

NLE12.6MFT Energy-optimized Tropical Compressor R134a 220-240V 50/60Hz

General

Code number	105G6388
Approvals	EN 60335-2-34 w. Annex AA
Compressors on pallet	80

Application

Application	LBP/MBP	LBP
Frequency	Hz 50	60
Evaporating temperature	°C -35 to 10	-35 to 0
Voltage range	V 187 - 254	198 to 254
Max. condensing temperature continuous (short)	°C 65 (70)	65 (70)
Max. winding temperature continuous (short)	°C 125 (135)	125 (135)

Cooling requirements

Frequency	Hz	50			60		
Application		LBP	MBP	HBP	LBP	MBP	HBP
32°C		F ₂	F ₂	-	F ₂	-	-
38°C		F ₂	F ₂	-	F ₂	-	-
43°C		F ₂	F ₂	-	F ₂	-	-
Remarks on application:							

Motor

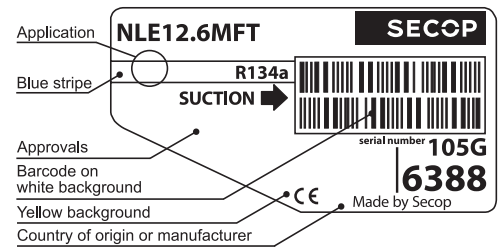
Motor type	CSIR/RSIR/RSCR	
LRA (rated after 4 sec. UL984), HST LST	A	13.7 14.4
Cut in Current, HST LST	A	13.7 19.4
Resistance, main start winding (25°C)	Ω	4.9 8.9

Design

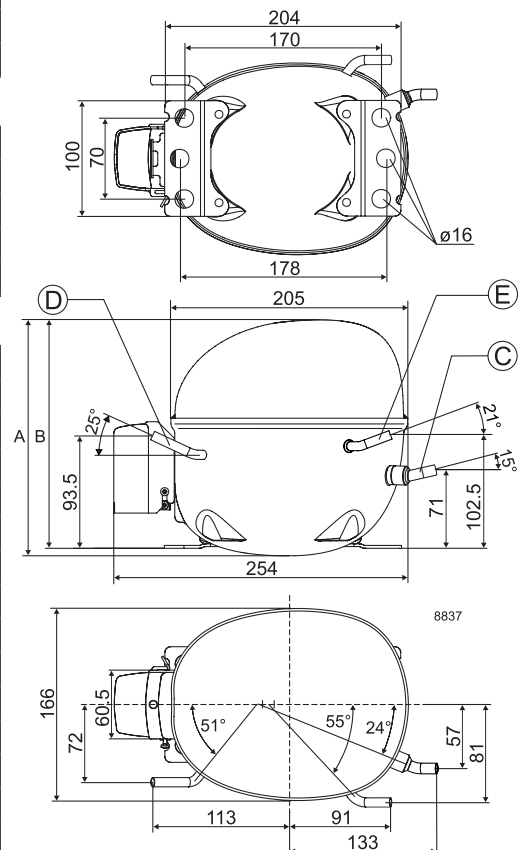
Displacement	cm ³	12.55
Oil quantity (type)	cm ³	300 (polyolester)
Maximum refrigerant charge	g	600
Free gas volume in compressor	cm ³	2360
Weight without electrical equipment	kg	11.5

Dimensions

Height	mm	A	203
		B	197
		B1	-
		B2	-
Suction connector	location/I.D. mm angle	C	8.2 15°
	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 21°
	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			199	254	334	367	440	572	730	848	914	1123	1360	1472	1623		
Power cons. in W			181	205	234	245	268	304	342	368	381	422	461	479	500		
Current cons. in A			1.96	1.97	2.02	2.04	2.09	2.17	2.28	2.35	2.39	2.52	2.65	2.71	2.78		
COP in W/W			1.10	1.24	1.42	1.50	1.65	1.88	2.14	2.31	2.40	2.67	2.95	3.08	3.24		

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			193	236	305	335	400	521	668	779	841	1040	1265	1373	1518		
Power cons. in W			184	207	236	246	269	305	345	372	387	429	472	491	515		
Current cons. in A			1.97	1.98	2.02	2.04	2.09	2.18	2.29	2.37	2.42	2.56	2.70	2.77	2.85		
COP in W/W			1.05	1.14	1.30	1.36	1.49	1.71	1.94	2.09	2.18	2.42	2.68	2.79	2.95		

ASHRAE LBP

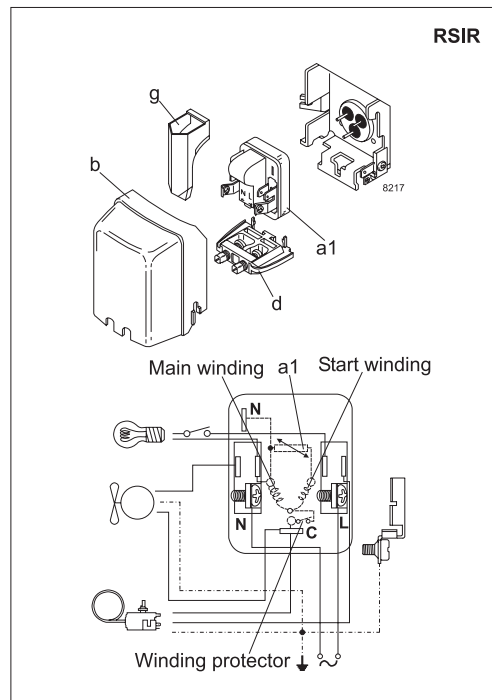
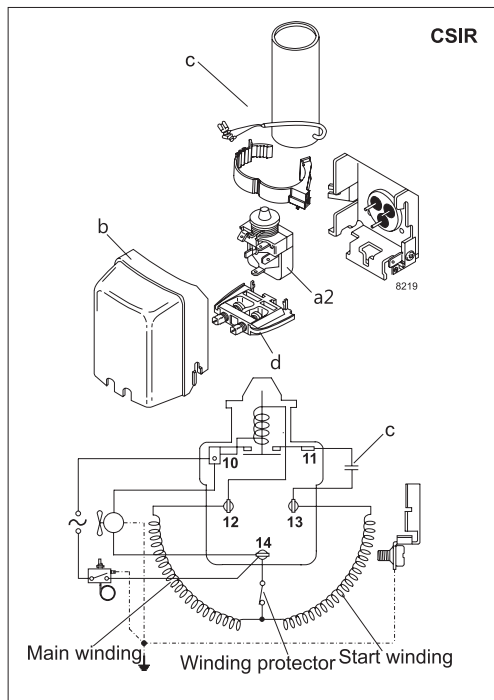
220V, 50Hz, fan cooling F₂

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			241	268	327	355	420	545	703	826	894	1119	1378	1502	1670		
Power cons. in W			178	200	228	239	262	301	343	372	388	435	483	504	531		
Current cons. in A			1.98	1.99	2.03	2.05	2.10	2.21	2.33	2.43	2.48	2.65	2.83	2.91	3.02		
COP in W/W			1.36	1.34	1.43	1.48	1.60	1.81	2.05	2.22	2.31	2.58	2.85	2.98	3.15		

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			215	239	292	317	374	486	626	735	796	995	1224	1334	1482		
Power cons. in W			176	198	226	237	260	298	339	368	384	430	477	498	524		
Current cons. in A			1.98	1.99	2.03	2.05	2.10	2.21	2.33	2.43	2.48	2.65	2.83	2.91	3.02		
COP in W/W			1.22	1.21	1.29	1.34	1.44	1.63	1.85	2.00	2.08	2.32	2.57	2.68	2.83		



Accessories for	NLE12.6MFT	Figure	Code number
ePTC starting device	6.3 mm spade connectors	a1	-
	4.8 mm spade connectors		103N0050
Starting relay	6.3 mm spade connectors	a2	117U6005
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			202	258	339	373	447	581	741	862	928	1141	1381	1495	1648		
Power cons. in W			176	200	228	239	260	295	332	358	371	410	449	465	486		
Current cons. in A			1.90	1.92	1.96	1.98	2.03	2.11	2.21	2.29	2.33	2.45	2.57	2.63	2.70		
COP in W/W			1.15	1.29	1.49	1.56	1.72	1.97	2.23	2.41	2.50	2.78	3.08	3.21	3.39		

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			196	240	310	340	407	529	679	791	854	1056	1285	1395	1541		
Power cons. in W			179	201	229	240	261	297	335	362	376	417	459	478	501		
Current cons. in A			1.91	1.93	1.97	1.99	2.03	2.12	2.23	2.31	2.35	2.48	2.63	2.69	2.77		
COP in W/W			1.10	1.19	1.35	1.42	1.56	1.78	2.02	2.19	2.27	2.53	2.80	2.92	3.08		

ASHRAE LBP

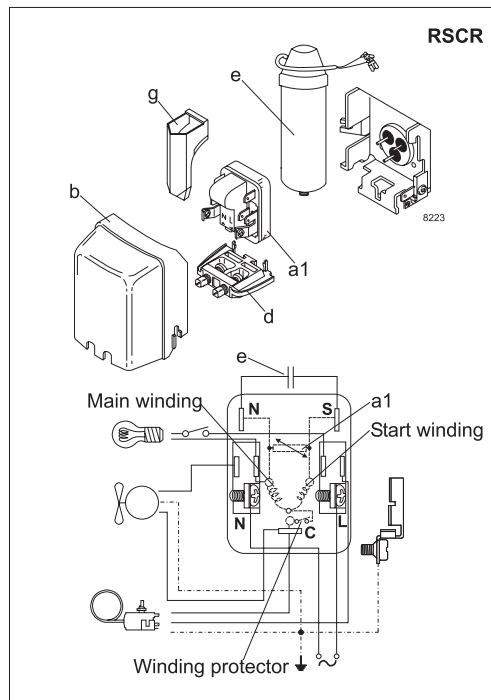
 220V, 50Hz, RC 4 µF, ePTC consumption incl., fan cooling F₂

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			245	272	333	361	426	553	714	839	908	1137	1399	1526	1697		
Power cons. in W			173	194	222	233	255	292	333	362	377	423	469	490	516		
Current cons. in A			1.93	1.93	1.97	2.00	2.05	2.15	2.27	2.36	2.41	2.58	2.75	2.83	2.94		
COP in W/W			1.42	1.40	1.50	1.55	1.67	1.89	2.14	2.32	2.41	2.69	2.98	3.11	3.29		

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			219	243	297	322	380	493	636	747	809	1011	1243	1355	1506		
Power cons. in W			171	193	220	230	252	289	330	358	373	418	464	484	510		
Current cons. in A			1.93	1.93	1.97	2.00	2.05	2.15	2.27	2.36	2.41	2.58	2.75	2.83	2.94		
COP in W/W			1.28	1.26	1.35	1.40	1.51	1.70	1.93	2.09	2.17	2.42	2.68	2.80	2.95		



Accessories for	NLE12.6MFT	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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