



Selection: Semi-hermetic Reciprocating Compressors

Input Values

Compressor model Mode	4FE-35Y Refrigeration and Air conditioning	Suction gas temperature Operating mode	20,00 °C Auto
Refrigerant	R404A	Power supply	400V-3-50Hz
Reference temperature	Dew point temp.	Capacity control	100%
Liq. subc. (in condenser)	0 K	Useful superheat	100%

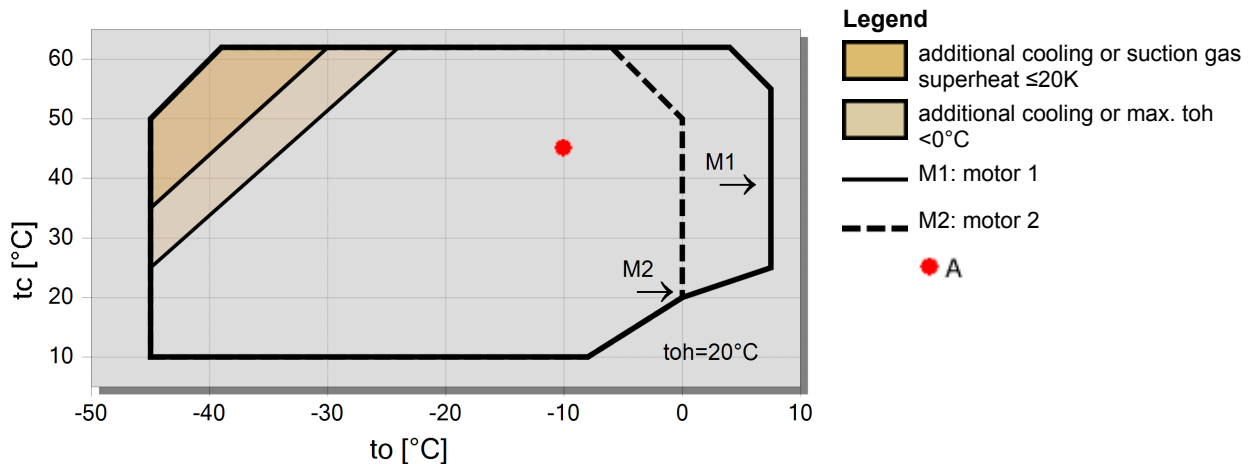
Result

Q [W]	Cooling capacity	COP [-]	COP/EER
Qu* [W]	Evaporator capacity	m [kg/h]	Mass flow
P [kW]	Power input	Op.	Operating mode
I [A]	Current	th [°C]	Discharge gas temp. w/o cooling
Qc [W]	Condenser capacity		

tc	to	15°C	5°C	-5°C	-15°C	-25°C	-35°C	-45°C	-55°C
30°C	Q [W]	--	117055	81987	55630	36058	21827	11772	--
	Qu* [W]	--	117055	81987	55630	36058	21827	11772	--
	P [kW]	--	22,3	20,8	18,36	15,17	11,67	8,24	--
	I [A]	--	39,2	37,1	33,5	29,1	24,7	21,2	--
	Qc [W]	--	139323	102836	73987	51230	33500	20013	--
	COP [-]	--	5,26	3,93	3,03	2,38	1,87	1,43	--
	m [kg/h]	--	3018	2060	1372	878	527	282	--
	Op.	--	Standard	Standard	Standard	Standard	Standard	Standard	--
	th [°C]	--	56,8	69,0	82,2	96,8	114,3	138,1	--
40°C	Q [W]	--	99809	69973	47359	30440	18034	9170	--
	Qu* [W]	--	99809	69973	47359	30440	18034	9170	--
	P [kW]	--	26,6	24,0	20,4	16,28	12,03	8,01	--
	I [A]	--	45,8	41,7	36,4	30,6	25,2	21,0	--
	Qc [W]	--	126430	93932	67745	46724	30066	17179	--
	COP [-]	--	3,75	2,92	2,32	1,87	1,50	1,14	--
	m [kg/h]	--	2909	1981	1313	832	488	246	--
	Op.	--	Standard	Standard	Standard	Standard	Standard	Standard	--
	th [°C]	--	67,7	79,9	93,1	107,8	125,3	0	--
50°C	Q [W]	--	82010	57590	38853	24676	14143	6472	--
	Qu* [W]	--	82010	57590	38853	24676	14143	6472	--
	P [kW]	--	30,4	26,5	21,9	16,95	11,99	7,42	--
	I [A]	--	51,6	45,6	38,7	31,5	25,1	20,5	--
	Qc [W]	--	112414	84130	60783	41629	26133	13893	--
	COP [-]	--	2,70	2,17	1,77	1,46	1,18	0,87	--
	m [kg/h]	--	2782	1889	1244	777	440	199,8	--
	Op.	--	Standard	Standard	Standard	Standard	Standard	Standard	--
	th [°C]	--	78,9	91,1	104,1	118,7	136,7	0	--

-- No calculation possible (see message in single point selection)
 *According to EN12900 (20°C suction gas temp., 0K liquid subcooling)

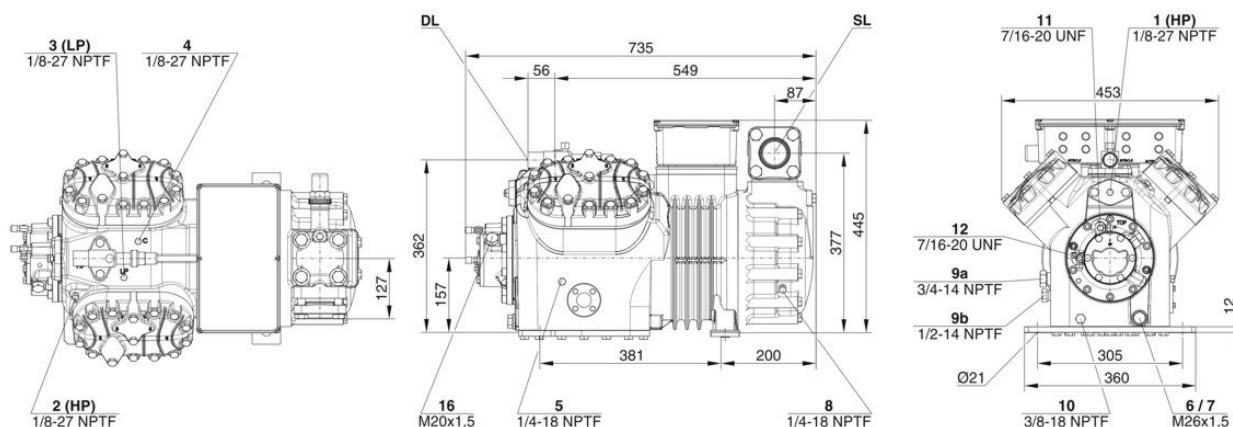
Application Limits 100% 4FE-35





Technical Data: 4FE-35Y

Dimensions and Connections



Technical Data

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Displacement (1450 RPM 50Hz)	101,8 m³/h
Displacement (1750 RPM 60Hz)	121,3 m³/h
No. of cylinder x bore x stroke	4 x 82 mm x 55 mm
Weight	207 kg
Max. pressure (LP/HP)	19 / 32 bar
Connection suction line	54 mm - 2 1/8"
Connection discharge line	28 mm - 1 1/8"
Oil type R134a/R407C/R404A/R507A/R407A/R407F	BSE32(Standard) R134a tc>70°C: BSE55 (Option)
Oil type R22 (R12/R502)	B5.2(Option)
Oil type R1234yf/R1234ze	BSE32 (Standard) R1234ze tc>70°C & to>0°C: BSE55 (Option) R1234ze to>15°C: BSE85K (Option)

Motor data

Motor version	1
Motor voltage (more on request)	380-420V PW-3-50Hz
Max operating current	62.1 A
Winding ratio	50/50
Starting current (Rotor locked)	141.0 A Y / 233.0 A YY
Max. Power input	35,0 kW

Extent of delivery (Standard)

Motor protection	SE-B2, CM-RC-01(Option)
Enclosure class	IP54 (Standard), IP66 (Option)
Vibration dampers	Standard
Oil charge	4,50 dm³
Discharge shut-off valve	Standard
Suction shut-off valve	Standard

Available Options

Discharge gas temperature sensor	Option
Start unloading	Option
Capacity control	100-50% (Option)
Capacity Control - infinite	100-10% (Option)
Additional fan	Option
Oil service valve	Option
Crankcase heater	140 W (Option)
Oil pressure monitoring	MP54 (Option), Delta-PII

Sound measurement

Sound power level (+5°C / 50°C)	81,5 dB(A) @50Hz
Sound power level (-10°C / 45°C)	81,0 dB(A) @50Hz
Sound power level (-35°C / 40°C)	86,5 dB(A) @50Hz
Sound pressure level @ 1m (+5°C / 50°C)	73,5 dB(A) @50Hz
Sound pressure level @ 1m (-10°C / 45°C)	73 dB(A) @50Hz
Sound pressure level @ 1m (-35°C / 40°C)	78,5 dB(A) @50Hz
Sound power level (+5°C / 50°C) R134a	79,5 dB(A) @50Hz
Sound power level (-10°C / 45°C) R134a	79 dB(A) @50Hz
Sound pressure level @ 1m (+5°C / 50°C) R134a	71,5 dB(A) @50Hz
Sound pressure level @ 1m (-10°C / 45°C) R134a	71 dB(A) @50Hz