

Model

Designation	SC15GHH	220-240V/50Hz 1~ 220-240V/60Hz 1~	Sales code:	104G8572
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Compressor design

Oil type	Polyolester	Refrigerant(s)	R134a, R513A
Oil viscosity	22cSt	Displacement	15,28cm³ / 0,93cu.in
Oil quantity	449cm³ / 15,2fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	1300g / 45,9oz		
Free gas volume comp.	1540cm³ / 52,1fl.oz		
Weight	13kg / 28,7lbs		
Motor protection	1# internal		
Winding resistance main	5,13Ω (at 25°C)		
Winding resistance aux	13,51Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	140°C / 284°F		



General - Configurations with SC15GHH

	Conf. 1	Conf. 2	Conf. 3
Motor configuration	CSCR	CSCR	CSCR
Power supply (nominal)	220-240V/50Hz	220-240V/60Hz	220-240V/50Hz
Number of phases	1	1	1
Voltage range	198-254V	198-254V	198-254V
Approvals	VDE	VDE	VDE
Starting torque	HST	HST	HST
Note	Compressor with oil cooler.		

Applications with SC15GHH

	Conf. 1	Conf. 2	Conf. 3
Refrigerant	R134a	R134a	R513A
Application	HBP	HBP	HBP
System cooling	oil cooled	oil cooled	oil cooled
Hot gas defrost	OK	OK	OK
Long interval pull down	OK	OK	OK

Electrical data - Configurations with SC15GHH

	Conf. 1	Conf. 2	Conf. 3
Starting device type	relay	relay	relay
Run capacitor	10μF	10μF	10μF
Start capacitor	80μF	80μF	80μF
LRA (locked rotor amps / 4s/ U(N))	16,2A	15,6A	
RLA (rated load amps / 1s/ U(N))	3,1A	2,8A	-/-A
Cut in current (U(N))	16,2A	15,6A	

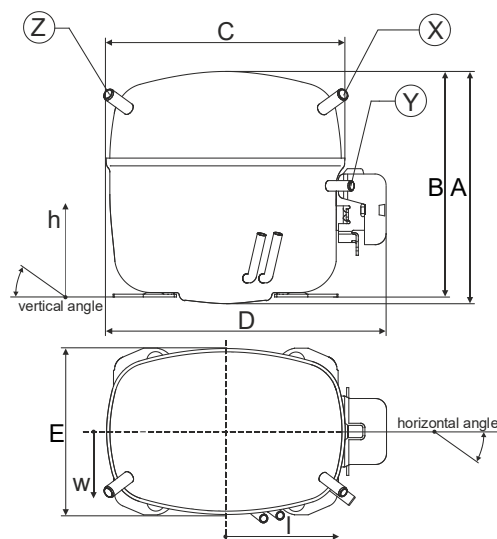
Model

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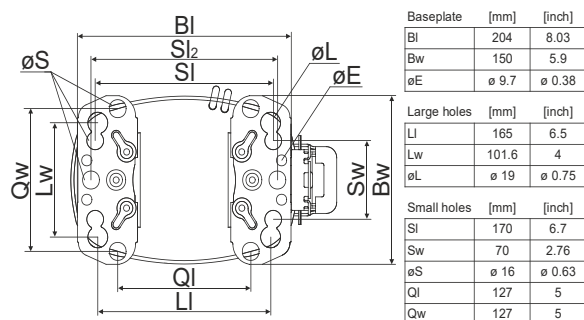
Compressor dimensions

Housing	A Height	209mm / 8,23in
	B Height	203mm / 7,99in
	C Length shell	218mm / 8,58in
	D Length w. cover	255mm / 10,04in
	E Width	151mm / 5,94in

Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 10,11-10,29	øi 8,11-8,29	øi 6,11-6,29
(i:inside, o:outside) [in]	øi 0,4-0,41	øi 0,32-0,33	øi 0,24-0,25
Material	copper	copper	copper
Horizontal angle	±2° 37°	37°	143°
Vertical angle	±2° 30°	0°	150°
Position l/h/w [mm]	107/183/55	115/100/63	-107/183/55
	[in] 4,2/7,2/2,2	4,5/3,9/2,5	-4,2/7,2/2,2
Straight tube l. [mm]	12	12	12
	[in] 0,5	0,5	0,5

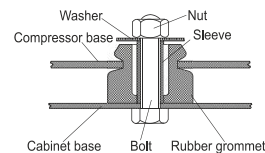


Compressor fixation

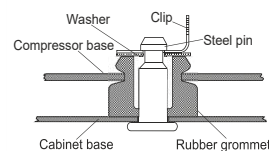


Baseplate	[mm]	[inch]
BI	204	8.03
Bw	150	5.9
øE	ø 9.7	ø 0.38
Large holes	[mm]	[inch]
LI	165	6.5
Lw	101.6	4
øL	ø 19	ø 0.75
Small holes	[mm]	[inch]
SI	170	6.7
Sw	70	2.76
øS	ø 16	ø 0.63
QI	127	5
Qw	127	5

Bolt joint



Snap-on



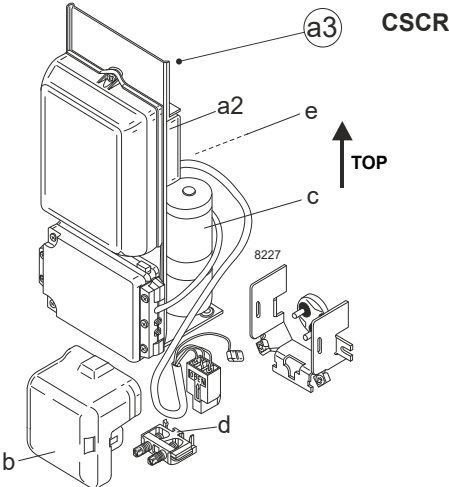
Mounting accessories

	one comp.	multi pack
Bolt joint M6 ø16mm	118-1917	118-1918
Bolt joint ø1/4" ø16mm	118-1946	
Bolt joint ø1/4" ø19mm	118-1949	
Snap-on ø7,3 ø16mm	118-1947	118-1919

Application notes

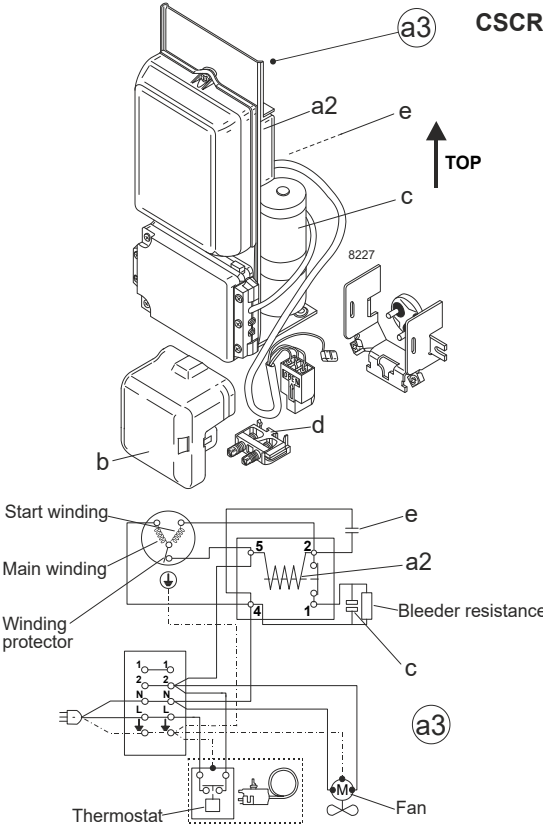
Provision for PE Grounding is located at the PE Stamp on the compressor

Model				
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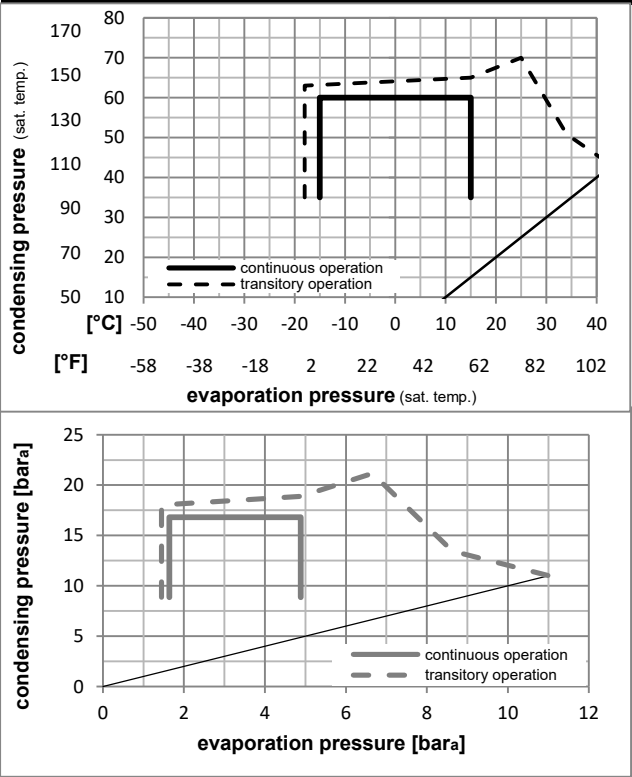
Configuration		Electrical accessories / wiring diagram		
Motor configuration	CSCR			
Power supply (nominal)	220-240V/50Hz 1~			
Refrigerant	R134a			
Application	HBP			
Voltage range	198-254V			
Starting torque	HST			
Approvals	VDE			

Ambient/ machine room temperatures minimum /maximum

Ambient temperature range:	10 - 43°C / 50 - 110°F
Machine room temperature range:	10 - 48°C / 50 - 119°F
Compressor cooling:	fan 1,5m/s



Operation pressure range



Components

a3	SC starter kit (550mm)	117-7027
b	plastic cover	103N2009
d	cord relief	103N1004

Alternative components

a3	SC starter kit (1000mm)	117-7040
a3	SC starter kit (650mm)	117-7046
c	start capacitor (80µF)	117U5373
e	run capacitor (10µF, 6.3mm)	117-7112

Model

Designation **SC15GHH** **220-240V/50Hz** Conf. 1 Sales code: **104G8572**

Optimization + standard conditions

R134a, 220V/50Hz, CSCR, fan 1,5m/s, VDE

Evaporating pressure (saturation temperature)					Condensing pressure (saturation temperature)						Power consumption			
Return gas temp.					Liquid temp.						Current consumption			
Cooling capacity					COP		EER		P1		I		Ref. mass flow	
pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]		
[°C]	7	54	35	46	1474,4	5035	1268,9	2,57	8,76	2,21	574,5	2,51	32,71	ASHRAE HBP
[°F]	45	130	95	115										
[°C]	5	55	32	55	1206,7	4121	1038,5	2,16	7,36	1,85	559,9	2,45	29,74	cecomaf HBP
[°F]	41	131	90	131										
[°C]	5	50	20	50	1260,3	4304	1084,7	2,40	8,21	2,07	524,5	2,31	31,76	EN12900 HBP
[°F]	41	122	68	122										
[°C]	-7	54	35	46	769,2	2627	662,0	1,74	5,95	1,50	441,8	1,95	16,78	ASHRAE MBP
[°F]	20	130	95	115										
[°C]	-10	55	32	55	575,9	1967	495,7	1,41	4,82	1,21	408,3	1,81	13,93	cecomaf MBP
[°F]	14	131	90	131										
[°C]	-10	45	20	45	683,4	2334	588,1	1,79	6,11	1,54	382,2	1,70	16,00	EN12900 MBP
[°F]	14	113	68	113										

Performance tables

R134a, 220V/50Hz, CSCR, fan 1,5m/s, VDE

	pe		Cooling capacity			COP	EER		P1	I	m
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]
[°C / °F]	-15	5	539,1	1841	463,9	1,57	5,37	1,35	343,0	1,53	11,75
cond. pressure	-10	14	709,0	2421	610,2	1,86	6,34	1,60	382,2	1,70	15,52
pc= 45/113	-5	23	910,3	3109	783,4	2,16	7,38	1,86	421,2	1,87	20,02
return gas temp.	0	32	1148,3	3922	988,2	2,52	8,59	2,16	456,5	2,02	25,39
RGT= 32/90	5	41	1428,7	4879	1229,5	2,95	10,07	2,54	484,7	2,14	31,81
liquid temp	10	50	1756,8	6000	1512,0	3,50	11,94	3,01	502,4	2,21	39,42
Tliq= 45/113	15	59	2138,3	7303	1840,2	4,22	14,43	3,64	506,1	2,23	48,43
[°C / °F]	-15	5	420,0	1434	361,4	1,17	4,00	1,01	358,6	1,60	10,11
cond. pressure	-10	14	575,9	1967	495,7	1,41	4,82	1,21	408,3	1,81	13,93
pc= 55/131	-5	23	755,4	2580	650,1	1,64	5,60	1,41	460,7	2,03	18,36
return gas temp	0	32	963,8	3292	829,5	1,88	6,42	1,62	512,4	2,25	23,58
RGT= 32/90	5	41	1206,7	4121	1038,5	2,16	7,36	1,85	559,9	2,45	29,74
liquid temp	10	50	1489,6	5087	1282,0	2,48	8,48	2,14	599,8	2,62	37,03
Tliq= 55/131	15	59	1818,0	6209	1564,6	2,89	9,88	2,49	628,7	2,74	45,66

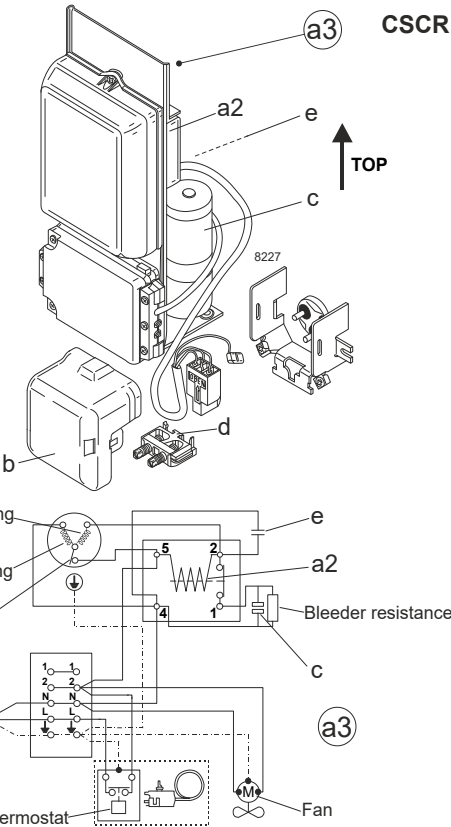
Model

Designation	SC15GHH	220-240V/60Hz	Conf. 2	Sales code:	104G8572
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Configuration

Motor configuration	CSCR
Power supply (nominal)	220-240V/60Hz 1~
Refrigerant	R134a
Application	HBP
Voltage range	198-254V
Starting torque	HST
Approvals	VDE

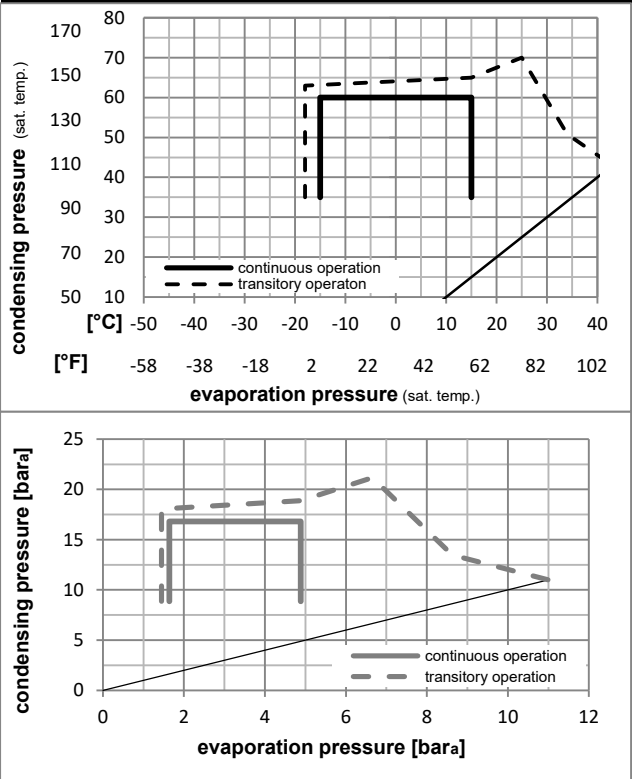
Electrical accessories / wiring diagram



Ambient/ machine room temperatures minimum /maximum

Ambient temperature range:	10 - 43°C / 50 - 110°F
Machine room temperature range:	10 - 48°C / 50 - 119°F
Compressor cooling:	fan 1,5m/s

Operation pressure range



Components

a3	SC starter kit (550mm)	117-7027
b	plastic cover	103N2009
d	cord relief	103N1004

Alternative components

a3	SC starter kit (1000mm)	117-7040
a3	SC starter kit (650mm)	117-7046
c	start capacitor (80µF)	117U5373
e	run capacitor (10µF, 6.3mm)	117-7112

Model

Designation **SC15GHH** **220-240V/60Hz** Conf. 2 Sales code: **104G8572**

Optimization + standard conditions

R134a, 220V/60Hz, CSCR, fan 1,5m/s, VDE

Evaporating pressure (saturation temperature)														
Condensing pressure (saturation temperature)														
Return gas temp.														
Liquid temp.														
Cooling capacity														
COP														
EER														
Power consumption														
Current consumption														
Ref. mass flow														
pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	P1	I	m		
[°C]										[W]	[A]	[kg/h]		
[°C]	7,2	54	35	46	1661,4	5674	1429,8	2,73	9,31	2,35	609,6	2,75	36,86	ASHRAE HBP
[°F]	45	130	95	115										
[°C]	5	55	32	55	1363,2	4656	1173,2	2,31	7,88	1,99	590,5	2,67	33,59	cecomaf HBP
[°F]	41	131	90	131										
[°C]	5	50	20	50	1403,7	4794	1208,0	2,46	8,42	2,12	569,5	2,57	35,37	EN12900 HBP
[°F]	41	122	68	122										
[°C]	-7	54	35	46	889,1	3036	765,2	1,90	6,49	1,64	467,7	2,13	19,40	ASHRAE MBP
[°F]	20	130	95	115										
[°C]	-10	55	32	55	684,5	2338	589,1	1,57	5,35	1,35	437,0	2,00	16,55	cecomaf MBP
[°F]	14	131	90	131										
[°C]	-10	45	20	45	763,9	2609	657,4	1,80	6,16	1,55	423,7	1,94	17,88	EN12900 MBP
[°F]	14	113	68	113										

Performance tables

R134a, 220V/60Hz, CSCR, fan 1,5m/s, VDE

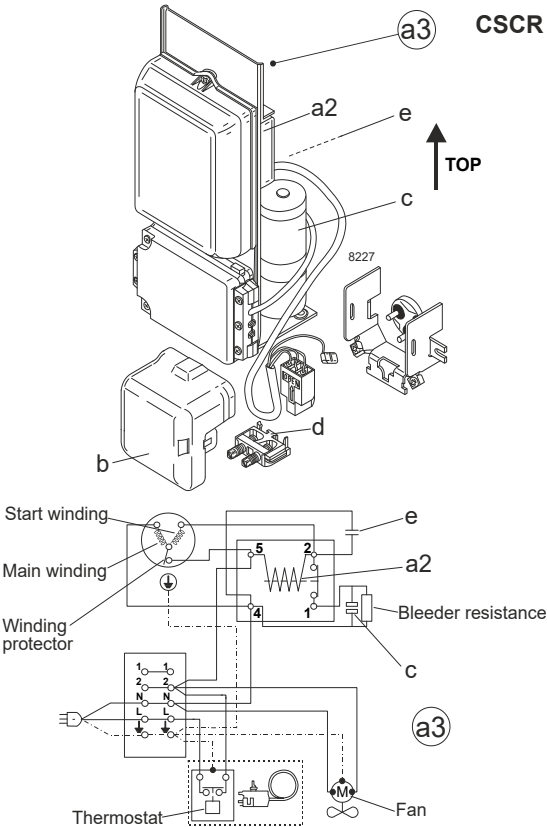
	pe		Cooling capacity			COP		EER		P1		I	m
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]		
[°C / °F]	-15	5	587,1	2005	505,3	1,49	5,10	1,29	392,9	1,81	12,80		
cond. pressure	-10	14	792,5	2707	682,1	1,87	6,39	1,61	423,7	1,94	17,35		
pc= 45/113	-5	23	1022,8	3493	880,3	2,21	7,54	1,90	463,1	2,11	22,49		
return gas temp.	0	32	1288,4	4400	1108,8	2,55	8,70	2,19	505,6	2,30	28,49		
RGT= 32/90	5	41	1599,8	5463	1376,8	2,93	10,01	2,52	545,8	2,47	35,62		
liquid temp	10	50	1967,2	6718	1693,0	3,40	11,61	2,93	578,6	2,61	44,14		
Tliq= 45/113	15	59	2401,2	8200	2066,5	4,01	13,71	3,45	598,3	2,71	54,39		
[°C / °F]	-15	5	522,0	1783	449,2	1,31	4,47	1,13	398,9	1,84	12,57		
cond. pressure	-10	14	684,5	2338	589,1	1,57	5,35	1,35	437,0	2,00	16,55		
pc= 55/131	-5	23	871,9	2978	750,3	1,80	6,14	1,55	485,3	2,21	21,19		
return gas temp	0	32	1094,6	3738	942,1	2,03	6,95	1,75	538,2	2,44	26,78		
RGT= 32/90	5	41	1363,2	4656	1173,2	2,31	7,88	1,99	590,5	2,67	33,59		
liquid temp	10	50	1687,9	5765	1452,7	2,65	9,05	2,28	636,8	2,87	41,96		
Tliq= 55/131	15	59	2079,3	7101	1789,5	3,10	10,57	2,66	671,8	3,03	52,23		

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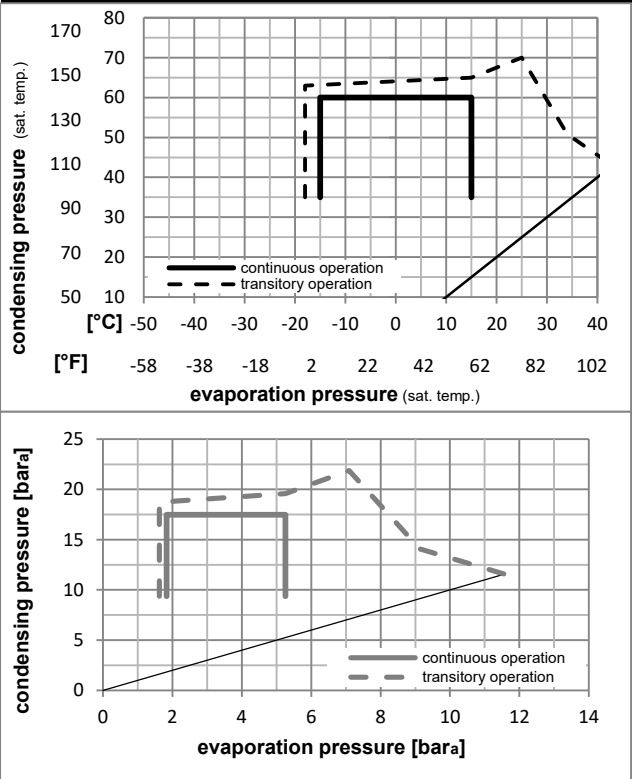
Configuration	Electrical accessories / wiring diagram				
Motor configuration	CSCR				
Power supply (nominal)	220-240V/50Hz 1~				
Refrigerant	R513A				
Application	HBP				
Voltage range	198-254V				
Starting torque	HST				
Approvals	VDE				

Ambient/ machine room temperatures minimum /maximum

Ambient temperature range:	10 - 43°C / 50 - 110°F
Machine room temperature range:	10 - 48°C / 50 - 119°F
Compressor cooling:	fan 1,5m/s



Operation pressure range



Components

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b	plastic cover	103N2009
d	cord relief	103N1004

Alternative components

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a3	SC starter kit (650mm)	117-7046
c	start capacitor (80µF)	117U5373
e	run capacitor (10µF, 6.3mm)	117-7112

Model

Designation **SC15GHH** **220-240V/50Hz** Conf. 3 Sales code: **104G8572**

Optimization + standard conditions

R513A, 220V/50Hz, CSCR, fan 1,5m/s, VDE

Evaporating pressure (saturation temperature)														
Condensing pressure (saturation temperature)														
Return gas temp.														
Liquid temp.														
Cooling capacity														
COP														
EER														
Power consumption														
Current consumption														
Ref. mass flow														
pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	P1	I	m		
[°C]										[W]	[A]	[kg/h]		
[°F]														
[°C]	7,2	54	35	46	1422,3	4858	1224,1	2,62	8,94	2,25	543,4	2,55	35,33	ASHRAE HBP
[°F]	45	130	95	115										
[°C]	5	55	32	55	1150,1	3928	989,8	2,18	7,44	1,88	527,8	2,49	32,32	cecomaf HBP
[°F]	41	131	90	131										
[°C]	5	50	20	50	1186,8	4053	1021,4	2,33	7,96	2,01	509,3	2,41	34,03	EN12900 HBP
[°F]	41	122	68	122										
[°C]	-7	54	35	46	779,0	2660	670,4	1,83	6,24	1,57	426,6	2,05	19,08	ASHRAE MBP
[°F]	20	130	95	115										
[°C]	-10	55	32	55	593,0	2025	510,4	1,48	5,04	1,27	401,6	1,94	16,40	cecomaf MBP
[°F]	14	131	90	131										
[°C]	-10	45	20	45	665,8	2274	573,0	1,71	5,85	1,47	388,8	1,89	17,65	EN12900 MBP
[°F]	14	113	68	113										

Performance tables

R513A, 220V/50Hz, CSCR, fan 1,5m/s, VDE

	pe		Cooling capacity			COP		EER		P1		I	m
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]		
[°C / °F]	-15	5	520,7	1778	448,1	1,43	4,88	1,23	364,4	1,78	12,76		
cond. pressure	-10	14	696,2	2378	599,2	1,79	6,11	1,54	388,8	1,89	17,12		
pc= 45/113	-5	23	891,0	3043	766,8	2,12	7,23	1,82	420,8	2,03	22,00		
return gas temp.	0	32	1113,8	3804	958,6	2,44	8,35	2,10	455,7	2,18	27,63		
RGT= 32/90	5	41	1373,2	4690	1181,8	2,81	9,60	2,42	488,7	2,32	34,25		
liquid temp	10	50	1677,9	5730	1444,0	3,26	11,12	2,80	515,1	2,43	42,13		
Tliq= 45/113	15	59	2036,6	6955	1752,7	3,84	13,12	3,31	530,3	2,50	51,53		
[°C / °F]	-15	5	457,2	1562	393,5	1,23	4,21	1,06	371,1	1,81	12,60		
cond. pressure	-10	14	593,0	2025	510,4	1,48	5,04	1,27	401,6	1,94	16,40		
pc= 55/131	-5	23	748,0	2555	643,7	1,70	5,79	1,46	441,0	2,11	20,78		
return gas temp	0	32	930,8	3179	801,1	1,92	6,56	1,65	484,7	2,30	25,99		
RGT= 32/90	5	41	1150,1	3928	989,8	2,18	7,44	1,88	527,8	2,49	32,32		
liquid temp	10	50	1414,7	4831	1217,5	2,50	8,54	2,15	565,7	2,65	40,05		
Tliq= 55/131	15	59	1733,0	5919	1491,5	2,92	9,97	2,51	593,7	2,77	49,49		