

Model

Designation	SC12/12G	220-240V/50Hz 1~	Sales code:	104G8280
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Compressor design

Oil type	Polyolester	Refrigerant(s)	R134a
Oil viscosity	22cST	Displacement	25,74cm ³ / 1,57cu.in
Oil quantity	1238cm ³ / 41,9fl.oz	Compressors on pallet	18
Refr. charge - tech. limit	2200g / 77,6oz		
Free gas volume comp.	3020cm ³ / 102,1fl.oz		
Weight	28kg / 61,7lbs		
Motor protection	1# internal		
Winding resistance main	6,9Ω (at 25°C)		
Winding resistance aux	11Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	135°C / 275°F		



General - Configurations with SC12/12G

	Conf. 1
Motorconfiguration	CSIR
Power supply (nominal)	220-240V/50Hz
Number of phases	1
Voltage range	187-254V
Approvals	CCC, VDE
Starting torque	HST
Note	- / -

Applications with SC12/12G

	Conf. 1
Refrigerant	R134a
Application	LBP+MBP+HBP
System cooling	fan 3m/s
Hot gas defrost	OK
Long interval pull down	OK

Electrical data - Configurations with SC12/12G

	Conf. 1
Starting device type	relay
Run capacitor	- / -
Start capacitor	80μF
LRA (locked rotor amps / 4s)	2x 23,4A
RLA (rated load amps / 1s)	2x 4,3A
Cut in current	2x 23,4A

Model

Designation

SC12/12G

220-240V/50Hz 1~

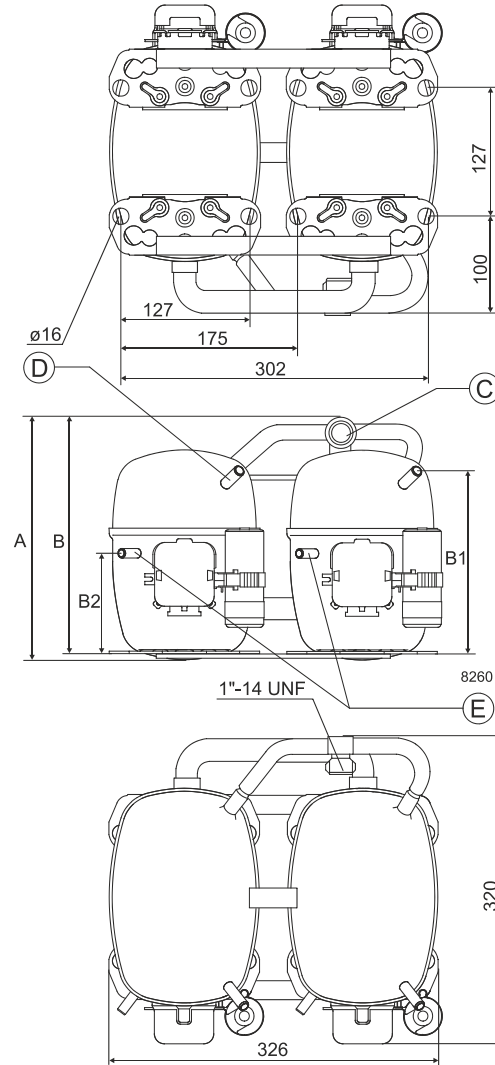
Sales code:

104G8280

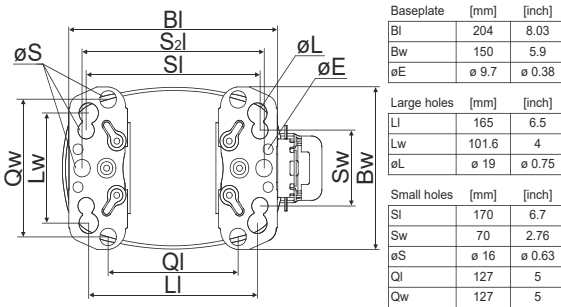
Compressor dimensions

Housing	A Height	249mm / 9,8in
	B Height	244mm / 9,6in
	B1	183mm / 7,2in
	B2	100mm / 3,94in

Connectors		Suction	Discharge	Process
		C	E	D
Diameter	[mm]	øi 15,21-15,37	øi 6,11-6,29	øi 6,11-6,29
(i:inside, o:outside)	[in]	øi 0,6-0,61	øi 0,24-0,25	øi 0,24-0,25
Material		steel	copper	copper
Horizontal angle	±2°	0°	37°	37°
Vertical angle	±2°	0°	0°	0°
Position l/h/w	[mm]	0/0/0	0/0/0	0/0/0
	[in]	0/0/0	0/0/0	0/0/0
Straight tube l.	[mm]	10	12	12
	[in]	0,4	0,5	0,5



Compressor fixation

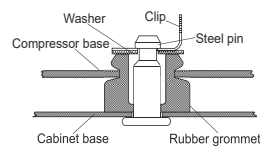
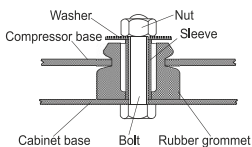


Mounting accessories

	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

Bolt joint

Snap-on



Application notes

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

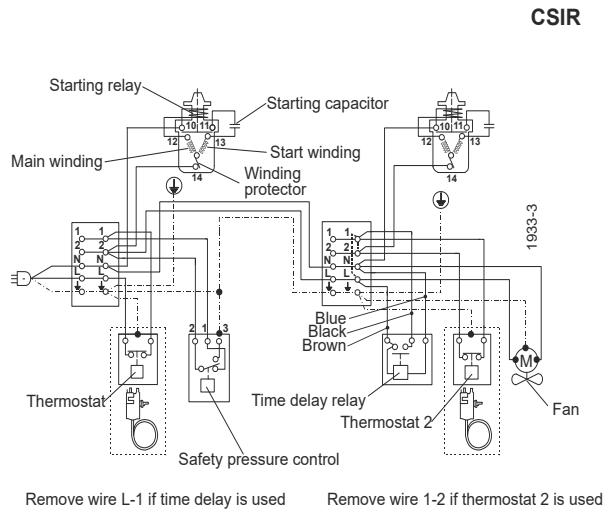
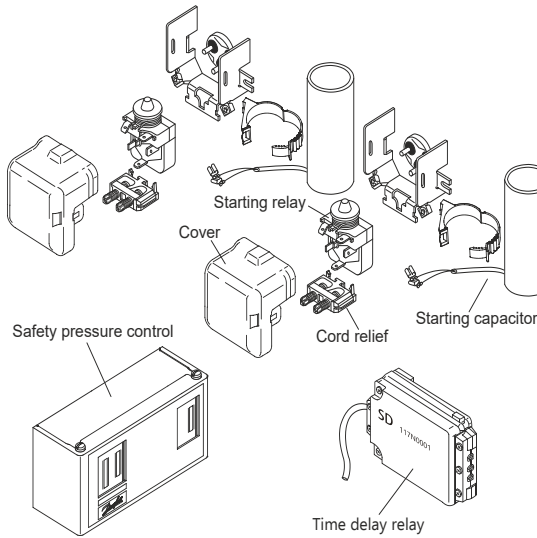
Twin should be used with a time-delay relay

Model	
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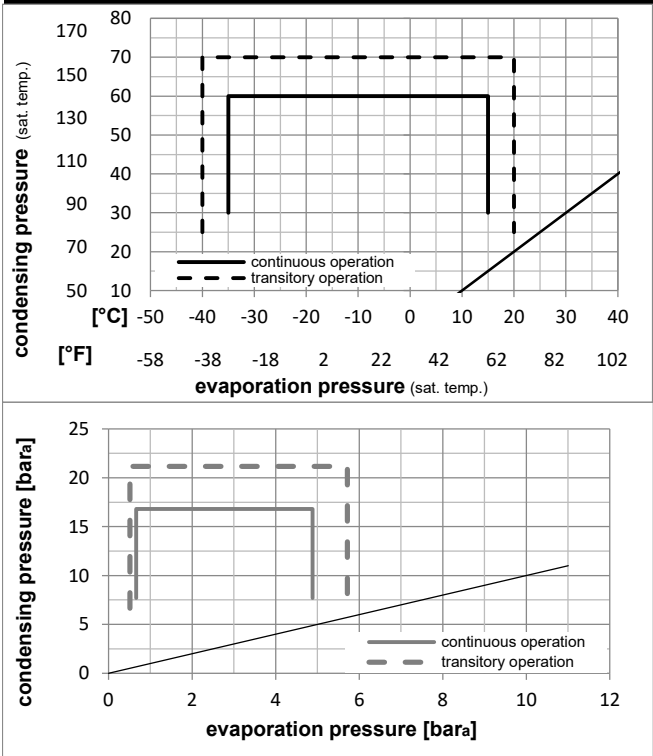
Configuration	Ambient/ machine room temperatures minimum /maximum	
Motorconfiguration	CSIR	Ambient temperature range: 10 - 43°C / 50 - 110°F
Power supply (nominal)	220-240V/50Hz 1~	Machine room temperature range: 10 - 48°C / 50 - 119°F
Refrigerant	R134a	Compressor cooling: fan 3m/s
Application	LBP+MBP+HBP	
Voltage range	187-254V	
Starting torque	HST	
Approvals	CCC, VDE,	

Operation Limits

Electrical accessories / wiring diagram

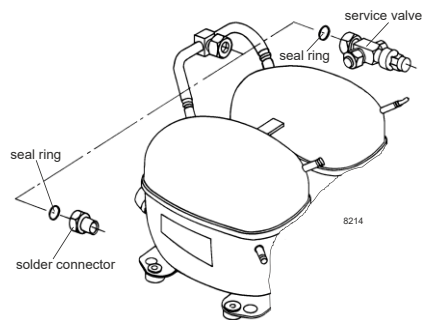


Operation pressure range



Components

a2	assy. relay	117U6003
c	start capacitor (80µF)	117U5017
d	cord relief	103N1004
b	plastic cover	103N2009
.	Check valve (to be used with time-delay relay)	020-1014
.	Service valve 12mm	118-7350
.	Solder connector (alternative) 12 mm	104B0584
.	Seal ring for service valve and solder conn.	118-3638



Model

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Optimization + standard conditions

R134a, 220V/50Hz, CSIR, fan 3m/s, CCC, VDE

		Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)			Return gas temp.		Liquid temp.		Cooling capacity			COP	EER	Power consumption			ASHRAE LBP
		pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	P1	I	Current consumption		Ref. mass flow	ASHRAE MBP				
[°C]	[°F]											[W]	[A]	[kg/h]							
-23	-10	54	130	32	90	495,1	1691	426,1	1,03	3,52	0,89	480,7	3,74	9,61							
7,2	45	54	130	35	95	1230,0	4201	1058,6	1,60	5,47	1,38	767,8	4,67	26,84							
-35	-31	40	104	20	68	2340,8	7994	2014,5	2,29	7,81	1,97	1023,5	5,67	51,93							
-10	14	45	113	20	68	246,5	842	212,2	0,75	2,55	0,64	329,9	3,45	5,41							
5	41	50	122	20	68	1094,3	3737	941,8	1,61	5,51	1,39	678,5	4,30	25,62							
-35	-31	40	104	20	68	1989,5	6795	1712,2	2,10	7,16	1,80	949,4	5,34	50,13							

Performance tables

R134a, 220V/50Hz, CSIR, fan 3m/s, CCC, 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]	-35	-31	205,2	701	176,6	0,65	2,21	0,56	317,0	3,38	4,43	
cond. pressure	-25	-13	469,5	1603	404,0	1,03	3,51	0,89	456,2	3,67	10,17	
pc= 45/113	-15	5	871,0	2975	749,6	1,44	4,93	1,24	602,9	4,06	18,99	
return gas temp.	-10	14	1135,3	3877	977,1	1,67	5,71	1,44	678,5	4,30	24,85	
RGT= 32/90	0	32	1815,5	6200	1562,4	2,18	7,44	1,88	833,2	4,85	40,15	
liquid temp	5	41	2241,0	7653	1928,6	2,46	8,39	2,11	911,9	5,16	49,89	
Tliq= 45/113	15	59	3287,1	11226	2828,9	3,07	10,48	2,64	1071,0	5,87	74,46	
[°C / °F]	-35	-31	129,2	441	111,2	0,44	1,49	0,38	295,7	3,25	3,08	
cond. pressure	-25	-13	349,9	1195	301,1	0,77	2,63	0,66	453,5	3,66	8,37	
pc= 55/131	-15	5	696,0	2377	599,0	1,12	3,82	0,96	622,3	4,17	16,76	
return gas temp	-10	14	928,2	3170	798,8	1,31	4,46	1,12	710,2	4,47	22,44	
RGT= 32/90	0	32	1535,1	5243	1321,1	1,72	5,88	1,48	892,2	5,14	37,55	
liquid temp	5	41	1919,6	6556	1652,0	1,95	6,65	1,68	985,9	5,52	47,30	
Tliq= 55/131	15	59	2874,6	9817	2473,9	2,44	8,34	2,10	1177,5	6,35	72,20	