



## Selection: Semi-hermetic Reciprocating Compressors

### Input Values

Compressor model	(6F-40.2Y)	Suction gas temperature	20,00 °C
Mode	Refrigeration and Air conditioning	Operating mode	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

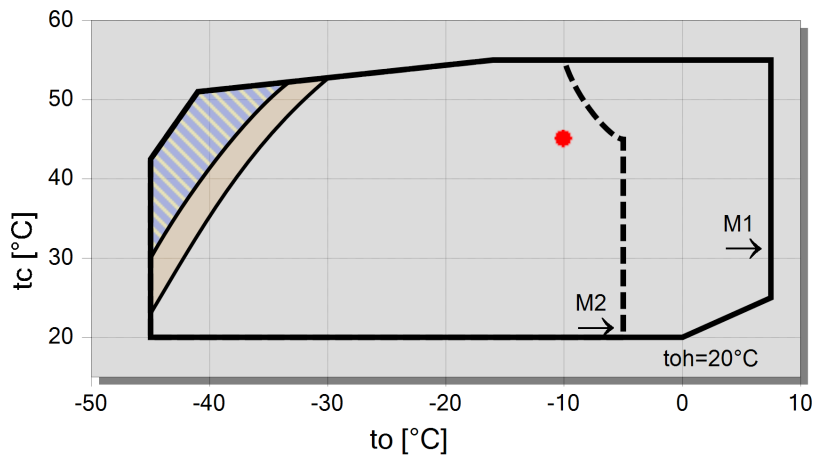
Q [W]	Cooling capacity	COP [ - ]	COP/EER
Qu* [W]	Evaporator capacity	m [kg/h]	Mass flow
P [kW]	Power input	Op.	Operating mode
I [A]	Current	th [°C]	Discharge gas temp. w/o cooling
Qc [W]	Condenser capacity		

tc	to	5°C	-5°C	-15°C	-25°C	-35°C	-45°C	-55°C	-65°C
30°C	Q [W]	--	118731	80128	51411	30468	15597	--	--
	Qu* [W]		118731	80128	51411	30468	15597		
	P [kW]		31,5	27,7	22,8	17,34	11,63		
	I [A]		56,9	51,9	45,6	39,0	33,3		
	Qc [W]		150191	107814	74247	47809	27229		
	COP [ - ]		3,77	2,89	2,25	1,76	1,34		
	m [kg/h]		2983	1976	1252	735	374		
	Op.		Standard	Standard	Standard	Standard	Standard		
	th [°C]		70,4	84,2	100,0	118,9	0		
40°C	Q [W]	--	100899	67634	42783	24607	11677	--	--
	Qu* [W]		100899	67634	42783	24607	11677		
	P [kW]		36,0	30,6	24,4	17,73	11,14		
	I [A]		63,2	55,8	47,5	39,4	32,9		
	Qc [W]		136897	98223	67137	42334	22817		
	COP [ - ]		2,80	2,21	1,76	1,39	1,05		
	m [kg/h]		2856	1876	1169	666	314		
	Op.		Standard	Standard	Standard	Standard	Standard		
	th [°C]		81,5	95,6	111,8	131,6	0		
50°C	Q [W]	--	--	55295	34324	18984	--	--	--
	Qu* [W]			55295	34324	18984			
	P [kW]			33,1	25,5	17,76			
	I [A]			59,1	49,0	39,5			
	Qc [W]			88368	59812	36746			
	COP [ - ]			1,67	1,35	1,07			
	m [kg/h]			1771	1081	591			
	Op.			Standard	Standard	Standard			
	th [°C]			107,3	124,2	0			






-- No calculation possible (see message in single point selection)

\*According to EN12900 (20°C suction gas temp., 0K liquid subcooling)

## Application Limits 100% 6F-40.2



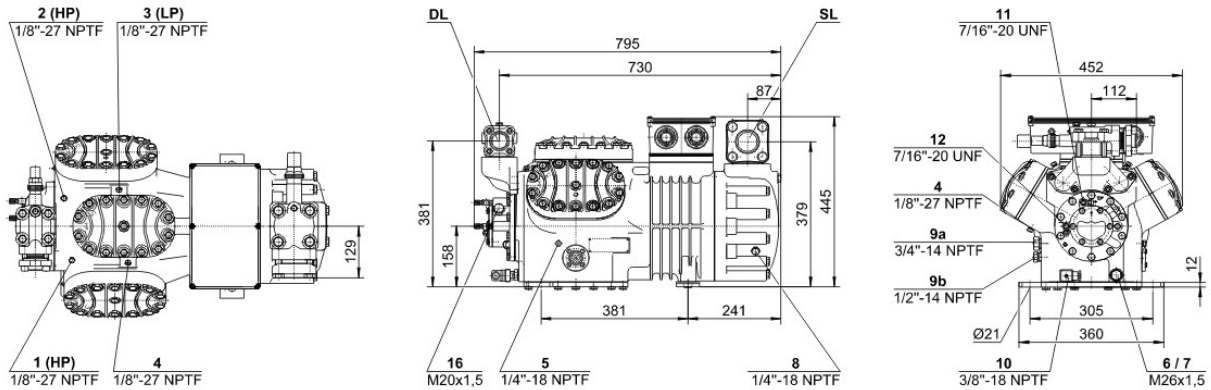
**Legend**

-  additional cooling & suction gas superheat  $\leq 20K$
-  additional cooling or max. toh  $< 0^\circ C$
-  M1: motor 1
-  M2: motor 2
-  A



## Technical Data: (6F-40.2Y)

### Dimensions and Connections



### Technical Data

#### Technical Data

Displacement (1450 RPM 50Hz)	151,6 m <sup>3</sup> /h
Displacement (1750 RPM 60Hz)	183,0 m <sup>3</sup> /h
No. of cylinder x bore x stroke	6 x 82 mm x 55 mm
Weight	239 kg
Max. pressure (LP/HP)	19 / 28 bar
Connection suction line	54 mm - 2 1/8"
Connection discharge line	42 mm - 1 5/8"
Connection cooling water	R 3/4"
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	78.0 A
Winding ratio	50/50
Starting current (Rotor locked)	180.0 A Y / 323.0 A YY
Max. Power input	38,6 kW

#### Extent of delivery (Standard)

Motor protection	SE-B2
Enclosure class	IP54 (Standard), IP66 (Option)
Vibration dampers	Standard
Oil charge	4,75 dm <sup>3</sup>

#### Available Options

Connection suction line	Option
Discharge shut-off valve	Option
Discharge gas temperature sensor	Option
Start unloading	Option
Capacity control	100-66-33% (Option)
Additional fan	Option
Water-cooled cylinder heads	Option
CIC System	Option
Oil service valve	Option
Crankcase heater	140 W (Option)
Oil pressure monitoring	MP54 (Option), Delta-PII (Option, not for R290/R1270)

#### Sound measurement

Sound power level (-10°C / 45°C)	83,0 dB(A) @ 50Hz
Sound power level (-35°C / 40°C)	91,5 dB(A) @ 50Hz
Sound pressure level @ 1m (-10°C / 45°C)	75,0 dB(A) @ 50Hz