

Datasheets

NLE12.6MN Energy-optimized MBP R290 220-240V 50Hz

General

Code number	105H6377
Approvals	EN 60335-2-34 w. Annex AA
Compressors on pallet	80

Application

Application	MBP		
	Hz	50	60
Frequency	Hz	50	60
Evaporating temperature	°C	-25 to 10	-
Voltage range	V	198 to 254	-
Max. condensing temperature continuous (short)	°C	55 (65)	-
Max. winding temperature continuous (short)	°C	125 (135)	-

Cooling requirements

Frequency	Hz	50			60		
		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/RSIR/RSCR		
LRA (rated after 4 sec. UL984), HST LST	A	14.4	15.1
Cut in Current, HST LST	A	14.4	16.9
Resistance, main start winding (25°C)	Ω	4.9	7.9

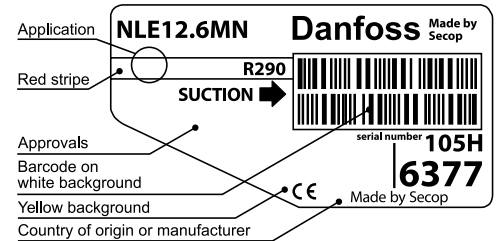
Design

Displacement	cm ³	12.55
Oil quantity (type)	cm ³	320 (polyolester)
Maximum refrigerant charge	g	150
Free gas volume in compressor	cm ³	2360
Weight without electrical equipment	kg	12.1

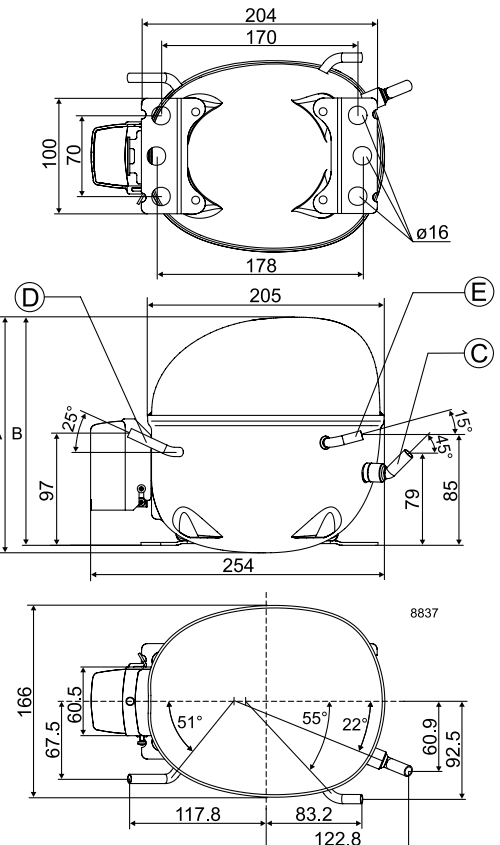
Dimensions

Height	mm	A	203
		B	197
		B1	-
		B2	-
Suction connector	location/I.D. mm angle	C	8.2 45°
		material comment	Copper Rubber plug
Process connector	location/I.D. mm angle	D	6.2 25°
		material comment	Copper Rubber plug
Discharge connector	location/I.D. mm angle	E	6.2 15°
		material comment	Copper Rubber plug
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
- 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 LBP 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					565	608	698	855	1039	1176	1251	1494	1768	1899	2077		
Power cons. in W					356	369	393	430	466	489	500	532	562	574	589		
Current cons. in A					2.36	2.40	2.48	2.60	2.72	2.81	2.85	2.99	3.13	3.20	3.29		
COP in W/W					1.59	1.65	1.77	1.99	2.23	2.41	2.50	2.81	3.15	3.31	3.53		

EN 12900 MBP 220V, 50Hz, fan cooling F₂

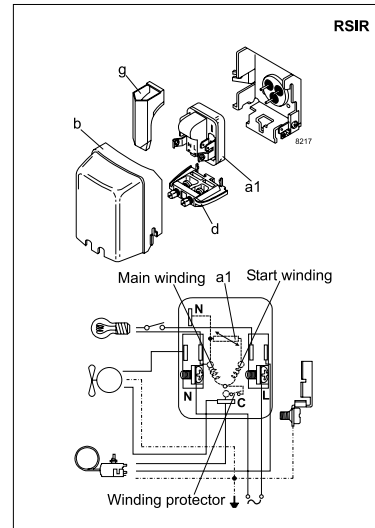
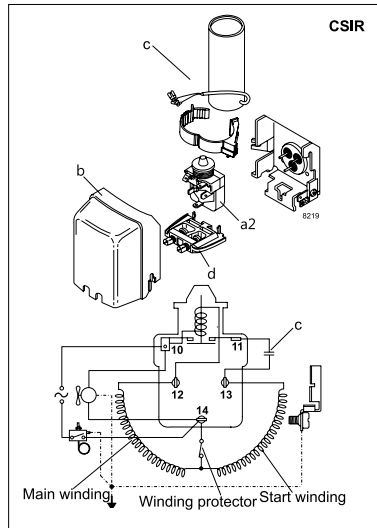
Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10	15	20
Capacity in W					524	564	648	795	967	1095	1165	1391	1648	1770	1936		
Power cons. in W					368	381	406	446	486	512	525	564	601	617	637		
Current cons. in A					2.41	2.45	2.52	2.65	2.77	2.86	2.91	3.06	3.22	3.29	3.39		
COP in W/W					1.43	1.48	1.60	1.78	1.99	2.14	2.22	2.47	2.74	2.87	3.04		

ASHRAE LBP 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					558	602	694	855	1043	1183	1261	1510	1793	1929	2113		
Power cons. in W					371	385	413	458	505	536	553	603	652	674	702		
Current cons. in A					2.49	2.54	2.64	2.80	2.98	3.10	3.16	3.37	3.58	3.68	3.82		
COP in W/W					1.50	1.56	1.68	1.87	2.07	2.21	2.28	2.51	2.75	2.86	3.01		

ASHRAE MBP/HBP 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					499	537	620	763	930	1055	1123	1344	1595	1715	1877		
Power cons. in W					368	381	409	453	499	530	547	595	644	666	693		
Current cons. in A					2.49	2.54	2.64	2.80	2.98	3.10	3.16	3.37	3.58	3.68	3.82		
COP in W/W					1.36	1.41	1.52	1.69	1.86	1.99	2.05	2.26	2.47	2.58	2.71		



Accessories for	NLE12.6MN	Figure	Code number
ePTC starting device	6.3 mm spade connectors 4.8 mm spade connectors	a1	- 103N0050
Starting relay	6.3 mm spade connectors	a2	117U7011
Start. capacitor 80 µF	6.3 mm spade connectors	c	117U5015
Cover		b	103N2010
Cord relief		d	103N1010
Protection screen for PTC		g	-

Test conditions	EN 12900		ASHRAE	
	LBP	MBP	LBP	MBP
Condensing temperature	40°C	45°C	54.4°C	54.4°C
Ambient temperature	32°C	32°C	32.2°C	35°C
Suction gas temperature	20°C	20°C	32.2°C	35°C
Liquid temperature	no subcooling		32.2°C	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

EN 12900 LBP 220V, 50Hz, RC 4 µF, ePTC consumption incl., 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					568	611	703	862	1048	1186	1263	1508	1785	1918	2097		
Power cons. in W					342	354	377	412	446	467	478	507	534	545	558		
Current cons. in A					2.07	2.11	2.19	2.31	2.42	2.50	2.54	2.64	2.74	2.78	2.83		
COP in W/W					1.66	1.73	1.86	2.09	2.35	2.54	2.64	2.97	3.34	3.52	3.76		

EN 12900 MBP 220V, 50Hz, RC 4 µF, ePTC consumption incl., fan cooling F₂

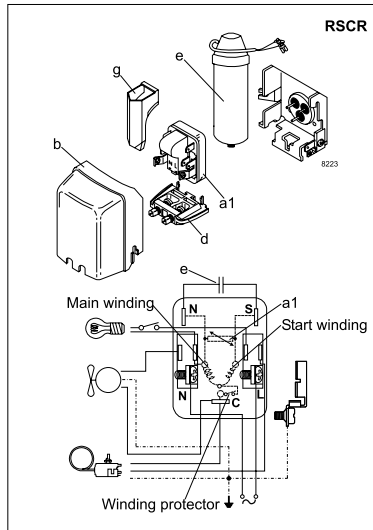
Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10	15	20
Capacity in W					527	567	653	801	975	1104	1175	1404	1664	1788	1955		
Power cons. in W					352	365	390	427	465	489	502	537	572	586	604		
Current cons. in A					2.10	2.14	2.22	2.36	2.49	2.58	2.62	2.76	2.89	2.94	3.01		
COP in W/W					1.50	1.55	1.67	1.88	2.10	2.26	2.34	2.61	2.91	3.05	3.24		

ASHRAE LBP 220V, 50Hz, RC 4 µF, ePTC consumption incl., 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					561	605	699	862	1052	1194	1272	1524	1811	1949	2135		
Power cons. in W					356	369	396	439	483	512	528	574	620	640	665		
Current cons. in A					2.16	2.21	2.31	2.48	2.66	2.78	2.85	3.04	3.25	3.34	3.45		
COP in W/W					1.58	1.64	1.76	1.96	2.18	2.33	2.41	2.66	2.92	3.04	3.21		

ASHRAE MBP/HBP 220V, 50Hz, RC 4 µF, ePTC consumption incl., 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					501	541	624	769	938	1064	1134	1357	1610	1732	1896		
Power cons. in W					352	366	392	434	477	507	522	567	612	632	657		
Current cons. in A					2.16	2.21	2.31	2.48	2.66	2.78	2.85	3.04	3.25	3.34	3.45		
COP in W/W					1.42	1.48	1.59	1.77	1.97	2.10	2.17	2.39	2.63	2.74	2.89		



Accessories for	NLE12.6MN	Figure	Code number
ePTC starting device	6.3 mm spade connectors	a1	-
	4.8 mm spade connectors		103N0050
Run capacitor 4 µF (optional)	4.8 mm spade connectors	e	117-7119
Cover		b	103N2010
Cord relief		d	103N1010
Protection screen for PTC		g	-

Test conditions	EN 12900		ASHRAE	
	LBP	MBP	LBP	MBP
Condensing temperature	40°C	45°C	54.4°C	54.4°C
Ambient temperature	32°C	32°C	32.2°C	35°C
Suction gas temperature	20°C	20°C	32.2°C	35°C
Liquid temperature	no subcooling		32.2°C	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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