

Model

NLE12.6MF.2

Sales code:

105G6389

Compressor Data

Refrigerant(s)	R134a / R513A
Refr. charge - tech. limit	600g / 21.16oz
Weight	11.50 kg / 25.35lbs
Displacement	12.55 cm³ / 0.77cu.in
Compressors on pallet	80



General – Configurations With NLE12.6MF.2

-	Conf. 1	Conf. 2	Conf. 3	Conf. 4	Conf. 5
Motor configuration	CSIR	eRSIR	eRSCR	CSIR	eRSCR
Power supply (nominal)	220-240 V/50 Hz	220-240 V/50 Hz	220-240 V/50 Hz	220-240 V/60 Hz	220-240 V/60 Hz
Number of phases	1	1	1	1	1
Voltage range	198-254 V	198-254 V	198-254 V	198-254 V	198-254 V
Approvals	VDE	VDE	VDE	VDE	VDE
Starting torque	HST	LST	LST	HST	LST
Refrigerant	R134a	R134a	R134a	R134a	R134a
Application	LBP+MBP	LBP+MBP	LBP+MBP	LBP	LBP
Hot gas defrost	OK	OK	OK	OK	OK
Long interval pull down	OK	OK	OK	-	-

Application Notes

- Provision for PE Grounding is located at the PE Stamp on the compressor

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Compressor Design

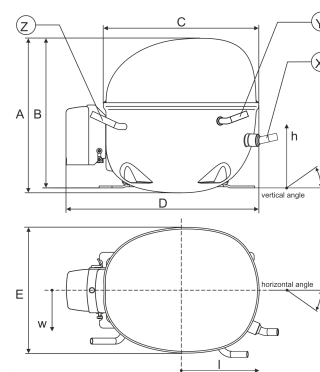
Oil type	POE	Winding resistance main	4.900 Ohm
Oil viscosity	19,2cSt	Winding resistance aux	8.90 Ohm
Oil quantity	295 / 9.98fl.oz	Max. winding temp.	125 °C
Free gas volume comp.	2,360 cm3 / 79.80fl.oz	Max. discharge temp.	120°C / 248°F
Motor protection	internal		

Compressor Dimensions

Housing

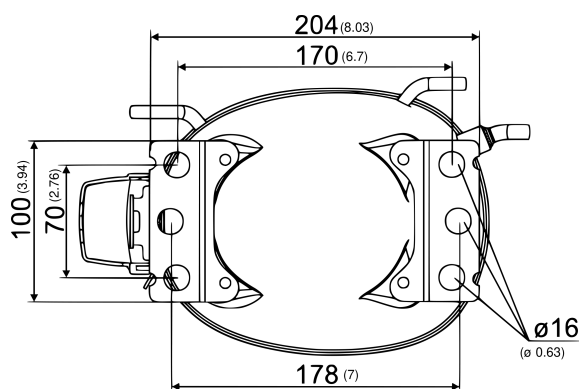
A Height	203mm / 7.99in
B Height	197mm / 7.76in
C Length shell	205mm / 8.07in
D Length w. cover	254mm / 10.00in
E Width	166mm / 6.54in

[Find 3D Model here](#)

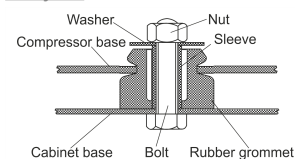


Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.11–6.29 / 0.24–0.25in	øi 6.11–6.29 / 0.24–0.25in
Material	CU	CU	CU
Horizontal angle ±2°	0°	0°	0°
Vertical angle ±2°	15°	21°	155°
Position l/h/w [mm]	132/68.5/56.7 / 5.20/2.70/2.23in	94/101.7/81 / 3.70/4.00/3.19in	-109.3/94.3/72 / -4.30/3.71/2.83in
Straight tube l. [mm]	12 / 0.47in	12 / 0.47in	12 / 0.47in

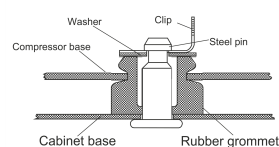
Mounting Accessories



Bolt joint



Snap-on



Dimensions in mm [in]

	one comp.	multi pack
Bolt joint M6 Ø16mm	118-1917	118-1918
Bolt joint Ø1/4" Ø16mm	118-1946	-
Snap-on Ø7,3 Ø16mm	118-1947	118-1919

Model

NLE12.6MF.2

Configuration 1

Sales code:

105G6389

Configuration

Motor configuration	CSIR
Power supply (nominal)	220-240 V/50 Hz 1~
Refrigerant	R134a
Application	LBP+MBP
Voltage range	198-254 V
Starting torque	HST
Approvals	VDE
Starting device type	relay
Run capacitor	-/-
Start capacitor	80 µF
LRA (locked rotor amps / 4s/ U(N))	13.65 A
RLA (rated load amps / 1s/ U(N))	2.8 A
Cut in current (U(N))	13.65 A

Ambient/ machine room temperatures minimum /maximum

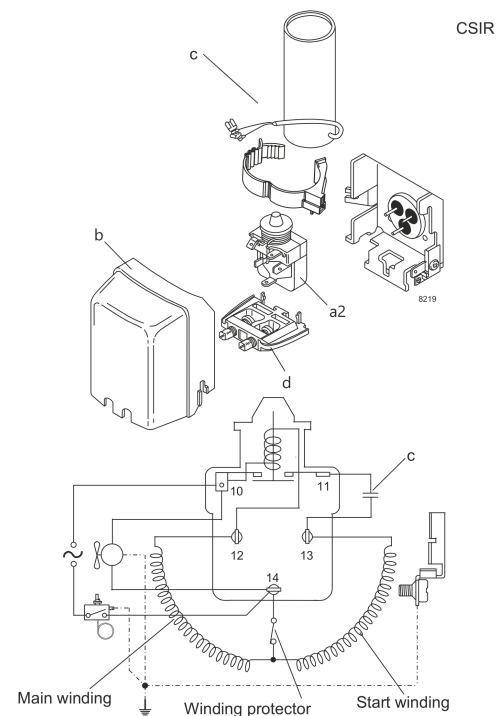
Ambient temperature range: 10 - 43°C / 50 - 109°F

Machine room temp. compressor: 10 - 48°C / 50 - 118°F

System Cooling

fan 3m/s

Electrical Accessories / Wiring Diagram



[View full size](#)

Components

a2 relay 117U6005

c start capacitor (80µF) 117U5015

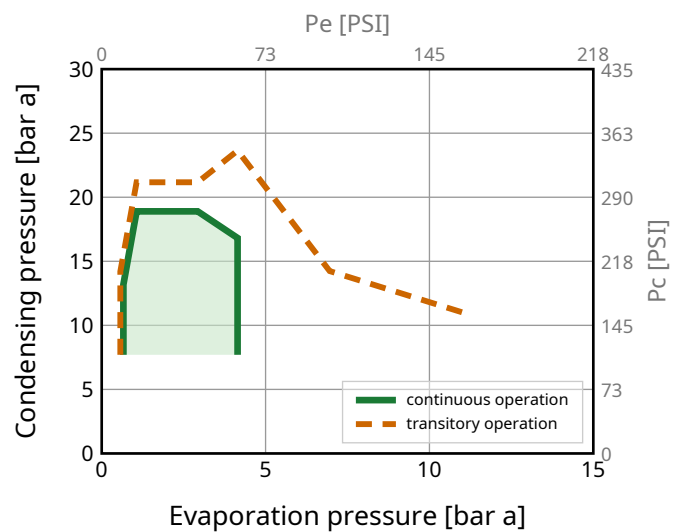
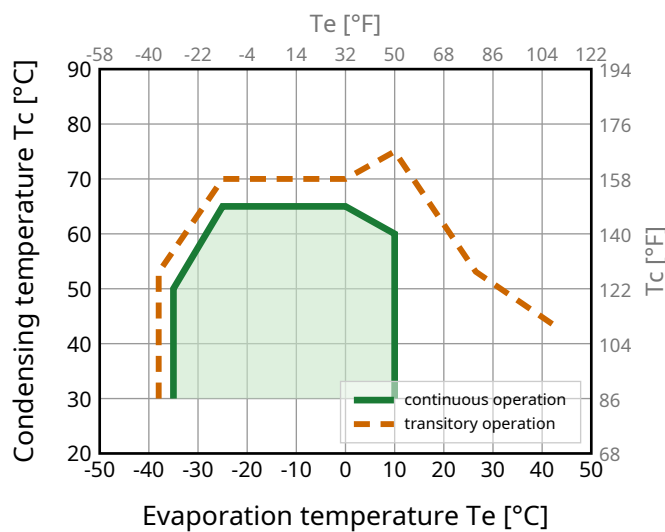
b plastic cover 103N2010

d cord relief 103N1010

Alternative components

b plastic cover 103N2011

Operation Pressure Range



Model
NLE12.6MF.2

Configuration 1

Sales code:
105G6389

Standard Conditions

R134a, 220 V/50 Hz, CSIR, fan 3m/s

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	m	
[°C] [°F]	[°C] [°F]	[°C] [°F]	[°C] [°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
-6.7 20	54.4 129.9	35 95	46.1 115	737	2516	634	1.98	6.76	372	2.43	16.05	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	567	1935	488	1.65	5.63	344	2.34	13.67	CECOMAF MBP
-10 14	45 113	20 68	45 113	658	2246	566	2.00	6.82	329	2.29	15.35	EN12900 MBP
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	712	2430	613	1.97	6.73	361	2.40	17.50	ARI540 MBP
-10 14	45 113	32 89.6	45 113	682	2327	586	2.07	7.07	329	2.29	14.89	opt MBP
-23.3 -10	45 113	32.2 90	32.2 90	382	1302	328	1.62	5.52	236	2.04	7.40	opt LBP

Performance Tables

R134a, 220 V/50 Hz, CSIR, fan 3m/s

pc= 45/113 | RGT= 32/89.6 | Tliq= 45/113 | °C/°F

pe		Cooling capacity			COP	EER	P	I	m
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-35	-31	197	673	170	1.12	3.81	176	1.97	4.25
-30	-22	242	824	208	1.22	4.15	198	1.98	5.21
-20	-4	409	1396	352	1.59	5.43	257	2.09	8.87
-10	14	682	2327	586	2.07	7.07	329	2.29	14.89
0	32	1060	3617	912	2.60	8.86	408	2.56	23.39
10	50	1544	5267	1327	3.17	10.81	487	2.85	34.55

pc= 55/131 | RGT= 32/89.6 | Tliq= 55/131 | °C/°F

-35	-31	198	676	170	1.12	3.81	178	1.98	4.70
-30	-22	218	745	188	1.09	3.73	200	1.99	5.19
-20	-4	339	1157	292	1.29	4.41	263	2.10	8.11
-10	14	567	1935	488	1.65	5.63	344	2.34	13.67
0	32	902	3077	776	2.06	7.04	437	2.66	21.99
10	50	1344	4584	1155	2.51	8.57	535	3.04	33.29

Model

NLE12.6MF.2

Configuration 2

Sales code:

105G6389

Configuration

Motor configuration	eRSIR
Power supply (nominal)	220-240 V/50 Hz 1~
Refrigerant	R134a
Application	LBP+MBP
Voltage range	198-254 V
Starting torque	LST
Approvals	VDE
Starting device type	e-PTC
Run capacitor	-/-
Start capacitor	-/-
LRA (locked rotor amps / 4s/ U(N))	13.65 A
RLA (rated load amps / 1s/ U(N))	2.8 A
Cut in current (U(N))	13.65 A

Ambient/ machine room temperatures minimum /maximum

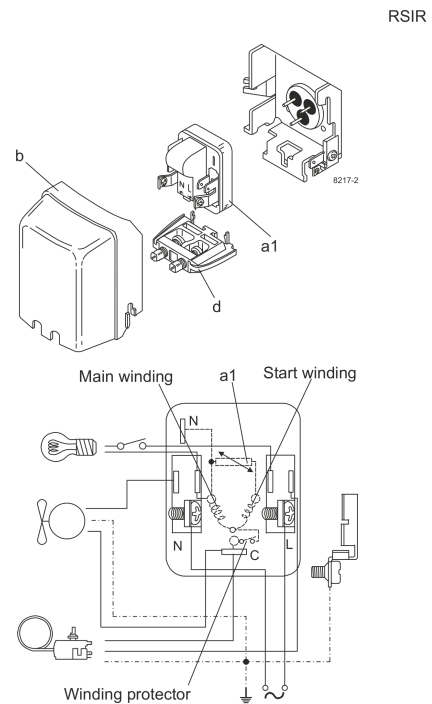
Ambient temperature range: 10 - 43°C / 50 - 109°F

Machine room temp. compressor: 10 - 48°C / 50 - 118°F

System Cooling

fan 3m/s

Electrical Accessories / Wiring Diagram



Components

a1 e-PTC starter (220V, 250hm, 4.8mm) 103N0050

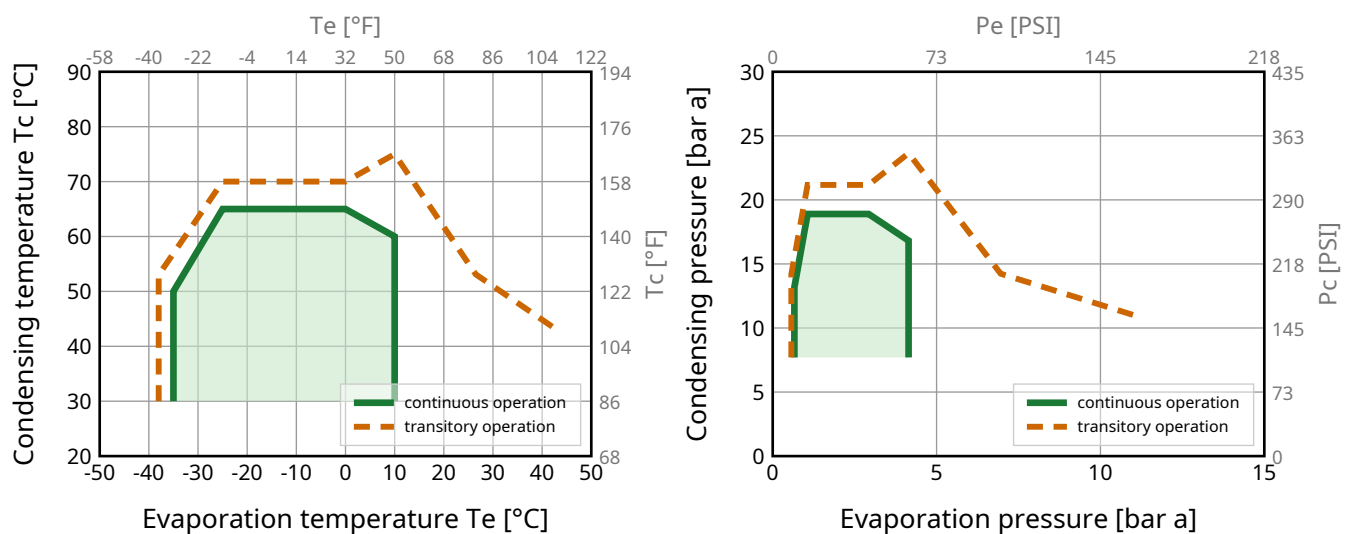
b plastic cover 103N2010

d cord relief 103N1010

Alternative components

b plastic cover 103N2011

Operation Pressure Range



Model

NLE12.6MF.2

Configuration 2

Sales code:

105G6389

Standard Conditions

R134a, 220 V/50 Hz, eRSIR, fan 3m/s

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	m	
[°C] [°F]	[°C] [°F]	[°C] [°F]	[°C] [°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
-6.7 20	54.4 129.9	35 95	46.1 115	737	2516	634	1.98	6.76	372	2.43	16.05	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	567	1935	488	1.65	5.63	344	2.34	13.67	CECOMAF MBP
-10 14	45 113	20 68	45 113	658	2246	566	2.00	6.82	329	2.29	15.35	EN12900 MBP
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	712	2430	613	1.97	6.73	361	2.40	17.50	ARI540 MBP
-10 14	45 113	32 89.6	45 113	682	2327	586	2.07	7.07	329	2.29	14.89	opt MBP
-23.3 -10	45 113	32.2 90	32.2 90	382	1302	328	1.62	5.52	236	2.04	7.40	opt LBP

Performance Tables

R134a, 220 V/50 Hz, eRSIR, fan 3m/s

pc= 45/113 | RGT= 32/89.6 | Tliq= 45/113 | °C/°F

pe		Cooling capacity			COP	EER	P	I	m
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-35	-31	197	673	170	1.12	3.81	176	1.97	4.25
-30	-22	242	824	208	1.22	4.15	198	1.98	5.21
-20	-4	409	1396	352	1.59	5.43	257	2.09	8.87
-10	14	682	2327	586	2.07	7.07	329	2.29	14.89
0	32	1060	3617	912	2.60	8.86	408	2.56	23.39
10	50	1544	5267	1327	3.17	10.81	487	2.85	34.55

pc= 55/131 | RGT= 32/89.6 | Tliq= 55/131 | °C/°F

-35	-31	198	676	170	1.12	3.81	178	1.98	4.70
-30	-22	218	745	188	1.09	3.73	200	1.99	5.19
-20	-4	339	1157	292	1.29	4.41	263	2.10	8.11
-10	14	567	1935	488	1.65	5.63	344	2.34	13.67
0	32	902	3077	776	2.06	7.04	437	2.66	21.99
10	50	1344	4584	1155	2.51	8.57	535	3.04	33.29

Model

NLE12.6MF.2

Configuration 3

Sales code:

105G6389

Configuration

Motor configuration	eRSCR
Power supply (nominal)	220-240 V/50 Hz 1~
Refrigerant	R134a
Application	LBP+MBP
Voltage range	198-254 V
Starting torque	LST
Approvals	VDE
Starting device type	e-PTC
Run capacitor	4 μF
Start capacitor	-/-
LRA (locked rotor amps / 4s/ U(N))	13.65 A
RLA (rated load amps / 1s/ U(N))	2.8 A
Cut in current (U(N))	13.65 A

Ambient/ machine room temperatures minimum /maximum

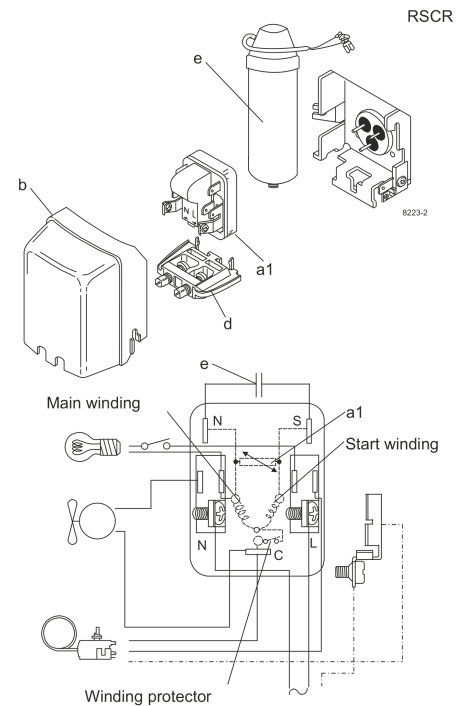
Ambient temperature range: 10 - 43°C / 50 - 109°F

Machine room temp. compressor: 10 - 48°C / 50 - 118°F

System Cooling

fan 3m/s

Electrical Accessories / Wiring Diagram



Components

a1 e-PTC starter (220V, 250hm, 4.8mm) 103N0050

e run capacitor (4 μ F, 4.8mm) 117-7119

b plastic cover 103N2010

d cord relief 103N1010

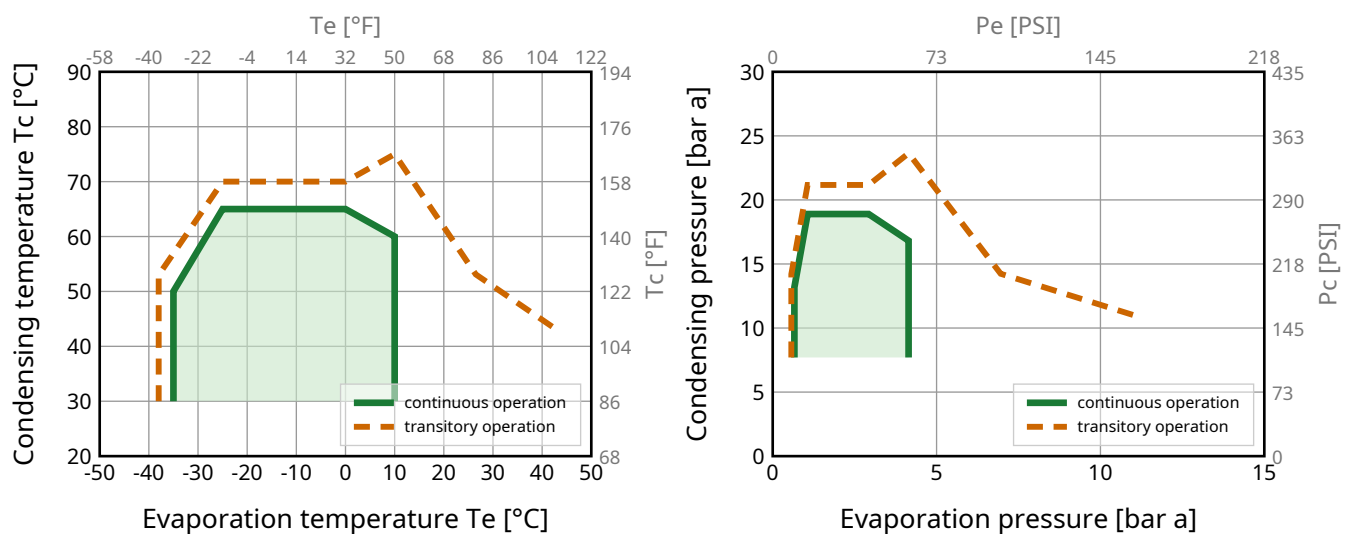
bracket for run capacitor 117-0300

screw M4x8mm 117-0301

Alternative components

b plastic cover 103N2011

Operation Pressure Range



Model

NLE12.6MF.2

Configuration 3

Sales code:

105G6389

Standard Conditions

R134a, 220 V/50 Hz, eRSCR, fan 3m/s

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	m	
[°C] [°F]	[°C] [°F]	[°C] [°F]	[°C] [°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
-6.7 20	54.4 129.9	35 95	46.1 115	749	2555	644	2.07	7.06	362	2.36	16.30	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	576	1965	495	1.72	5.88	334	2.27	13.88	CECOMAF MBP
-10 14	45 113	20 68	45 113	669	2282	575	2.09	7.13	320	2.23	15.59	EN12900 MBP
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	723	2468	622	2.06	7.03	351	2.33	17.78	ARI540 MBP
-10 14	45 113	32 89.6	45 113	693	2363	596	2.16	7.38	320	2.23	15.13	opt MBP
-23.3 -10	45 113	32.2 90	32.2 90	388	1322	333	1.69	5.76	229	1.99	7.52	opt LBP

Performance Tables

R134a, 220 V/50 Hz, eRSCR, fan 3m/s

pc= 45/113 | RGT= 32/89.6 | Tliq= 45/113 | °C/°F

pe		Cooling capacity			COP	EER	P	I	m
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-35	-31	200	684	172	1.17	3.99	172	1.91	4.32
-30	-22	245	837	211	1.27	4.34	193	1.93	5.29
-20	-4	416	1418	357	1.66	5.67	250	2.03	9.01
-10	14	693	2363	596	2.16	7.38	320	2.23	15.13
0	32	1077	3674	926	2.71	9.26	397	2.48	23.75
10	50	1568	5349	1348	3.31	11.30	474	2.77	35.09

pc= 55/131 | RGT= 32/89.6 | Tliq= 55/131 | °C/°F

-35	-31	201	686	173	1.17	3.97	173	1.93	4.78
-30	-22	222	757	191	1.14	3.89	194	1.93	5.28
-20	-4	344	1175	296	1.35	4.60	255	2.05	8.24
-10	14	576	1965	495	1.72	5.88	334	2.27	13.88
0	32	916	3125	788	2.16	7.36	425	2.58	22.33
10	50	1365	4656	1174	2.62	8.96	520	2.95	33.81

Model

NLE12.6MF.2

Configuration 4

Sales code:

105G6389

Configuration

Motor configuration	CSIR
Power supply (nominal)	220-240 V/60 Hz 1~
Refrigerant	R134a
Application	LBP
Voltage range	198-254 V
Starting torque	HST
Approvals	VDE
Starting device type	relay
Run capacitor	-/-
Start capacitor	80 µF
LRA (locked rotor amps / 4s/ U(N))	13.65 A
RLA (rated load amps / 1s/ U(N))	2.8 A
Cut in current (U(N))	13.65 A

Ambient/ machine room temperatures minimum /maximum

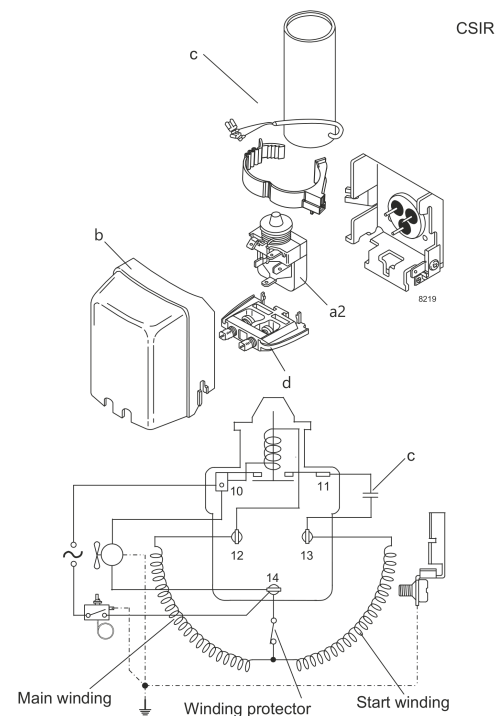
Ambient temperature range: 10 - 43°C / 50 - 109°F

Machine room temp. compressor: 10 - 48°C / 50 - 118°F

System Cooling

fan 3m/s

Electrical Accessories / Wiring Diagram



[View full size](#)

Components

a2 relay 117U6005

c start capacitor (80µF) 117U5015

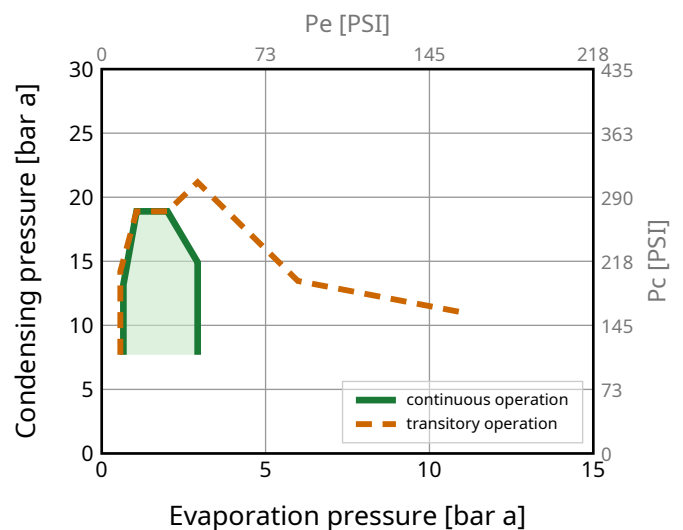
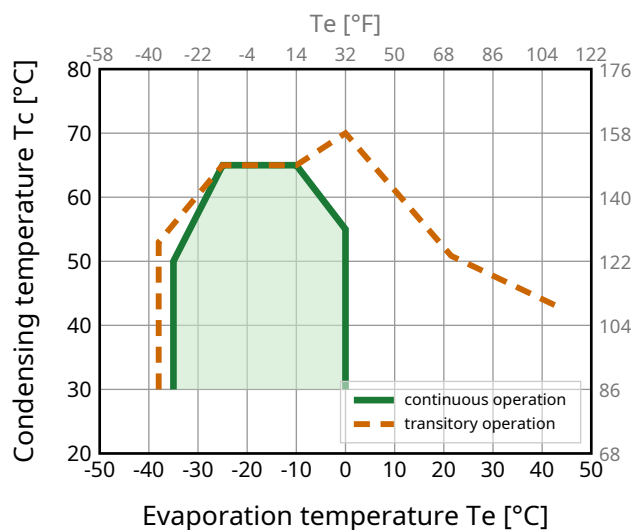
b plastic cover 103N2010

d cord relief 103N1010

Alternative components

b plastic cover 103N2011

Operation Pressure Range



Model

NLE12.6MF.2

Configuration 4

Sales code:

105G6389

Standard Conditions

R134a, 220 V/60 Hz, CSIR, fan 3m/s

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	m	
[°C] [°F]	[°C] [°F]	[°C] [°F]	[°C] [°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
-6.7 20	54.4 129.9	35 95	46.1 115	888	3031	764	2.00	6.82	444	2.90	19.34	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	683	2330	587	1.67	5.68	410	2.79	16.47	CECOMAF MBP
-10 14	45 113	20 68	45 113	793	2706	682	2.02	6.89	393	2.73	18.50	EN12900 MBP
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	858	2928	738	1.99	6.79	431	2.86	21.09	ARI540 MBP
-10 14	45 113	32 89.6	45 113	822	2803	706	2.09	7.13	393	2.73	17.94	opt MBP
-23.3 -10	45 113	32.2 90	32.2 90	460	1568	395	1.63	5.57	282	2.44	8.92	opt LBP

Performance Tables

R134a, 220 V/60 Hz, CSIR, fan 3m/s

pc= 45/113 | RGT= 32/89.6 | Tliq= 45/113 | °C/°F

pe		Cooling capacity			COP	EER	P	I	m
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-35	-31	238	811	204	1.13	3.85	210	2.35	5.12
-30	-22	291	993	250	1.23	4.19	237	2.36	6.28
-20	-4	493	1682	424	1.61	5.48	307	2.50	10.69
-10	14	822	2803	706	2.09	7.13	393	2.73	17.94
0	32	1277	4357	1098	2.62	8.95	487	3.05	28.18
10	50	1860	6345	1599	3.20	10.92	581	3.40	41.62
15	59	2198	7501	1891	3.52	11.99	626	3.59	49.67

pc= 55/131 | RGT= 32/89.6 | Tliq= 55/131 | °C/°F

-35	-31	239	814	205	1.13	3.85	212	2.37	5.67
-30	-22	263	898	226	1.10	3.76	238	2.37	6.26
-20	-4	409	1394	351	1.30	4.45	313	2.51	9.77
-10	14	683	2330	587	1.67	5.68	410	2.79	16.47
0	32	1086	3707	934	2.08	7.11	521	3.17	26.49
10	50	1619	5523	1392	2.54	8.66	638	3.62	40.10
15	59	1933	6596	1663	2.78	9.48	696	3.86	48.39

Model

NLE12.6MF.2

Configuration 5

Sales code:

105G6389

Configuration

Motor configuration	eRSCR
Power supply (nominal)	220-240 V/60 Hz 1~
Refrigerant	R134a
Application	LBP
Voltage range	198-254 V
Starting torque	LST
Approvals	VDE
Starting device type	e-PTC
Run capacitor	4 μF
Start capacitor	-/-
LRA (locked rotor amps / 4s/ U(N))	13.65 A
RLA (rated load amps / 1s/ U(N))	2.8 A
Cut in current (U(N))	13.65 A

Ambient/ machine room temperatures minimum /maximum

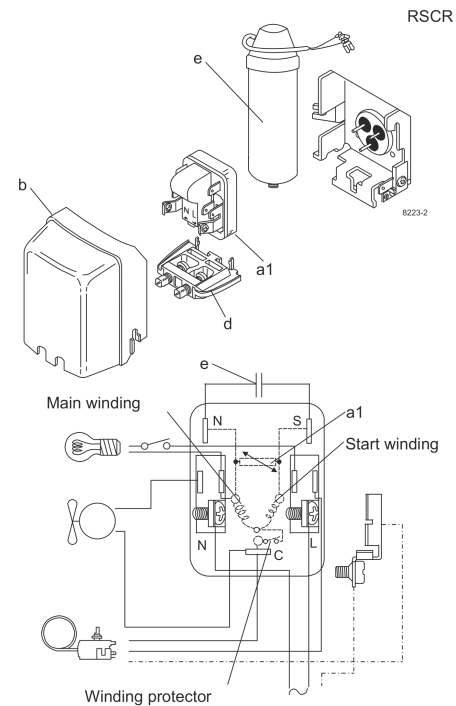
Ambient temperature range: 10 - 43°C / 50 - 109°F

Machine room temp. compressor: 10 - 48°C / 50 - 118°F

System Cooling

fan 3m/s

Electrical Accessories / Wiring Diagram



Components

a1 e-PTC starter (220V, 250hm, 4.8mm) 103N0050

e run capacitor (4 μ F, 4.8mm) 117-7119

b plastic cover 103N2010

d cord relief 103N1010

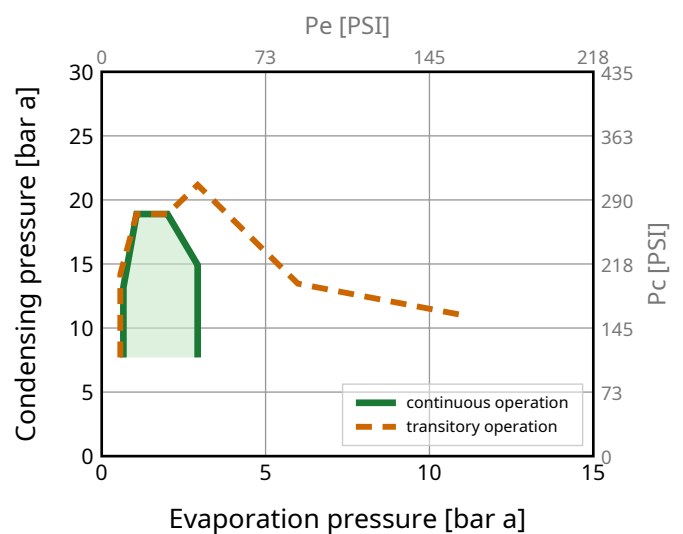
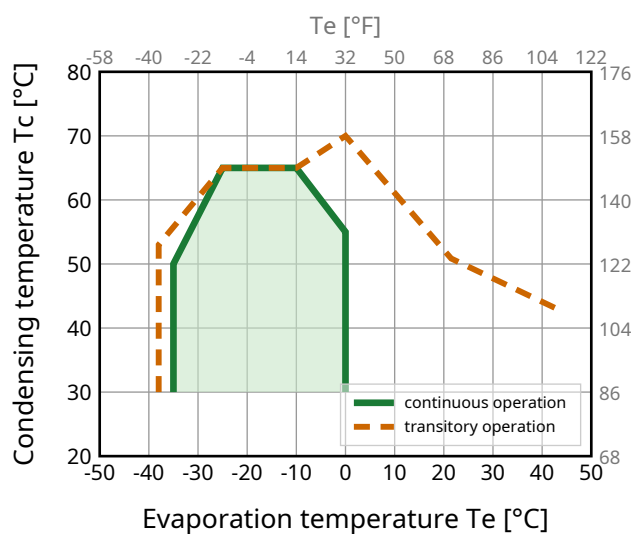
bracket for run capacitor 117-0300

screw M4x8mm 117-0301

Alternative components

b plastic cover 103N2011

Operation Pressure Range



Model
NLE12.6MF.2

Configuration 5

Sales code:
105G6389

Standard Conditions

R134a, 220 V/60 Hz, eRSCR, fan 3m/s

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	m	
[°C] [°F]	[°C] [°F]	[°C] [°F]	[°C] [°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
-6.7 20	54.4 129.9	35 95	46.1 115	902	3078	776	2.09	7.12	432	2.82	19.64	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	694	2367	597	1.74	5.93	399	2.71	16.73	CECOMAF MBP
-10 14	45 113	20 68	45 113	806	2749	693	2.11	7.20	382	2.66	18.79	EN12900 MBP
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	872	2974	749	2.08	7.10	419	2.78	21.41	ARI540 MBP
-10 14	45 113	32 89.6	45 113	834	2847	718	2.19	7.46	382	2.66	18.22	opt MBP
-23.3 -10	45 113	32.2 90	32.2 90	467	1593	401	1.71	5.82	274	2.37	9.06	opt LBP

Performance Tables

R134a, 220 V/60 Hz, eRSCR, fan 3m/s

pc= 45/113 | RGT= 32/89.6 | Tliq= 45/113 | °C/°F

pe		Cooling capacity			COP	EER	P	I	m
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-35	-31	241	824	208	1.18	4.03	205	2.28	5.20
-30	-22	296	1009	254	1.28	4.38	230	2.30	6.38
-20	-4	501	1708	431	1.68	5.73	298	2.43	10.85
-10	14	834	2847	718	2.19	7.46	382	2.66	18.22
0	32	1297	4426	1116	2.74	9.35	474	2.96	28.62
10	50	1889	6444	1624	3.34	11.41	565	3.31	42.27
15	59	2233	7618	1920	3.67	12.53	608	3.49	50.44

pc= 55/131 | RGT= 32/89.6 | Tliq= 55/131 | °C/°F

-35	-31	242	827	208	1.18	4.02	206	2.30	5.75
-30	-22	267	912	230	1.15	3.93	232	2.31	6.36
-20	-4	415	1416	357	1.36	4.65	305	2.44	9.93
-10	14	694	2367	597	1.74	5.93	399	2.71	16.73
0	32	1103	3765	949	2.18	7.43	507	3.08	26.91
10	50	1644	5609	1414	2.65	9.05	620	3.52	40.73
15	59	1963	6699	1689	2.90	9.90	677	3.76	49.15