

Model
NL10FT

Sales code:
105G6140

Compressor Data

Refrigerant(s)	R134a
Refr. charge - tech. limit	400g / 14.11oz
Weight	10.50 kg / 23.15lbs
Displacement	10.09 cm³ / 0.62cu.in
Compressors on pallet	80



General - Configurations With NL10FT

-	Conf. 1	Conf. 2	Conf. 3	Conf. 4
Motor configuration	CSIR	RSIR	CSIR	RSIR
Power supply (nominal)	220-240 V/50 Hz	220-240 V/50 Hz	208-230 V/60 Hz	208-230 V/60 Hz
Number of phases	1	1	1	1
Voltage range	187-254 V	187-254 V	187-253 V	187-253 V
Approvals	VDE, CCC, CB	VDE, CCC, CB	VDE, CCC, CB	VDE, CCC, CB
Starting torque	HST	LST	HST	LST
Refrigerant	R134a	R134a	R134a	R134a
Application	LBP	LBP	LBP	LBP

Application Notes

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

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Compressor Design

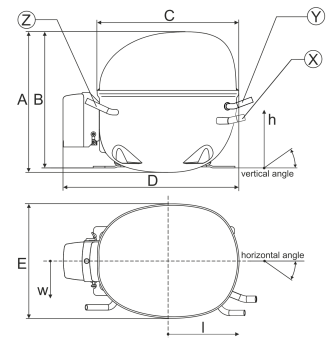
Oil type	POE	Winding resistance main	8.2 Ohm
Oil viscosity	32cSt	Winding resistance aux	14.7 Ohm
Oil quantity	298 / 10.08fl.oz	Max. winding temp.	125 °C
Free gas volume comp.	2,360 cm ³ / 79.80fl.oz	Max. discharge temp.	120°C / 248°F
Motor protection	internal		

Compressor Dimensions

Housing

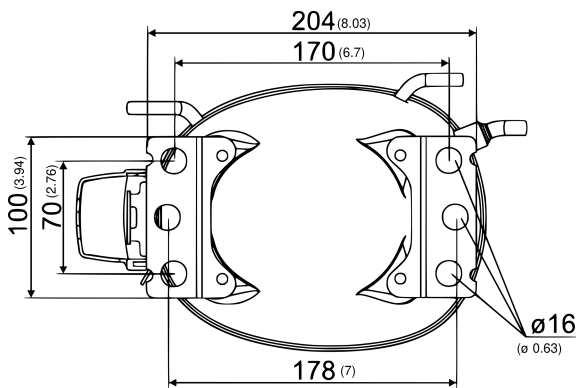
A Height	203mm / 7.99in
B Height	197mm / 7.76in
C Length shell	205mm / 8.07in
D Length w. cover	254mm / 10.00in
E Width	166mm / 6.54in

[Find 3D Model here](#)

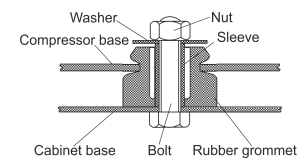


Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.41–6.59 / 0.25–0.26in	øi 6.41–6.59 / 0.25–0.26in
Material	CU	CU	CU
Horizontal angle ±2°	0°	0°	0°
Vertical angle ±2°	15°	35°	155°
Position l/h/w [mm]	125.5/75.5/78 / 4.94/2.97/3.07in	133/102.5/54 / 5.24/4.04/2.13in	-107/93.5/72 / -4.21/3.68/2.83in
Straight tube l. [mm]	12 / 0.47in	12 / 0.47in	12 / 0.47in

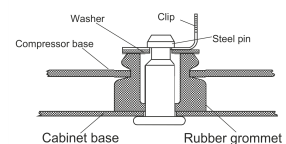
Mounting Accessories



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

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Configuration

Motor configuration	CSIR
Power supply (nominal)	220-240 V/50 Hz 1~
Refrigerant	R134a
Application	LBP
Voltage range	187-254 V
Starting torque	HST
Approvals	VDE, CCC, CB
Starting device type	relay
Run capacitor	-/-
Start capacitor	80 µF
LRA (locked rotor amps / 4s/ U(N))	10.4 A
RLA (rated load amps / 1s/ U(N))	1.8 A
Cut in current (U(N))	10.4 A

Ambient/ machine room temperatures minimum /maximum

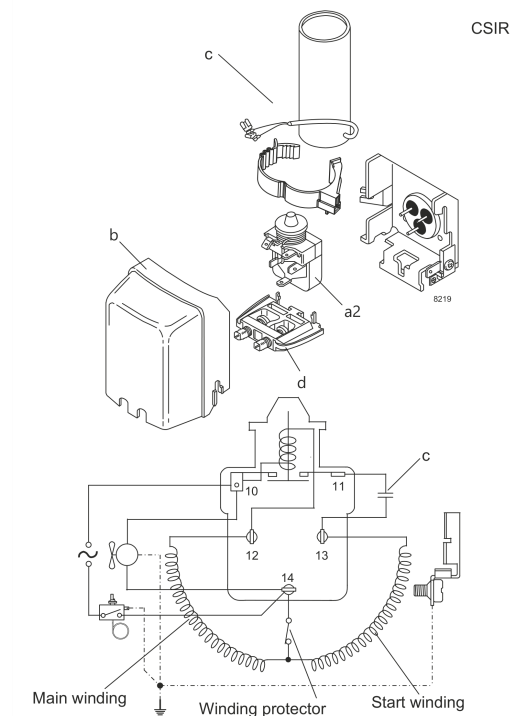
Ambient temperature range: 10 - 43°C / 50 - 109°F

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

System Cooling

static

Electrical Accessories / Wiring Diagram



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Components

a2 assy. relay 117U6002

c start capacitor (80µF) 117U5015

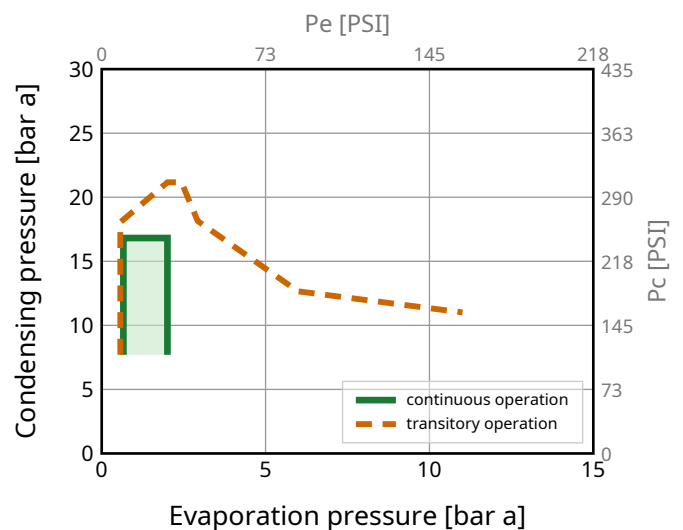
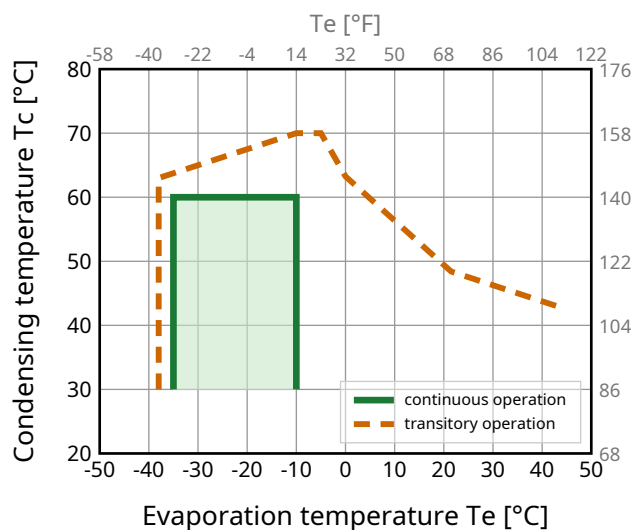
b plastic cover 103N2010

d cord relief 103N1010

Alternative components

b plastic cover 103N2011

Operation Pressure Range



Model
NL10FT

Configuration 1

Sales code:
105G6140

Standard Conditions

R134a, 220 V/50 Hz, CSIR, static

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]	
-23.3 -10	54.4 129.9	32.2 90	32.2 90	284	968	244	1.25	4.26	227	1.54	5.51	ASHRAE LBP
-25 -13	55 131	32 89.6	55 131	210	718	181	0.98	3.34	215	1.50	5.02	CECOMAF LBP
-35 -31	40 104	20 68	40 104	152	520	131	0.96	3.26	159	1.36	3.33	EN12900 LBP
-23.3 -10	48.8 119.8	4.4 39.9	48.8 119.8	232	793	200	1.02	3.48	228	1.55	6.10	ARI540 LBP
-23.3 -10	40.6 105.1	32.2 90	32.2 90	314	1070	270	1.44	4.91	218	1.52	6.09	AHAM LBP
-35 -31	45 113	32 89.6	45 113	142	484	122	0.88	3.00	162	1.36	3.06	opt LBP

Performance Tables

R134a, 220 V/50 Hz, CSIR, static

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	142	484	122	0.88	3.00	162	1.36	3.06
-30	-22	190	647	163	1.03	3.50	185	1.42	4.09
-25	-13	249	849	214	1.17	3.97	214	1.50	5.38
-20	-4	321	1094	276	1.31	4.46	245	1.61	6.95
-15	5	407	1389	350	1.47	5.01	278	1.72	8.86
-10	14	510	1740	439	1.66	5.67	307	1.83	11.14

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

-35	-31	115	392	99	0.72	2.46	159	1.35	2.72
-30	-22	158	538	136	0.86	2.92	184	1.41	3.75
-25	-13	210	718	181	0.98	3.34	215	1.50	5.02
-20	-4	274	937	236	1.10	3.75	249	1.62	6.57
-15	5	352	1200	302	1.24	4.22	284	1.74	8.44
-10	14	444	1514	382	1.40	4.78	316	1.87	10.70

Model
NL10FT

Configuration 2

Sales code:
105G6140

Configuration

Motor configuration	RSIR
Power supply (nominal)	220-240 V/50 Hz 1~
Refrigerant	R134a
Application	LBP
Voltage range	187-254 V
Starting torque	LST
Approvals	VDE, CCC, CB
Starting device type	PTC
Run capacitor	-/-
Start capacitor	-/-
LRA (locked rotor amps / 4s/ U(N))	10.4 A
RLA (rated load amps / 1s/ U(N))	1.8 A
Cut in current (U(N))	10.4 A

Ambient/ machine room temperatures minimum /maximum

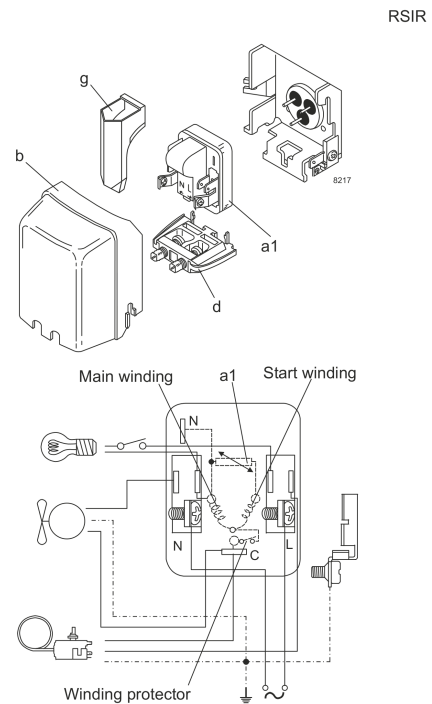
Ambient temperature range: 10 - 43°C / 50 - 109°F

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

System Cooling

static

Electrical Accessories / Wiring Diagram



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Components

a1 PTC starter (220V, 250Ohm, 4.8mm) 103N0018

b plastic cover 103N2010

d cord relief 103N1010

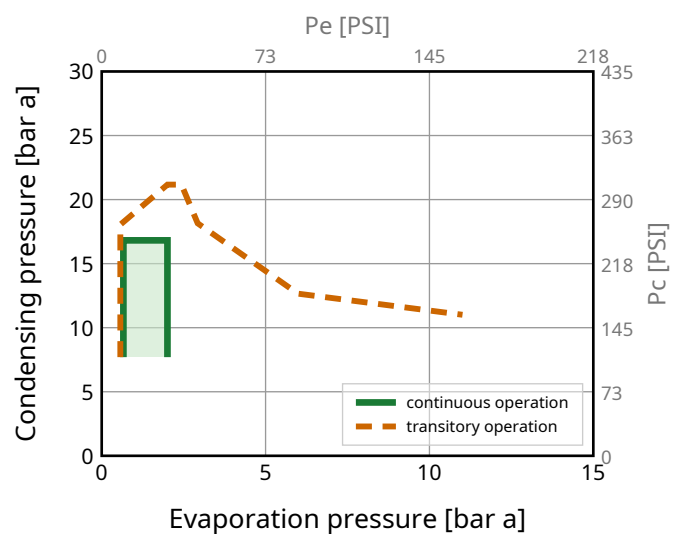
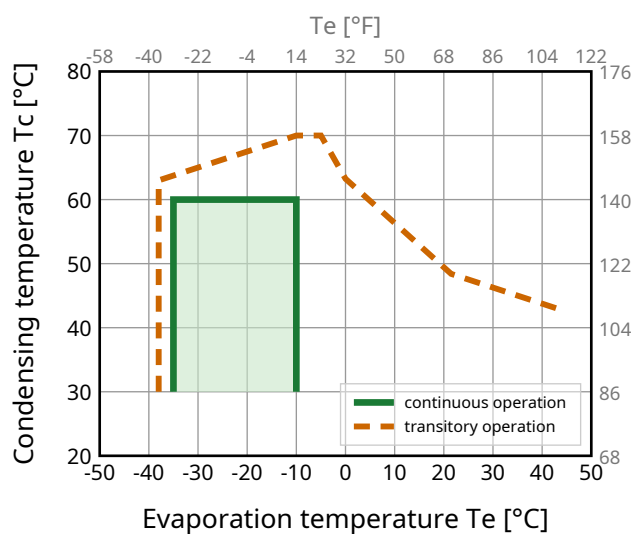
g protection screen for PTC 103N0476

Alternative components

a1 PTC starter (220V, 250Ohm, 6.3mm) 103N0011

b plastic cover 103N2011

Operation Pressure Range



Model
NL10FT

Configuration 2

Sales code:
105G6140

Standard Conditions

R134a, 220 V/50 Hz, RSIR, static

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]	
-23.3 -10	54.4 129.9	32.2 90	32.2 90	284	968	244	1.25	4.26	227	1.54	5.51	ASHRAE LBP
-25 -13	55 131	32 89.6	55 131	210	718	181	0.98	3.34	215	1.50	5.02	CECOMAF LBP
-35 -31	40 104	20 68	40 104	152	520	131	0.96	3.26	159	1.36	3.33	EN12900 LBP
-23.3 -10	48.8 119.8	4.4 39.9	48.8 119.8	232	793	200	1.02	3.48	228	1.55	6.10	ARI540 LBP
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-35 -31	45 113	32 89.6	45 113	142	484	122	0.88	3.00	162	1.36	3.06	opt LBP

Performance Tables

R134a, 220 V/50 Hz, RSIR, static

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	142	484	122	0.88	3.00	162	1.36	3.06
-30	-22	190	647	163	1.03	3.50	185	1.42	4.09
-25	-13	249	849	214	1.17	3.97	214	1.50	5.38
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-15	5	407	1389	350	1.47	5.01	278	1.72	8.86
-10	14	510	1740	439	1.66	5.67	307	1.83	11.14

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

-35	-31	115	392	99	0.72	2.46	159	1.35	2.72
-30	-22	158	538	136	0.86	2.92	184	1.41	3.75
-25	-13	210	718	181	0.98	3.34	215	1.50	5.02
-20	-4	274	937	236	1.10	3.75	249	1.62	6.57
-15	5	352	1200	302	1.24	4.22	284	1.74	8.44
-10	14	444	1514	382	1.40	4.78	316	1.87	10.70

Model
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Configuration 3

Sales code:
105G6140

Configuration

Motor configuration	CSIR
Power supply (nominal)	208-230 V/60 Hz 1~
Refrigerant	R134a
Application	LBP
Voltage range	187-253 V
Starting torque	HST
Approvals	VDE, CCC, CB
Starting device type	relay
Run capacitor	-/-
Start capacitor	80 µF
LRA (locked rotor amps / 4s/ U(N))	10.4 A
RLA (rated load amps / 1s/ U(N))	1.8 A
Cut in current (U(N))	10.4 A

Ambient/ machine room temperatures minimum /maximum

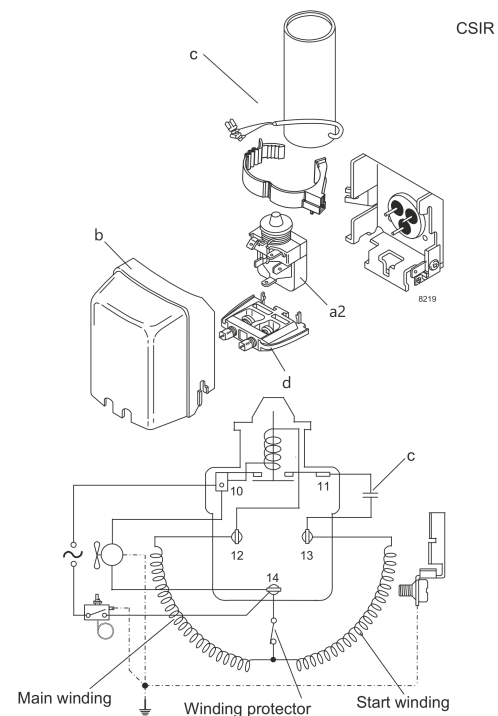
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Machine room temp. compressor: 10 - 48°C / 50 - 118°F

System Cooling

static

Electrical Accessories / Wiring Diagram



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Components

a2 assy. relay 117U6002

c start capacitor (80µF) 117U5015

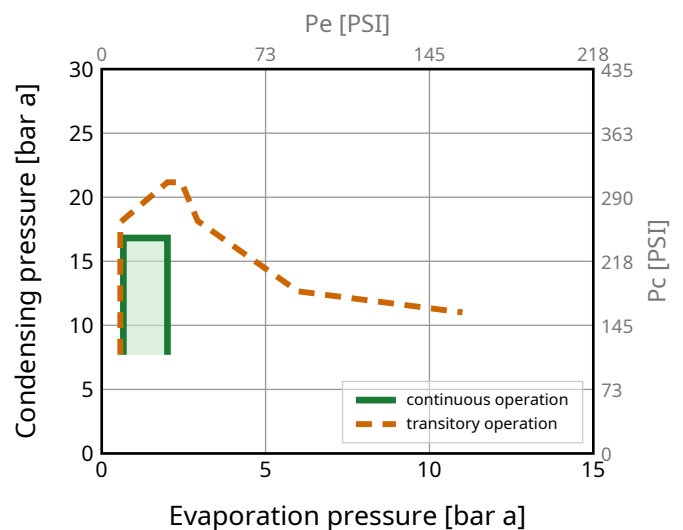
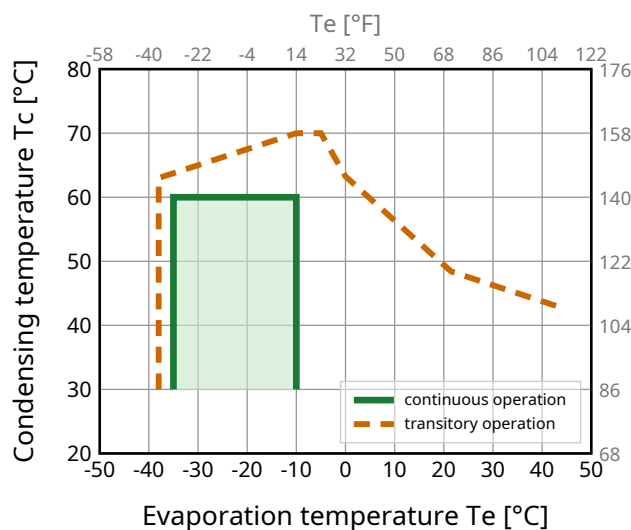
b plastic cover 103N2010

d cord relief 103N1010

Alternative components

b plastic cover 103N2011

Operation Pressure Range



Model

NL10FT

Configuration 3

Sales code:

105G6140

Standard Conditions

R134a, 220 V/60 Hz, CSIR, static

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]	
-23.3 -10	54.4 129.9	32.2 90	32.2 90	330	1125	284	1.28	4.36	258	1.48	6.40	ASHRAE LBP
-25 -13	55 131	32 89.6	55 131	245	835	210	1.01	3.44	243	1.42	5.83	CECOMAF LBP
-35 -31	40 104	20 68	40 104	177	604	152	1.07	3.66	165	1.18	3.87	EN12900 LBP
-23.3 -10	48.8 119.8	4.4 39.9	48.8 119.8	270	922	232	1.06	3.63	254	1.45	7.09	ARI540 LBP
-23.3 -10	40.6 105.1	32.2 90	32.2 90	364	1244	313	1.49	5.09	244	1.37	7.07	AHAM LBP
-35 -31	45 113	32 89.6	45 113	165	562	142	1.01	3.43	164	1.21	3.55	opt LBP

Performance Tables

R134a, 220 V/60 Hz, CSIR, static

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	165	562	142	1.01	3.43	164	1.21	3.55
-30	-22	221	754	190	1.13	3.85	196	1.26	4.77
-25	-13	289	987	249	1.23	4.19	236	1.37	6.25
-20	-4	372	1269	320	1.34	4.56	279	1.50	8.07
-15	5	471	1608	405	1.47	5.00	321	1.66	10.25
-10	14	589	2010	507	1.64	5.58	360	1.80	12.87

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

-35	-31	133	453	114	0.79	2.71	168	1.21	3.15
-30	-22	184	626	158	0.91	3.11	202	1.29	4.37
-25	-13	245	835	210	1.01	3.44	243	1.42	5.83
-20	-4	318	1086	274	1.10	3.77	288	1.59	7.61
-15	5	407	1388	350	1.22	4.16	334	1.76	9.76
-10	14	512	1747	440	1.36	4.66	375	1.93	12.35

Model
NL10FT

Configuration 4

Sales code:
105G6140

Configuration

Motor configuration	RSIR
Power supply (nominal)	208-230 V/60 Hz 1~
Refrigerant	R134a
Application	LBP
Voltage range	187-253 V
Starting torque	LST
Approvals	VDE, CCC, CB
Starting device type	PTC
Run capacitor	-/-
Start capacitor	-/-
LRA (locked rotor amps / 4s/ U(N))	10.4 A
RLA (rated load amps / 1s/ U(N))	1.8 A
Cut in current (U(N))	10.4 A

Ambient/ machine room temperatures minimum /maximum

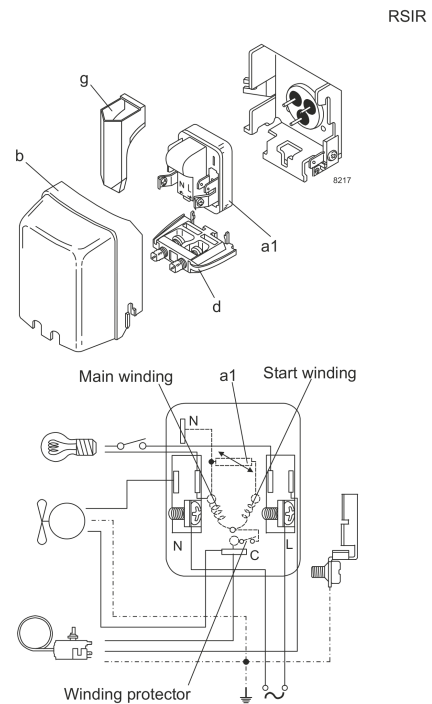
Ambient temperature range: 10 - 43°C / 50 - 109°F

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System Cooling

static

Electrical Accessories / Wiring Diagram



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Components

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d cord relief 103N1010

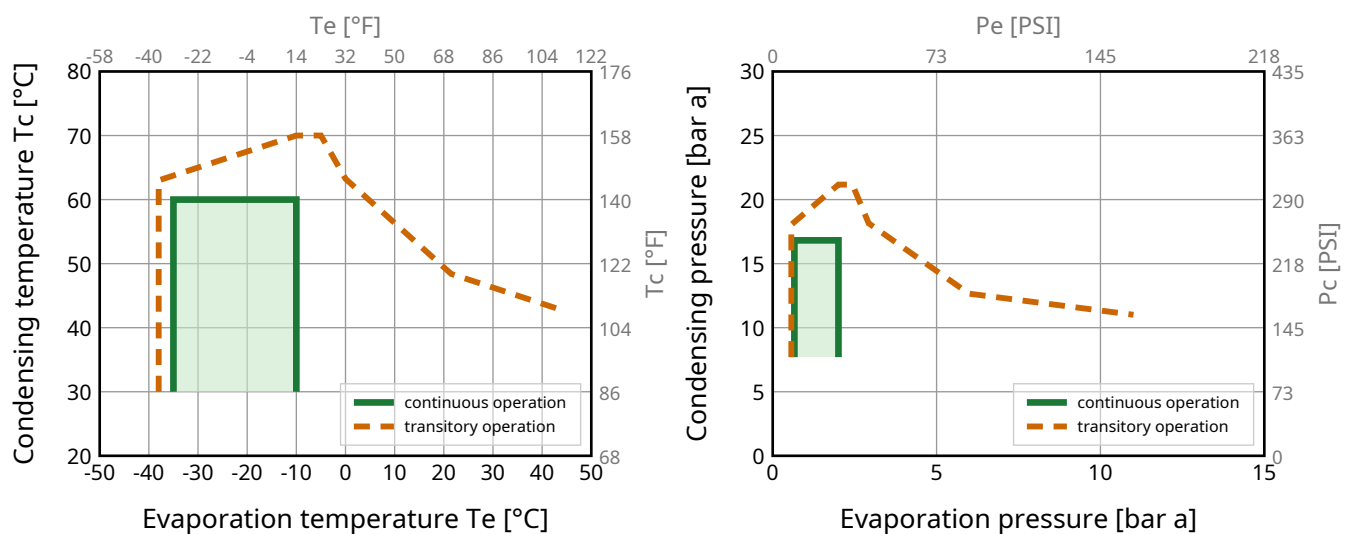
g protection screen for PTC 103N0476

Alternative components

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b plastic cover 103N2011

Operation Pressure Range



Model
NL10FT

Configuration 4

Sales code:
105G6140

Standard Conditions

R134a, 220 V/60 Hz, RSIR, static

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	ṁ	
[°C] [°F]	[°C] [°F]	[°C] [°F]	[°C] [°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
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R134a, 220 V/60 Hz, RSIR, static

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

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-10	14	512	1747	440	1.36	4.66	375	1.93	12.35