

## Single Pack SC10/10DL 220-240V 50Hz CSIR

Single pack code number: **195B3365**

Position	Title	Code	Amount
1	Compressor SC10/10DL	104L4091	1
2	Starting relay	117U6005	2
3	Starting capacitor (80 $\mu$ F 220V, 6.3mm)	117U5017	2
4	Cord relief	103N1004	2
5	Cover	103N2009	2
6	Bolt joint for one compressor   M6   $\varnothing$ 16mm	118-1917	1

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## Model

Designation	<b>SC10/10DL</b>	220-240V/50Hz 1~	Sales code:	<b>104L4091</b>
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## Compressor design

Oil type	Polyolester	Refrigerant(s)	<b>R404A, R507, R407C</b>
Oil viscosity	32cST	Displacement	20,58cm <sup>3</sup> / 1,26cu.in
Oil quantity	1233cm <sup>3</sup> / 41,7fl.oz	Compressors on pallet	18
Refr. charge - tech. limit	2200g / 77,6oz		
Free gas volume comp.	2820cm <sup>3</sup> / 95,4fl.oz		
Weight	26,8kg / 59,1lbs		
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 SC10/10DL

	<b>Conf. 1</b>	<b>Conf. 2</b>
Motorconfiguration	CSIR	CSIR
Power supply (nominal)	220-240V/50Hz	220-240V/50Hz
Number of phases	1	1
Voltage range	198-254V	198-254V
Approvals	CCC, EAC, VDE	CCC, EAC, VDE
Starting torque	HST	HST
Note	- / -	

## Applications with SC10/10DL

	<b>Conf. 1</b>	<b>Conf. 2</b>
Refrigerant	R404A	R407C
Application	HBP	HBP
System cooling	fan 3m/s	fan 3m/s
Hot gas defrost	OK	OK
Long interval pull down	OK	OK

## Electrical data - Configurations with SC10/10DL

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

## Model

Designation

**SC10/10DL**

220-240V/50Hz 1~

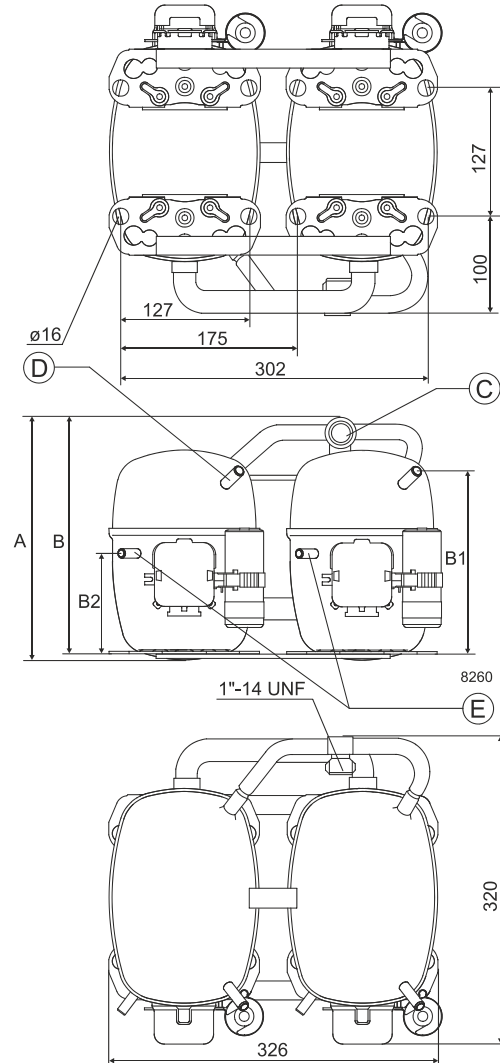
Sales code:

**104L4091**

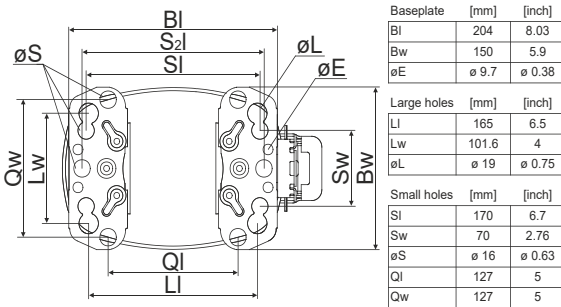
## Compressor dimensions

<b>Housing</b>	A Height	249mm / 9,8in
	B Height	244mm / 9,61in
	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

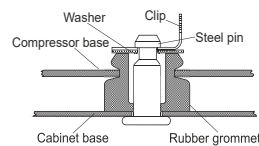


## Mounting accessories

	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

Designation	<b>SC10/10DL</b>	<b>220-240V/50Hz</b>	<b>Conf. 1</b>	Sales code:	<b>104L4091</b>
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## Configuration

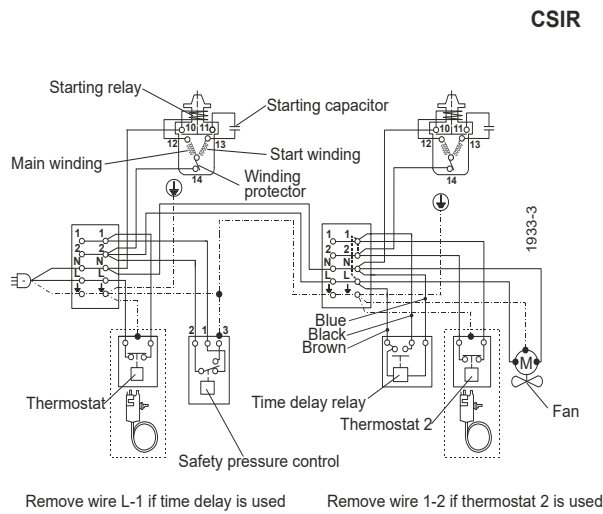
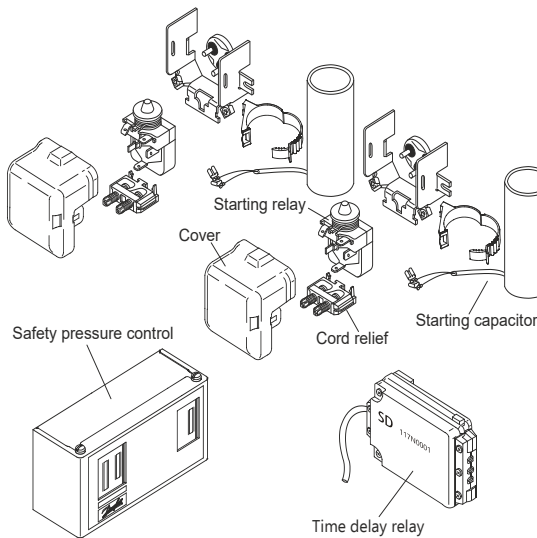
Motorconfiguration	CSIR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R404A
Application	HBP
Voltage range	198-254V
Starting torque	HST
Approvals	CCC, EAC, VDE

## Ambient/ machine room temperatures minimum /maximum

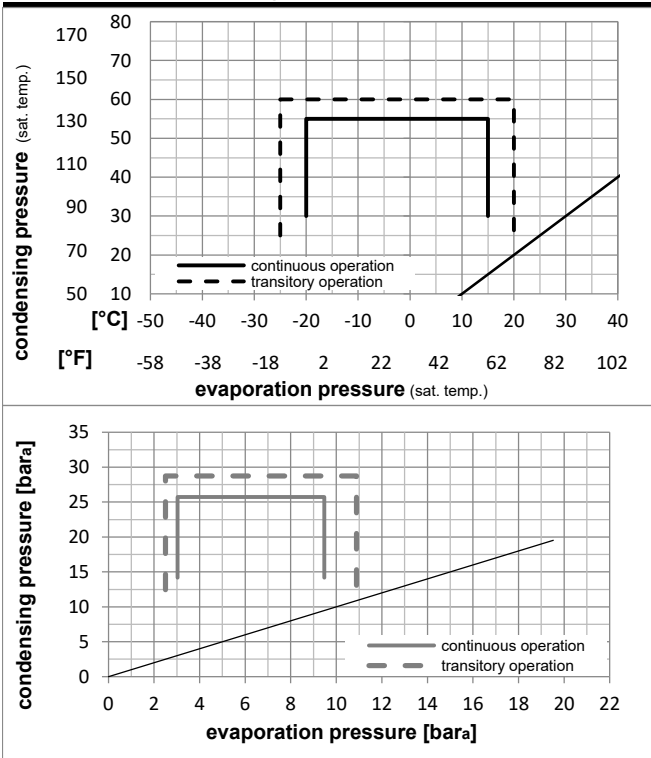
Ambient temperature range:	10 - 38°C / 50 - 101°F
Machine room temperature range:	10 - 43°C / 50 - 110°F
Compressor cooling:	fan 3m/s

## Operation Limits

## Electrical accessories / wiring diagram

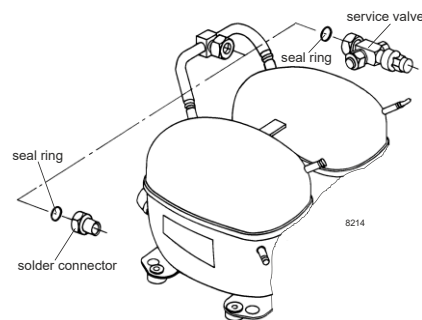


## Operation pressure range



## Components

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 **SC10/10DL** **220-240V/50Hz** Conf. 1 Sales code: **104L4091**

### Optimization + standard conditions

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

		Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)						Power consumption			
		Return gas temp.		Liquid temp.		Cooling capacity		COP	EER		Current consumption		Ref. mass flow		
		pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	P1	I	m	
[°C]	[°F]	[°C]	[°F]	[°C]	[°F]							[W]	[A]	[kg/h]	
[°C]	7,2	54	35	46	2956,0	10095	2544,0	2,15	7,35	1,85	1373,5	7,59	84,05	<b>ASHRAE HBP</b>	
[°F]	45	130	95	115											
[°C]	5	55	32	55	2311,6	7894	1989,4	1,71	5,85	1,47	1349,9	7,49	76,98	<b>cecomaf HBP</b>	
[°F]	41	131	90	131											
[°C]	5	50	20	50	2415,7	8250	2079,0	1,92	6,56	1,65	1257,3	7,15	82,38	<b>EN12900 HBP</b>	
[°F]	41	122	68	122											
[°C]	-7	54	35	46	1676,1	5724	1442,4	1,51	5,16	1,30	1109,7	6,54	46,12	<b>ASHRAE MBP</b>	
[°F]	20	130	95	115											
[°C]	-10	55	32	55	1227,0	4190	1056,0	1,18	4,05	1,02	1035,6	6,25	39,28	<b>cecomaf MBP</b>	
[°F]	14	131	90	131											
[°C]	-10	45	20	45	1460,7	4989	1257,1	1,53	5,21	1,31	957,0	5,95	44,00	<b>EN12900 MBP</b>	
[°F]	14	113	68	113											

### Performance tables

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

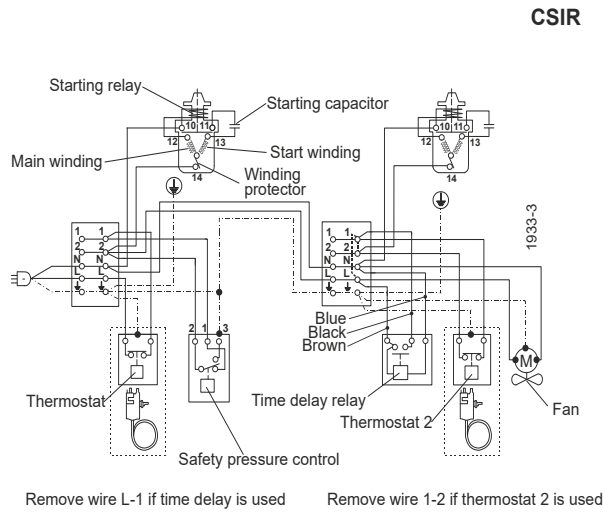
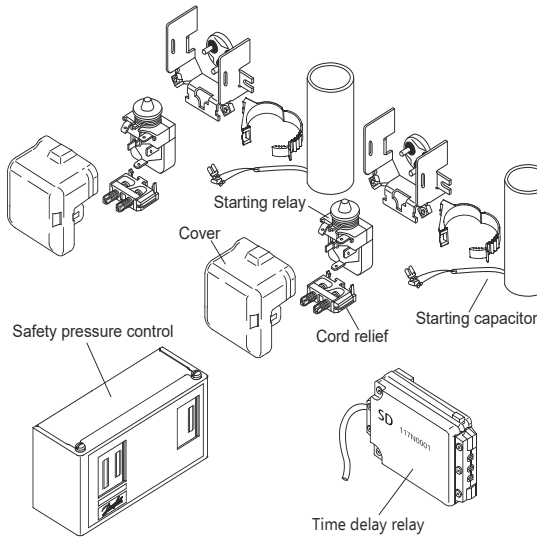
	pe		Cooling capacity			COP	EER	P1		I	m
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]
[°C / °F]	-20	-4	942,5	3219	811,1	1,26	4,31	1,09	746,8	5,11	25,57
cond. pressure	-15	5	1221,5	4172	1051,2	1,42	4,86	1,23	857,8	5,55	33,37
pc= 45/113	-10	14	1550,3	5294	1334,2	1,62	5,53	1,39	957,0	5,95	42,69
return gas temp.	-5	23	1935,3	6609	1665,5	1,85	6,33	1,60	1044,0	6,30	53,80
RGT= 32/90	0	32	2383,2	8139	2051,0	2,13	7,28	1,83	1118,3	6,60	67,00
liquid temp	5	41	2900,4	9905	2496,1	2,46	8,40	2,12	1179,7	6,85	82,63
Tliq= 45/113	15	59	4169,1	14238	3588,0	3,30	11,28	2,84	1262,3	7,21	122,94
[°C / °F]	-20	-4	699,5	2389	602,0	0,92	3,15	0,79	757,5	5,19	22,01
cond. pressure	-15	5	948,1	3238	815,9	1,05	3,58	0,90	903,2	5,74	30,07
pc= 55/131	-10	14	1227,0	4190	1056,0	1,18	4,05	1,02	1035,6	6,25	39,28
return gas temp	-5	23	1542,9	5269	1327,8	1,34	4,56	1,15	1154,4	6,71	49,94
RGT= 32/90	0	32	1902,2	6496	1637,1	1,51	5,16	1,30	1259,3	7,12	62,38
liquid temp	5	41	2311,6	7894	1989,4	1,71	5,85	1,47	1349,9	7,49	76,98
Tliq= 55/131	15	59	3306,4	11292	2845,6	2,22	7,60	1,91	1486,8	8,08	114,66

<b>Model</b>				
Designation	<b>SC10/10DL</b>	<b>220-240V/50Hz</b>	<b>Conf. 2</b>	Sales code: <b>104L4091</b>

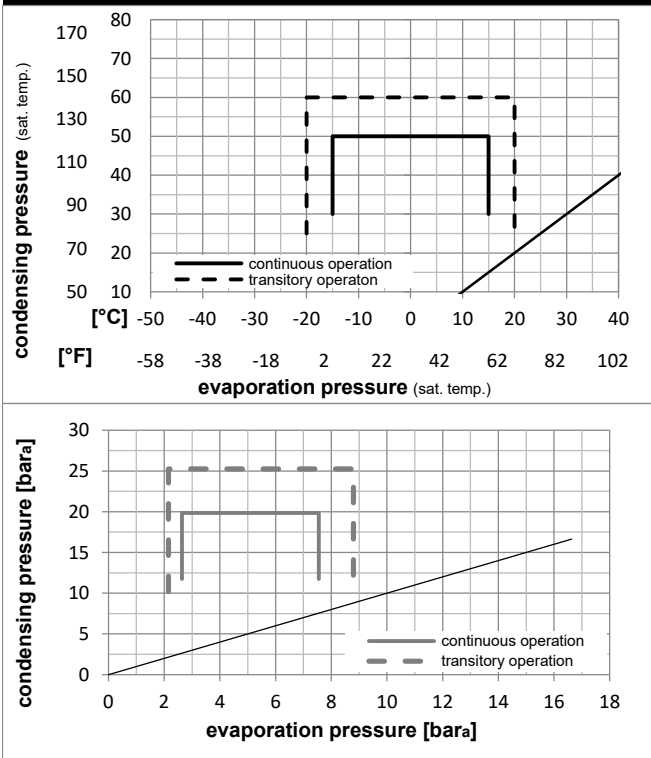
<b>Configuration</b>		<b>Ambient/ machine room temperatures minimum /maximum</b>
Motorconfiguration	CSIR	Ambient temperature range: 10 - 38°C / 50 - 101°F
Power supply (nominal)	220-240V/50Hz 1~	Machine room temperature range: 10 - 43°C / 50 - 110°F
Refrigerant	R407C	<b>Compressor cooling:</b> fan 3m/s
Application	HBP	
Voltage range	198-254V	
Starting torque	HST	
Approvals	CCC, EAC, VDE	

**Operation Limits**

**Electrical accessories / wiring diagram**

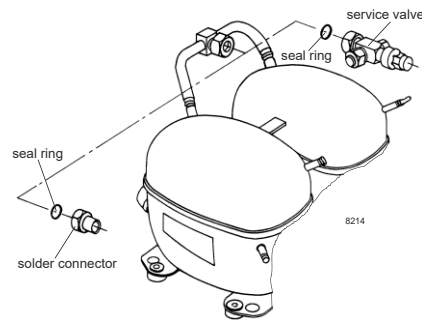


**Operation pressure range**



**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	<b>SC10/10DL</b>	<b>220-240V/50Hz</b>	Conf. 2	Sales code:	<b>104L4091</b>
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### Optimization + standard conditions

R407C, 220V/50Hz, CSIR, fan 3m/s, CCC, EAC, VDE

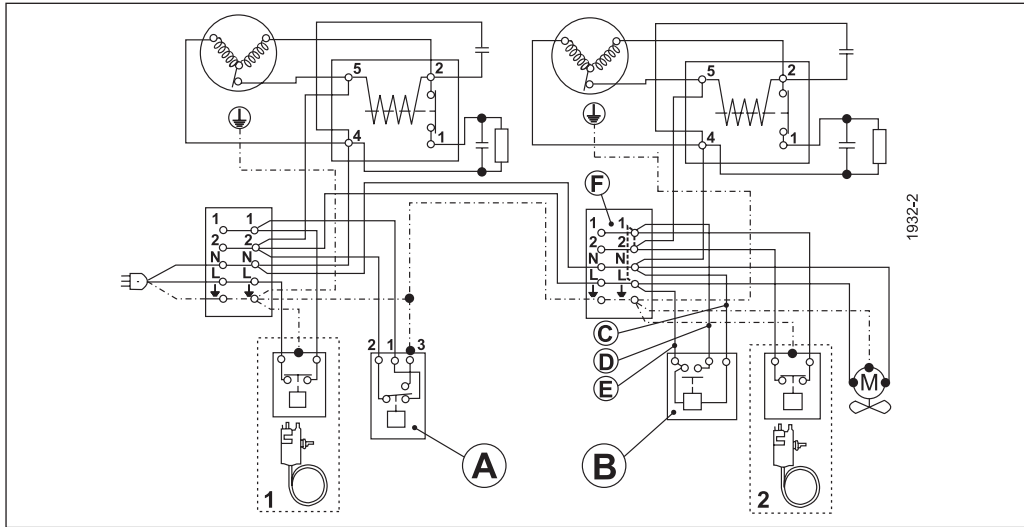
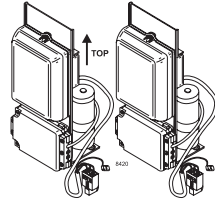
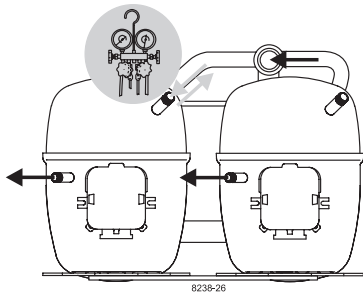
		Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)						Power consumption			
		Return gas temp.		Liquid temp.		Cooling capacity		COP	EER		P1	Current consumption		Ref. mass flow	
		pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	
[°C]	7,2	54	35	46	2616,2	8935	2251,5	2,32	7,91	1,99	1129,4	6,58	55,91	<b>ASHRAE HBP</b>	
[°F]	45	130	95	115											
[°C]	5	55	32	55	2127,3	7265	1830,8	1,94	6,62	1,67	1098,1	6,45	50,72	<b>cecomaf HBP</b>	
[°F]	41	131	90	131											
[°C]	5	50	20	50	2243,1	7661	1930,5	2,12	7,24	1,82	1058,8	6,31	54,37	<b>EN12900 HBP</b>	
[°F]	41	122	68	122											
[°C]	-7	54	35	46	1373,2	4690	1181,8	1,57	5,36	1,35	875,5	5,61	28,67	<b>ASHRAE MBP</b>	
[°F]	20	130	95	115											
[°C]	-10	55	32	55	1022,6	3492	880,0	1,27	4,35	1,10	803,3	5,36	23,74	<b>cecomaf MBP</b>	
[°F]	14	131	90	131											
[°C]	-10	45	20	45	1228,7	4196	1057,5	1,56	5,32	1,34	788,3	5,32	27,35	<b>EN12900 MBP</b>	
[°F]	14	113	68	113											

### Performance tables

R407C, 220V/50Hz, CSIR, fan 3m/s, CCC, EAC, VDE

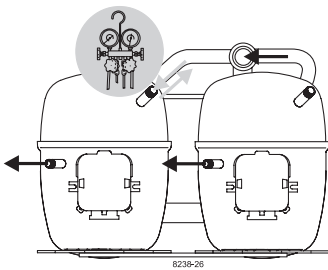
	pe		Cooling capacity			COP	EER		P1	I	m
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]
[°C / °F]	-15	5	960,9	3282	827,0	1,39	4,74	1,19	692,8	5,00	19,96
cond. pressure	-10	14	1272,4	4346	1095,1	1,61	5,51	1,39	788,3	5,32	26,58
pc= 45/113	-5	23	1641,9	5607	1413,0	1,88	6,41	1,62	874,2	5,62	34,53
return gas temp.	0	32	2077,0	7093	1787,5	2,18	7,46	1,88	951,0	5,90	44,03
RGT= 32/90	5	41	2585,7	8831	2225,3	2,54	8,66	2,18	1019,6	6,16	55,32
liquid temp	10	50	3175,7	10846	2733,1	2,94	10,04	2,53	1080,8	6,40	68,70
Tliq= 45/113	15	59	3854,9	13165	3317,5	3,40	11,60	2,92	1135,2	6,63	84,50
[°C / °F]	-15	5	745,3	2545	641,4	1,09	3,73	0,94	683,1	4,97	17,19
cond. pressure	-10	14	1022,6	3492	880,0	1,27	4,35	1,10	803,3	5,36	23,74
pc= 55/131	-5	23	1340,1	4577	1153,3	1,47	5,02	1,26	912,0	5,74	31,34
return gas temp	0	32	1705,8	5825	1468,0	1,69	5,77	1,45	1010,1	6,10	40,25
RGT= 32/90	5	41	2127,3	7265	1830,8	1,94	6,62	1,67	1098,1	6,45	50,72
liquid temp	10	50	2612,5	8922	2248,3	2,22	7,58	1,91	1177,1	6,77	63,06
Tliq= 55/131	15	59	3169,2	10823	2727,4	2,54	8,68	2,19	1247,5	7,08	77,63

# SC Twin Compressors

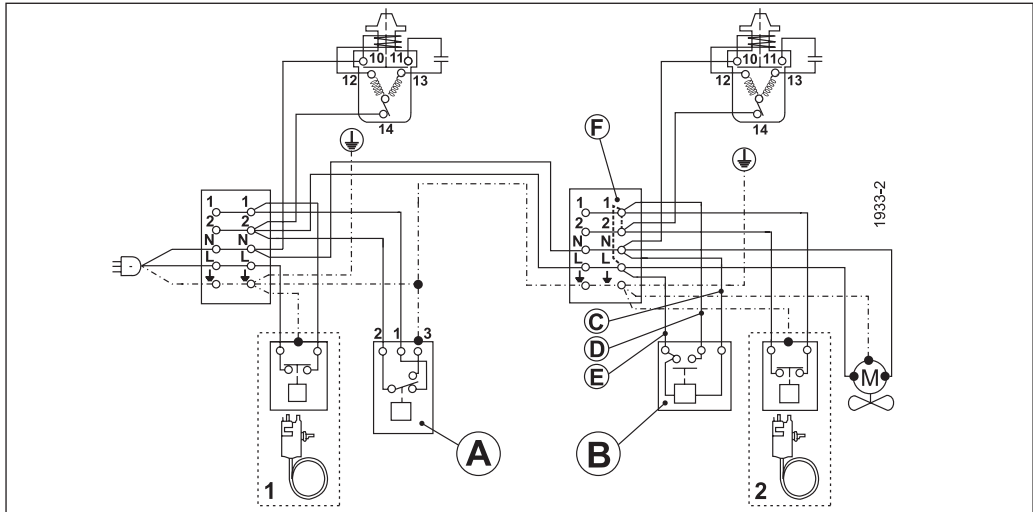
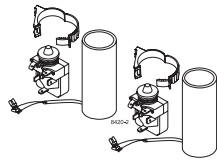


	A	B	C	D	E	F	
ENGLISH	Safety pressure control	Time delay relay	Blue	Black	Brown	Remove wire L-1 if time delay is used	Remove wire 1-2 if thermostat 2 is used
中文	安全压力控制	延时继电器	蓝	黑	棕	若延时继电器使用, 线L-1不使用	若温控器2使用, 线1-2不使用
Русский	Предохранительное реле давления	Реле задержки времени	Синий	Чёрный	Коричневый	Отсоедините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



	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 Anlaufverzögerung 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	Tijdvertraging-relais	Blauw	Zwart	Bruin	Verwijder draad L-1 indien tijdvertraging wordt toegepast	Verwijder draad 1-2 indien thermostaat wordt toegepast
DANSK	Sikkerhedspressostat	Tidsforsinkel-sesrelæ	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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