

SC12MNX MBP Compressor R290 220-240V 50Hz

General

Code number	104H8275
Approvals	EN 60335-2-34, CCC
Compressors on pallet	80

Application

Application	MBP		
Frequency	Hz	50	60
Evaporating temperature	°C	-35 to 10	-
Voltage range	V	187 - 254	-
Max. condensing temperature continuous (short)	°C	55 (65)	-
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	-	-	-	-
38°C		-	F ₂	-	-	-	-
43°C		-	F ₂	-	-	-	-
Remarks on application:							

Motor

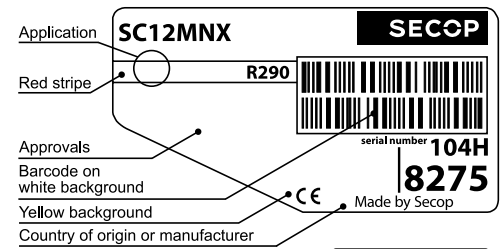
Motor type	CSIR		
LRA (rated after 4 sec. UL984), HST LST	A	18.6	-
Cut in Current, HST LST	A	18.6	-
Resistance, main start winding (25°C)	Ω	3.7	14.1

Design

Displacement	cm ³	12.87
Oil quantity (type)	cm ³	550 (polyolester)
Maximum refrigerant charge	g	150
Free gas volume in compressor	cm ³	1510
Weight without electrical equipment	kg	13.5

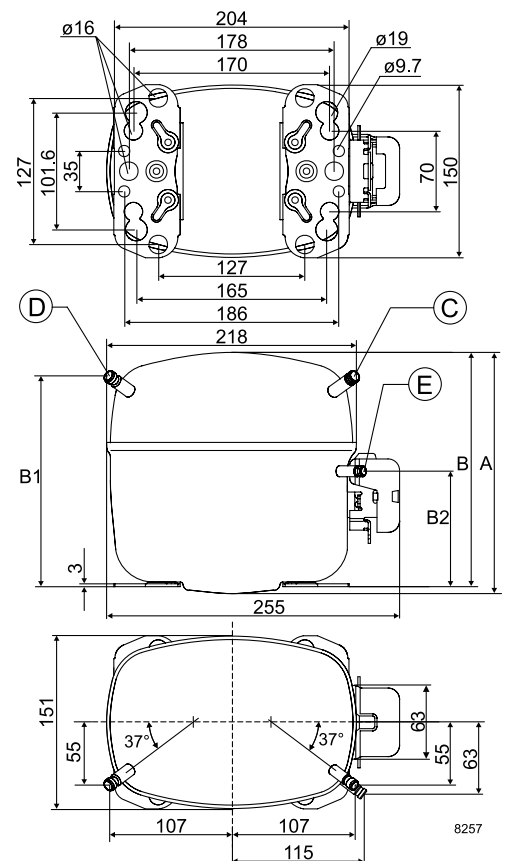
Dimensions

Height	mm	A	219
		B	213
		B1	193
		B2	110
Suction connector	location/I.D. mm angle	C	8.2 37°
	material comment		Cu-plated steel Al cap
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:			



Yellow warning label

- 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 MBP

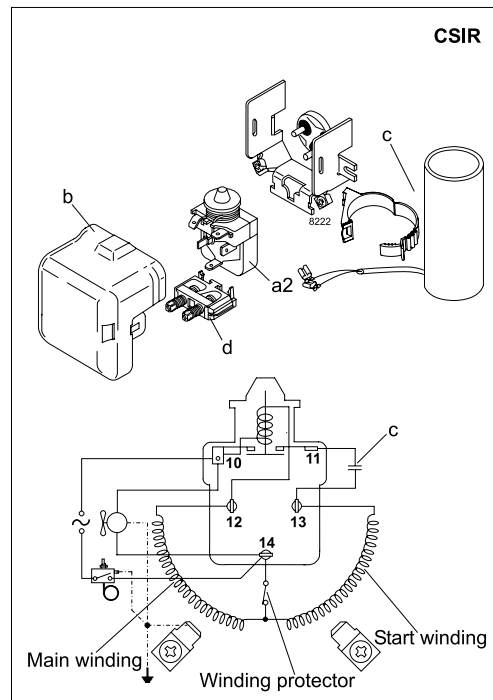
220V, 50Hz, fan cooling F₂

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			224	327	446	490	582	738	918	1050	1123	1356	1620	1747	1918		
Power cons. in W			302	348	392	406	432	469	503	524	534	563	590	601	615		
Current cons. in A			2.75	2.88	3.01	3.05	3.13	3.24	3.34	3.40	3.44	3.52	3.60	3.64	3.67		
COP in W/W			0.74	0.94	1.14	1.21	1.35	1.58	1.83	2.01	2.10	2.41	2.75	2.91	3.12		

ASHRAE HBP/MBP

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			147	254	375	420	513	670	851	983	1056	1291	1557	1685	1858		
Power cons. in W			296	354	407	424	456	501	543	569	581	616	648	662	678		
Current cons. in A			2.69	2.86	3.02	3.08	3.18	3.33	3.46	3.55	3.60	3.72	3.84	3.88	3.94		
COP in W/W			0.50	0.72	0.92	0.99	1.12	1.34	1.57	1.73	1.82	2.09	2.40	2.55	2.74		



Accessories for	SC12MNX	Figure	Code number	Test conditions	EN 12900 MBP	ASHRAE HBP/MBP
PTC starting device	6.3 mm spade connectors	-	-	Condensing temperature	45°C	54.4°C
	4.8 mm spade connectors			Ambient temperature	32°C	35°C
Starting relay	6.3 mm spade connectors	a2	117U7019	Suction gas temperature	20°C	35°C
Cover		b	103N2008	Liquid temperature	no subcooling	46.1°C
Start. capacitor 80 µF	6.3 mm spade connectors	c	117U5017			
Cord relief		d	103N1004			
Protection screen for PTC		-	-			
				Mounting accessories	Code number	
				Bolt joint for one comp.	Ø: 16 mm	118-1917
				Bolt joint in quantities	Ø: 16 mm	118-1918
				Snap-on in quantities	Ø: 16 mm	118-1919

Danfoss can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.