

Compressor: D2-13.1Y

Refrigerant: R404A

Electrical supply: STANDARD

Performance data

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

Legend:

Additional cooling required

Evaporating temperature	°C	-5,0	-10,0	-15,0	-20,0	-25,0	-30,0	-35,0
Condensing temperature = 20,0°C								
Refrigerating capacity	kW	-	9,88	8,07	6,49	5,14	4,00	3,05
Power input	kW	-	2,430	2,327	2,187	2,019	1,829	1,627
COP		-	4,07	3,47	2,97	2,55	2,19	1,88
Condensing temperature = 25,0°C								
Refrigerating capacity	kW	11,13	9,19	7,49	6,01	4,75	3,69	2,80
Power input	kW	2,673	2,580	2,446	2,278	2,086	1,877	1,659
COP		4,16	3,56	3,06	2,64	2,28	1,97	1,69
Condensing temperature = 30,0°C								
Refrigerating capacity	kW	10,33	8,51	6,92	5,55	4,38	3,39	2,57
Power input	kW	2,866	2,737	2,570	2,375	2,160	1,931	1,696
COP		3,60	3,11	2,69	2,34	2,03	1,76	1,52
Condensing temperature = 35,0°C								
Refrigerating capacity	kW	9,54	7,84	6,37	5,10	4,02	3,11	2,35
Power input	kW	3,067	2,902	2,704	2,481	2,241	1,992	1,742
COP		3,11	2,70	2,36	2,05	1,79	1,56	1,35
Condensing temperature = 40,0°C								
Refrigerating capacity	kW	8,76	7,19	5,83	4,66	3,67	2,83	2,14
Power input	kW	3,279	3,078	2,848	2,597	2,333	2,064	1,797
COP		2,67	2,34	2,05	1,80	1,57	1,37	1,19
Condensing temperature = 45,0°C								
Refrigerating capacity	kW	8,00	6,56	5,31	4,24	3,33	2,57	1,94
Power input	kW	3,503	3,266	3,004	2,725	2,437	2,147	1,864
COP		2,28	2,01	1,77	1,55	1,37	1,20	1,04
Condensing temperature = 50,0°C								
Refrigerating capacity	kW	7,26	5,93	4,79	3,82	3,00	2,32	1,75
Power input	kW	3,743	3,469	3,175	2,867	2,555	2,245	1,945
COP		1,94	1,71	1,51	1,33	1,18	1,03	0,90
Condensing temperature = 55,0°C								
Refrigerating capacity	kW	6,52	5,32	4,29	3,42	2,69	2,08	-
Power input	kW	3,999	3,689	3,362	3,026	2,689	2,358	-
COP		1,63	1,44	1,28	1,13	1,00	0,88	-

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Subcooling	= 0,0K
Operating mode	= normal

Legend:

Additional cooling required

Evaporating temperature	°C	-40,0	-45,0
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Condensing temperature = 20,0°C

Refrigerating capacity	kW	2,28	1,66
Power input	kW	1,419	1,214
COP		1,60	1,37

Condensing temperature = 25,0°C

Refrigerating capacity	kW	2,08	1,51
Power input	kW	1,439	1,226
COP		1,45	1,23

Condensing temperature = 30,0°C

Refrigerating capacity	kW	1,90	1,37
Power input	kW	1,465	1,244
COP		1,30	1,10

Condensing temperature = 35,0°C

Refrigerating capacity	kW	1,73	1,24
Power input	kW	1,498	1,269
COP		1,16	0,97

Condensing temperature = 40,0°C

Refrigerating capacity	kW	1,57	1,12
Power input	kW	1,541	1,304
COP		1,02	0,86

Condensing temperature = 45,0°C

Refrigerating capacity	kW	1,43	-
Power input	kW	1,596	-
COP		0,89	-

Condensing temperature = 50,0°C

Refrigerating capacity	kW	1,29	-
Power input	kW	1,665	-
COP		0,77	-

Condensing temperature = 55,0°C

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

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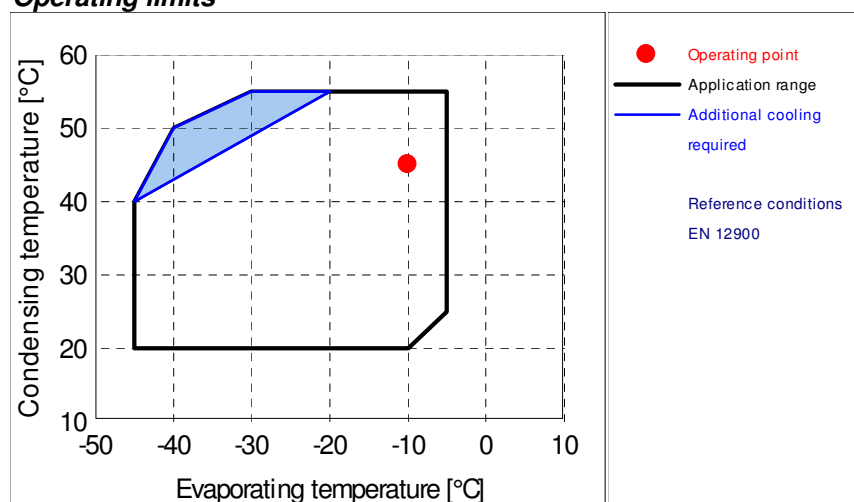
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Legend:

Additional cooling required

Operating limits



Compressor: D2-13.1Y

Refrigerant: R404A

Electrical supply: STANDARD

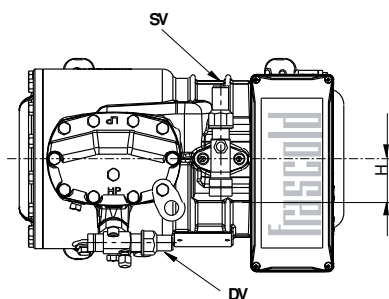
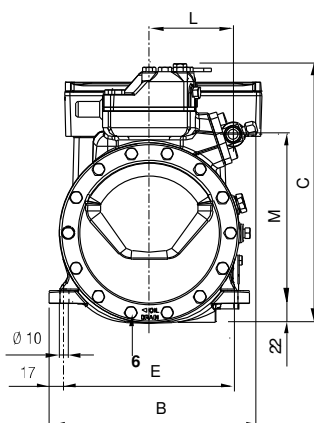
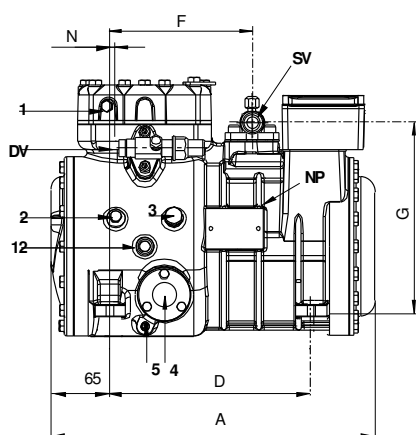
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Legend:

Additional cooling required

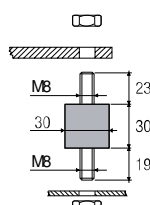
Dimensions



Supporto antivibrante

Vibration absorber

Vibrationsabsorber



D

Legend:

Suction Valve	Ḃ22,2 mm
Discharge valve	Ḃ15,8 mm
A: Length	369mm
B: Width	242mm
C: Height	294mm
D: Base mounting	234mm
E: Base mounting	194mm
F: Suction Valve	165mm
G: Suction Valve	221mm
H: Suction Valve	42mm
L: Discharge valve	94mm
M: Discharge valve	192mm
N: Discharge valve	13mm
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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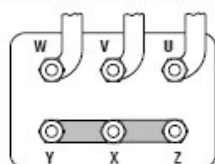
Additional cooling required

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	13,15 ml/h
Number of pistons	2
Net weight	45 kg
Lubricant	FRASCOLD POE32
Oil charge	1,2 l
Locked rotor current (LRA)	35,9 A
Maximum allowed operating current (MRA)	7,1 A
Sound power level -10/45°C R404A @50Hz	66,5 dB(A)
Sound power level -35/40°C R404A @50Hz	69,0 dB(A)

Motor connections

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



400V
3Ph
50Hz
DOL-STAR

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Characteristics

Polynomial coefficients according to EN 12900

Coefficient	Refrigerating capacity	Power input	Mass flow
C1	1,83536E+04	1,62383E+03	9,81845E-02
C2*S	6,14803E+02	-3,75232E+01	3,49826E-03
C3*D	-2,11454E+02	4,35996E+01	-3,44561E-04
C4*S _c	6,78795E+00	-1,52675E+00	4,49032E-05
C5*S*D	-5,89618E+00	1,62909E+00	-7,09549E-06
C6*D _c	4,73452E-01	-5,87615E-02	-9,55763E-07
C7*S _i	2,20081E-02	-1,05491E-02	2,12637E-07
C8*S _c *D	-4,88999E-02	1,58019E-02	-4,70089E-08
C9*S*D _c	2,30425E-03	6,18067E-04	-2,22006E-08
C10*D _i	-1,48967E-03	2,64288E-03	1,32471E-08
Reference conditions:	Ambient temperature:		32,0 °C
	Suction gas temperature:		20,0 °C
	Liquid subcooling:		0,0 K
	Nominal operating frequency:		50 Hz

Accessories

Accessories	Model	Technical data	
1 Motor protector	ECA01	230V AC	
2 Rubber damper	T00SSA1	30X30 45SH M8 A-B-C	
1 Crankcase heater	T00CH13 A-D	230V	optional
2 Head fan	SZ_FM1 (standard cooling)	230V - 1ph - 50/60 Hz	optional
3 Motor protector INT69 DIAGNOSE	T00ECA01D	115V-230V 50/60 Hz	optional
4 USB adpter for INT69 DIAGNOSE	T00EC57		optional