

Compressor: Q5-21.1Y

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	7,5	5,0	0	-5,0	-10,0	-15,0	-20,0
Condensing temperature = 20,0°C								
Refrigerating capacity	kW	-	-	22,94	19,10	15,70	12,71	10,11
Power input	kW	-	-	3,266	3,328	3,301	3,191	3,008
COP		-	-	7,02	5,74	4,76	3,98	3,36
Condensing temperature = 25,0°C								
Refrigerating capacity	kW	27,60	25,42	21,38	17,79	14,61	11,81	9,37
Power input	kW	3,570	3,653	3,742	3,736	3,642	3,468	3,222
COP		7,73	6,96	5,71	4,76	4,01	3,41	2,91
Condensing temperature = 30,0°C								
Refrigerating capacity	kW	25,61	23,57	19,81	16,47	13,50	10,90	8,62
Power input	kW	4,116	4,163	4,183	4,109	3,949	3,712	3,405
COP		6,22	5,66	4,74	4,01	3,42	2,93	2,53
Condensing temperature = 35,0°C								
Refrigerating capacity	kW	23,59	21,70	18,23	15,13	12,39	9,97	7,86
Power input	kW	4,624	4,636	4,587	4,447	4,223	3,923	3,556
COP		5,10	4,68	3,97	3,40	2,93	2,54	2,21
Condensing temperature = 40,0°C								
Refrigerating capacity	kW	21,57	19,83	16,63	13,79	11,26	9,04	7,09
Power input	kW	5,093	5,071	4,954	4,748	4,461	4,100	3,674
COP		4,24	3,91	3,36	2,90	2,52	2,20	1,93
Condensing temperature = 45,0°C								
Refrigerating capacity	kW	19,54	17,95	15,03	12,43	10,13	8,10	6,31
Power input	kW	5,522	5,466	5,283	5,013	4,663	4,242	3,758
COP		3,54	3,28	2,85	2,48	2,17	1,91	1,68
Condensing temperature = 50,0°C								
Refrigerating capacity	kW	17,51	16,07	13,43	11,08	9,00	7,16	5,54
Power input	kW	5,910	5,820	5,572	5,239	4,828	4,348	3,807
COP		2,96	2,76	2,41	2,12	1,86	1,65	1,45
Condensing temperature = 55,0°C								
Refrigerating capacity	kW	15,47	14,19	11,82	9,73	7,87	6,22	4,77
Power input	kW	6,256	6,134	5,821	5,426	4,955	4,417	3,820
COP		2,47	2,31	2,03	1,79	1,59	1,41	1,25

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Subcooling	= 0,0K
Operating mode	= normal

Evaporating temperature	°C	-25,0	-30,0
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Condensing temperature = 20,0°C

Refrigerating capacity	kW	7,87	5,96
Power input	kW	2,759	2,452
COP		2,85	2,43

Condensing temperature = 25,0°C

Refrigerating capacity	kW	7,26	5,46
Power input	kW	2,913	2,548
COP		2,49	2,14

Condensing temperature = 30,0°C

Refrigerating capacity	kW	6,64	4,95
Power input	kW	3,037	2,615
COP		2,19	1,89

Condensing temperature = 35,0°C

Refrigerating capacity	kW	6,02	4,42
Power input	kW	3,130	2,652
COP		1,92	1,67

Condensing temperature = 40,0°C

Refrigerating capacity	kW	5,38	3,89
Power input	kW	3,191	2,658
COP		1,69	1,47

Condensing temperature = 45,0°C

Refrigerating capacity	kW	4,74	3,36
Power input	kW	3,219	2,632
COP		1,47	1,28

Condensing temperature = 50,0°C

Refrigerating capacity	kW	4,10	2,83
Power input	kW	3,213	2,574
COP		1,28	1,10

Condensing temperature = 55,0°C

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

Compressor: Q5-21.1Y

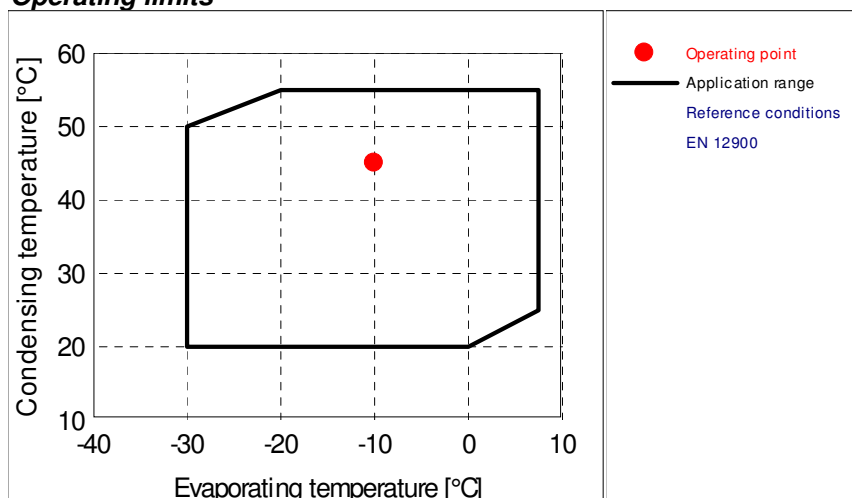
Refrigerant: R404A

Electrical supply: STANDARD

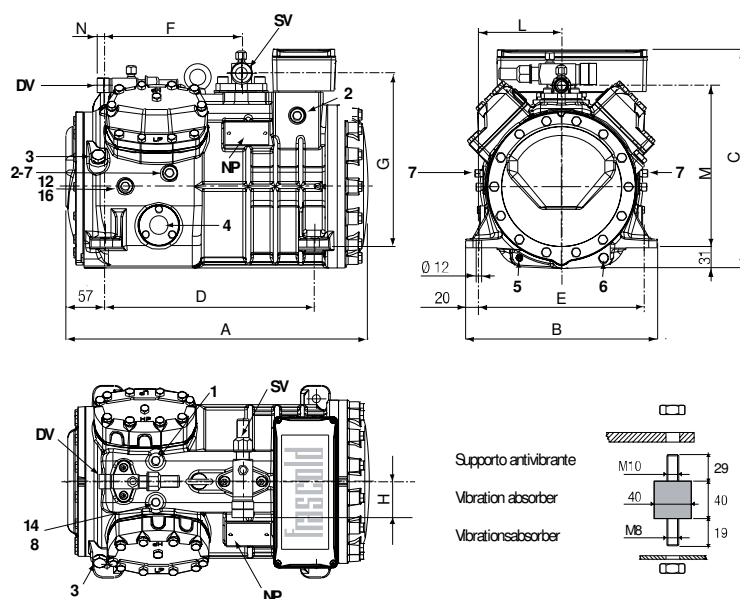
Performance data

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

Operating limits



Dimensions



Legend:

Q	Suction Valve	28,6 mm
	Discharge valve	19 mm
A:	Length	449mm
B:	Width	286mm
C:	Height	325mm
D:	Base mounting	312mm
E:	Base mounting	246mm
F:	Suction Valve	203mm
G:	Suction Valve	258mm
H:	Suction Valve	53mm
L:	Discharge valve	123mm
M:	Discharge valve	239mm
N:	Discharge valve	12mm
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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Operating mode	= normal

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	21,18 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)	11,6 A
Sound power level 5/50°C R404A @50Hz	68,5 dB(A)
Sound power level -10/45°C R404A @50Hz	70,0 dB(A)

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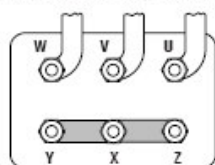
Electrical supply: STANDARD

Performance data

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

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	2,89534E+04	1,02186E+03	0,00000E+00
C2*S	1,02267E+03	-7,99970E+01	0,00000E+00
C3*D	-2,90034E+02	1,25117E+02	0,00000E+00
C4*S _c	1,16278E+01	-2,12751E+00	0,00000E+00
C5*S*D	-1,03810E+01	2,98751E+00	0,00000E+00
C6*D _c	-6,09950E-01	-6,21824E-01	0,00000E+00
C7*S _i	3,50539E-02	-1,07031E-02	0,00000E+00
C8*S _c *D	-1,15044E-01	8,46750E-03	0,00000E+00
C9*S*D _c	-2,24018E-03	-4,36829E-03	0,00000E+00
C10*D _i	4,01638E-03	-1,20856E-03	0,00000E+00

Reference conditions:	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