, from the simplest to the most complex.

Using the FSS3 software, it is possible to perform calculations based either on the requirements set by the user or on standard operating conditions (EN12900), for the selection of compressors and condensing units. FSS3 fully replaces the previous FSS2 software, with the addition of new important functions and applications. The software comes with a new graphical interface and is easy to use, accurate in calculations and flexible in the various functions.



## Main features of FSS3

Easy to use and accurate in calculations, it provides users with all the elements necessary for the selection of compressors and condensing units, according to the project capacities and conditions:

- Provides performance reports for all products
- Lets you export reports to several useful formats for printing and archiving
- Displays the operating limits of all compressors and condensing units with all approved refrigerants
- Essential for contractors and designers in the development and design of complex systems
- Can be configured according to user needs
- Provides full support for the recalculation of performance coefficients in conditions other than standard EN12900
- Features the technical specifications of the selected products (dimensional drawings, mechanical and electrical data, etc.)
- Designed to receive notification whenever a software update is available

The program is available on our website in the Software section. Download the executable file to your computer, run it and follow the installation instructions. A program shortcut will be created on your desktop for easier start up.



## From 1936 to date, a long process involving the development, constant improvement and attention to the latest technology

Throughout this time, Frascold has been producing made in Italy compressors for the cooling and air conditioning industry, for a wide range of applications.

It has built its reputation and established its international market position thanks to its ability to constantly improve its product, whilst cultivating customer relationships in order to stay firmly at the forefront of its sector.

With its technology, application experience and global presence, it offers products, solutions and services that allow customers to reap benefits in terms of performance, energy efficiency and operating comfort.

Today, Frascold is an industrial company that operates worldwide with experience, resources, great professional skills and tools to be nearby and to respond quickly to market needs.

## Frascold products

Renowned worldwide for their high quality and used in commercial and industrial applications.

- Reciprocating compressors
- Screw compressors
- Condensing units

## Applications

The products are used in many refrigeration sectors, relating to air conditioning, process chiller and heat pump; and they influence the daily lives of many people.

- Retail cooling systems
- Industrial refrigeration
- Transport refrigeration and marine cooling systems
- Environmental simulation chambers
- Air conditioning systems
- Liquid chillers
- Heat pumps



**1936 - 2016**

Celebrating 80 years of innovation



Blue is better

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