

**Compressor: Q5-33.1Y**
**Refrigerant: R404A**
**Electrical supply: STANDARD**
**Performance data**

Suction gas temperature	= 20,0°C
Evaporator superheating	= 10,0K
Subcooling	= 0,0K
Operating mode	= normal

Evaporating temperature	°C	-5,0	-10,0	-15,0	-20,0	-25,0	-30,0	-35,0
<b>Condensing temperature = 20,0°C</b>								
Refrigerating capacity	kW	29,27	24,36	20,05	16,31	13,07	10,31	7,98
Power input	kW	5,421	5,393	5,229	4,955	4,595	4,175	3,721
COP		5,40	4,52	3,84	3,29	2,84	2,47	2,14
<b>Condensing temperature = 25,0°C</b>								
Refrigerating capacity	kW	27,21	22,61	18,58	15,08	12,06	9,49	7,32
Power input	kW	6,187	6,008	5,710	5,319	4,859	4,357	3,837
COP		4,40	3,76	3,25	2,83	2,48	2,18	1,91
<b>Condensing temperature = 30,0°C</b>								
Refrigerating capacity	kW	25,20	20,90	17,15	13,89	11,09	8,70	6,68
Power input	kW	6,905	6,578	6,151	5,647	5,091	4,511	3,930
COP		3,65	3,18	2,79	2,46	2,18	1,93	1,70
<b>Condensing temperature = 35,0°C</b>								
Refrigerating capacity	kW	23,23	19,24	15,76	12,74	10,15	7,95	6,08
Power input	kW	7,579	7,110	6,557	5,944	5,298	4,644	4,006
COP		3,07	2,71	2,40	2,14	1,92	1,71	1,52
<b>Condensing temperature = 40,0°C</b>								
Refrigerating capacity	kW	21,31	17,61	14,40	11,63	9,25	7,23	5,51
Power input	kW	8,217	7,609	6,935	6,218	5,485	4,761	4,071
COP		2,59	2,31	2,08	1,87	1,69	1,52	1,35
<b>Condensing temperature = 45,0°C</b>								
Refrigerating capacity	kW	-	16,03	13,08	10,55	8,38	6,53	4,97
Power input	kW	-	8,083	7,291	6,475	5,659	4,870	4,132
COP		-	1,98	1,79	1,63	1,48	1,34	1,20
<b>Condensing temperature = 50,0°C</b>								
Refrigerating capacity	kW	-	-	11,80	9,50	7,54	5,87	4,45
Power input	kW	-	-	7,632	6,721	5,827	4,977	4,195
COP		-	-	1,55	1,41	1,29	1,18	1,06
<b>Condensing temperature = 55,0°C</b>								
Refrigerating capacity	kW	-	-	10,55	8,48	6,72	-	-
Power input	kW	-	-	7,964	6,961	5,994	-	-
COP		-	-	1,32	1,22	1,12	-	-

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 Subcooling = 0,0K  
 Operating mode = normal

**Evaporating temperature    °C    -40,0    -45,0**

**Condensing temperature = 20,0°C**

Refrigerating capacity	kW	6,03	4,43
Power input	kW	3,257	2,809
COP		1,85	1,58

**Condensing temperature = 25,0°C**

Refrigerating capacity	kW	5,50	4,00
Power input	kW	3,325	2,846
COP		1,65	1,40

**Condensing temperature = 30,0°C**

Refrigerating capacity	kW	4,99	3,59
Power input	kW	3,374	2,869
COP		1,48	1,25

**Condensing temperature = 35,0°C**

Refrigerating capacity	kW	4,52	3,20
Power input	kW	3,411	2,884
COP		1,32	1,11

**Condensing temperature = 40,0°C**

Refrigerating capacity	kW	4,07	2,85
Power input	kW	3,441	2,896
COP		1,18	0,98

**Condensing temperature = 45,0°C**

Refrigerating capacity	kW	3,64	2,51
Power input	kW	3,471	2,912
COP		1,05	0,86

**Condensing temperature = 50,0°C**

Refrigerating capacity	kW	3,24	-
Power input	kW	3,507	-
COP		0,92	-

**Condensing temperature = 55,0°C**

Refrigerating capacity	kW	-	-
Power input	kW	-	-
COP		-	-

Compressor: Q5-33.1Y

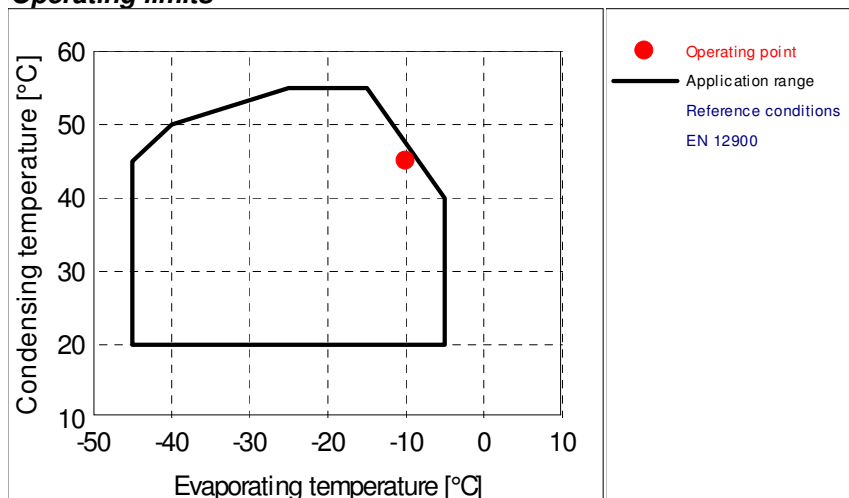
Refrigerant: R404A

Electrical supply: STANDARD

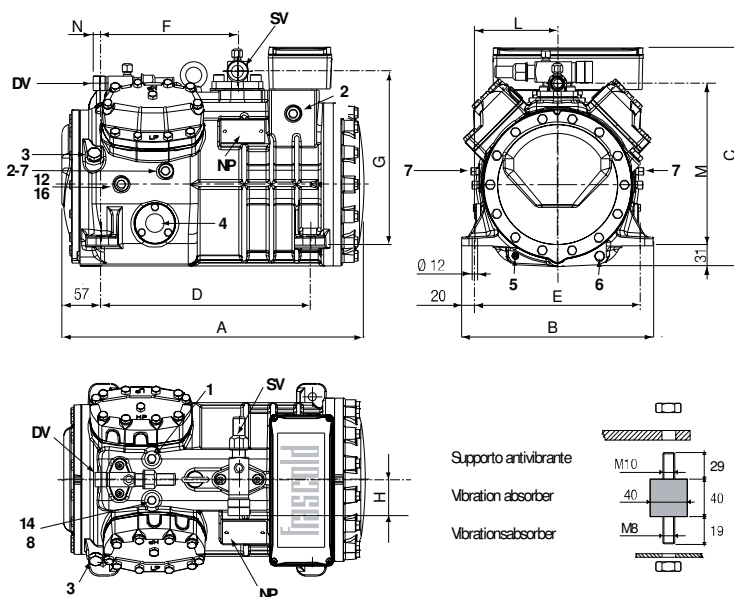
**Performance data**

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**Operating limits**



**Dimensions**



**Legend:**

Q	Suction Valve	∅35 mm
	Discharge valve	∅28,6 mm
A:	Lenght	449mm
B:	Width	286mm
C:	Height	328mm
D:	Base mounting	312mm
E:	Base mounting	246mm
F:	Suction Valve	203mm
G:	Suction Valve	261mm
H:	Suction Valve	58mm
L:	Discharge valve	123mm
M:	Discharge valve	239mm
N:	Discharge valve	28mm
1:	High pressure plug	
2:	Low pressure plug	
3:	oil charge plug	
4:	oil level sight glass	
5:	crankcase heater seat	
6:	oil drain plug	
12:	oil return plug	
DV:	Discharge valve	
SV:	Suction Valve	
NP:	Nameplate	

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**Technical data**

Make	Reciprocating/ semi-hermetic/ one stage
Nominal operating frequency	50 Hz
Nominal compressor speed @50 Hz	1450 1/min
Nominal displacement @50 Hz	32,66 ml/h
Number of pistons	4
Net weight	79 kg
Lubricant	FRASCOLD POE32
Oil charge	1,6 l
Locked rotor current (LRA)	63,1 A
Maximum allowed operating current (MRA)	14,4 A
Sound power level -10/45°C R404A @50Hz	72,5 dB(A)
Sound power level -35/40°C R404A @50Hz	76,0 dB(A)

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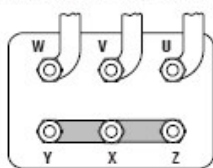
Electrical supply: STANDARD

**Performance data**

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**Motor connections**

Serie A-B-C-D-F-Q Series



400V  
 3Ph  
 50Hz  
 DOL-STAR

**Characteristics**

**Polynomial coefficients according to EN 12900**

Coefficient	Refrigerating capacity	Power input	Mass flow
C1	4,49272E+04	8,84755E+02	0,00000E+00
C2*S	1,46382E+03	-1,94952E+02	0,00000E+00
C3*D	-5,27295E+02	2,50833E+02	0,00000E+00
C4*S <sub>c</sub>	1,61258E+01	-5,11272E+00	0,00000E+00
C5*S <sub>c</sub> *D	-1,44797E+01	7,86443E+00	0,00000E+00
C6*D <sub>c</sub>	1,15674E+00	-1,70395E+00	0,00000E+00
C7*S <sub>i</sub>	5,72074E-02	-3,37992E-02	0,00000E+00
C8*S <sub>c</sub> *D	-1,19198E-01	6,88847E-02	0,00000E+00
C9*S <sub>c</sub> *D <sub>c</sub>	9,16682E-03	-1,72342E-02	0,00000E+00
C10*D <sub>i</sub>	-2,46324E-03	8,43731E-03	0,00000E+00

<b>Reference conditions:</b>	Ambient temperature:	32,0 °C
	Suction gas temperature:	20,0 °C
	Liquid subcooling:	0,0 K
	Nominal operating frequency:	50 Hz

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**Accessories**

Accessories	Model	Technical data
1 Motor protector INT69 DIAGNOSE	T00ECA01D	115V-230V 50/60 Hz
2 Rubber damper	T00SSA15	40X40 45SH M10/M8 F-Q
1 Capacity control head	capacity control	230V optional
2 Unloaded start head	Unload start	230V optional
3 Head fan	SZ_FM9 (standard cooling)	230V - 1ph - 50/60 Hz optional
4 Thermistor	PT140	140°C optional
5 Crankcase heater	T00CH1 F-S	230V optional
6 USB adpter for INT69 DIAGNOSE	T00EC57	optional
7 Oil level switch	T00WK252	230V - 50/60Hz optional