



Selection: Semi-hermetic Reciprocating Compressors

Input Values

Compressor model	2GSL-3K	Suct. gas superheat	10,00 K
Mode	Refrigeration and Air conditioning	Operating mode	Subcritical
Refrigerant	R744	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	-20°C	-25°C	-30°C	-35°C	-40°C	-45°C	-50°C	-55°C
-20°C	Q [W]	--	--	--	11126	8840	6895	5268	--
	Qu* [W]				11126	8840	6895	5268	
	P [kW]				1,40	1,52	1,57	1,55	
	I [A]				4,68	4,76	4,79	4,78	
	Qc [W]				12529	10364	8462	6813	
	COP [-]				7,93	5,80	4,40	3,41	
	m [kg/h]				137,0	109,4	85,8	65,9	
	Op.				Standard	Standard	Standard	Standard	
	th [°C]				21,9	33,6	47,7	64,7	
-10°C	Q [W]	--	14570	11840	9472	7438	5715	4285	--
	Qu* [W]		14570	11840	9472	7438	5715	4285	
	P [kW]		1,68	1,87	1,96	1,97	1,91	1,79	
	I [A]		4,87	5,02	5,10	5,11	5,06	4,96	
	Qc [W]		16245	13707	11433	9409	7626	6079	
	COP [-]		8,70	6,34	4,83	3,77	2,99	2,39	
	m [kg/h]		192,8	157,1	126,2	99,6	77,0	58,1	
	Op.		Standard	Standard	Standard	Standard	Standard	Standard	
	th [°C]		26,0	35,8	47,1	60,5	76,7	96,4	
0°C	Q [W]	15000	12270	9884	7816	6042	4540	--	--
	Qu* [W]	15000	12270	9884	7816	6042	4540		
	P [kW]	2,30	2,46	2,52	2,50	2,39	2,23		
	I [A]	5,41	5,57	5,63	5,61	5,50	5,34		
	Qc [W]	17295	14732	12409	10314	8436	6769		
	COP [-]	6,53	4,98	3,91	3,13	2,52	2,04		
	m [kg/h]	217	177,6	143,6	114,0	88,6	67,0		
	Op.	Standard	Standard	Standard	Standard	Standard	Standard		
	th [°C]	41,0	50,8	62,2	75,5	91,5	111,4		

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

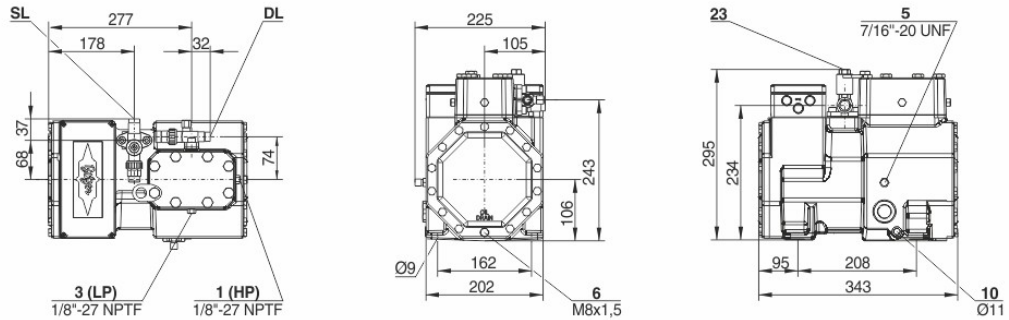
*According to EN12900 (10K suction gas superheat, 0K liquid subcooling)

Application Limits 2GSL-3K



Technical Data: 2GSL-3K

Dimensions and Connections



Technical Data

Technical Data

Displacement (1450 RPM 50Hz)	5,05 m ³ /h
Displacement (1750 RPM 60Hz)	6,1 m ³ /h
No. of cylinder x bore x stroke	2 x 41 mm x 22 mm
Weight	52 kg
Max. pressure (LP/HP)	30 / 53 bar
Connection suction line	16 mm - 5/8"
Connection discharge line	12 mm - 1/2"
Oil type R744 (CO ₂)	BSE60K (Standard) BSE85K, BSG68K (Option)

Motor data

Motor version	1
Motor voltage (more on request)	380-420V Y-3-50Hz
Max operating current	6.8 A
Starting current (Rotor locked)	39.3 A
Max. Power input	3,6 kW

Extent of delivery (Standard)

Motor protection	SE-B1
Enclosure class	IP65
Vibration dampers	Standard
Oil charge	1,00 dm ³

Available Options

Crankcase heater	0..60 W PTC (Option)
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Sound measurement



Selection: Semi-hermetic Reciprocating Compressors

Input Values

Compressor model	(2JC-3.2K)	Suct. gas superheat	10,00 K
Mode	Refrigeration and Air conditioning	Operating mode	Subcritical
Refrigerant	R744	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	-20°C	-25°C	-30°C	-35°C	-40°C	-45°C	-50°C	-55°C
-20°C	Q [W]	--	--	--	10727	8483	6533	4847	--
	Qu* [W]				10727	8483	6533	4847	
	P [kW]				1,52	1,62	1,64	1,64	
	I [A]				3,45	3,55	3,57	3,57	
	Qc [W]				12251	10105	8175	6490	
	COP [-]				7,04	5,23	3,98	2,95	
	m [kg/h]				132,1	105,0	81,3	60,7	
	Op.				Standard	Standard	Standard	Standard	
	th [°C]				26,4	39,1	54,7	78,0	
-10°C	Q [W]	--	14226	11574	9248	7218	5454	3931	--
	Qu* [W]		14226	11574	9248	7218	5454	3931	
	P [kW]		1,80	2,00	2,12	2,15	2,11	1,99	
	I [A]		3,74	3,97	4,11	4,16	4,10	3,96	
	Qc [W]		16022	13575	11368	9372	7564	5921	
	COP [-]		7,92	5,78	4,36	3,35	2,59	1,97	
	m [kg/h]		188,2	153,6	123,2	96,6	73,5	53,3	
	Op.		Standard	Standard	Standard	Standard	Standard	Standard	
	th [°C]		28,8	39,6	52,8	69,3	90,4	119,3	
0°C	Q [W]	--	12219	9815	7713	5887	--	--	--
	Qu* [W]		12219	9815	7713	5887			
	P [kW]		2,78	2,87	2,87	2,79			
	I [A]		4,95	5,07	5,07	4,96			
	Qc [W]		15002	12685	10581	8672			
	COP [-]		4,39	3,42	2,69	2,11			
	m [kg/h]		176,9	142,6	112,5	86,4			
	Op.		Standard	Standard	Standard	Standard			
	th [°C]		56,8	70,6	87,6	109,5			

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

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

Application Limits 2JC-3.2K



Technical Data: (2JC-3.2K)

Dimensions and Connections

Drawing not found: C:\inetpub\wwwroot\WebSoftware\img\drawings\.

Technical Data

Technical Data

Displacement (1450 RPM 50Hz)	5,21 m ³ /h
Displacement (1750 RPM 60Hz)	6,29 m ³ /h
No. of cylinder x bore x stroke	2 x 34 mm x 33 mm
Weight	48 kg
Max. pressure (LP/HP)	25 / 42 bar
Connection suction line	16 mm - 5/8"
Connection discharge line	12 mm - 1/2"
Oil type R744 (CO ₂)	BSE85K (Standard) BSE60K (Option)

Motor data

Motor voltage (more on request)	380-420V Y-3-50Hz
Max operating current	5.8 A
Starting current (Rotor locked)	25.5 A
Max. Power input	2,9 kW

Extent of delivery (Standard)

Motor protection	SE-B1
Enclosure class	IP65
Vibration dampers	Standard
Oil charge	1,00 dm ³

Available Options

Discharge gas temperature sensor	Option
Crankcase heater	0..60 W PTC (Option)

Sound measurement