

Single Pack SC21/21CL 220-240V 50Hz CSCR

Single pack code number: **195B3009**

Position	Title	Code	Amount
1	Compressor SC21/21CL	104L4094	1
2	SC starting device (550mm)	117-7027	2
3	Cover	103N2009	2
4	Cord relief	103N1004	2
5	Bolt joint for one compressor M6 ø16mm	118-1917	2

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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

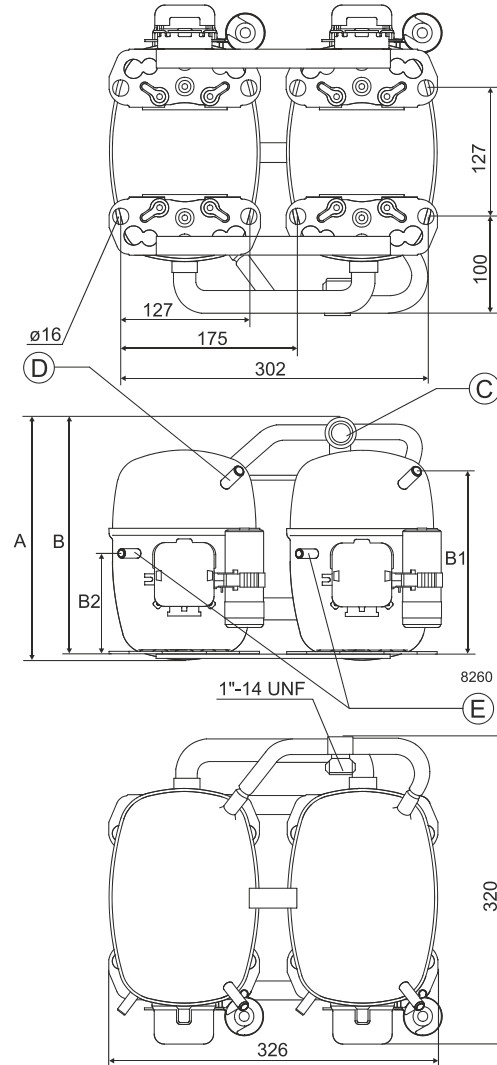
Model

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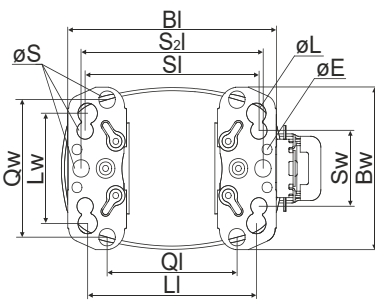
Compressor dimensions

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°	37°	37°
Vertical angle	±2°	0°	0°	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



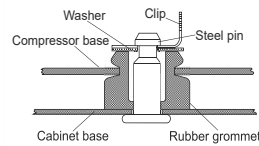
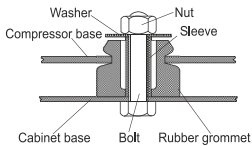
Baseplate	[mm]	[inch]
BI	204	8.03
Bw	150	5.9
øE	ø 9.7	ø 0.38
Large holes		
LI	165	6.5
Lw	101.6	4
øL	ø 19	ø 0.75
Small holes		
SI	170	6.7
Sw	70	2.76
øS	ø 16	ø 0.63
QI	127	5
Qw	127	5

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

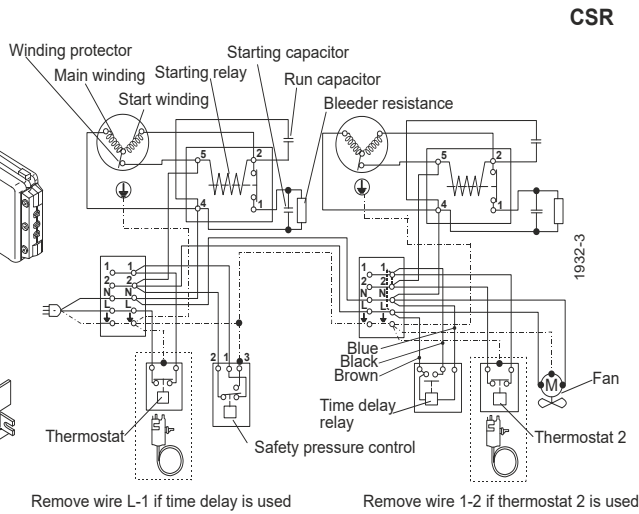
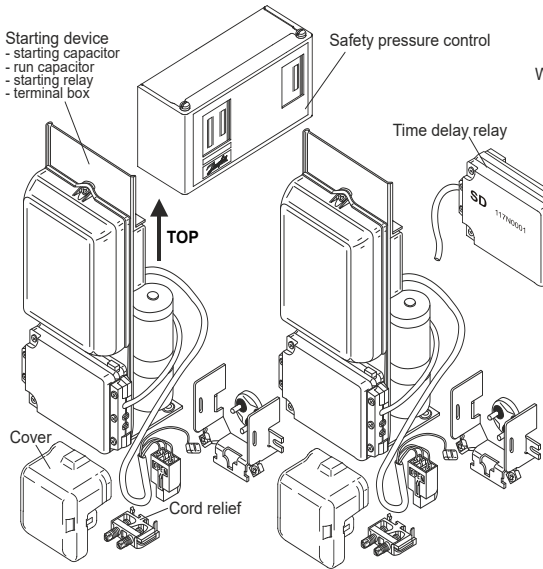
Motorconfiguration	CSCR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R404A
Application	LBP
Voltage range	198-254V
Starting torque	HST
Approvals	VDE, EAC,

Ambient/ machine room temperatures minimum /maximum

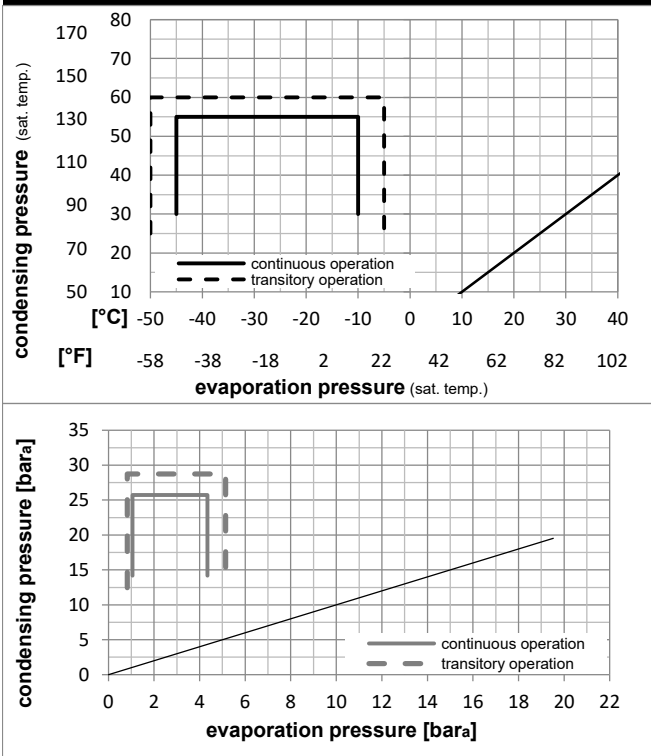
Ambient temperature range:	10 - 38°C / 50 - 101°F
Machine room temperature range:	10 - 43°C / 50 - 110°F
Compressor cooling:	fan 3m/s

Operation Limits

Electrical accessories / wiring diagram

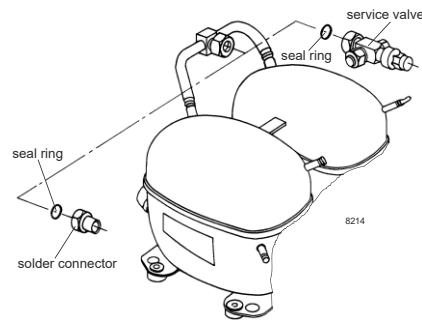


Operation pressure range



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



Model

Designation **SC21/21CL** **220-240V/50Hz** Conf. 1 Sales code: **104L4094**

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

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	

SC Twin Compressors



	A	B	C	D	E	F	
ENGLISH	Safety pressure control	Time delay relay	Blue	Black	Brown	Remove wire L-1 if time delay is used	Remove wire 1-2 if thermostat 2 is used
中文	安全压力控制	延时继电器	蓝	黑	棕	若延时继电器使用，线L-1不使用	若温控器2使用，线1-2不使用
Русский	Предохранительное реле давления	Реле задержки времени	Синий	Чёрный	Коричневый	Отсоедините провод L-1, если используется реле задержки времени	Отсоедините провод 1-2, если используется термостат 2
DEUTSCH	Sicherheitsdruckschalter	Zeitrelais (verzögernd)	Blau	Schwarz	Braun	Bei Benutzung der Anlaßverzögerung Brücke L-1 entfernen	Bei Benutzung von Thermostat 2 Brücke 1-2 entfernen
FRANÇAIS	Pressostat	Relais de temporisation	Bleu	Noir	Marron	Supprimer la connection L-1 si le relais de temporisation est utilisé	Supprimer la connection 1-2 si thermostat 2 est utilisé
ESPAÑOL	Presostato de seguridad	Relé de retardo	Azul	Negro	Marrón	Quitar cable L-1, si se utiliza un relé de retardo	Quitar cable 1-2, si se utiliza el termostato 2
ITALIANO	Pressostato	Relè di ritardo avviam.	Blu	Nero	Marrone	Eliminare il cavo L-1 se è utilizzato il ritardatore	Eliminare il cavo 1-2 se è utilizzato il termostato 2
NEDERLANDS	Pressostaat	Tijdvertragingrelais	Blauw	Zwart	Bruin	Verwijder draad L-1 indien tijdvertraging wordt toegepast	Verwijder draad 1-2 indien thermostaat wordt toegepast
DANSK	Sikkerhedspressostat	Tidsforsinkelsesrelæ	Blå	Sort	Brun	Ved tidsforsinkelse fjernes ledning L-1	Ved termostat 2 fjernes ledning 1-2
SVENSKA	Säkerhetspressostat	Tidsfördröjningsrelä	Blå	Svart	Brun	Vid anslutning av tidsfördröjningsrelä avlägsnas bygling L-1	Vid anslutning av termostat 2 avlägsnas bygling 1-2



SC Twin Compressors



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ESPAÑOL	Presostato de seguridad	Relé de retardo	Azul	Negro	Marrón	Quitar cable L-1, si se utiliza un relé de retardo	Quitar cable 1-2, si se utiliza el termostato 2
ITALIANO	Pressostato	Relè di ritardo avviam.	Blu	Nero	Marrone	Eliminare il cavo L-1 se è utilizzato il ritardatore	Eliminare il cavo 1-2 se è utilizzato il termostato 2
NEDERLANDS	Pressostaat	Tijdvertraging-relais	Blauw	Zwart	Bruin	Verwijder draad L-1 indien tijdvertraging wordt toegepast	Verwijder draad 1-2 indien thermostaat wordt toegepast
DANSK	Sikkerhedspressostat	Tidsforsinkelsesrelæ	Blå	Sort	Brun	Ved tidsforsinkelse fjernes ledning L-1	Ved termostat 2 fjernes ledning 1-2
SVENSKA	Säkerhetspressostat	Tidsfördröjningsrelä	Blå	Svart	Brun	Vid anslutning av tidsfördröjningsrelä avlägsnas bygling L-1	Vid anslutning av termostat 2 avlägsnas bygling 1-2

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