

Model

Designation	SC18/18G	220-240V/50Hz 1~	Sales code:	104G8880
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Compressor design

Oil type	Polyolester	Refrigerant(s)	R134a
Oil viscosity	22cST	Displacement	35,38cm ³ / 2,16cu.in
Oil quantity	1238cm ³ / 41,9fl.oz	Compressors on pallet	18
Refr. charge - tech. limit	2200g / 77,6oz		
Free gas volume comp.	2920cm ³ / 98,7fl.oz		
Weight	28kg / 61,7lbs		
Motor protection	1# internal		
Winding resistance main	3,7Ω (at 25°C)		
Winding resistance aux	14Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	135°C / 275°F		



General - Configurations with SC18/18G

	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 SC18/18G

	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 SC18/18G

	Conf. 1
Starting device type	relay
Run capacitor	-/-
Start capacitor	80μF
LRA (locked rotor amps / 4s)	2x 20,43A
RLA (rated load amps / 1s)	2x 3,9A
Cut in current	2x 20,43A

Model

Designation

SC18/18G

220-240V/50Hz 1~

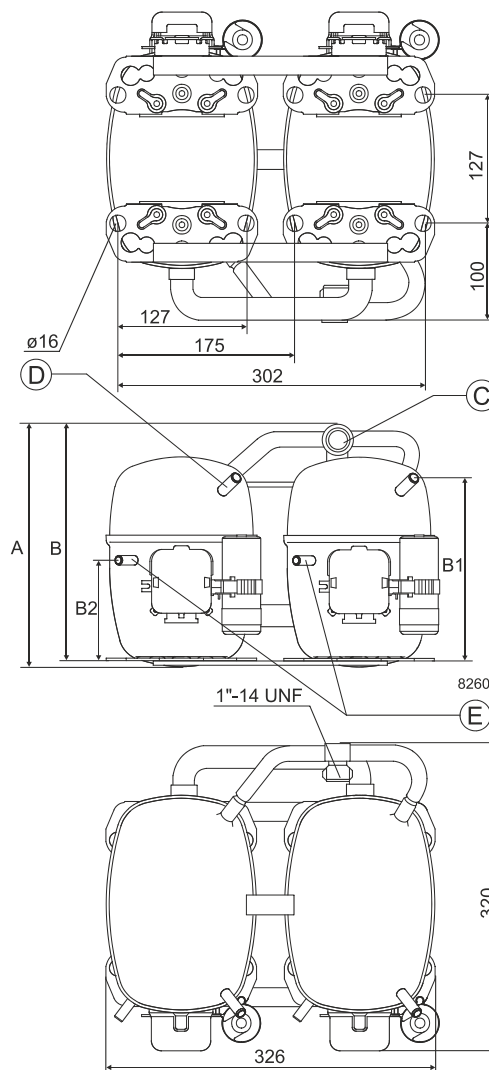
Sales code:

104G8880

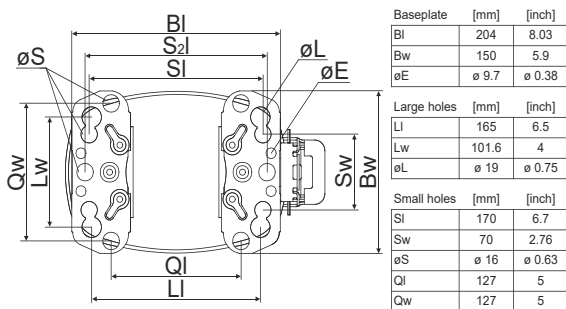
Compressor dimensions

Housing	A Height	259mm / 10,2in
	B Height	254mm / 10in
	B1	193mm / 7,6in
	B2	110mm / 4,33in

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

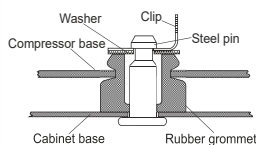
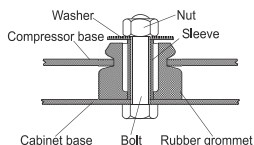


Mounting accessories

	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

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Configuration

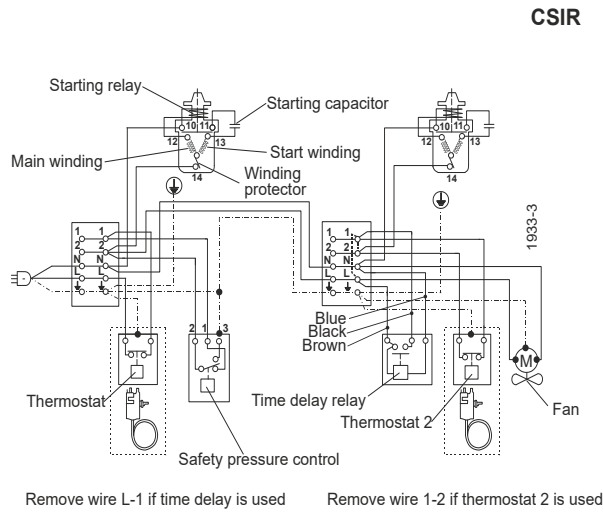
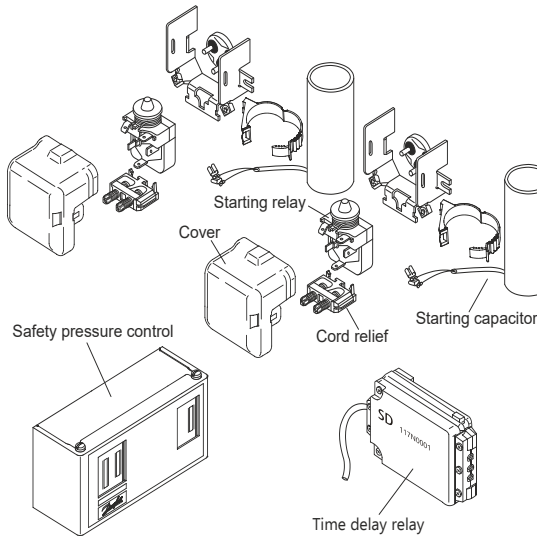
Motorconfiguration	CSIR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R134a
Application	LBP+MBP+HBP
Voltage range	187-254V
Starting torque	HST
Approvals	CCC, VDE,

Ambient/ machine room temperatures minimum /maximum

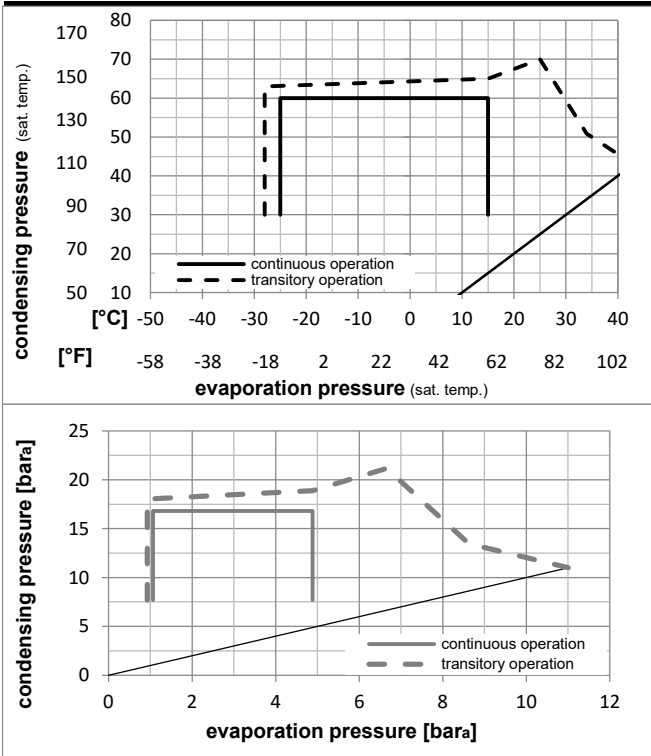
Ambient temperature range:	10 - 43°C / 50 - 110°F
Machine room temperature range:	10 - 48°C / 50 - 119°F
Compressor cooling:	fan 3m/s

Operation Limits

Electrical accessories / wiring diagram

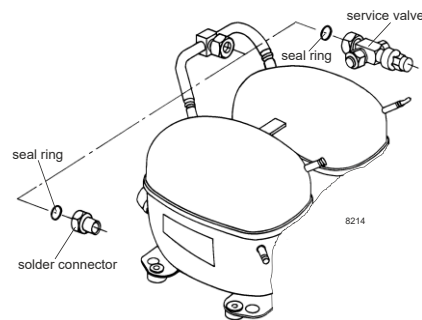


Operation pressure range



Components

a2	relay	117U6019
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



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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	Ref. mass flow				ASHRAE MBP			
[°C]	[°F]											[W]	[A]	[kg/h]					ASHRAE HBP		
-23	-10	54	130	32	90	780,7	2666	671,9	1,12	3,83	0,96	696,8	5,22	15,16							
-7	20	54	130	35	95	1777,0	6069	1529,3	1,63	5,58	1,41	1088,2	6,33	38,77							
7,2	45	54	130	35	95	3227,6	11023	2777,7	2,24	7,65	1,93	1441,3	7,64	71,60							
-35	-31	40	104	20	68	312,8	1068	269,2	0,74	2,53	0,64	423,0	4,51	6,86							
-10	14	45	113	20	68	1527,4	5216	1314,5	1,63	5,58	1,41	935,3	5,83	35,75							
5	41	50	122	20	68	2697,4	9212	2321,4	2,04	6,96	1,75	1322,8	7,16	67,97							

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]	-25	-13	673,3	2299	579,4	1,08	3,69	0,93	623,3	5,03	14,59	
cond. pressure	-20	-4	930,3	3177	800,7	1,28	4,37	1,10	726,8	5,28	20,21	
pc= 45/113	-10	14	1584,6	5412	1363,7	1,69	5,79	1,46	935,3	5,83	34,68	
return gas temp.	-5	23	1993,2	6807	1715,4	1,91	6,53	1,65	1042,5	6,14	43,83	
RGT= 32/90	0	32	2463,8	8414	2120,3	2,14	7,30	1,84	1153,0	6,51	54,49	
liquid temp	5	41	3001,9	10252	2583,4	2,37	8,09	2,04	1267,9	6,93	66,83	
Tliq= 45/113	15	59	4303,6	14698	3703,8	2,84	9,70	2,44	1515,0	8,01	97,48	
[°C / °F]	-25	-13	566,1	1933	487,2	0,86	2,92	0,74	661,7	5,13	13,54	
cond. pressure	-20	-4	787,2	2688	677,5	1,01	3,46	0,87	778,1	5,44	18,88	
pc= 55/131	-10	14	1368,7	4674	1177,9	1,35	4,61	1,16	1013,8	6,10	33,10	
return gas temp	-5	23	1740,5	5944	1497,9	1,53	5,24	1,32	1135,2	6,49	42,31	
RGT= 32/90	0	32	2173,8	7424	1870,8	1,72	5,89	1,48	1260,4	6,92	53,17	
liquid temp	5	41	2674,5	9134	2301,7	1,92	6,57	1,66	1390,4	7,43	65,90	
Tliq= 55/131	15	59	3900,3	13320	3356,6	2,34	7,98	2,01	1669,2	8,68	97,97	