

## Model

Designation	<b>SC18/18CL</b>	220-240V/50Hz 1~	Sales code:	<b>104L4090</b>
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## Compressor design

Oil type	Polyolester	Refrigerant(s)	<b>R404A, R507</b>
Oil viscosity	32cST	Displacement	35,38cm <sup>3</sup> / 2,16cu.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.	2920cm <sup>3</sup> / 98,7fl.oz		
Weight	29,1kg / 64,2lbs		
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 SC18/18CL

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

## Applications with SC18/18CL

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

## Electrical data - Configurations with SC18/18CL

	<b>Conf. 1</b>
Starting device type	relay
Run capacitor	10μF
Start capacitor	80μF
LRA (locked rotor amps / 4s)	2x 20,43A
RLA (rated load amps / 1s)	2x 4,2A
Cut in current	2x 20,43A

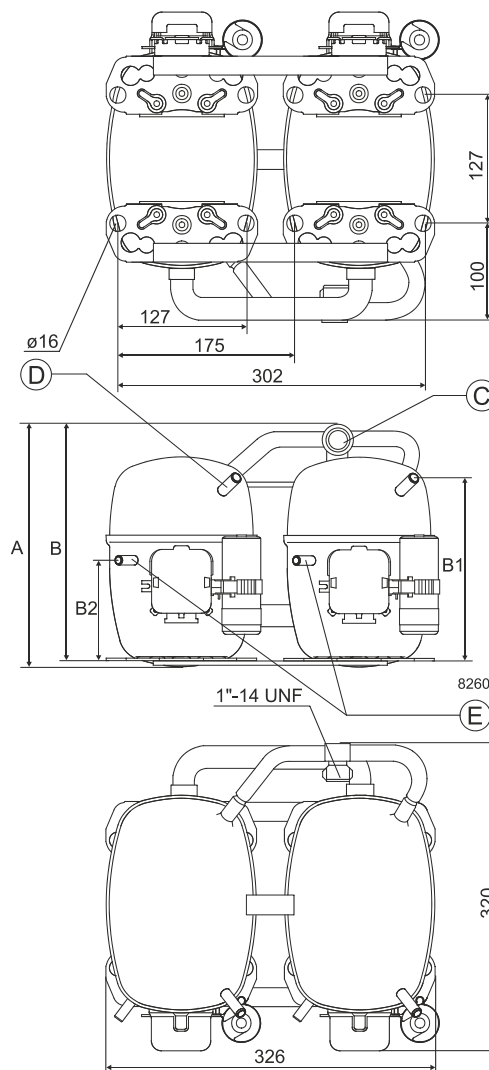
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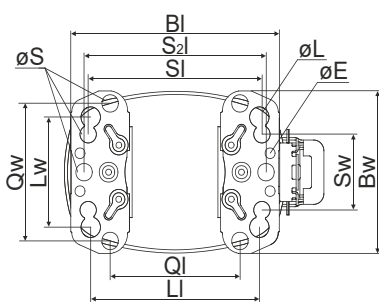
## Compressor dimensions

<b>Housing</b>	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



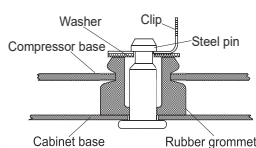
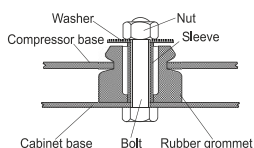
Baseplate	[mm]	[inch]
BI	204	8.03
Bw	150	5.9
øE	ø 9.7	ø 0.38
Large holes		
LI	165	6.5
Lw	101.6	4
øL	ø 19	ø 0.75
Small holes		
SI	170	6.7
Sw	70	2.76
øS	ø 16	ø 0.63
QI	127	5
Qw	127	5

## 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

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## Configuration

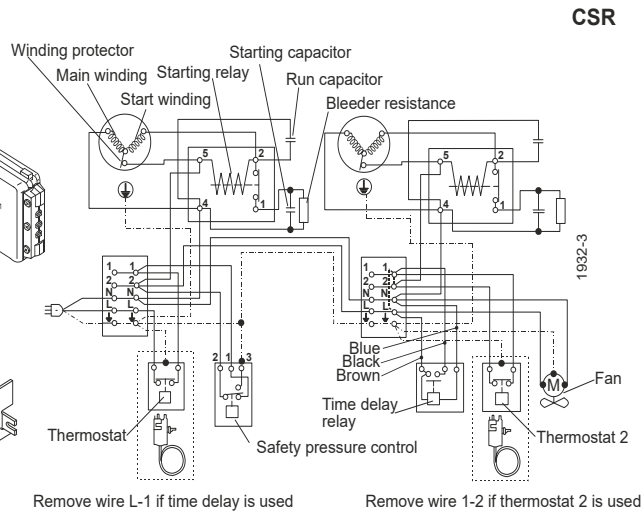
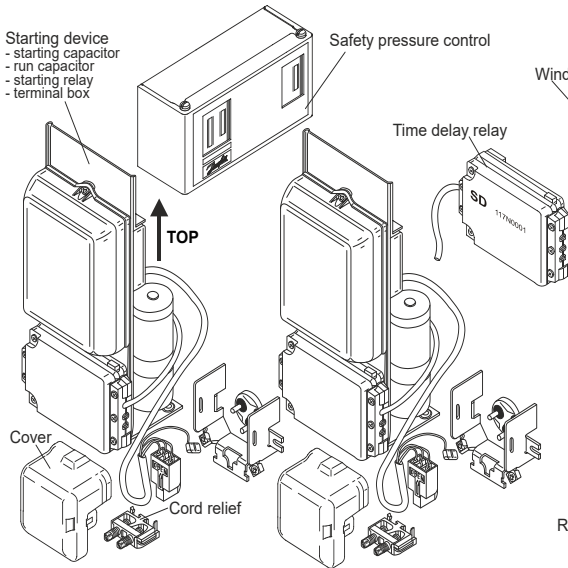
Motorconfiguration	CSCR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R404A
Application	LBP+MBP
Voltage range	198-254V
Starting torque	HST
Approvals	CCC, EAC, VDE

## Ambient/ machine room temperatures minimum /maximum

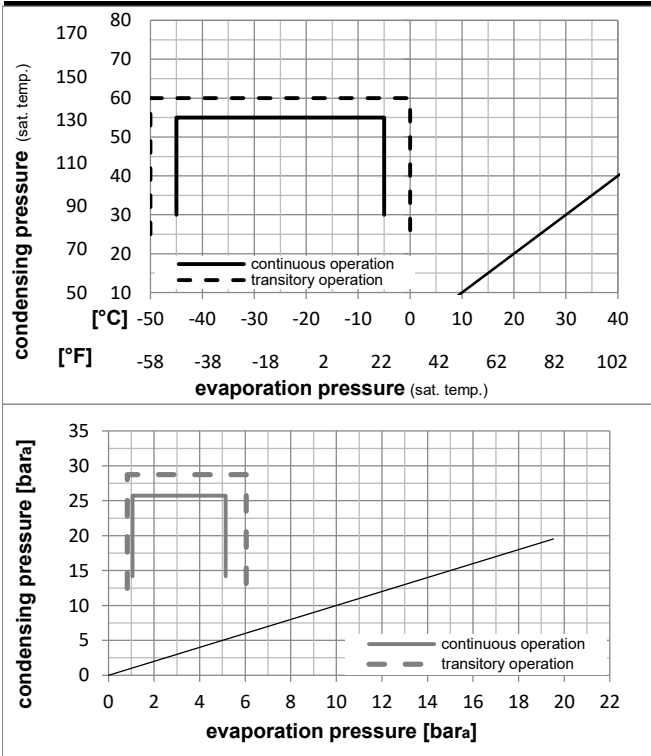
Ambient temperature range:	10 - 38°C / 50 - 101°F
Machine room temperature range:	10 - 43°C / 50 - 110°F
Compressor cooling:	fan 3m/s

## Operation Limits

## Electrical accessories / wiring diagram

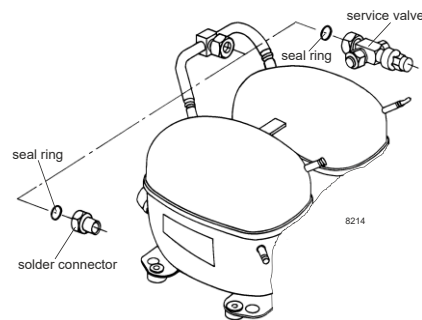


## Operation pressure range



## Components

a3	SC starter kit (550mm)	117-7027
b	plastic cover	103N2009
d	cord relief	103N1004
.	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, CCC, EAC, VDE

		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	Current consumption		Ref. mass flow				
[°C]	[°F]	[°C]	[°F]	[°C]	[°C]							[W]	[A]	[kg/h]						
-23	-10	54	130	32	32	1601,5	5469	1378,3	1,21	4,14	1,04	1319,9	7,55	37,32			ASHRAE LBP			
-25	-13	55	131	32	55	1077,1	3679	927,0	0,86	2,92	0,74	1258,0	7,29	33,66			cecomaf LBP			
-35	-31	40	104	20	40	872,3	2979	750,7	0,97	3,30	0,83	902,1	6,02	23,70			EN12900 LBP			
-23	-10	49	120	4,4	49	1218,6	4162	1048,7	0,93	3,19	0,80	1304,8	7,51	43,14			ARI540 LBP			
-23	-10	41	105	32	32	1898,1	6482	1633,5	1,51	5,17	1,30	1254,8	7,32	44,23			AHAM LBP			
-35	-31	45	113	32	45	788,9	2694	679,0	0,87	2,96	0,75	910,3	6,04	21,09			opt			

## Performance tables

R404A, 220V/50Hz, CSCR, 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	333,4	1139	286,9	0,57	1,94	0,49	587,3	5,22	8,86	
cond. pressure	-35	-31	788,9	2694	679,0	0,87	2,96	0,75	910,3	6,04	21,09	
pc= 45/113	-30	-22	1083,3	3700	932,3	1,01	3,46	0,87	1067,9	6,58	29,08	
return gas temp.	-25	-13	1430,4	4885	1231,0	1,16	3,97	1,00	1229,5	7,21	38,58	
RGT= 32/90	-20	-4	1836,3	6271	1580,4	1,31	4,48	1,13	1400,1	7,92	49,82	
liquid temp	-15	5	2307,3	7880	1985,7	1,46	4,97	1,25	1584,6	8,72	63,03	
Tliq= 45/113	-5	23	3469,0	11847	2985,4	1,72	5,88	1,48	2015,1	10,58	96,44	
[°C / °F]	-45	-49	167,7	573	144,4	0,33	1,14	0,29	504,3	4,93	5,15	
cond. pressure	-35	-31	550,2	1879	473,5	0,62	2,11	0,53	889,5	5,94	17,02	
pc= 55/131	-30	-22	792,5	2706	682,0	0,74	2,52	0,64	1073,4	6,57	24,63	
return gas temp	-25	-13	1077,1	3679	927,0	0,86	2,92	0,74	1258,0	7,29	33,66	
RGT= 32/90	-20	-4	1410,2	4816	1213,7	0,97	3,33	0,84	1448,4	8,10	44,37	
liquid temp	-15	5	1798,0	6141	1547,4	1,09	3,72	0,94	1649,4	9,00	57,02	
Tliq= 55/131	-5	23	2762,5	9434	2377,4	1,31	4,49	1,13	2103,5	11,04	89,41	