

## SC12MNX MBP Compressor R290 220-240V 50Hz

### General

Code number	104H8275
Approvals	EN 60335-2-34, CCC, EAC
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 <sub>2</sub>	-	-	-	-
38°C		-	F <sub>2</sub>	-	-	-	-
43°C		-	F <sub>2</sub>	-	-	-	-
Remarks on application:							

### Motor

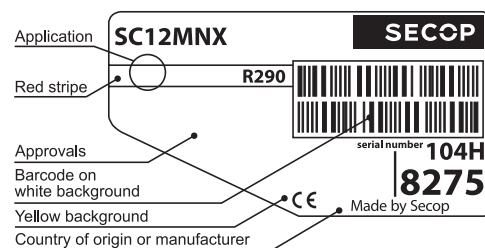
Motor type	CSIR		
LRA (rated after 4 sec. UL984), HST   LST	A	18.6	-
Cut in Current, HST   LST	A	18.6	-
Resistance, main   start winding (25°C)	Ω	3.7	14.1

### Design

Displacement	cm <sup>3</sup>	12.87
Oil quantity (type)	cm <sup>3</sup>	500 (polyolester)
Maximum refrigerant charge	g	150
Free gas volume in compressor	cm <sup>3</sup>	1510
Weight without electrical equipment	kg	13.5

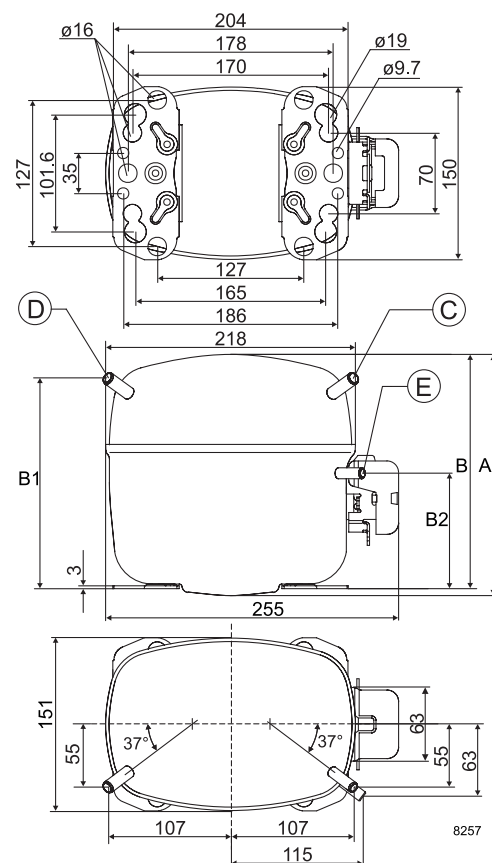
### Dimensions

Height	mm	A	219
		B	213
		B1	193
		B2	110
Suction connector	location/I.D. mm   angle	C	8.2   37°
	material   comment		Copper   Rubber plug
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:			



Yellow warning label

- 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 MBP**

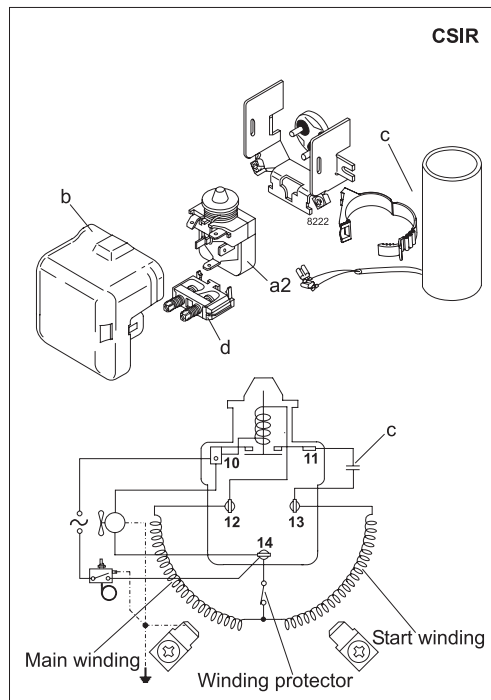
220V, 50Hz, fan cooling F<sub>2</sub>

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			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 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			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
PTC starting device	6.3 mm spade connectors 4.8 mm spade connectors	-	-
Starting relay	6.3 mm spade connectors	a2	117U7019
Cover		b	103N2008
Start. capacitor 80 µF	6.3 mm spade connectors	c	117U5017
Cord relief		d	103N1004
Protection screen for PTC		-	-

Test conditions	EN 12900 MBP	ASHRAE HBP/MBP
Condensing temperature	45°C	54.4°C
Ambient temperature	32°C	35°C
Suction gas temperature	32°C	35°C
Liquid temperature	no subcooling	46.1°C

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

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