



## Compressor Selection: Semi-hermetic Screw Compressors HS

### Input Values

Compressor model	HSK7471-90	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

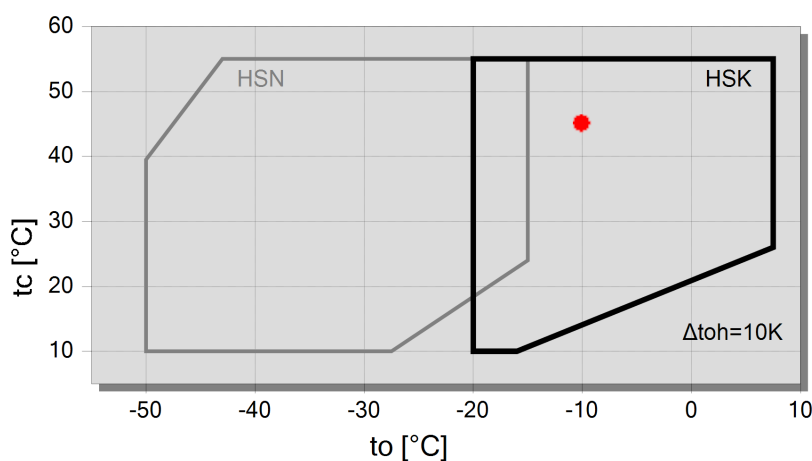
Q [W]	Cooling capacity	mHP [kg/h]	Mass flow HP
P [kW]	Power input	Qac [kW]	Additional cooling
I [A]	Current	tcu [°C]	Liquid temp.
COP [-]	COP/EER	pm [bar(a)]	ECO pressure
mLP [kg/h]	Mass flow LP	Qsc [kW]	sub cooler capacity (ECO)

tc	to	10°C	5°C	0°C	-5°C	-10°C	-15°C	-20°C	-25°C
30°C	Q [W]	--	299426	249994	207249	170430	138854	111909	--
	P [kW]	--	56,3	54,6	53,0	51,4	50,0	48,8	--
	I [A]	--	97,5	95,1	92,8	90,7	88,7	87,0	--
	COP [-]	--	5,32	4,58	3,91	3,31	2,78	2,29	--
	mLP [kg/h]	--	8007	6824	5781	4863	4057	3351	--
	mHP [kg/h]	--	8007	6824	5781	4863	4057	3351	--
	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]	--	258678	215045	177388	145021	117322	93740	--
	P [kW]	--	67,2	65,5	63,9	62,4	61,0	59,8	--
	I [A]	--	112,9	110,6	108,3	106,1	104,1	102,3	--
	COP [-]	--	3,85	3,28	2,77	2,32	1,92	1,57	--
	mLP [kg/h]	--	7859	6689	5655	4745	3944	3242	--
	mHP [kg/h]	--	7859	6689	5655	4745	3944	3242	--
	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]	--	213191	175847	143719	116200	92741	72854	--
	P [kW]	--	81,0	79,4	77,9	76,4	75,0	73,6	--
	I [A]	--	133,6	131,2	128,9	126,6	124,5	122,4	--
	COP [-]	--	2,63	2,21	1,85	1,52	1,24	0,99	--
	mLP [kg/h]	--	7592	6437	5417	4516	3723	3026	--
	mHP [kg/h]	--	7592	6437	5417	4516	3723	3026	--
	Qac [kW]	--	--	--	--	8,41	15,88	23,0	--
	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

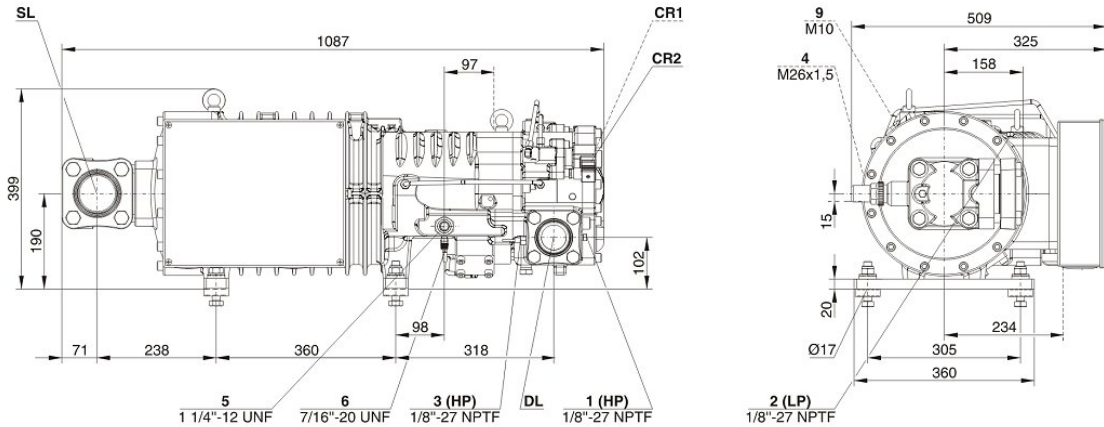


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● A



## Technical Data: HSK7471-90

### Dimensions and Connections



### Technical Data

#### Technical Data

Displacement (2900 RPM 50 Hz)	250 m <sup>3</sup> /h
Displacement (3500 RPM 60 Hz)	302 m <sup>3</sup> /h
Weight	336 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	162.0 A
Starting current (Rotor locked)	423.0 A D / 686.0 A DD
Max. Power input	92,0 kW

#### Extent of delivery (Standard)

Discharge gas temperature sensor	Standard
Start unloading	Standard
Oil flow control	SE-B2 (Standard)
Motor protection	SE-E1 (Standard), SE-E3 (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)	87,0 dB(A)
Sound pressure level @ 1m (-10°C / 45°C)	79,0 dB(A)



## Compressor Selection: Semi-hermetic Screw Compressors HS

### Input Values

Compressor model	HSK5363-40	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

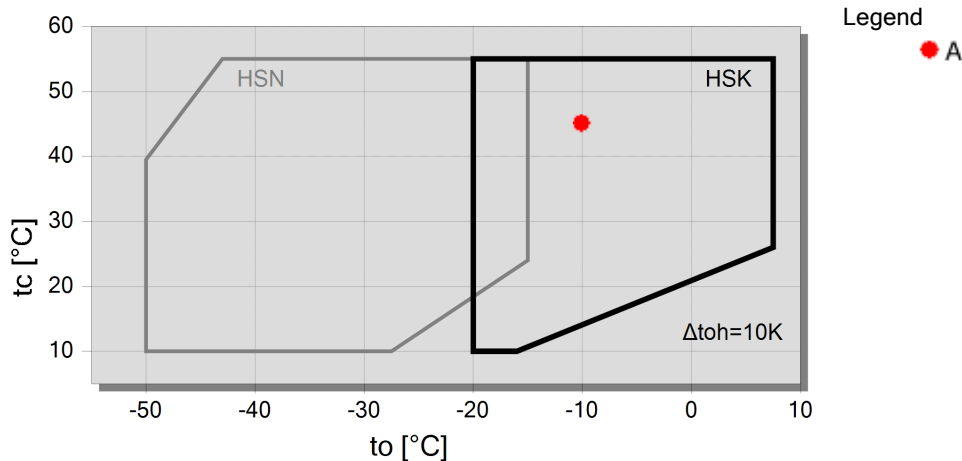
### Result

	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]	--	134357	112161	92968	76437	62259	50162	--
	P [kW]	--	26,6	25,8	25,0	24,3	23,6	23,0	--
	I [A]	--	42,1	40,9	39,7	38,7	37,7	36,8	--
	COP [-]	--	5,05	4,35	3,71	3,15	2,63	2,18	--
	mLP [kg/h]	--	3593	3062	2593	2181	1819	1502	--
	mHP [kg/h]	--	3593	3062	2593	2181	1819	1502	--
	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]	--	116354	96687	79718	65135	52661	42045	--
	P [kW]	--	31,8	31,0	30,3	29,6	28,9	28,3	--
	I [A]	--	49,8	48,6	47,5	46,5	45,5	44,6	--
	COP [-]	--	3,66	3,11	2,63	2,20	1,82	1,49	--
	mLP [kg/h]	--	3535	3007	2541	2131	1770	1454	--
	mHP [kg/h]	--	3535	3007	2541	2131	1770	1454	--
	Qac [kW]	--	--	--	--	--	--	1,35	--
	tcu [°C]	--	39,6	39,6	39,6	39,6	39,6	39,6	--
	pm [bar(a)]	--	--	--	--	--	--	--	--
	Qsc [kW]	--	--	--	--	--	--	--	--
50°C	Q [W]	--	96627	79698	65136	52667	42041	33036	--
	P [kW]	--	38,7	38,0	37,2	36,5	35,8	35,2	--
	I [A]	--	59,9	58,8	57,7	56,7	55,7	54,7	--
	COP [-]	--	2,50	2,10	1,75	1,44	1,17	0,94	--
	mLP [kg/h]	--	3441	2918	2455	2047	1688	1372	--
	mHP [kg/h]	--	3441	2918	2455	2047	1688	1372	--
	Qac [kW]	--	--	--	2,22	5,69	9,03	12,23	--
	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)

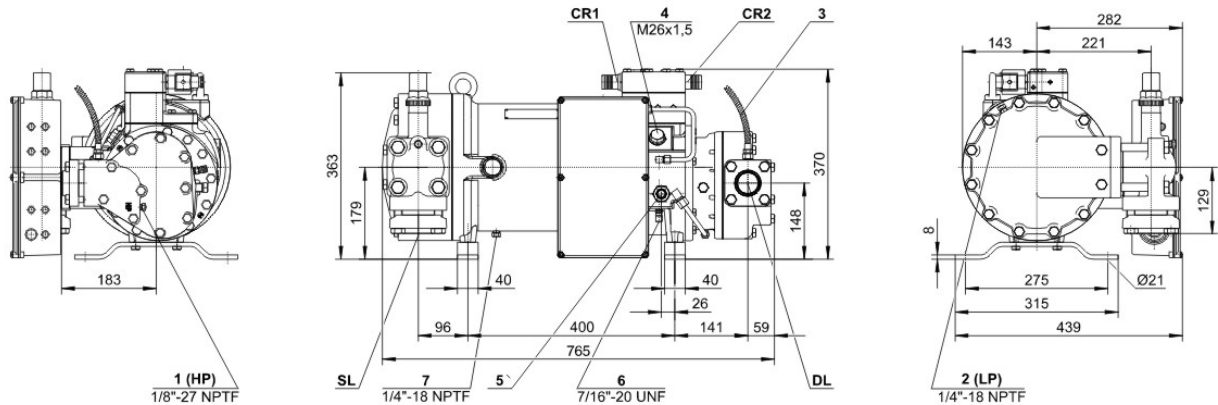
### Application Limits Standard





## Technical Data: HSK5363-40

### Dimensions and Connections



### Technical Data

#### Technical Data

Displacement (2900 RPM 50 Hz)	118 m <sup>3</sup> /h
Displacement (3500 RPM 60 Hz)	142 m <sup>3</sup> /h
Weight	183 kg
Max. pressure (LP/HP)	19 / 28 bar
Connection suction line	54 mm - 2 1/8"
Connection discharge line	42 mm - 1 5/8"
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	66.0 A
Starting current (Rotor locked)	182.0 A D / 311.0 A DD
Max. Power input	42,0 kW

#### Extent of delivery (Standard)

Discharge gas temperature sensor	Standard
Start unloading	Standard
Oil flow control	SE-B2 (Standard)
Motor protection	SE-E1 (Standard), SE-E3 (Standard for 660-690V)
Suction shut-off valve	Standard
Capacity control	100-75-50% (Standard)
Enclosure class	IP54

#### Available Options

Oil flow control	OFC (Option)
Discharge shut-off valve	Option
ECO connection with shut-off valve	Option

#### Sound measurement

Sound power level (-10°C / 45°C)	82,5 dB(A)
Sound pressure level @ 1m (-10°C / 45°C)	74,5 dB(A)