



Selection: Semi-hermetic Reciprocating Compressors

Input Values

Compressor model Mode	(4TC-8.2Y) 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%

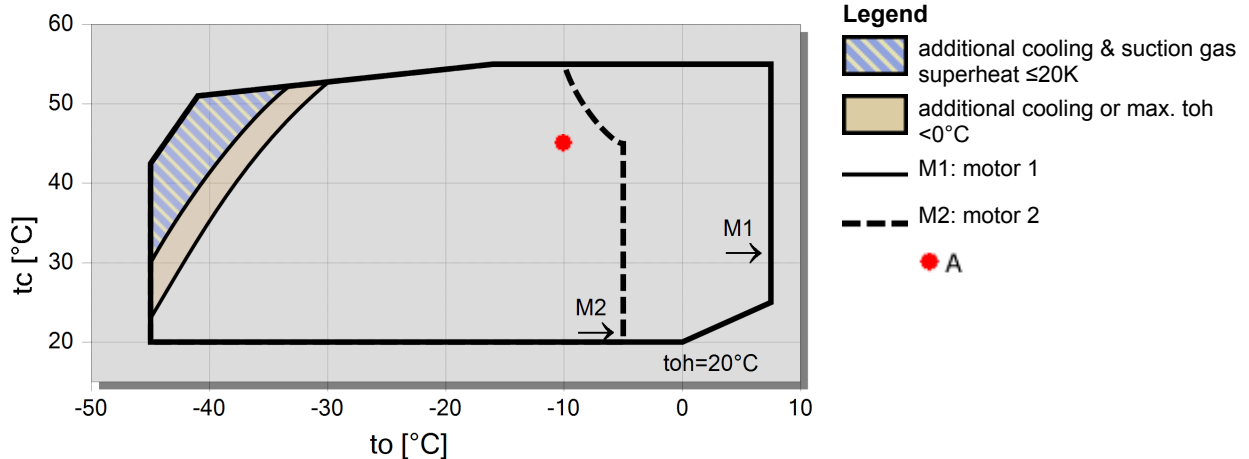
Result

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	5°C	-5°C	-15°C	-25°C	-35°C	-45°C	-55°C	-65°C
30°C	Q [W]	--	33051	22218	14166	8302	4150	--	--
	Qu* [W]	--	33051	22218	14166	8302	4150	--	--
	P [kW]	--	8,74	7,55	6,16	4,64	3,07	--	--
	I [A]	--	14,96	13,14	11,07	8,94	6,99	--	--
	Qc [W]	--	41789	29766	20326	12947	7223	--	--
	COP [-]	--	3,78	2,94	2,30	1,79	1,35	--	--
	m [kg/h]	--	830	548	345	200	99,5	--	--
	Op.	--	Standard	Standard	Standard	Standard	Standard	--	--
	th [°C]	--	70,3	83,5	98,8	117,6	0	--	--
40°C	Q [W]	--	27759	18477	11559	6520	2959	--	--
	Qu* [W]	--	27759	18477	11559	6520	2959	--	--
	P [kW]	--	9,86	8,20	6,46	4,66	2,81	--	--
	I [A]	--	16,69	14,14	11,52	8,96	6,70	--	--
	Qc [W]	--	37624	26680	18020	11178	5773	--	--
	COP [-]	--	2,81	2,25	1,79	1,40	1,05	--	--
	m [kg/h]	--	786	512	316	176,4	79,5	--	--
	Op.	--	Standard	Standard	Standard	Standard	Standard	--	--
	th [°C]	--	81,4	94,7	110,6	130,9	0	--	--
50°C	Q [W]	--	--	14792	9065	4879	--	--	--
	Qu* [W]	--	--	14792	9065	4879	--	--	--
	P [kW]	--	--	8,71	6,65	4,55	--	--	--
	I [A]	--	--	14,91	11,80	8,81	--	--	--
	Qc [W]	--	--	23498	15715	9430	--	--	--
	COP [-]	--	--	1,70	1,36	1,07	--	--	--
	m [kg/h]	--	--	474	285	151,8	--	--	--
	Op.	--	--	Standard	Standard	Standard	--	--	--
	th [°C]	--	--	106,4	123,3	0	--	--	--

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

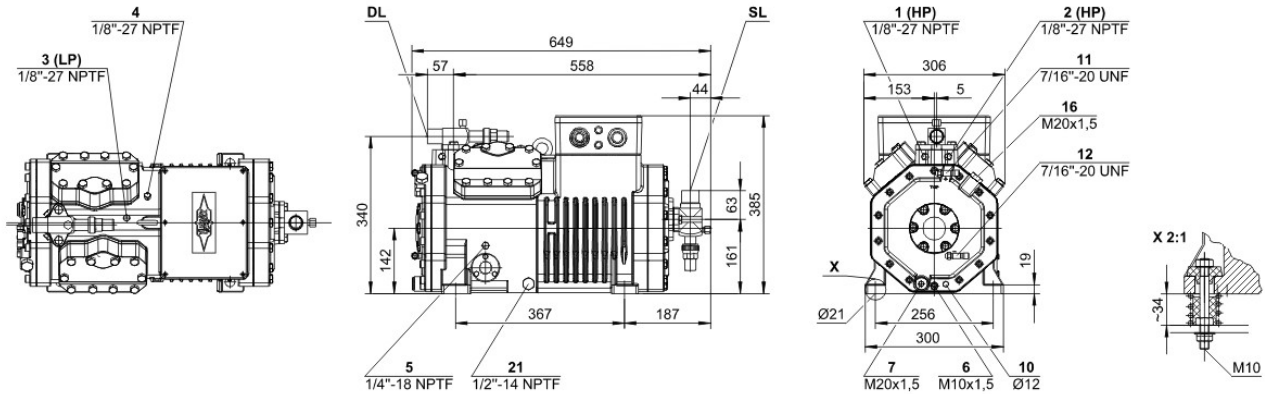
Application Limits 100% 4TC-8.2





Technical Data: (4TC-8.2Y)

Dimensions and Connections



Technical Data

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Displacement (1450 RPM 50Hz)	41,33 m ³ /h
Displacement (1750 RPM 60Hz)	49,88 m ³ /h
No. of cylinder x bore x stroke	4 x 60 mm x 42 mm
Weight	137 kg
Max. pressure (LP/HP)	19 / 28 bar
Connection suction line	35 mm - 1 3/8"
Connection discharge line	28 mm - 1 1/8"
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	17.0 A
Winding ratio	50/50
Starting current (Rotor locked)	49.0 A Y / 81.0 A YY
Max. Power input	10,3 kW

Extent of delivery (Standard)

Motor protection	SE-B1
Enclosure class	IP65
Vibration dampers	Standard
Oil charge	2,60 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
CIC System	Option
Oil service valve	Option
Crankcase heater	0..140 W PTC (Option)
Oil pressure monitoring	MP54 (Option), Delta-PII (Option, not for R290/R1270)

Sound measurement

Sound power level (-10°C / 45°C)	74,5 dB(A) @ 50Hz
Sound power level (-35°C / 40°C)	79,0 dB(A) @ 50Hz
Sound pressure level @ 1m (-10°C / 45°C)	66,5 dB(A) @ 50Hz
Sound pressure level @ 1m (-35°C / 40°C)	71,0 dB(A) @ 50Hz