

# NF7MLX MBP Compressor R404A/R507 220-240V 50Hz & 208-230V 60Hz

## General

Code number	105F3720
Approvals	UL984
Compressors on pallet	80

## Application

Application	MBP			
	Hz	50	60	
Frequency	Hz	50	60	
Evaporating temperature	°C	-15 to 10	-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: 220V 50Hz nominal below -10°C evaporating temperature

## Motor

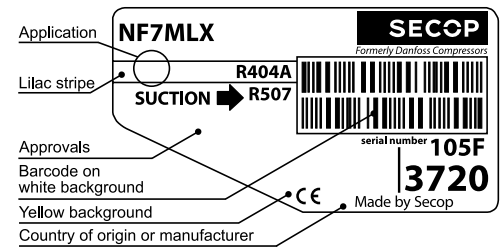
Motor type	CSIR		
LRA (rated after 4 sec. UL984), HST   LST	A	20.0	-
Cut in Current, HST   LST	A	20.0	-
Resistance, main   start winding (25°C)	Ω	4.5	12.8

## Design

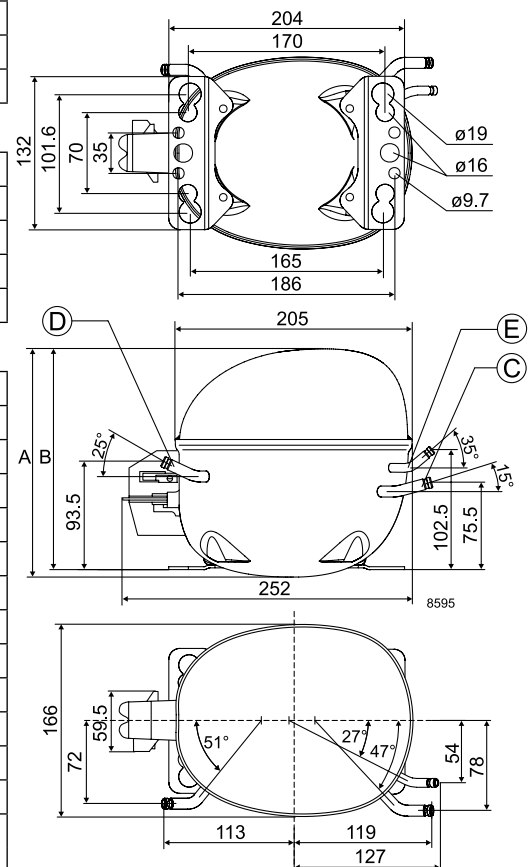
Displacement	cm <sup>3</sup>	7.27
Oil quantity (type)	cm <sup>3</sup>	320 (polyolester)
Maximum refrigerant charge	g	400
Free gas volume in compressor	cm <sup>3</sup>	2310
Weight without electrical equipment	kg	10.5

## Dimensions

Height	mm	A	203
		B	197
		B1	-
		B2	-
Suction connector	location/I.D. mm   angle	C	9.7   15°
	material   comment		Cu-plated steel   Al cap
Process connector	location/I.D. mm   angle	D	6.5   25°
	material   comment		Cu-plated steel   Al cap
Discharge connector	location/I.D. mm   angle	E	6.5   35°
	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							363	438	563	708	815	874	1065	1284	1390		
Power cons. in W							368	398	445	494	529	547	603	663	691		
Current cons. in A							2.38	2.51	2.70	2.89	3.02	3.09	3.29	3.50	3.59		
COP in W/W							0.99	1.10	1.27	1.43	1.54	1.60	1.77	1.94	2.01		

**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							413	489	618	768	879	940	1137	1362	1470		
Power cons. in W							358	385	428	473	504	521	573	629	656		
Current cons. in A							2.37	2.47	2.62	2.78	2.89	2.94	3.11	3.28	3.35		
COP in W/W							1.15	1.27	1.45	1.62	1.74	1.80	1.98	2.16	2.24		

**ASHRAE MBP**

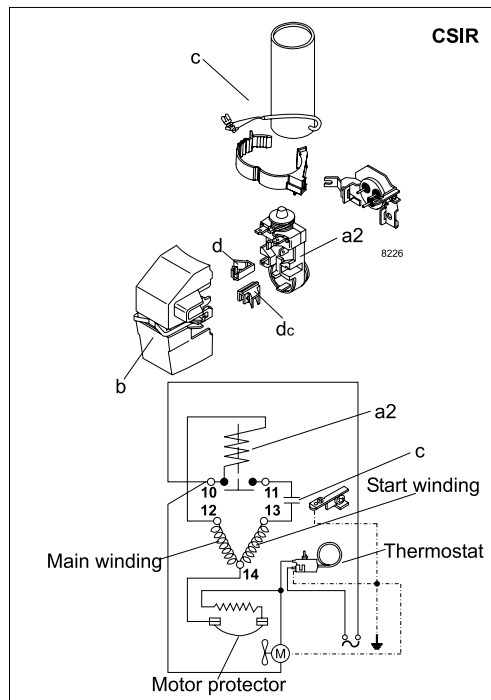
220V, 50Hz, fan cooling F<sub>2</sub>

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								466	585	673	722	880	1061	1148	1268		
Power cons. in W								397	434	458	470	504	536	549	565		
Current cons. in A								3.06	3.17	3.24	3.28	3.40	3.52	3.57	3.64		
COP in W/W								1.17	1.35	1.47	1.54	1.75	3.52	2.09	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								511	635	726	777	940	1125	1215	1336		
Power cons. in W								374	406	425	435	463	488	498	511		
Current cons. in A								3.01	3.10	3.17	3.20	3.29	3.39	3.43	3.49		
COP in W/W								1.37	1.57	1.71	1.78	2.03	2.31	2.44	2.62		



Accessories for	NF7MLX	Figure	Code number
Starting relay (protector incl.)	6.3 mm spade connectors	a1	117U4139
Protector 3/4 in.	Texas Instruments		MRP56EN-6
Cover (UL approved)		b	117U1021
Start. capacitor 125 µF	6.3 mm spade connectors	c	117U5018
Cord relief		d	117U0349
Cord relief for capacitor		dc	117U0349

Test conditions	EN 12900/CECOMAF	ASHRAE MBP
Condensing temperature	43.3°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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