

Datasheets

NLE11MF.2 Energy-optimized MBP Compressor R134a, 220-240V 50Hz

General

Code number	105G6197
Approvals	EN 60335-2-34 w. Annex AA, CCC
Compressors on pallet	80

Application

Application	LBP/MBP		
	Hz	50	60
Frequency	Hz	50	60
Evaporating temperature	°C	-25 to 10	-
Voltage range	V	198 to 242/254	-
Max. condensing temperature continuous (short)	°C	60 (70)	-
Max. winding temperature continuous (short)	°C	125 (135)	-

Cooling requirements

Frequency	Hz	50			60		
		LBP	MBP	HBP	LBP	MBP	HBP
32°C		F ₂	F ₂	-	-	-	-
38°C		F ₂	F ₂	-	-	-	-
43°C		F ₂	F ₂	-	-	-	-

Remarks on application:
Voltage range: without run capacitor: 198 to 242V / with run capacitor: 198 to 254V

Motor

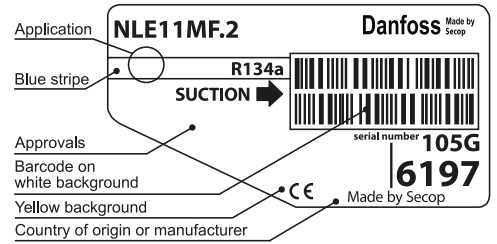
Motor type	CSIR/RSIR/RSCR		
LRA (rated after 4 sec. UL984), HST LST	A	13.1	11.4
Cut in Current, HST LST	A	13.1	15.7
Resistance, main start winding (25°C)	Ω	8.8	19.0

Design

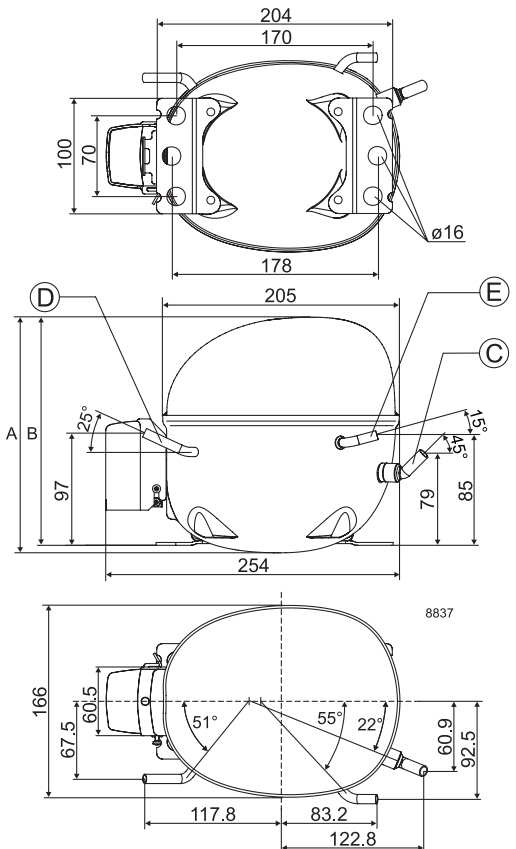
Displacement	cm ³	11.15
Oil quantity (type)	cm ³	320 (polyolester)
Maximum refrigerant charge	g	600
Free gas volume in compressor	cm ³	2360
Weight without electrical equipment	kg	10.9

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					311	340	404	516	649	749	805	985	1192	1292	1428		
Power cons. in W					224	234	254	286	320	342	354	387	418	431	447		
Current cons. in A					1.72	1.76	1.83	1.92	2.00	2.04	2.07	2.15	2.24	2.28	2.35		
COP in W/W					1.38	1.45	1.59	1.80	2.03	2.19	2.27	2.55	2.85	3.00	3.20		

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

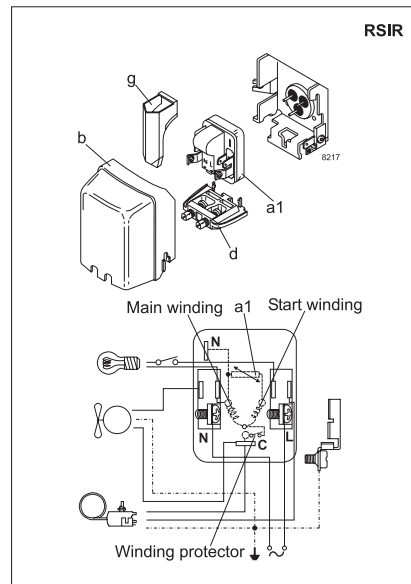
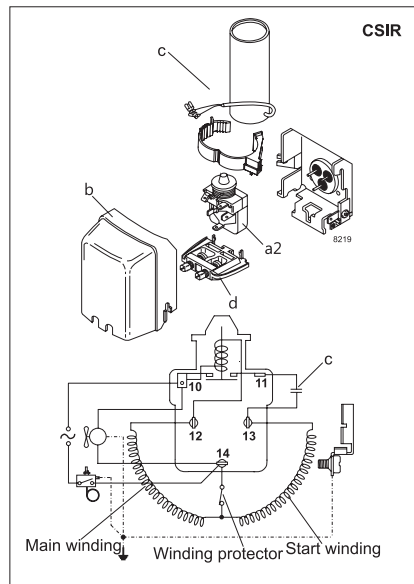
Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10	15	20
Capacity in W					290	318	378	484	611	706	759	931	1129	1226	1356		
Power cons. in W					231	241	261	295	331	355	368	405	441	457	476		
Current cons. in A					1.78	1.82	1.89	1.97	2.05	2.11	2.14	2.23	2.35	2.41	2.49		
COP in W/W					1.26	1.32	1.45	1.64	1.85	1.99	2.06	2.30	2.56	2.68	2.85		

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					300	331	396	513	654	761	821	1018	1246	1357	1508		
Power cons. in W					224	235	257	293	334	362	377	421	466	485	510		
Current cons. in A					1.79	1.82	1.89	2.00	2.11	2.19	2.24	2.38	2.56	2.65	2.78		
COP in W/W					1.34	1.41	1.54	1.75	1.96	2.10	2.18	2.42	2.68	2.80	2.96		

ASHRAE 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					268	295	353	457	582	678	731	905	1107	1205	1339		
Power cons. in W					222	232	254	290	330	358	373	416	460	479	503		
Current cons. in A					1.79	1.82	1.89	2.00	2.11	2.19	2.24	2.38	2.56	2.65	2.78		
COP in W/W					1.21	1.27	1.39	1.57	1.76	1.89	1.96	2.17	2.41	2.51	2.66		



Accessories for	NLE11MF.2	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	117U6003
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					315	345	409	523	658	759	815	998	1208	1309	1447		
Power cons. in W					211	220	239	269	301	322	333	364	393	406	420		
Current cons. in A					1.62	1.66	1.72	1.80	1.88	1.92	1.94	2.02	2.10	2.15	2.21		
COP in W/W					1.49	1.57	1.71	1.94	2.19	2.36	2.45	2.74	3.07	3.23	3.44		

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

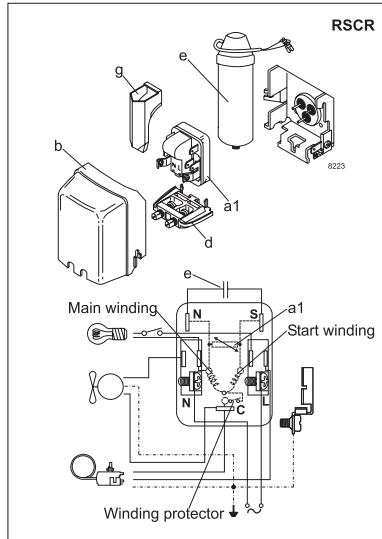
Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10	15	20
Capacity in W					294	323	383	491	619	715	769	943	1144	1242	1374		
Power cons. in W					217	227	246	277	311	334	346	381	415	430	448		
Current cons. in A					1.68	1.71	1.77	1.86	1.93	1.98	2.01	2.10	2.21	2.26	2.34		
COP in W/W					1.35	1.42	1.56	1.77	1.99	2.14	2.22	2.48	2.76	2.89	3.07		

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					304	335	401	520	662	771	832	1031	1262	1375	1528		
Power cons. in W					211	221	241	276	314	340	354	396	438	456	479		
Current cons. in A					1.68	1.72	1.78	1.88	1.99	2.06	2.10	2.24	2.41	2.50	2.62		
COP in W/W					1.44	1.52	1.66	1.88	2.11	2.27	2.35	2.60	2.88	3.01	3.19		

ASHRAE 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					271	299	358	463	590	687	741	917	1121	1221	1356		
Power cons. in W					209	219	239	273	311	337	350	391	433	451	473		
Current cons. in A					1.68	1.72	1.78	1.88	1.99	2.06	2.10	2.24	2.41	2.50	2.62		
COP in W/W					1.30	1.37	1.50	1.70	1.90	2.04	2.11	2.34	2.59	2.71	2.86		



Accessories for	NLE11MF.2	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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