

# SC21/21G Universal Twin Compressor R134a 220-240V 50Hz

## General

Code number	104G8180
Approvals	EN 60335-2-34
Compressors on pallet	18

## Application

Application	LBP/HBP		
Frequency	Hz	50	60
Evaporating temperature	°C	-25 to 15	-
Voltage range	V	198 - 254	-
Max. condensing temperature continuous (short)	°C	60 (70)	-
Max. winding temperature continuous (short)	°C	125 (135)	-

## Cooling requirements

Frequency	Hz	50			60		
Application		LBP	MBP	HBP	LBP	MBP	HBP
32°C		F <sub>2</sub>	F <sub>2</sub>	F <sub>2</sub>	-	-	-
38°C		F <sub>2</sub>	F <sub>2</sub>	F <sub>2</sub>	-	-	-
43°C		F <sub>2</sub>	F <sub>2</sub>	F <sub>2</sub>	-	-	-

Remarks on application: Not applicable below -25°C evaporating temperature in 43°C ambient temperature above 240V.

## 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

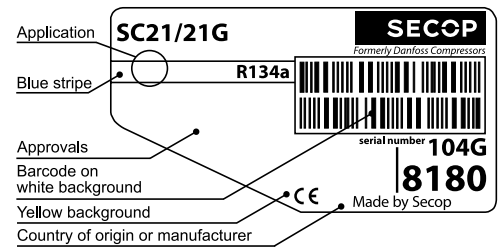
\* Operational current for the second compressor time-delayed.

## Design

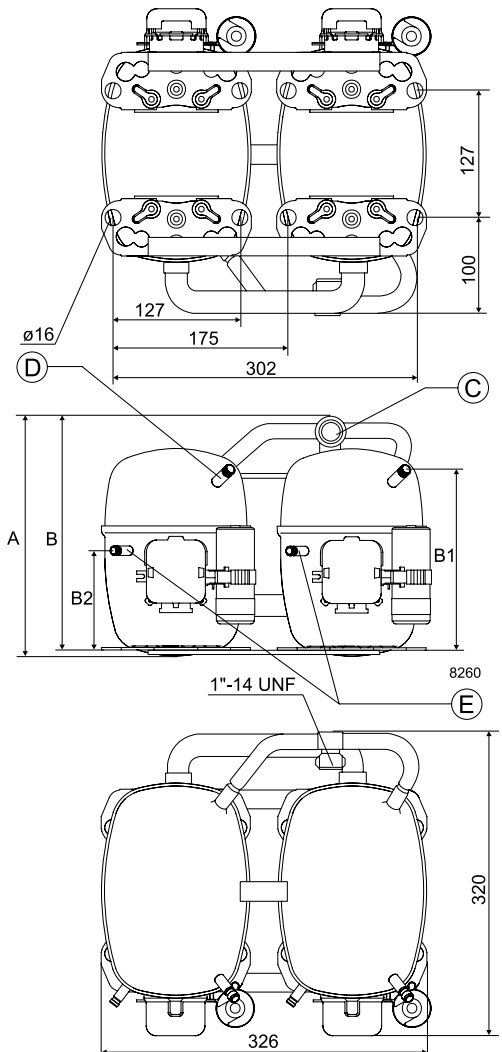
Displacement	cm <sup>3</sup>	2 x 20.95
Oil quantity (type)	cm <sup>3</sup>	1120 (polyolester)
Maximum refrigerant charge	g	2200
Free gas volume in compressor	cm <sup>3</sup>	2920
Weight without electrical equipment	kg	28.0

## Dimensions

Height	mm	A	259
		B	254
		B1	193
		B2	110
Suction connector (service valve)	location/I.D. mm	C	16   37°
Suction connector (solder connector)	location/I.D. mm	C	16   37°
Process connector	location/I.D. mm   angle	D	6.2   37°
	material   comment		Cu-plated steel   Al cap
Discharge connector	location/I.D. mm   angle	E	6.2   37°
	material   comment		Cu-plated steel   Al cap
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
- F<sub>1</sub> = Fan cooling 1.5 m/s (compressor compartment temperature equal to ambient temperature)
- F<sub>2</sub> = Fan cooling 3.0 m/s necessary
- SG = Suction gas cooling normally sufficient
- = not applicable in this area



**EN 12900 Household (CECOMAF)**

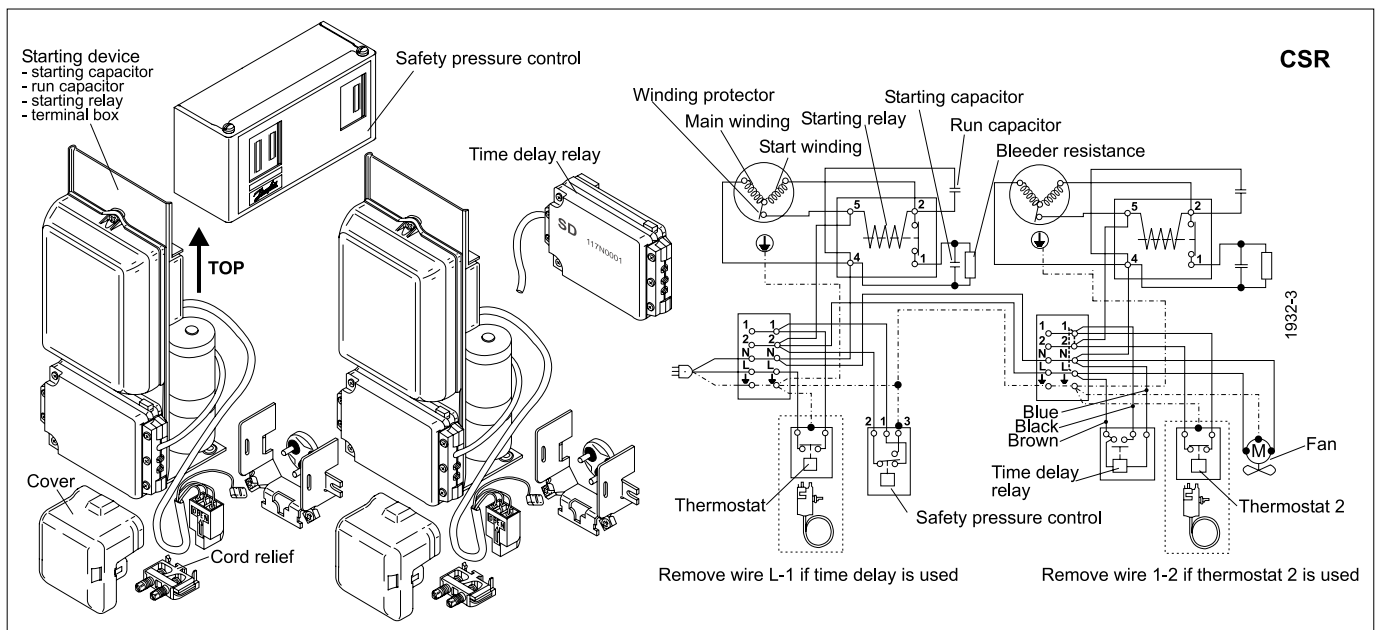
220V, 50Hz, fan cooling F<sub>2</sub>

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					667	741	907	1212	1584	1868	2025	2536	3120	3400	3778	4511	
Power cons. in W					771	815	899	1026	1156	1234	1289	1430	1581	1651	1744	1921	
Current cons. in A					4.56	4.68	4.96	5.42	5.92	6.28	6.48	7.08	7.74	8.04	8.44	9.20	
COP in W/W					0.87	0.92	1.02	1.19	1.38	1.50	1.58	1.78	1.98	2.07	2.18	2.37	

**ASHRAE LBP**

220V, 50Hz, fan cooling F<sub>2</sub>

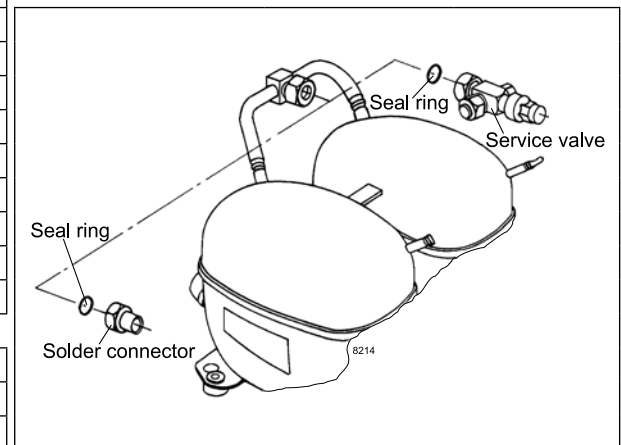
Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10	15	20
Capacity in W					820	912	1116	1493	1953	2310	2500	3135	3862	4212	4684	5605	
Power cons. in W					771	815	899	1026	1156	1243	1289	1430	1581	1651	1744	1921	
Current cons. in A					4.56	4.68	4.96	5.42	5.92	6.28	6.48	7.08	7.74	8.04	8.44	9.20	
COP in W/W					1.07	1.13	1.25	1.47	1.70	1.86	1.95	2.20	2.45	2.56	2.70	2.94	



Accessories	SC21/21G	pcs.	Code number	Test conditions	EN 12900/ CECOMAF	ASHRAE LBP
Starting device	470 mm cable length	2	117-7028	Condensing temperature	55°C	55°C
	550 mm cable length		117-7029	Ambient temperature	32°C	32°C
	650 mm cable length		117-7032	Suction gas temperature	32°C	32°C
Starting relay	6.3 mm spade connectors	2	-	Liquid temperature	55°C	32°C
Start. capacitor 80 µF	6.3 mm spade connectors	2	-			
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	-			
Solder connector (alternative)	12 mm	1	-			
Service valve	16 mm	1	118-7351			
Solder connector (alternative)	16 mm	1	118-7405			
Seal ring for service valve and solder connector		1	118-3638			

Accessories	pcs.	Code number
Starting device	2	117-7028
Starting relay	2	-
Start. capacitor 80 µF	2	-
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	1	-
Solder connector (alternative)	1	-
Service valve	1	118-7351
Solder connector (alternative)	1	118-7405
Seal ring for service valve and solder connector	1	118-3638

Mounting accessories	pcs.	Code number
Bolt joint for one compressor	2	118-1917
Bolt joint in quantities	2	118-1918



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