

Model

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

Oil type	Polyolester	Refrigerant(s)	R404A, R507, R407C
Oil viscosity	32cST	Displacement	20,58cm ³ / 1,26cu.in
Oil quantity	1233cm ³ / 41,7fl.oz	Compressors on pallet	18
Refr. charge - tech. limit	2200g / 77,6oz		
Free gas volume comp.	2820cm ³ / 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

	Conf. 1	Conf. 2
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

	Conf. 1	Conf. 2
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

	Conf. 1	Conf. 2
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

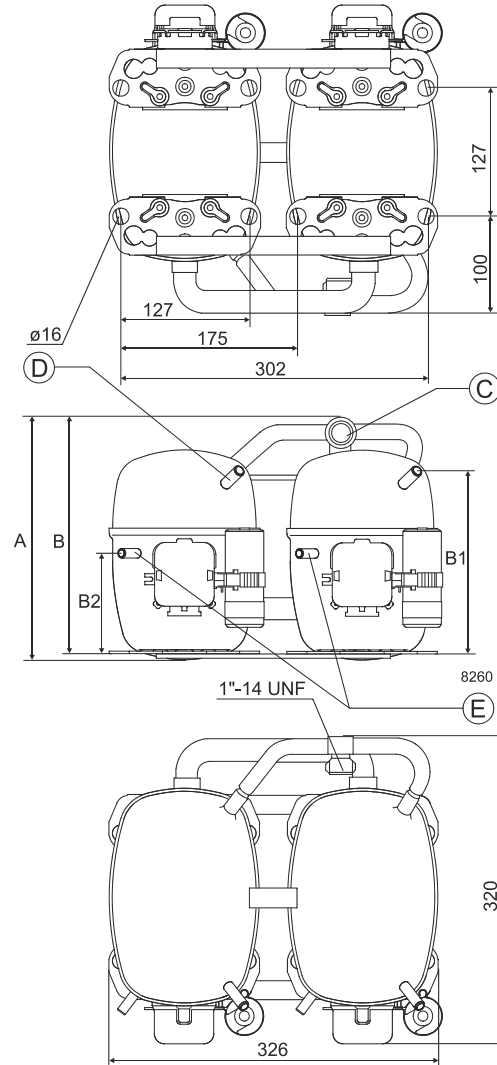
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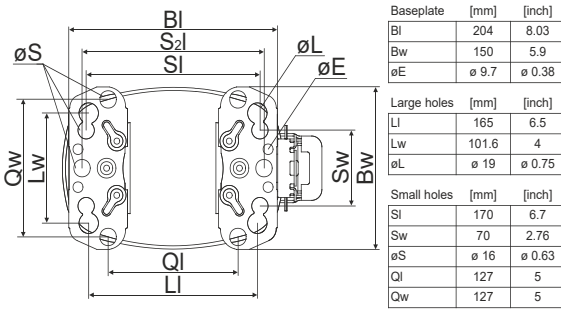
Compressor dimensions

Housing	A Height	249mm / 9,8in
	B Height	244mm / 9,6in
	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

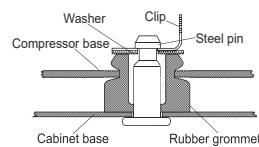
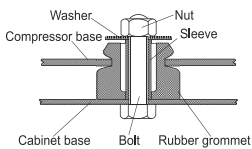


Mounting accessories

	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

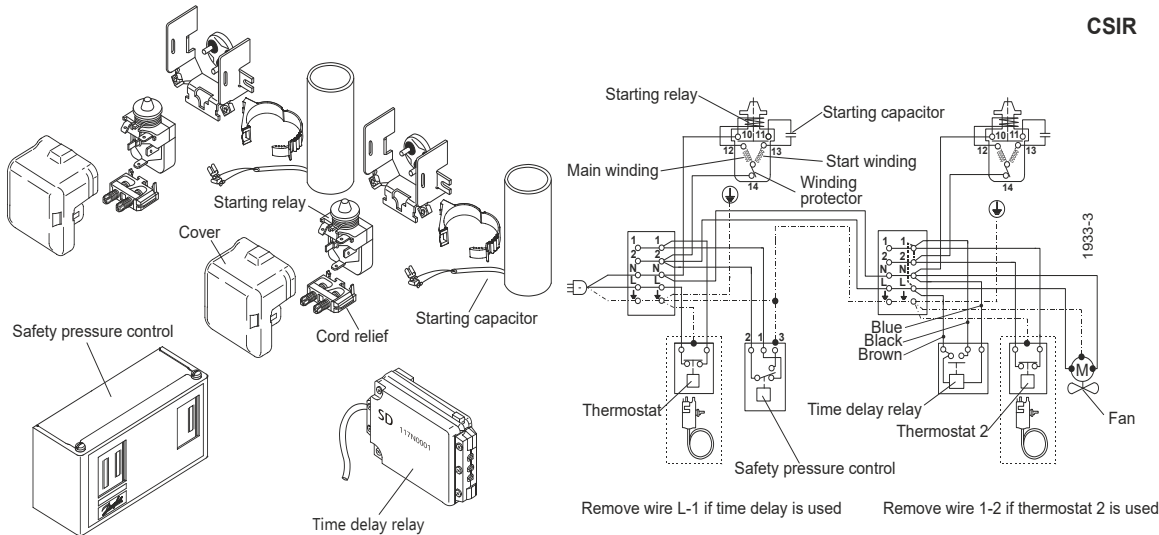
Provision for PE Grounding is located at the PE Stamp on the compressor
 Twin should be used with a time-delay relay

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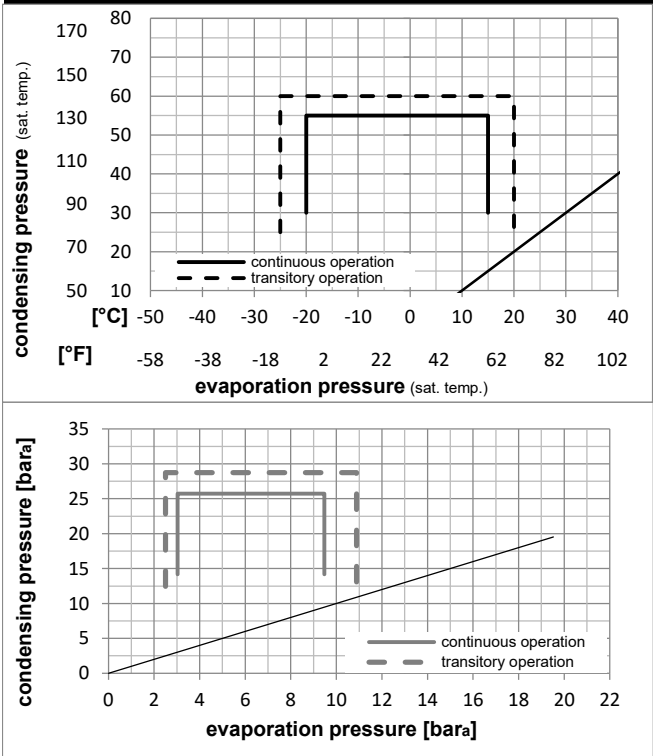
Configuration	Ambient/ machine room temperatures minimum /maximum	
Motorconfiguration	CSIR	Ambient temperature range: 10 - 38°C / 50 - 101°F
Power supply (nominal)	220-240V/50Hz 1~	Machine room temperature range: 10 - 43°C / 50 - 110°F
Refrigerant	R404A	Compressor cooling: fan 3m/s
Application	HBP	
Voltage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

Operation Limits

Electrical accessories / wiring diagram

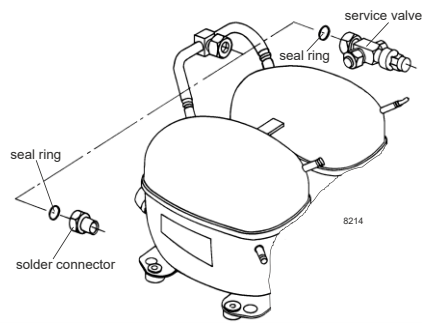


Operation pressure range



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 **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		P1	I	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	2956,0	10095	2544,0	2,15	7,35	1,85	1373,5	7,59	84,05	ASHRAE HBP	
[°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	cecomaf HBP	
[°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	EN12900 HBP	
[°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	ASHRAE MBP	
[°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	cecomaf MBP	
[°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	EN12900 MBP	
[°F]	14	113	68	113											

Performance tables

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

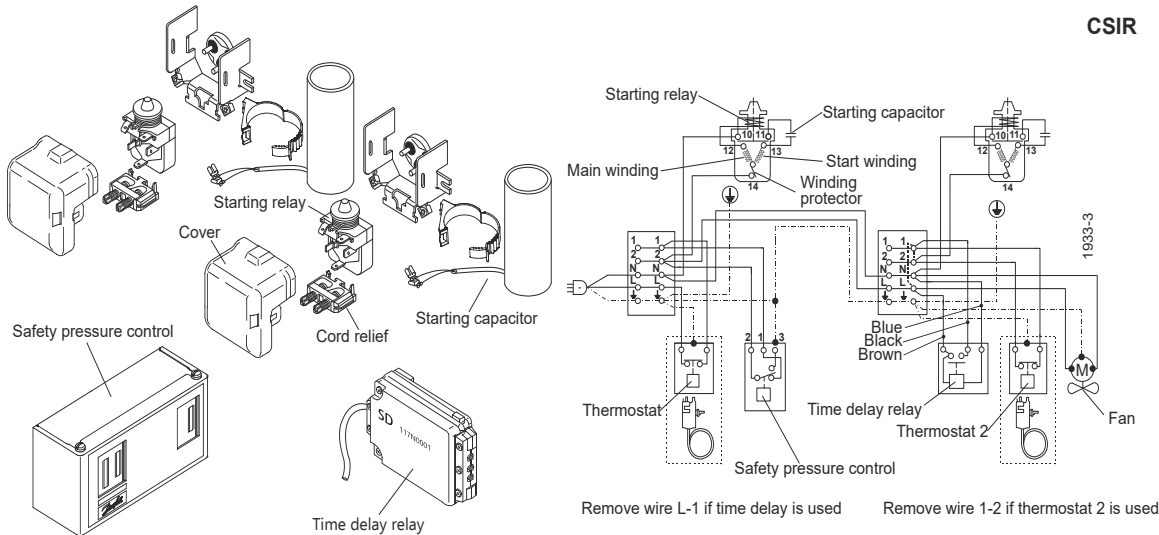
	pe		Cooling capacity			COP	EER	P1		I	m
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]
[°C / °F]	-20	-4	942,5	3219	811,1	1,26	4,31	1,09	746,8	5,11	25,57
cond. pressure	-15	5	1221,5	4172	1051,2	1,42	4,86	1,23	857,8	5,55	33,37
pc= 45/113	-10	14	1550,3	5294	1334,2	1,62	5,53	1,39	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

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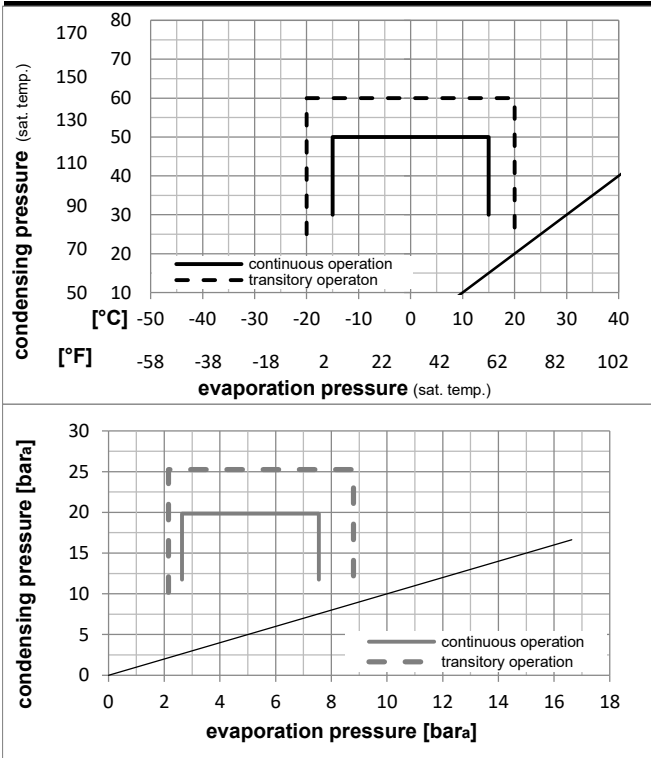
Configuration	Ambient/ machine room temperatures minimum /maximum	
Motorconfiguration	CSIR	Ambient temperature range: 10 - 38°C / 50 - 101°F
Power supply (nominal)	220-240V/50Hz 1~	Machine room temperature range: 10 - 43°C / 50 - 110°F
Refrigerant	R407C	Compressor cooling: fan 3m/s
Application	HBP	
Voltage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

Operation Limits

Electrical accessories / wiring diagram

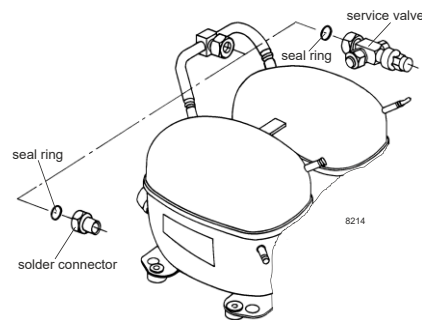


Operation pressure range



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	SC10/10DL	220-240V/50Hz	Conf. 2	Sales code:	104L4091
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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)			Return gas temp.			Liquid temp.		Cooling capacity			COP	EER	Power consumption			ASHRAE HBP
		pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	P1	I	Ref. mass flow				ASHRAE HBP				
[°C]	[°F]											[W]	[A]	[kg/h]								
7,2	45	54	130	35	95	46	115	2616,2	8935	2251,5	2,32	7,91	1,99	1129,4	6,58	55,91						
5	41	55	131	32	90	55	131	2127,3	7265	1830,8	1,94	6,62	1,67	1098,1	6,45	50,72				cecomaf HBP		
5	41	50	122	20	68	50	122	2243,1	7661	1930,5	2,12	7,24	1,82	1058,8	6,31	54,37				EN12900 HBP		
-7	20	54	130	35	95	46	115	1373,2	4690	1181,8	1,57	5,36	1,35	875,5	5,61	28,67				ASHRAE MBP		
-10	14	55	131	32	90	55	131	1022,6	3492	880,0	1,27	4,35	1,10	803,3	5,36	23,74				cecomaf MBP		
-10	14	45	113	20	68	45	113	1228,7	4196	1057,5	1,56	5,32	1,34	788,3	5,32	27,35				EN12900 MBP		

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