

Model
NLE11MF.2

Sales code:
105G7101

Compressor Data

Refrigerant(s)	R134a / R513A
Refr. charge - tech. limit	600g / 21.16oz
Weight	10.90 kg / 24.03lbs
Displacement	11.15 cm³ / 0.68cu.in
Compressors on pallet	80



General – Configurations With NLE11MF.2

-	Conf. 1	Conf. 2	Conf. 3	Conf. 4	Conf. 5
Motor configuration	CSIR	eRSIR	CSIR	eRSIR	eRSCR
Power supply (nominal)	220-230 V/50 Hz	220-230 V/50 Hz	220-240 V/50 Hz	220-240 V/50 Hz	220-240 V/50 Hz
Number of phases	1	1	1	1	1
Voltage range	198-242 V	198-242 V	198-254 V	198-254 V	198-254 V
Approvals	VDE	VDE	VDE	VDE	VDE
Starting torque	HST	LST	HST	LST	LST
Refrigerant	R513A	R513A	R513A	R513A	R513A
Application	MBP	MBP	MBP	MBP	MBP
Hot gas defrost	OK	OK	OK	OK	OK
Long interval pull down	OK	OK	OK	OK	OK

Application Notes

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

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Compressor Design

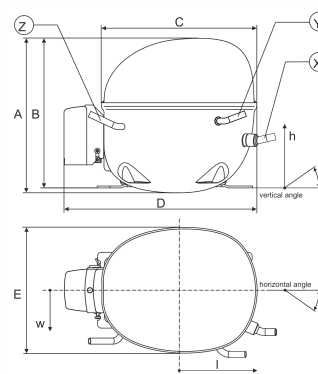
Oil type	POE	Winding resistance main	8.800 Ohm
Oil viscosity	19,2cSt	Winding resistance aux	19.00 Ohm
Oil quantity	295 / 9.98fl.oz	Max. winding temp.	125 °C
Free gas volume comp.	2,360 cm ³ / 79.80fl.oz	Max. discharge temp.	130°C / 266°F
Motor protection	internal		

Compressor Dimensions

Housing

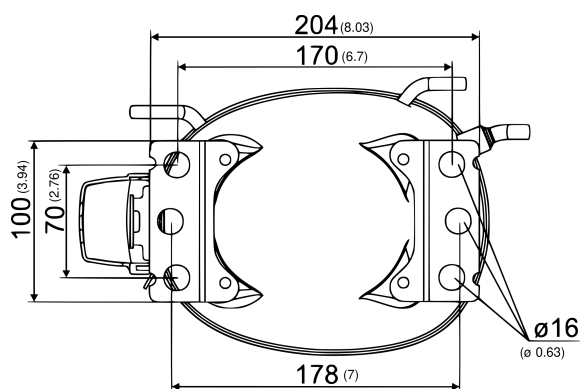
A Height	203mm / 7.99in
B Height	197mm / 7.76in
C Length shell	205mm / 8.07in
D Length w. cover	254mm / 10.00in
E Width	166mm / 6.54in

[Find 3D Model here](#)

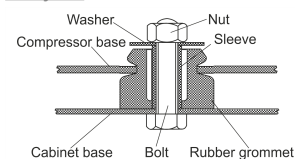


Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.11–6.29 / 0.24–0.25in	øi 6.11–6.29 / 0.24–0.25in
Material	CU	CU	CU
Horizontal angle ±2°	0°	0°	0°
Vertical angle ±2°	15°	21°	155°
Position l/h/w [mm]	132/68.5/56.7 / 5.20/2.70/2.23in	94/101.7/81 / 3.70/4.00/3.19in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

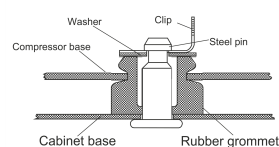
Mounting Accessories



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

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Configuration 1

Sales code:

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Configuration

Motor configuration	CSIR
Power supply (nominal)	220-230 V/50 Hz 1~
Refrigerant	R513A
Application	MBP
Voltage range	198-242 V
Starting torque	HST
Approvals	VDE
Starting device type	relay
Run capacitor	-/-
Start capacitor	80 µF
LRA (locked rotor amps / 4s/ U(N))	13.12 A
RLA (rated load amps / 1s/ U(N))	2.29 A
Cut in current (U(N))	13.12 A

Ambient/ machine room temperatures minimum /maximum

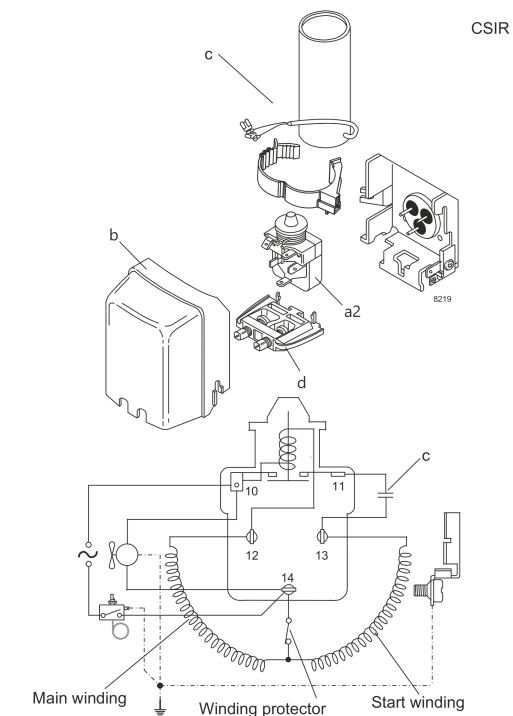
Ambient temperature range: 10 - 43°C / 50 - 109°F

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

System Cooling

fan 3m/s

Electrical Accessories / Wiring Diagram



[View full size](#)

Components

a2 assy. relay 117U6003

c start capacitor (80µF) 117U5015

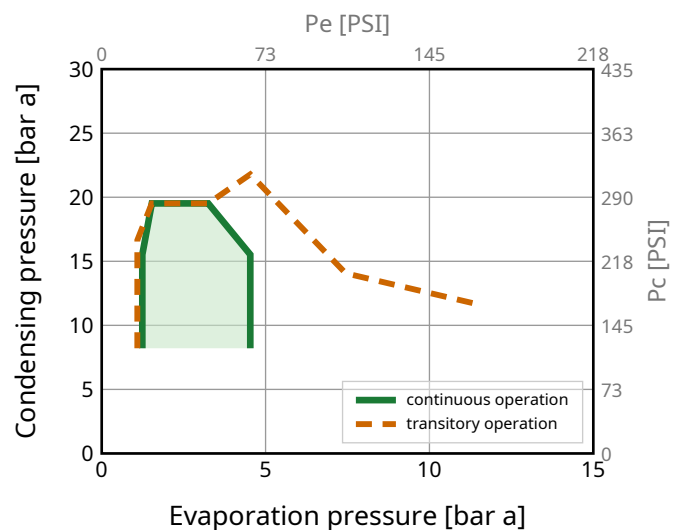
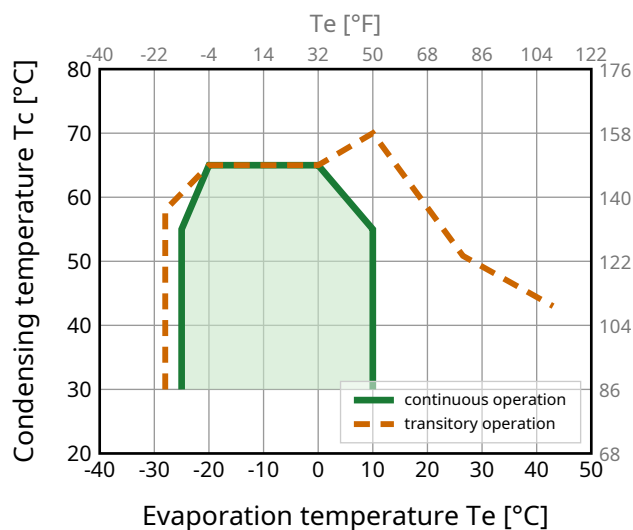
b plastic cover 103N2010

d cord relief 103N1010

Alternative components

b plastic cover 103N2011

Operation Pressure Range



Model

NLE11MF.2

Configuration 1

Sales code:

105G7101

Standard Conditions

R513A, 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	712	2429	612	1.85	6.32	384	2.29	17.75	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	546	1864	470	1.53	5.22	357	2.19	15.32	CECOMAF MBP
-10 14	45 113	20 68	45 113	625	2133	538	1.86	6.36	336	2.12	16.93	EN12900 MBP
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	668	2280	575	1.81	6.17	370	2.23	19.24	ARI540 MBP
-10 14	45 113	32 89.6	45 113	656	2238	564	1.96	6.67	336	2.12	16.42	opt MBP
-23.3 -10	45 113	32.2 90	32.2 90	398	1358	342	1.60	5.47	248	1.88	8.71	opt LBP

Performance Tables

R513A, 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]
-25	-13	322	1100	277	1.35	4.61	238	1.86	7.98
-20	-4	415	1416	357	1.55	5.28	268	1.93	10.30
-15	5	526	1793	452	1.75	5.96	301	2.02	13.10
-10	14	656	2238	564	1.96	6.67	336	2.12	16.42
-5	23	808	2757	695	2.18	7.43	371	2.23	20.33
0	32	983	3355	846	2.42	8.27	406	2.36	24.91
5	41	1184	4039	1018	2.69	9.20	439	2.48	30.22
10	50	1411	4815	1214	3.00	10.24	470	2.60	36.35

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

-25	-13	260	889	224	1.07	3.66	243	1.87	7.21
-20	-4	338	1155	291	1.22	4.17	277	1.95	9.40
-15	5	433	1477	372	1.38	4.69	315	2.06	12.09
-10	14	546	1864	470	1.53	5.22	357	2.19	15.32
-5	23	680	2319	584	1.69	5.78	401	2.35	19.18
0	32	835	2850	718	1.87	6.37	447	2.51	23.75
5	41	1015	3462	873	2.06	7.02	493	2.69	29.10
10	50	1220	4162	1049	2.27	7.73	539	2.87	35.34

Model

NLE11MF.2

Configuration 2

Sales code:

105G7101

Configuration

Motor configuration	eRSIR
Power supply (nominal)	220-230 V/50 Hz 1~
Refrigerant	R513A
Application	MBP
Voltage range	198-242 V
Starting torque	LST
Approvals	VDE
Starting device type	e-PTC
Run capacitor	-/-
Start capacitor	-/-
LRA (locked rotor amps / 4s/ U(N))	13.12 A
RLA (rated load amps / 1s/ U(N))	2.29 A
Cut in current (U(N))	13.12 A

Ambient/ machine room temperatures minimum /maximum

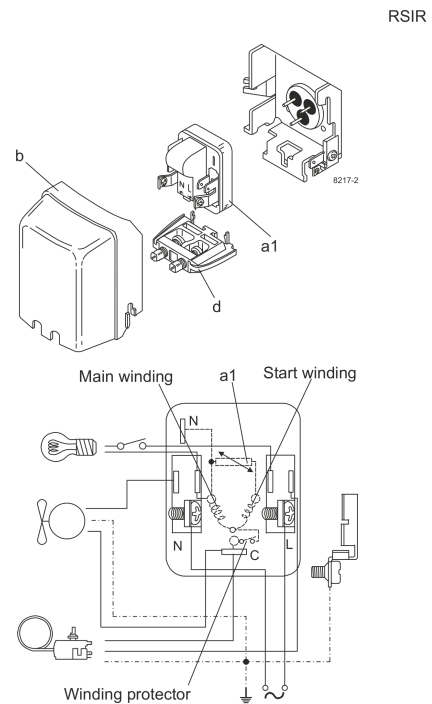
Ambient temperature range: 10 - 43°C / 50 - 109°F

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

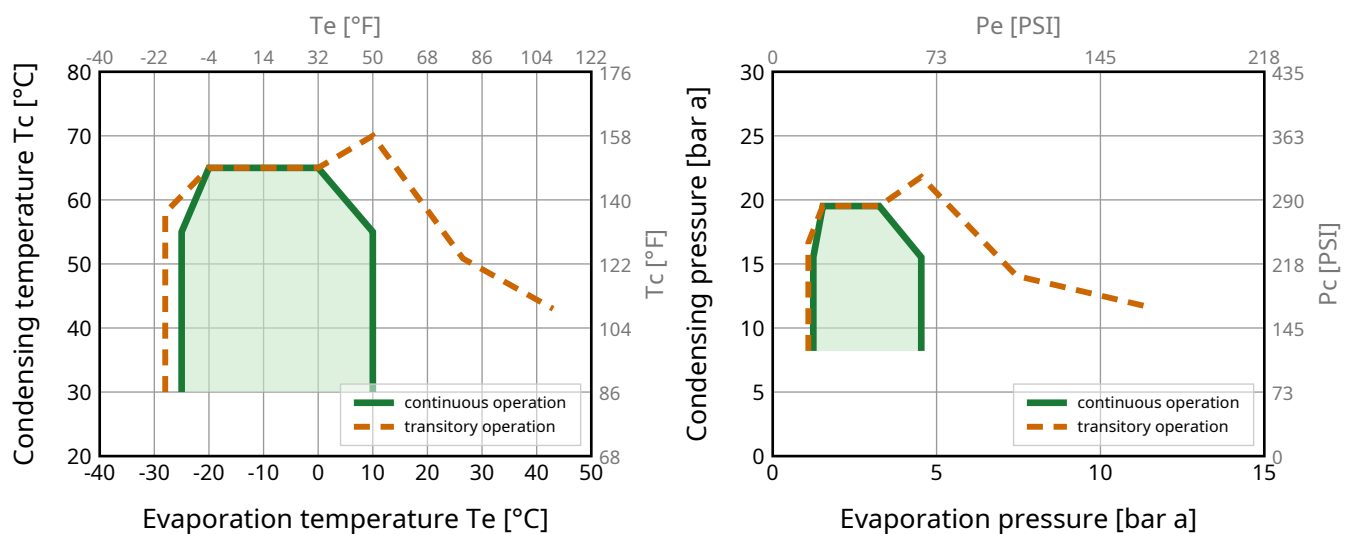
b plastic cover 103N2010

d cord relief 103N1010

Alternative components

b plastic cover 103N2011

Operation Pressure Range



Model

NLE11MF.2

Configuration 2

Sales code:

105G7101

Standard Conditions

R513A, 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	712	2429	612	1.85	6.32	384	2.29	17.75	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	546	1864	470	1.53	5.22	357	2.19	15.32	CECOMAF MBP
-10 14	45 113	20 68	45 113	625	2133	538	1.86	6.36	336	2.12	16.93	EN12900 MBP
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	668	2280	575	1.81	6.17	370	2.23	19.24	ARI540 MBP
-10 14	45 113	32 89.6	45 113	656	2238	564	1.96	6.67	336	2.12	16.42	opt MBP
-23.3 -10	45 113	32.2 90	32.2 90	398	1358	342	1.60	5.47	248	1.88	8.71	opt LBP

Performance Tables

R513A, 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]
-25	-13	322	1100	277	1.35	4.61	238	1.86	7.98
-20	-4	415	1416	357	1.55	5.28	268	1.93	10.30
-15	5	526	1793	452	1.75	5.96	301	2.02	13.10
-10	14	656	2238	564	1.96	6.67	336	2.12	16.42
-5	23	808	2757	695	2.18	7.43	371	2.23	20.33
0	32	983	3355	846	2.42	8.27	406	2.36	24.91
5	41	1184	4039	1018	2.69	9.20	439	2.48	30.22
10	50	1411	4815	1214	3.00	10.24	470	2.60	36.35

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

-25	-13	260	889	224	1.07	3.66	243	1.87	7.21
-20	-4	338	1155	291	1.22	4.17	277	1.95	9.40
-15	5	433	1477	372	1.38	4.69	315	2.06	12.09
-10	14	546	1864	470	1.53	5.22	357	2.19	15.32
-5	23	680	2319	584	1.69	5.78	401	2.35	19.18
0	32	835	2850	718	1.87	6.37	447	2.51	23.75
5	41	1015	3462	873	2.06	7.02	493	2.69	29.10
10	50	1220	4162	1049	2.27	7.73	539	2.87	35.34

Model

NLE11MF.2

Configuration 3

Sales code:

105G7101

Configuration

Motor configuration	CSIR
Power supply (nominal)	220-240 V/50 Hz 1~
Refrigerant	R513A
Application	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))	13.12 A
RLA (rated load amps / 1s/ U(N))	2.29 A
Cut in current (U(N))	13.12 A

Ambient/ machine room temperatures minimum /maximum

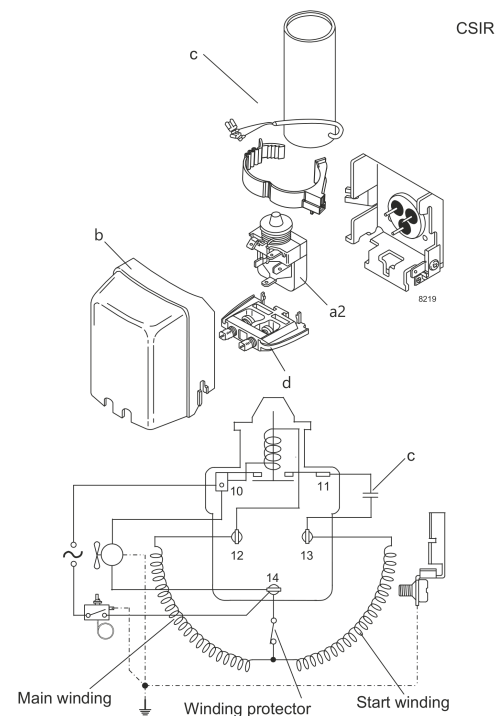
Ambient temperature range: 10 - 43°C / 50 - 109°F

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

System Cooling

fan 3m/s

Electrical Accessories / Wiring Diagram



[View full size](#)

Components

a2 assy. relay 117U6003

c start capacitor (80µF) 117U5015

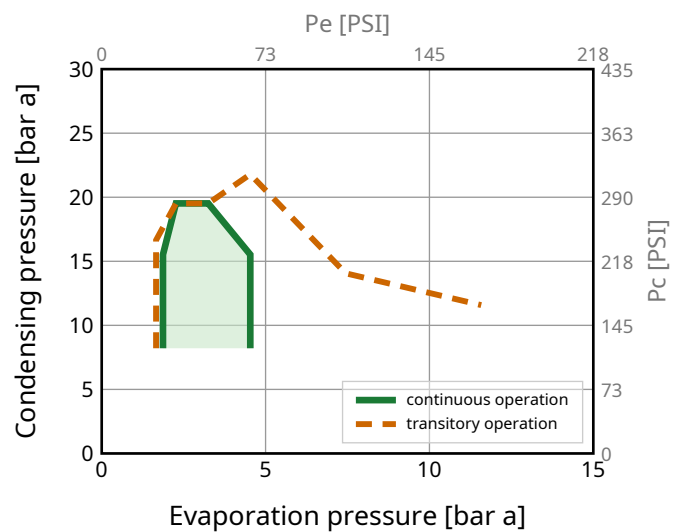
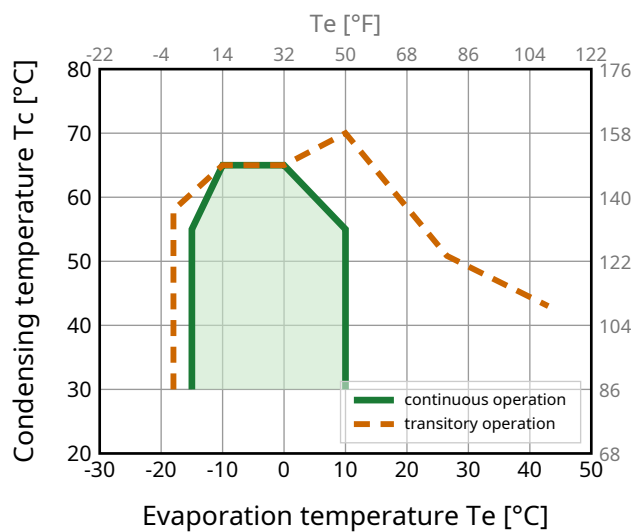
b plastic cover 103N2010

d cord relief 103N1010

Alternative components

b plastic cover 103N2011

Operation Pressure Range



Model

NLE11MF.2

Configuration 3

Sales code:

105G7101

Standard Conditions

R513A, 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	712	2429	612	1.85	6.32	384	2.29	17.75	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	546	1864	470	1.53	5.22	357	2.19	15.32	CECOMAF MBP
-10 14	45 113	20 68	45 113	625	2133	538	1.86	6.36	336	2.12	16.93	EN12900 MBP
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	668	2280	575	1.81	6.17	370	2.23	19.24	ARI540 MBP
-10 14	45 113	32 89.6	45 113	656	2238	564	1.96	6.67	336	2.12	16.42	opt MBP
-23.3 -10	45 113	32.2 90	32.2 90	398	1358	342	1.60	5.47	248	1.88	8.71	opt LBP

Performance Tables

R513A, 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]
-15	5	526	1793	452	1.75	5.96	301	2.02	13.10
-10	14	656	2238	564	1.96	6.67	336	2.12	16.42
-5	23	808	2757	695	2.18	7.43	371	2.23	20.33
0	32	983	3355	846	2.42	8.27	406	2.36	24.91
5	41	1184	4039	1018	2.69	9.20	439	2.48	30.22
10	50	1411	4815	1214	3.00	10.24	470	2.60	36.35

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

-15	5	433	1477	372	1.38	4.69	315	2.06	12.09
-10	14	546	1864	470	1.53	5.22	357	2.19	15.32
-5	23	680	2319	584	1.69	5.78	401	2.35	19.18
0	32	835	2850	718	1.87	6.37	447	2.51	23.75
5	41	1015	3462	873	2.06	7.02	493	2.69	29.10
10	50	1220	4162	1049	2.27	7.73	539	2.87	35.34

Model

NLE11MF.2

Configuration 4

Sales code:

105G7101

Configuration

Motor configuration	eRSIR
Power supply (nominal)	220-240 V/50 Hz 1~
Refrigerant	R513A
Application	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))	13.12 A
RLA (rated load amps / 1s/ U(N))	2.29 A
Cut in current (U(N))	13.12 A

Ambient/ machine room temperatures minimum /maximum

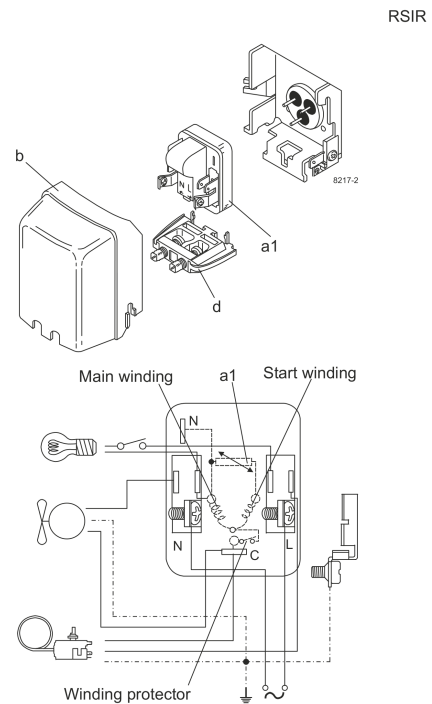
Ambient temperature range: 10 - 43°C / 50 - 109°F

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, 250Ω, 4.8mm) 103N0050

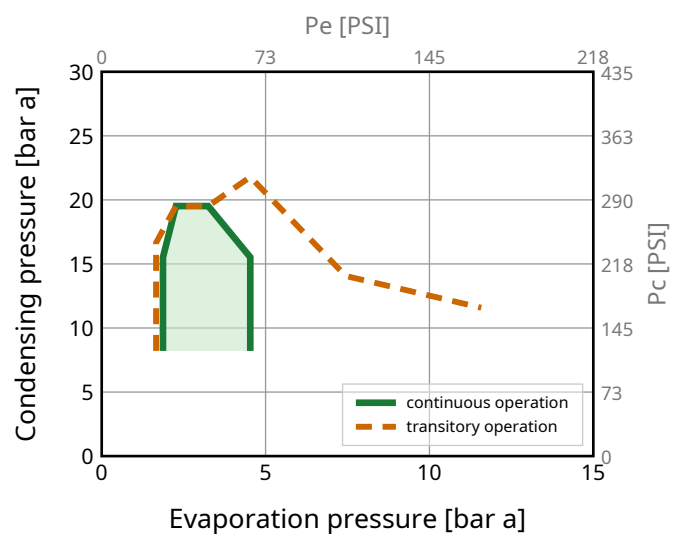
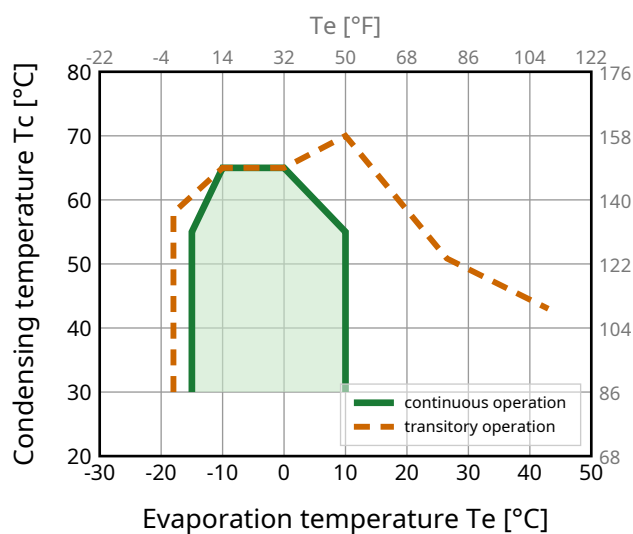
b plastic cover 103N2010

d cord relief 103N1010

Alternative components

b plastic cover 103N2011

Operation Pressure Range



Model
NLE11MF.2

Configuration 4

Sales code:
105G7101

Standard Conditions

R513A, 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	712	2429	612	1.85	6.32	384	2.29	17.75	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	546	1864	470	1.53	5.22	357	2.19	15.32	CECOMAF MBP
-10 14	45 113	20 68	45 113	625	2133	538	1.86	6.36	336	2.12	16.93	EN12900 MBP
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	668	2280	575	1.81	6.17	370	2.23	19.24	ARI540 MBP
-10 14	45 113	32 89.6	45 113	656	2238	564	1.96	6.67	336	2.12	16.42	opt MBP
-23.3 -10	45 113	32.2 90	32.2 90	398	1358	342	1.60	5.47	248	1.88	8.71	opt LBP

Performance Tables

R513A, 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]
-15	5	526	1793	452	1.75	5.96	301	2.02	13.10
-10	14	656	2238	564	1.96	6.67	336	2.12	16.42
-5	23	808	2757	695	2.18	7.43	371	2.23	20.33
0	32	983	3355	846	2.42	8.27	406	2.36	24.91
5	41	1184	4039	1018	2.69	9.20	439	2.48	30.22
10	50	1411	4815	1214	3.00	10.24	470	2.60	36.35

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

-15	5	433	1477	372	1.38	4.69	315	2.06	12.09
-10	14	546	1864	470	1.53	5.22	357	2.19	15.32
-5	23	680	2319	584	1.69	5.78	401	2.35	19.18
0	32	835	2850	718	1.87	6.37	447	2.51	23.75
5	41	1015	3462	873	2.06	7.02	493	2.69	29.10
10	50	1220	4162	1049	2.27	7.73	539	2.87	35.34

Model

NLE11MF.2

Configuration 5

Sales code:

105G7101

Configuration

Motor configuration	eRSCR
Power supply (nominal)	220-240 V/50 Hz 1~
Refrigerant	R513A
Application	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))	13.12 A
RLA (rated load amps / 1s/ U(N))	2.29 A
Cut in current (U(N))	13.12 A

Ambient/ machine room temperatures minimum /maximum

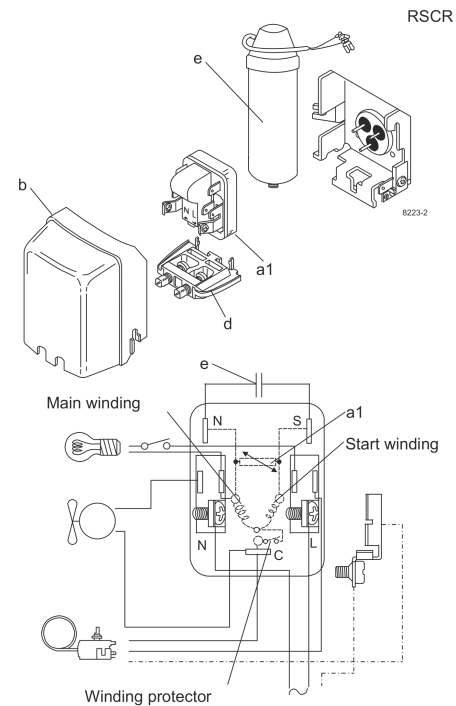
Ambient temperature range: 10 - 43°C / 50 - 109°F

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

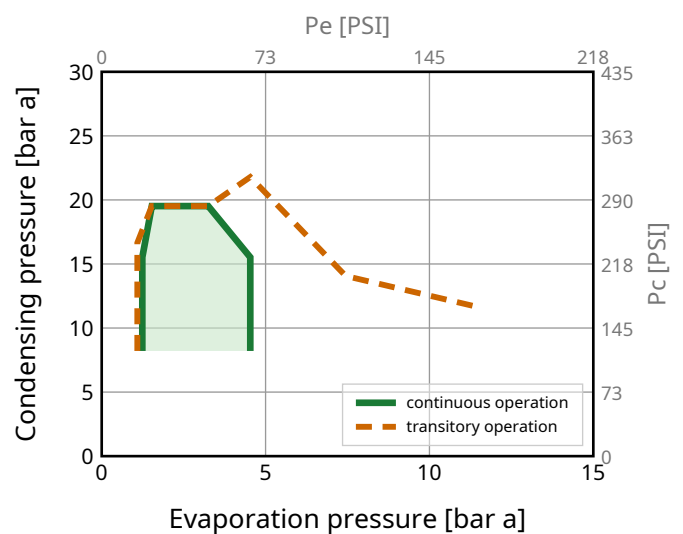
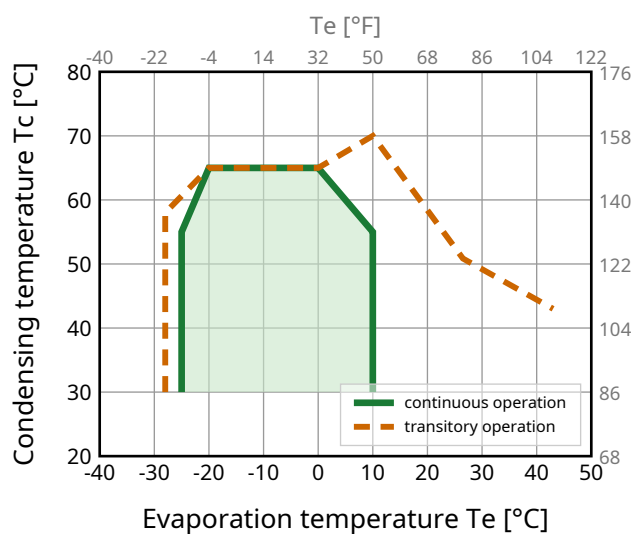
bracket for run capacitor 117-0300

screw M4x8mm 117-0301

Alternative components

b plastic cover 103N2011

Operation Pressure Range



Model
NLE11MF.2

Configuration 5

Sales code:
105G7101

Standard Conditions

R513A, 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	721	2461	620	2.00	6.82	361	1.96	17.99	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	554	1889	476	1.65	5.64	335	1.86	15.53	CECOMAF MBP
-10 14	45 113	20 68	45 113	634	2162	545	2.01	6.86	315	1.79	17.16	EN12900 MBP
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	677	2311	582	1.95	6.66	347	1.91	19.50	ARI540 MBP
-10 14	45 113	32 89.6	45 113	665	2268	572	2.11	7.20	315	1.79	16.64	opt MBP
-23.3 -10	45 113	32.2 90	32.2 90	403	1376	347	1.73	5.90	233	1.53	8.83	opt LBP

Performance Tables

R513A, 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]
-25	-13	327	1115	281	1.46	4.97	224	1.51	8.08
-20	-4	421	1435	362	1.67	5.69	252	1.59	10.44
-15	5	533	1817	458	1.88	6.43	283	1.68	13.27
-10	14	665	2268	572	2.11	7.20	315	1.79	16.64
-5	23	819	2794	704	2.35	8.03	348	1.91	20.61
0	32	996	3400	857	2.62	8.93	381	2.03	25.24
5	41	1200	4094	1032	2.91	9.92	412	2.16	30.62
10	50	1430	4881	1230	3.24	11.05	442	2.28	36.84

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

-25	-13	264	901	227	1.16	3.95	228	1.52	7.31
-20	-4	343	1170	295	1.32	4.50	260	1.61	9.53
-15	5	439	1498	377	1.48	5.06	296	1.73	12.25
-10	14	554	1889	476	1.65	5.64	335	1.86	15.53
-5	23	689	2350	592	1.83	6.24	377	2.02	19.45
0	32	846	2888	728	2.02	6.88	420	2.19	24.07
5	41	1028	3509	885	2.22	7.57	463	2.36	29.50
10	50	1236	4219	1063	2.44	8.34	506	2.54	35.82