



### Compressor Selection: Semi-hermetic Screw Compressors HS

#### Input Values

Compressor model	HSK7461-80	Operating mode	Standard
Refrigerant	R404A	Power supply	400V-3-50Hz
Reference temperature	Dew point temp.	Useful superheat	100%
Liq. subc. (in condenser)	0 K	Additional cooling	Automatic
Suct. gas superheat	10,00 K	Max. discharge gas temp.	80,0 °C

#### Result

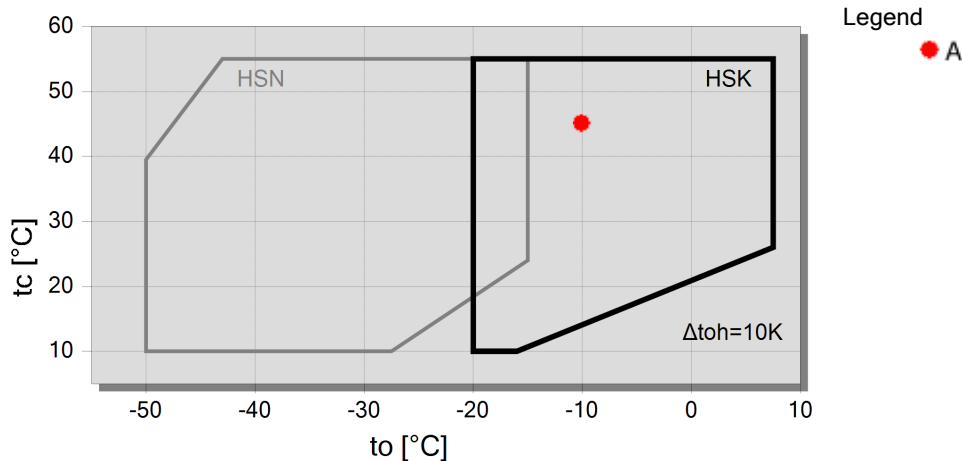
Q [W]	Cooling capacity	mHP [kg/h]	Mass flow HP
P [kW]	Power input	Qac [kW]	Additional cooling
I [A]	Current	tcu [°C]	Liquid temp.
COP [-]	COP/EER	pm [bar(a)]	ECO pressure
mLP [kg/h]	Mass flow LP	Qsc [kW]	sub cooler capacity (ECO)

tc	to	10°C	5°C	0°C	-5°C	-10°C	-15°C	-20°C	-25°C
30°C	Q [W]	--	276426	230444	190728	156569	127328	102436	--
	P [kW]	--	47,4	46,5	45,9	45,4	44,9	44,3	--
	I [A]	--	76,8	75,5	74,6	73,8	73,1	72,2	--
	COP [-]	--	5,83	4,95	4,15	3,45	2,84	2,31	--
	mLP [kg/h]	--	7392	6291	5320	4468	3720	3068	--
	mHP [kg/h]	--	7392	6291	5320	4468	3720	3068	--
	Qac [kW]	--	--	--	--	--	--	--	--
	tcu [°C]	--	29,6	29,6	29,6	29,6	29,6	29,6	--
	pm [bar(a)]	--	--	--	--	--	--	--	--
	Qsc [kW]	--	--	--	--	--	--	--	--
40°C	Q [W]	--	236732	196600	162045	132431	107182	85786	--
	P [kW]	--	58,3	57,7	57,1	56,6	55,9	55,2	--
	I [A]	--	93,1	92,2	91,3	90,5	89,5	88,4	--
	COP [-]	--	4,06	3,41	2,84	2,34	1,92	1,55	--
	mLP [kg/h]	--	7192	6115	5166	4333	3603	2967	--
	mHP [kg/h]	--	7192	6115	5166	4333	3603	2967	--
	Qac [kW]	--	--	--	--	--	--	--	--
	tcu [°C]	--	39,6	39,6	39,6	39,6	39,6	39,6	--
	pm [bar(a)]	--	--	--	--	--	--	--	--
	Qsc [kW]	--	--	--	--	--	--	--	--
50°C	Q [W]	--	194482	160443	131235	106299	85131	67279	--
	P [kW]	--	72,2	71,8	71,2	70,6	69,8	69,0	--
	I [A]	--	113,9	113,3	112,4	111,4	110,3	109,1	--
	COP [-]	--	2,69	2,23	1,84	1,51	1,22	0,97	--
	mLP [kg/h]	--	6926	5873	4946	4131	3417	2794	--
	mHP [kg/h]	--	6926	5873	4946	4131	3417	2794	--
	Qac [kW]	--	--	--	--	8,34	15,55	22,4	--
	tcu [°C]	--	49,7	49,7	49,7	49,7	49,7	49,7	--
	pm [bar(a)]	--	--	--	--	--	--	--	--
	Qsc [kW]	--	--	--	--	--	--	--	--

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

\*According to EN12900 (10K suction gas superheat, 0K liquid subcooling)

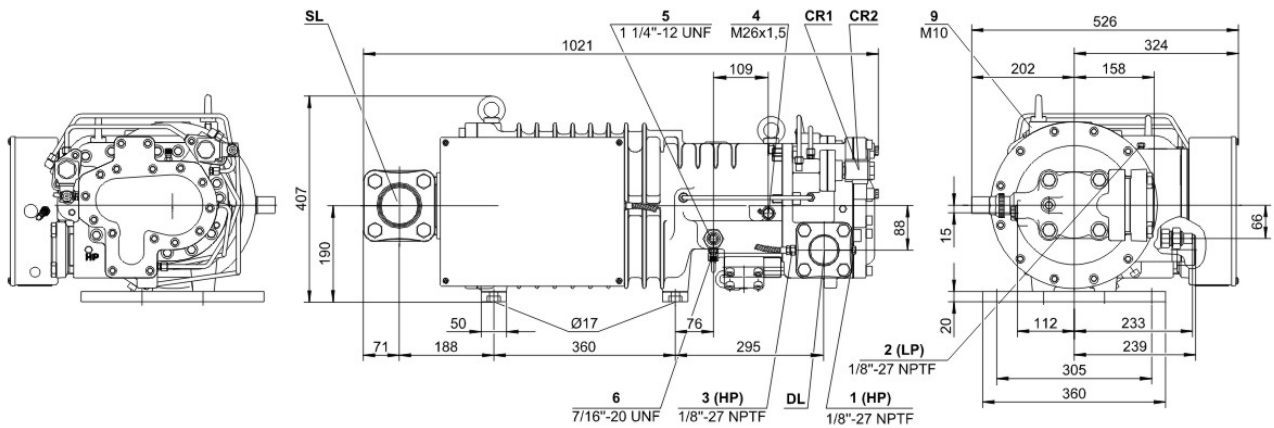
#### Application Limits Standard





## Technical Data: HSK7461-80

### Dimensions and Connections



### Technical Data

#### Technical Data

Displacement (2900 RPM 50 Hz)	220 m <sup>3</sup> /h
Displacement (3500 RPM 60 Hz)	266 m <sup>3</sup> /h
Weight	314 kg
Max. pressure (LP/HP)	19 / 28 bar
Connection suction line	76 mm - 3 1/8"
Connection discharge line	54 mm - 2 1/8"
Adapter/shut-off valve for ECO	22 mm - 7/8" (Option)
Adapter for liquid injection	16 mm - 5/8" (Option)
Oil type R22	B150SH, B100 (Option)
Oil type	BSE170 (Option)
R134a/R404A/R507A/R407A/R407F/R448A/R449A	

#### Motor data

Motor voltage (more on request)	380-415V PW-3-50Hz
Max operating current	144.0 A
Starting current (Rotor locked)	350.0 A D / 585.0 A DD
Max. Power input	85,0 kW

#### Extent of delivery (Standard)

Discharge gas temperature sensor	Standard
Start unloading	Standard
Oil flow control	SE-B2 (Standard)
Motor protection	SE-E1 (Standard), INT69VSY-II(Standard for 660-690V)
Suction shut-off valve	Standard
Capacity control	100-75-50% (Standard)
Enclosure class	IP54

#### Available Options

Discharge shut-off valve	Option
ECO connection with shut-off valve	Option
Motor protection	SE-C1 (Option)

#### Sound measurement

Sound power level (-10°C / 45°C)	86,5 dB(A)
Sound pressure level @ 1m (-10°C / 45°C)	78,5 dB(A)