



Selection: Semi-hermetic Reciprocating Compressors

Input Values

Compressor model Mode	(4V-10.2Y) 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%

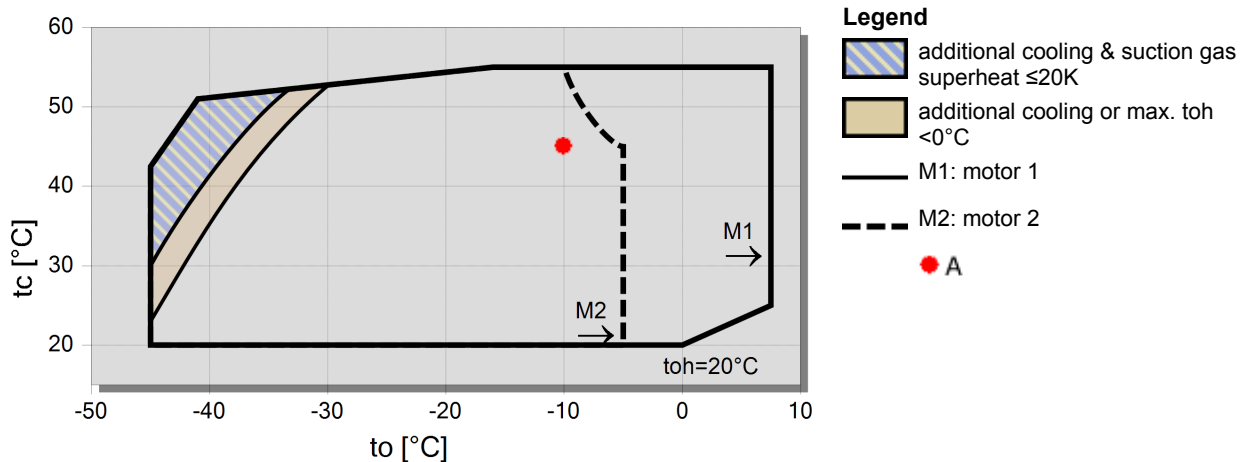
Result

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	10°C	0°C	-10°C	-20°C	-30°C	-40°C	-50°C	-60°C
30°C	Q [W]	--	31111	21314	13993	8617	4769	--	--
	Qu* [W]	--	31111	21314	13993	8617	4769	--	--
	P [kW]	--	6,76	6,13	5,33	4,31	3,06	--	--
	I [A]	--	12,52	11,67	10,61	9,38	8,08	--	--
	Qc [W]	--	37867	27447	19320	12928	7829	--	--
	COP [-]	--	4,60	3,48	2,63	2,00	1,56	--	--
	m [kg/h]	--	791	530	343	209	114,7	--	--
	Op.	--	Standard	Standard	Standard	Standard	Standard	--	--
	th [°C]	--	62,3	75,1	90,3	108,7	129,6	--	--
	40°C	Q [W]	--	26764	18212	11800	7088	3725	--
Qu* [W]		--	26764	18212	11800	7088	3725	--	--
P [kW]		--	7,84	6,93	5,79	4,46	2,99	--	--
I [A]		--	14,05	12,76	11,21	9,55	8,02	--	--
Qc [W]		--	34601	25143	17590	11550	6716	--	--
COP [-]		--	3,42	2,63	2,04	1,59	1,25	--	--
m [kg/h]		--	768	510	325	192,7	100,4	--	--
Op.		--	Standard	Standard	Standard	Standard	Standard	--	--
th [°C]		--	72,6	85,9	101,4	119,9	0	--	--
50°C		Q [W]	--	21986	14852	9470	5503	2669	--
	Qu* [W]	--	21986	14852	9470	5503	2669	--	--
	P [kW]	--	8,97	7,69	6,18	4,60	3,09	--	--
	I [A]	--	15,70	13,83	11,73	9,72	8,10	--	--
	Qc [W]	--	30951	22538	15653	10103	5756	--	--
	COP [-]	--	2,45	1,93	1,53	1,20	0,86	--	--
	m [kg/h]	--	732	481	301	172,2	82,7	--	--
	Op.	--	Standard	Standard	Standard	Standard	Standard	--	--
	th [°C]	--	84,3	98,1	114,1	134,6	0	--	--

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

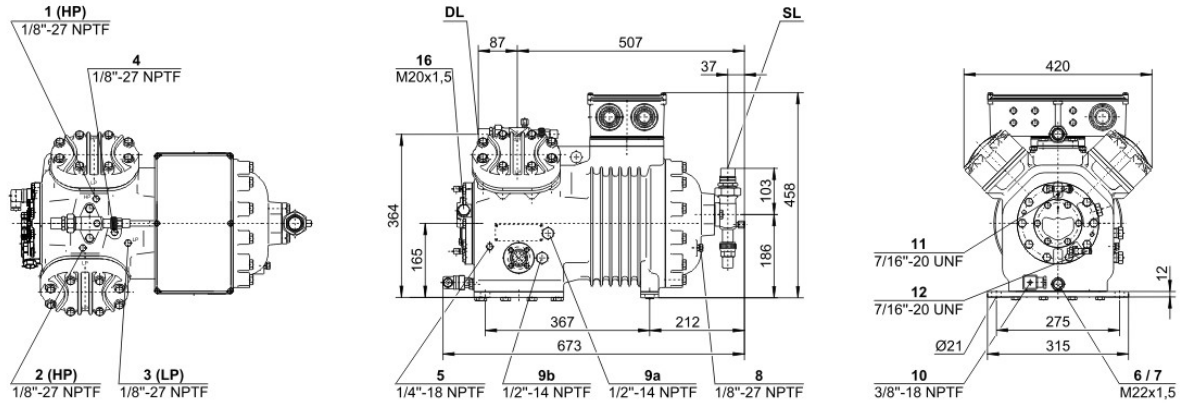
Application Limits 100% 4V-10.2





Technical Data: (4V-10.2Y)

Dimensions and Connections



Technical Data

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Displacement (1450 RPM 50Hz)	33,07 m ³ /h
Displacement (1750 RPM 60Hz)	39,91 m ³ /h
No. of cylinder x bore x stroke	4 x 55 mm x 40 mm
Weight	142 kg
Max. pressure (LP/HP)	19 / 28 bar
Connection suction line	28 mm - 1 1/8"
Connection discharge line	22 mm - 7/8"
Connection cooling water	R 1/2"
Oil type R134a/R407C/R404A/R507A/R407A/R407F	tc<55°C: BSE32 tc>55°C: BSE55 (Option)
Oil type R22 (R12/R502)	B5.2 (Standard)
Oil type R290/R1270	SHC226E (Standard)

Motor data

Motor voltage (more on request)	380-420V PW-3-50Hz
Max operating current	21.0 A
Winding ratio	50/50
Starting current (Rotor locked)	59.0 A Y / 99.0 A YY
Max. Power input	11,3 kW

Extent of delivery (Standard)

Motor protection	SE-B2
Enclosure class	IP54 (Standard), IP66 (Option)
Vibration dampers	Standard
Oil charge	3,00 dm ³

Available Options

Connection suction line	Option
Discharge shut-off valve	Option
Discharge gas temperature sensor	Option
Start unloading	Option
Capacity control	100-50% (Option)
Additional fan	Option
Water-cooled cylinder heads	Option
Oil service valve	Option
Crankcase heater	100 W (Option)
Oil pressure monitoring	MP54 (Option), Delta-PII (Option, not for R290/R1270)

Sound measurement

Sound power level (+5°C / 50°C)	73,5 dB(A) @ 50Hz
Sound power level (-10°C / 45°C)	74,5 dB(A) @ 50Hz
Sound power level (-35°C / 40°C)	(80,5) dB(A) @ 50Hz
Sound pressure level @ 1m (+5°C / 50°C)	65,5 dB(A) @ 50Hz
Sound pressure level @ 1m (-10°C / 45°C)	66,5 dB(A) @ 50Hz
Sound pressure level @ 1m (-35°C / 40°C)	(72,5) dB(A) @ 50Hz