

# SC12MLX MBP Compressor R404A/R507 208-230V 60Hz & 220-240V 50Hz

## General

Code number	104L2606
Approvals	EN 60335-2-34, UL984
Compressors on pallet	80

## Application

Application	MBP			
	Hz	50	60	
Frequency	Hz	50	60	
Evaporating temperature	°C	-23.3 to 7.2	-23.3 to 7.2	
Voltage range	V	187 - 254	187 - 254	
Max. condensing temperature continuous (short)	°C	50 (60)	50 (60)	
Max. winding temperature continuous (short)	°C	125 (135)	125 (135)	

## Cooling requirements

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

Remarks on application:  
Not applicable for 208V 60Hz at 0°C or higher evaporating temperature.

## Motor

Motor type	CSIR		
LRA (rated after 4 sec. UL984), HST   LST	A	23.4	-
Cut in Current, HST   LST	A	23.4	-
Resistance, main   start winding (25°C)	Ω	3.4	14.4

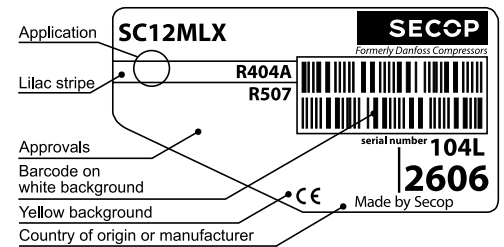
## Design

Displacement	cm <sup>3</sup>	12.87
Oil quantity (type)	cm <sup>3</sup>	600 (polyolester)
Maximum refrigerant charge	g	1300
Free gas volume in compressor	cm <sup>3</sup>	1460
Weight without electrical equipment	kg	13.9

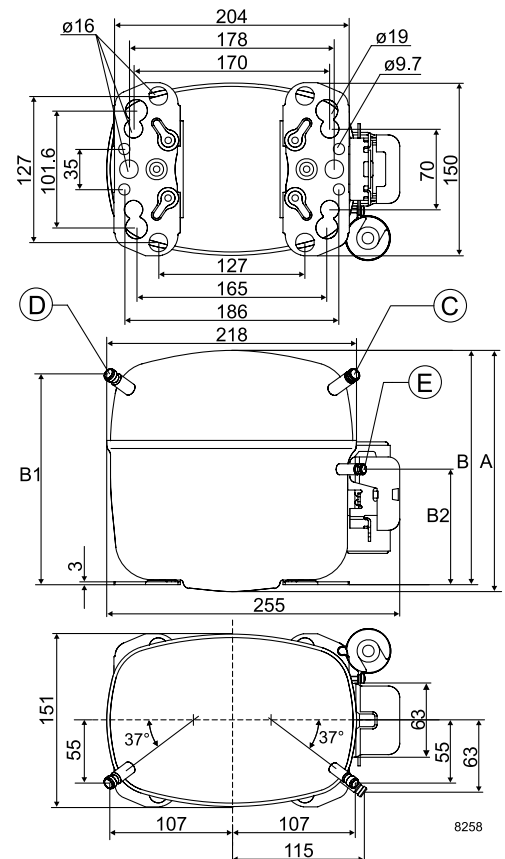
## Dimensions

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	6.5   37°
	material   comment	Cu-plated steel   Al cap	
Discharge connector	location/I.D. mm   angle	E	6.5   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



**ASHRAE MBP**

 230V, 60Hz, 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						554	667	859	1080	1245	1335	1629	1965	2127			
Power cons. in W						552	609	692	775	830	860	949	1046	1092			
Current cons. in A						3.39	3.57	3.87	4.21	4.46	4.59	5.01	5.47	5.68			
COP in W/W						1.00	1.10	1.24	1.39	1.50	1.55	1.72	1.88	1.95			

**ASHRAE 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						498	592	754	942	1083	1162	1415	1706	1847			
Power cons. in W						507	548	609	667	705	724	780	836	860			
Current cons. in A						3.72	3.84	4.03	4.25	4.40	4.48	4.72	4.99	5.11			
COP in W/W						0.98	1.08	1.24	1.41	1.54	1.60	1.81	2.04	2.15			

**EN 12900 Household (CECOMAF)\***

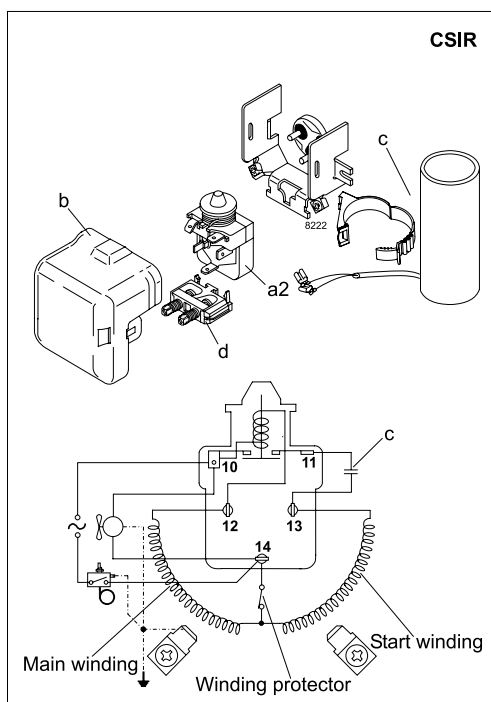
 230V, 60Hz, fan cooling F<sub>2</sub>

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						659	773	970	1199	1370	1465	1770	2118	2286			
Power cons. in W						561	601	664	729	776	801	882	975	1021			
Current cons. in A						3.38	3.52	3.76	4.05	4.26	4.37	4.73	5.14	5.32			
COP in W/W						1.18	1.29	1.46	1.64	1.77	1.83	2.01	2.17	2.24			

**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						572	669	838	1038	1188	1272	1542	1852	2001			
Power cons. in W						493	525	572	620	651	667	714	762	783			
Current cons. in A						3.67	3.76	3.91	4.08	4.20	4.27	4.47	4.69	4.79			
COP in W/W						1.16	1.27	1.46	1.68	1.83	1.91	2.16	2.43	2.55			



Accessories for	SC12MLX	Figure	Code number	Test conditions	EN 12900/ CECOMAF*	ASHRAE MBP
PTC starting device	6.3 mm spade connectors	a1	—	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	117U6011	Suction gas temperature	32°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		g	—			
				<b>Mounting accessories</b>	<b>Code number</b>	
				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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