Single
Packs

Single Pack SC12/12CL 220-240V 50Hz CSIR

Single pack code number: **195B3303**

Position	Title	Code	Amount
1	Compressor SC12/12CL	104L4088	1
2	Starting relay	117U6005	2
3	Starting capacitor (80µF 220V, 6.3mm)	117U5017	2
4	Cord relief	103N1004	2
5	Cover	103N2009	2
6	Bolt joint for one compressor | M6 | ø16mm	118-1917	2

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Technical Data Twin-Compressor

SECOP

Model

Designation	**SC12/12CL**	**220-240V/50Hz 1~**	Sales code:	**104L4088**

Compressor design

Oil type	Polyolester	Refrigerant(s)	**R404A, R507**
Oil viscosity	32cST	Displacement	25,74cm³ / 1,57cu.in
Oil quantity	1233cm³ / 41,7fl.oz	Compressors on pallet	18
Refr. charge - tech. limit	2200g / 77,6oz		
Free gas volume comp.	2820cm³ / 95,4fl.oz		
Weight	27,3kg / 60,2lbs		
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.	135°C / 275°F		

General - Configurations with SC12/12CL

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

Applications with SC12/12CL

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

Electrical data - Configurations with SC12/12CL

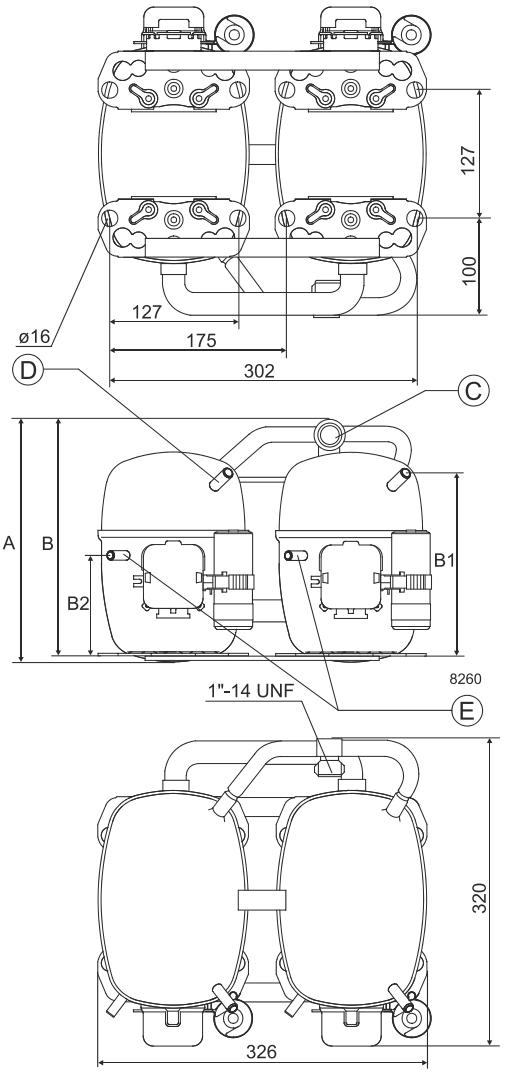
	Conf. 1
Starting device type	relay
Run capacitor	-/-
Start capacitor	80µF
LRA (locked rotor amps / 4s)	2x 23,4A
RLA (rated load amps / 1s)	2x 4,3A
Cut in current	2x 23,4A

Model

Designation **SC12/12CL** **220-240V/50Hz 1~** Sales code: **104L4088**

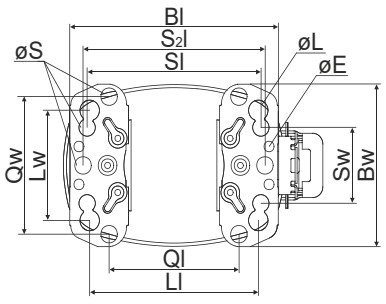
Compressor dimensions

Housing	A Height	249mm / 9,8in
	B Height	244mm / 9,61in
	B1	183mm / 7,2in
	B2	100mm / 3,94in



Connectors		**Suction** **C**	**Discharge** **E**	**Process** **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



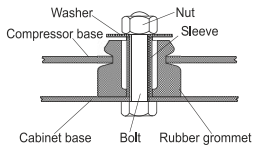
Baseplate	[mm]	[inch]
Bl	204	8.03
Bw	150	5.9
øE	ø 9.7	ø 0.38

Large holes	[mm]	[inch]
Ll	165	6.5
Lw	101.6	4
øL	ø 19	ø 0.75

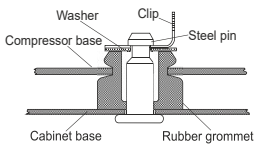
Small holes	[mm]	[inch]
Sl	170	6.7
Sw	70	2.76
øS	ø 16	ø 0.63
Ql	127	5
Qw	127	5

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

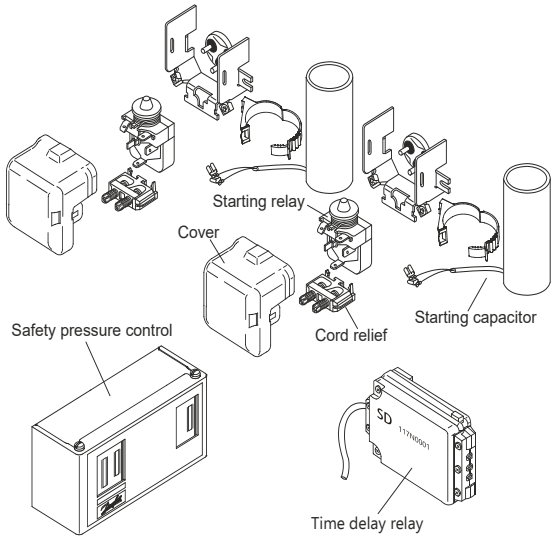
Twin should be used with a time-delay relay

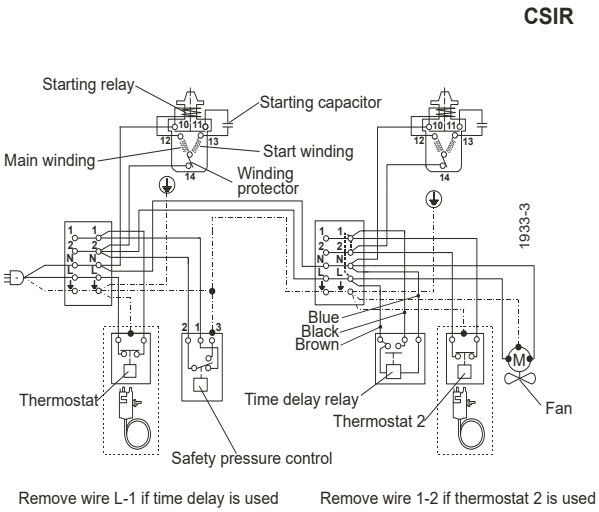
Model

Designation	**SC12/12CL**	**220-240V/50Hz**	**Conf. 1**	Sales code:	**104L4088**

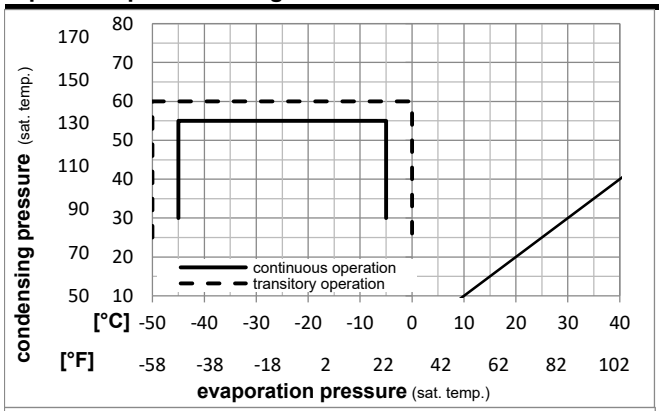
Configuration		**Ambient/ machine room temperatures minimum /maximum**	
Motorconfiguration	CSIR	Ambient temperature range:	10 - 38°C / 50 - 101°F
Power supply (nominal)	220-240V/50Hz 1~	Machine room temperature range:	10 - 43°C / 50 - 110°F
Refrigerant	R404A	**Compressor cooling:**	fan 3m/s
Application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

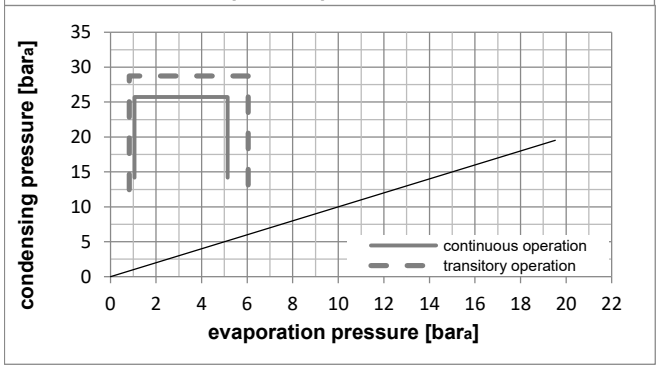
Electrical accessories / wiring diagram





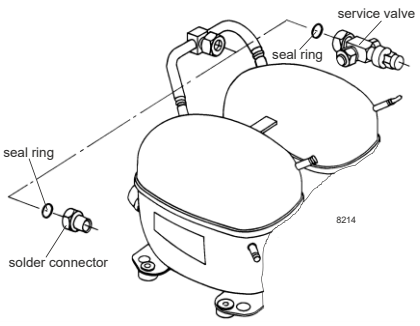
Operation pressure range





Components

a2	relay	117U6005
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

Designation **SC12/12CL** **220-240V/50Hz** **Conf. 1** Sales code: **104L4088**

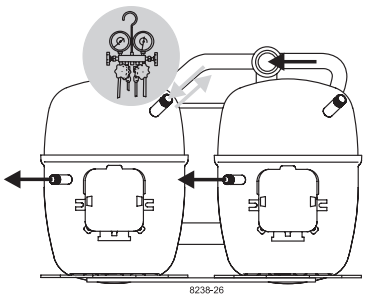
Optimization + standard conditions R404A, 220V/50Hz, CSIR, fan 3m/s, CCC, EAC, VDE

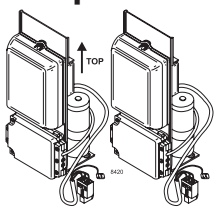
	Evaporating pressure (saturation temperature) pe	Condensing pressure (saturation temperature) pc	Return gas temp. RGT	Liquid temp. Tliq	Cooling capacity [W]	[Btu/h]	[kcal/h]	COP [W/W]	EER [Btu/Wh]	[kcal/Wh]	Power consumption P1 [W]	Current consumption I [A]	Ref. mass flow ṁ [kg/h]	
[°C]	-23	54	32	32	1028,8	3514	885,4	1,09	3,74	0,94	939,7	5,79	23,97	**ASHRAE LBP**
[°F]	-10	130	90	90										
[°C]	-25	55	32	55	667,8	2281	574,7	0,75	2,57	0,65	887,3	5,60	20,87	**cecomaf LBP**
[°F]	-13	131	90	131										
[°C]	-35	40	20	40	564,9	1929	486,1	0,87	2,99	0,75	645,8	4,86	15,35	**EN12900 LBP**
[°F]	-31	104	68	104										
[°C]	-23	49	4,4	49	825,1	2818	710,1	0,88	3,00	0,76	939,6	5,82	29,21	**ARI540 LBP**
[°F]	-10	120	40	120										
[°C]	-23	41	32	32	1339,4	4574	1152,7	1,45	4,94	1,25	925,1	5,73	31,21	**AHAM LBP**
[°F]	-10	105	90	90										
[°C]	-35	45	32	45	474,6	1621	408,4	0,75	2,56	0,65	632,9	4,85	12,69	**opt**
[°F]	-31	113	90	113										

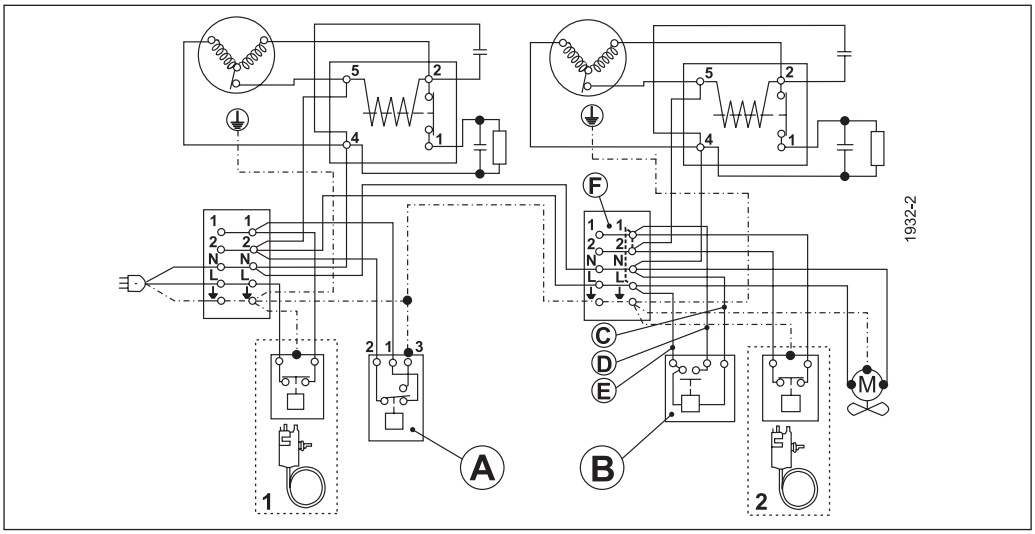
Performance tables R404A, 220V/50Hz, CSIR, fan 3m/s, CCC, EAC, VDE

	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]	-45	-49	115,4	394	99,3	0,30	1,04	0,26	379,2	4,30	3,07
cond. pressure	-35	-31	474,6	1621	408,4	0,75	2,56	0,65	632,9	4,85	12,69
pc= 45/113	-30	-22	706,4	2413	608,0	0,93	3,17	0,80	760,6	5,22	18,96
return gas temp.	-25	-13	979,6	3346	843,1	1,10	3,76	0,95	890,6	5,64	26,43
RGT= 32/90	-20	-4	1299,1	4437	1118,0	1,27	4,33	1,09	1024,3	6,13	35,24
liquid temp	-15	5	1669,6	5702	1436,8	1,44	4,90	1,24	1162,8	6,67	45,61
Tliq= 45/113	-5	23	2583,3	8822	2223,2	1,77	6,04	1,52	1460,2	7,94	71,82
[°C / °F]	-45	-49	-78,5	-268	-67,5	-0,29	-0,97	-0,25	275,2	3,96	-2,41
cond. pressure	-35	-31	234,6	801	201,9	0,40	1,38	0,35	581,0	4,66	7,26
pc= 55/131	-30	-22	433,7	1481	373,3	0,59	2,02	0,51	733,4	5,10	13,48
return gas temp	-25	-13	667,8	2281	574,7	0,75	2,57	0,65	887,3	5,60	20,87
RGT= 32/90	-20	-4	941,5	3216	810,3	0,90	3,08	0,78	1043,9	6,16	29,62
liquid temp	-15	5	1260,0	4303	1084,3	1,05	3,57	0,90	1204,6	6,77	39,96
Tliq= 55/131	-5	23	2050,2	7002	1764,4	1,33	4,54	1,14	1543,6	8,19	66,36

SC Twin Compressors

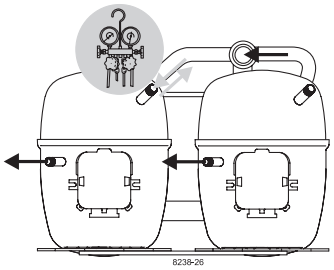


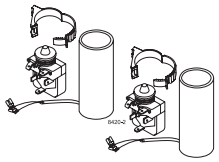


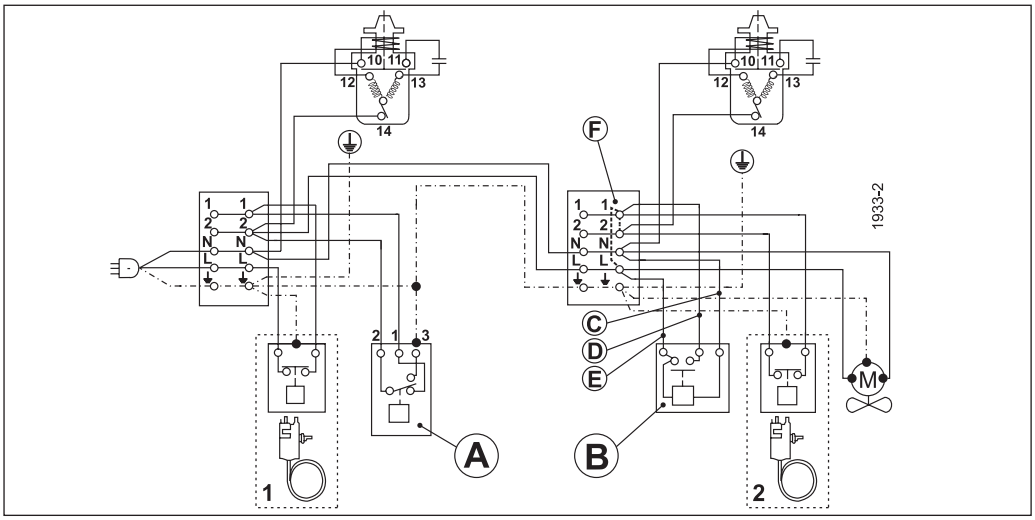


	A	B	C	D	E	F	
ENGLISH	Safety pressure control	Time delay relay	Blue	Black	Brown	Remove wire L-1 if time delay is used	Remove wire 1-2 if thermostat 2 is used
中文	安全压力控制	延时继电器	蓝	黑	棕	若延时继电器使用，线L-1不使用	若温控器2使用，线1-2不使用
Русский	Предохранительное реле давления	Реле задержки времени	Синий	Чёрный	Коричневый	Отсоедините 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	Tijdvertragings 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 tidfördröjningsrelä avlägsnas bygling L-1	Vid anslutning av termostat 2 avlägsnas bygling 1-2

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	Tijdvertragings 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 tidfördröjningsrelä avlägsnas bygling L-1	Vid anslutning av termostat 2 avlägsnas bygling 1-2