

Model

Designation	SC21/21CL	220-240V/50Hz 1~	Sales code:	104L4094
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Compressor design

Oil type	Polyolester	Refrigerant(s)	R404A, R452A, R507
Oil viscosity	32,5cST	Displacement	41,9cm ³ / 2,56cu.in
Oil quantity	1218cm ³ / 41,2fl.oz	Compressors on pallet	18
Refr. charge - tech. limit	2200g / 77,6oz		
Free gas volume comp.	2920cm ³ / 98,7fl.oz		
Weight	29,1kg / 64,2lbs		
Motor protection	1# internal		
Winding resistance main	3,4Ω (at 25°C)		
Winding resistance aux	14,4Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	135°C / 275°F		



General - Configurations with SC21/21CL

	Conf. 1
Motorconfiguration	CSCR
Power supply (nominal)	220-240V/50Hz
Number of phases	1
Voltage range	198-254V
Approvals	VDE, EAC
Starting torque	HST
Note	- / -

Applications with SC21/21CL

	Conf. 1
Refrigerant	R404A
Application	LBP
System cooling	fan 3m/s
Hot gas defrost	OK
Long interval pull down	OK

Electrical data - Configurations with SC21/21CL

	Conf. 1
Starting device type	relay
Run capacitor	10μF
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

SC21/21CL

220-240V/50Hz 1~

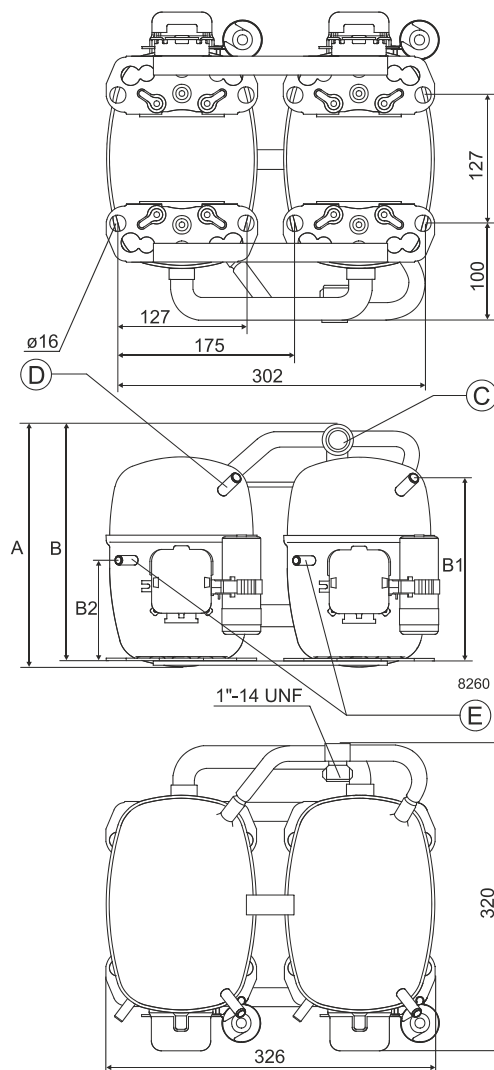
Sales code:

104L4094

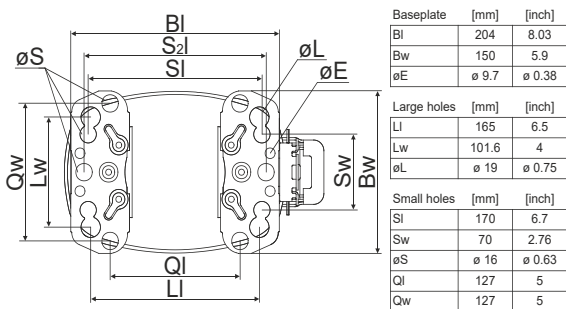
Compressor dimensions

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

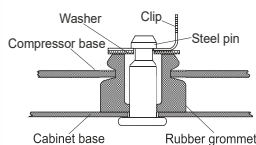
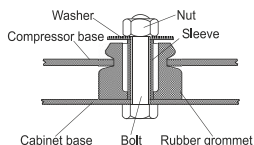


Mounting accessories

	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

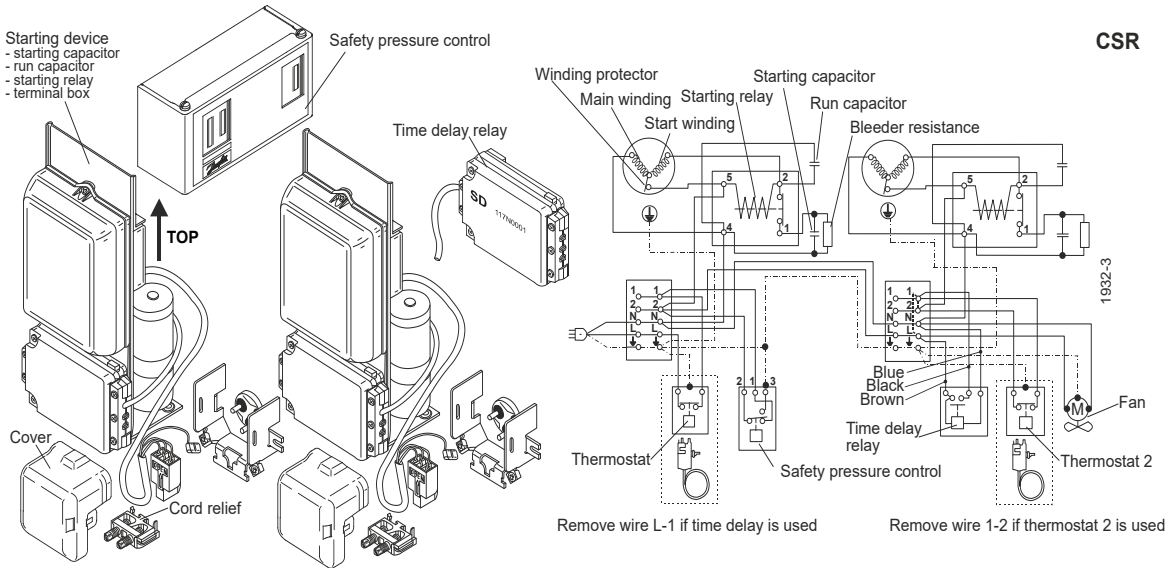
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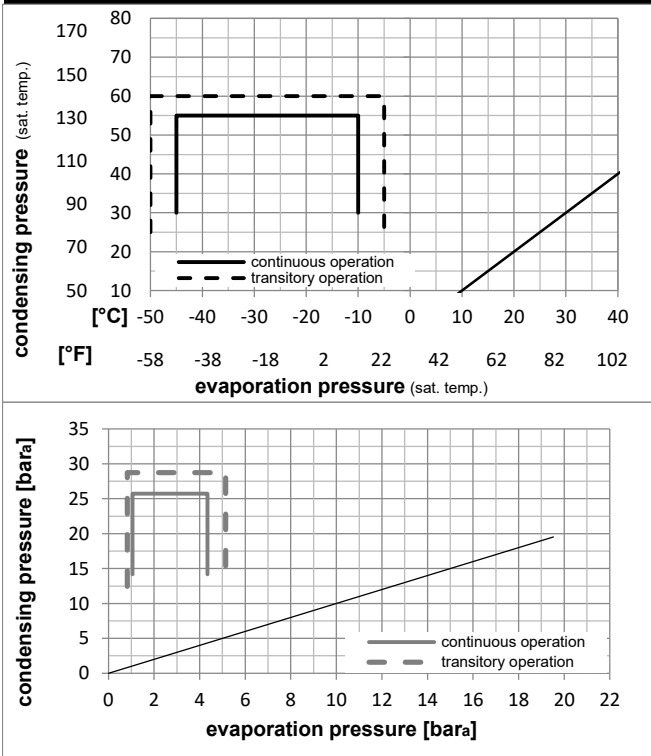
Configuration

Motorconfiguration	CSCR	Ambient/ machine room temperatures minimum /maximum	
Power supply (nominal)	220-240V/50Hz 1~	Ambient temperature range:	10 - 38°C / 50 - 101°F
Refrigerant	R404A	Machine room temperature range:	10 - 43°C / 50 - 110°F
Application	LBP	Compressor cooling:	fan 3m/s
Voltage range	198-254V	Operation Limits	
Starting torque	HST		
Approvals	VDE, EAC,		

Electrical accessories / wiring diagram

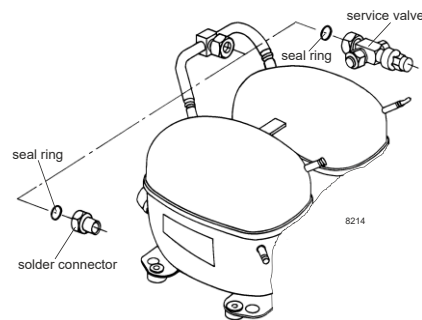


Operation pressure range



Components

- a3 SC starter kit (550mm) 117-7027
- b plastic cover 103N2009
- d cord relief 103N1004
- . Half Twin compressor 104L2326
- . Check valve (to be used with time-delay relay) 020-1014
- . Service valve 16mm 118-7351
- . Solder connector (alternative) 16 mm 118-7405
- . Seal ring for service valve and solder conn. 118-3638



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Optimization + standard conditions

R404A, 220V/50Hz, CSCR, fan 3m/s, VDE, EAC

	Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)			Return gas temp.	Liquid temp.	Cooling capacity			COP	EER	Power consumption			Ref. mass flow
	pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]			[W/W]	[Btu/Wh]	[kcal/Wh]			P1	I	m	
[°C]	-23	54	32	32	1805,9	6167	1554,1	1,18	4,02	1,01	1534,7	8,03	42,08	ASHRAE LBP				
[°F]	-10	130	90	90														
[°C]	-25	55	32	55	1216,9	4156	1047,3	0,83	2,82	0,71	1471,7	7,72	38,03	cecomaf LBP				
[°F]	-13	131	90	131														
[°C]	-35	40	20	40	1018,1	3477	876,2	0,98	3,34	0,84	1042,1	5,90	27,67	EN12900 LBP				
[°F]	-31	104	68	104														
[°C]	-23	49	4,4	49	1371,1	4683	1180,0	0,91	3,12	0,79	1499,3	7,83	48,54	ARI540 LBP				
[°F]	-10	120	40	120														
[°C]	-23	41	32	32	2182,0	7452	1877,9	1,53	5,23	1,32	1423,7	7,60	50,84	AHAM LBP				
[°F]	-10	105	90	90														
[°C]	-35	45	32	45	910,0	3108	783,2	0,85	2,91	0,73	1068,4	5,88	24,33	opt				
[°F]	-31	113	90	113														

Performance tables

R404A, 220V/50Hz, CSCR, fan 3m/s, VDE, EAC

	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]	-45	-49	451,9	1543	388,9	0,57	1,93	0,49	799,3	4,80	12,00	
cond. pressure	-35	-31	910,0	3108	783,2	0,85	2,91	0,73	1068,4	5,88	24,33	
pc= 45/113	-30	-22	1234,8	4217	1062,6	1,00	3,43	0,86	1229,6	6,61	33,14	
return gas temp.	-25	-13	1625,6	5552	1399,0	1,16	3,95	1,00	1404,3	7,42	43,85	
RGT= 32/90	-20	-4	2084,3	7118	1793,8	1,31	4,48	1,13	1589,3	8,28	56,55	
liquid temp	-15	5	2612,7	8923	2248,5	1,47	5,01	1,26	1781,6	9,15	71,37	
Tliq= 45/113	-10	14	3212,5	10971	2764,7	1,62	5,55	1,40	1978,0	9,99	88,47	
[°C / °F]	-45	-49	348,9	1192	300,3	0,44	1,49	0,37	802,0	4,57	10,72	
cond. pressure	-35	-31	655,3	2238	564,0	0,59	2,02	0,51	1106,2	5,89	20,27	
pc= 55/131	-30	-22	903,3	3085	777,4	0,70	2,40	0,61	1282,8	6,76	28,07	
return gas temp	-25	-13	1216,9	4156	1047,3	0,83	2,82	0,71	1471,7	7,72	38,03	
RGT= 32/90	-20	-4	1597,8	5457	1375,1	0,96	3,27	0,82	1669,6	8,74	50,27	
liquid temp	-15	5	2047,9	6994	1762,4	1,09	3,73	0,94	1873,5	9,79	64,95	
Tliq= 55/131	-10	14	2568,8	8773	2210,7	1,23	4,22	1,06	2080,1	10,82	82,23	