

SC12/12DL MBP/HBP Twin Compressor R404A/R507 & R407C 220-240V 50Hz

General

Code number	104L4092
Approvals	EN 60335-2-34
Compressors on pallet	18

Application

Application	MBP/HBP		
Frequency	Hz	50	60
Evaporating temperature	°C	-20 to 15	-
Voltage range	V	198 - 254	-
Max. condensing temperature continuous (short)	°C	55 (60)	-
Max. winding temperature continuous (short)	°C	125 (135)	-

Cooling requirements

Frequency	Hz	50			60		
Application		LBP	MBP	HBP	LBP	MBP	HBP
32°C		-	F ₂	F ₂	-	-	-
38°C		-	F ₂	F ₂	-	-	-
43°C		-	-	-	-	-	-
Remarks on application:							

Motor

Motor type	CSIR		
LRA (rated after 4 sec. UL984) *, HST LST	A	2 x 18.6	-
Cut in Current *, HST LST	A	2 x 18.6	-
Resistance, main start winding (25°C)	Ω	3.7	14.1

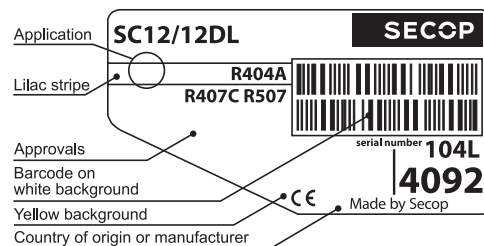
* Operational current for the second compressor time-delayed.

Design

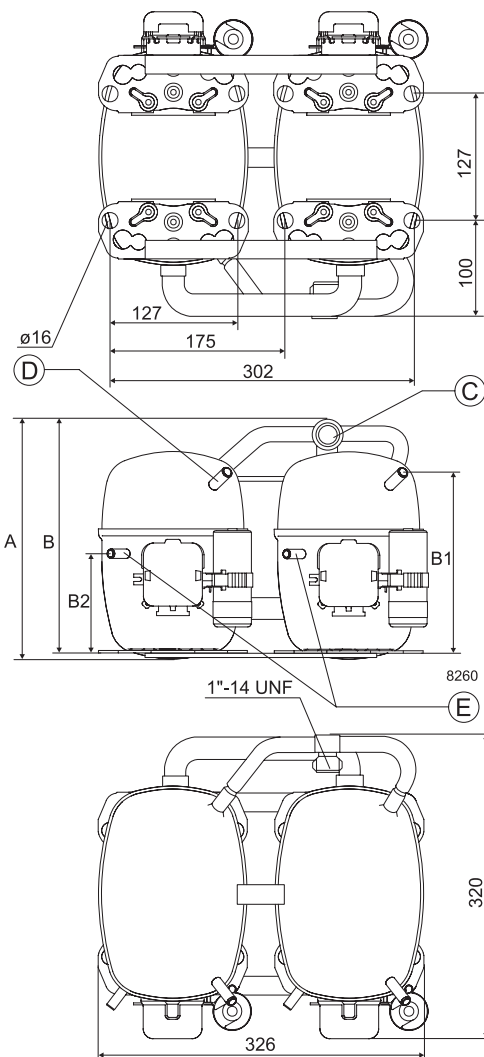
Displacement	cm ³	2 x 12.87
Oil quantity (type)	cm ³	1220 (polyolester)
Maximum refrigerant charge	g	2200
Free gas volume in compressor	cm ³	2920
Weight without electrical equipment	kg	27.8

Dimensions

Height	mm	A	249
		B	244
		B1	183
		B2	100
Suction connector (service valve)	location/I.D. mm	C	12 37°
Suction connector (solder connector)	location/I.D. mm	C	12 37°
Process connector	location/I.D. mm angle	D	6.2 37°
	material comment		Copper Rubber plug
Discharge connector	location/I.D. mm angle	E	6.2 37°
	material comment		Copper Rubber plug
Oil cooler connector	location/I.D. mm angle	F	-
	material comment		-
Connector tolerance	I.D. mm		±0.09
Remarks:			



- S = Static cooling normally sufficient
- O = Oil cooling
- F₁ = Fan cooling 1.5 m/s (compressor compartment temperature equal to ambient temperature)
- F₂ = Fan cooling 3.0 m/s necessary
- SG = Suction gas cooling normally sufficient
- = not applicable in this area



EN 12900 Household (CECOMAF) R404A/R507, 220V, 50Hz, fan cooling F₂

Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10	15	20
Capacity in W							1217	1612	2055	2380	2559	3130	3780	4092	4516	5348	
Power cons. in W							978	1125	1248	1317	1349	1433	1500	1526	1555	160	
Current cons. in A							6.74	7.29	7.78	8.07	8.21	8.58	8.88	9.00	9.13	9.31	
COP in W/W							1.24	1.43	1.65	1.81	1.90	2.18	2.52	2.68	2.90	3.34	

ASHRAE LBP R404A/R507, 220V, 50Hz, fan cooling F₂

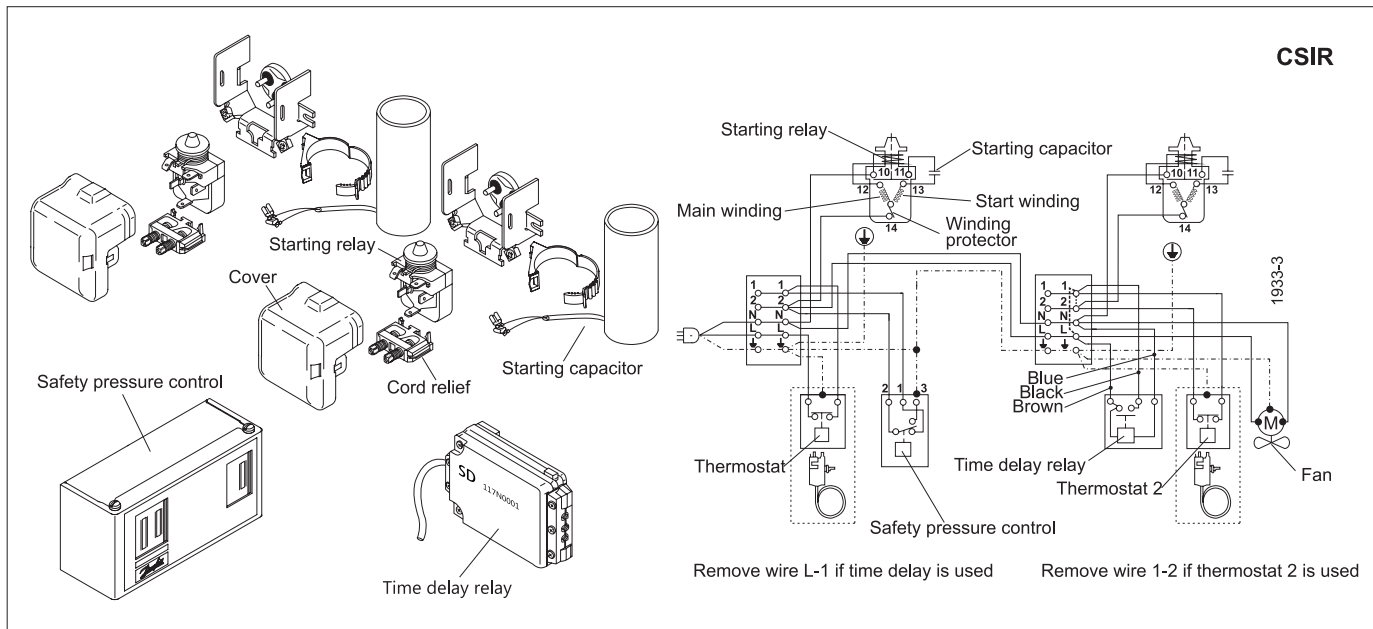
Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10	15	20
Capacity in W							1414	1874	2393	2761	2982	3654	4421	4791	5294	6287	
Power cons. in W							978	1125	1248	1317	1349	1433	1500	1526	1555	160	
Current cons. in A							6.74	7.29	7.78	8.07	8.21	8.58	8.88	9.00	9.13	9.31	
COP in W/W							1.45	1.67	1.92	2.10	2.21	2.55	2.95	3.14	3.40	3.93	

EN 12900 Household (CECOMAF) R407C, 220V, 50Hz, fan cooling F₂

Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10	15	20
Capacity in W							1263	1662	1955	2130	2285	2680	3321	3634	4062	4913	
Power cons. in W							912	1025	1087	1124	1212	1287	1316	1350	1400		
Current cons. in A							6.23	6.62	6.85	6.98	7.30	7.58	7.69	7.82	8.03		
COP in W/W							1.39	1.62	1.79	1.89	2.21	2.58	2.76	3.01	3.51		

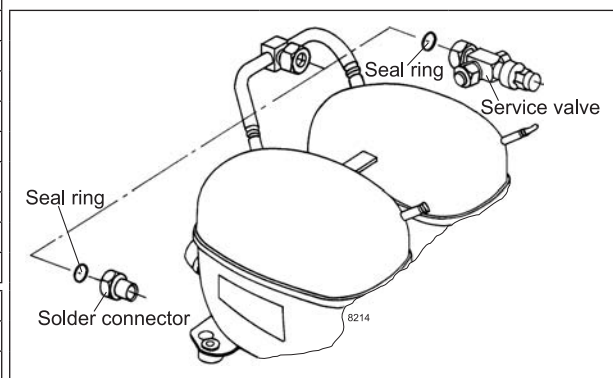
ASHRAE LBP R407C, 220V, 50Hz, fan cooling F₂

Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10	15	20
Capacity in W							1354	1781	2096	2285	2876	3566	3903	4364	5284		
Power cons. in W							912	1025	1087	1124	1212	1287	1316	1350	1400		
Current cons. in A							6.23	6.62	6.85	6.98	7.30	7.58	7.69	7.82	8.03		
COP in W/W							1.48	1.74	1.92	2.03	2.37	2.77	2.97	3.23	3.77		



Accessories	SC12/12DL	pcs.	Code number
Starting device	470 mm cable length	2	-
	550 mm cable length		-
	650 mm cable length		-
Starting relay	6.3 mm spade connectors	2	117U6019
Start. capacitor 80 µF	6.3 mm spade connectors	2	117U5017
Cover		2	103N2009
Cord relief		2	103N1004
Time-delay relay		1	117N0001
Check valve (to be used with time-delay relay)		2	020-1014
Service valve	12 mm	1	118-7350
Solder connector (alternative)	12 mm	1	104B0584
Service valve	16 mm	1	-
Solder connector (alternative)	16 mm	1	-
Seal ring for service valve and solder connector		1	118-3638
Mounting accessories		pcs.	Code number
Bolt joint for one compressor	Ø: 16 mm	2	118-1917
Bolt joint in quantities	Ø: 16 mm	2	118-1918

Test conditions	EN 12900/CECOMAF	ASHRAE MBP/HBP
Condensing temperature	45°C	45°C
Ambient temperature	32°C	32°C
Suction gas temperature	32°C	32°C
Liquid temperature	no subcooling	32°C



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