

Model
NL6FT

Sales code:
105G6628

Compressor Data

Refrigerant(s)	R134a
Refr. charge - tech. limit	400g / 14.11oz
Weight	10.00 kg / 22.05lbs
Displacement	6.13 cm³ / 0.37cu.in
Compressors on pallet	80



General – Configurations With NL6FT

	Conf. 1	Conf. 2	Conf. 3	Conf. 4
Motor configuration	CSIR	CSIR	RSIR	RSIR
Power supply (nominal)	220-240 V/50 Hz	208-230 V/60 Hz	220-240 V/50 Hz	208-230 V/60 Hz
Number of phases	1	1	1	1
Voltage range	187-254 V	198-254 V	187-254 V	198-254 V
Approvals	VDE, EAC	VDE, EAC	VDE, EAC	VDE, EAC
Starting torque	HST	HST	LST	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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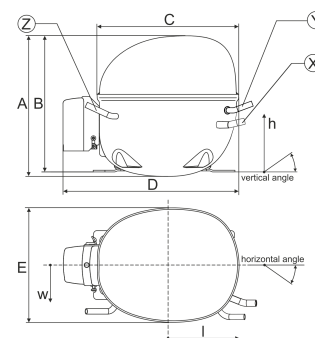
Compressor Design

Oil type	POE	Winding resistance main	12.600 Ohm
Oil viscosity	19,2cSt	Winding resistance aux	12.40 Ohm
Oil quantity	265 / 8.96fl.oz	Max. winding temp.	125 °C
Free gas volume comp.	2,360 cm3 / 79.80fl.oz	Max. discharge temp.	130°C / 266°F
Motor protection	internal		

Compressor Dimensions

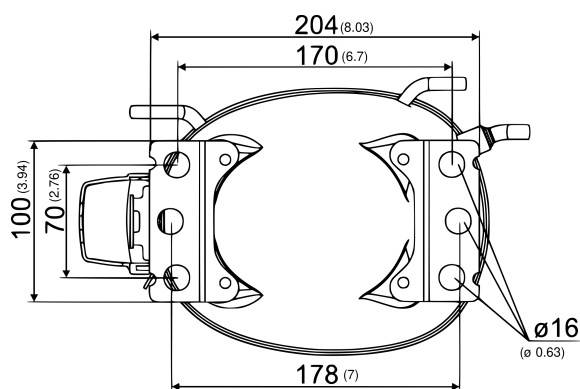
Housing

A Height	197mm / 7.76in
B Height	191mm / 7.52in
C Length shell	230mm / 9.06in
D Length w. cover	254mm / 10.00in
E Width	166mm / 6.54in

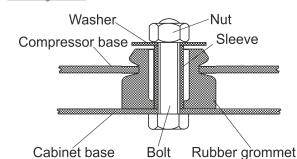
[Find 3D Model here](#)


Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 6.11–6.29 / 0.24–0.25in	øi 5.12–5.22 / 0.20–0.21in	øi 6.11–6.29 / 0.24–0.25in
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

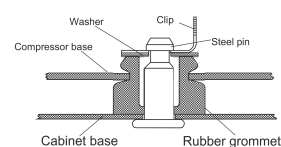
Mounting Accessories



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

Model

NL6FT

Configuration 1

Sales code:

105G6628

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, EAC
Starting device type	relay
Run capacitor	-/-
Start capacitor	80 µF
LRA (locked rotor amps / 4s/ U(N))	7.5 A
RLA (rated load amps / 1s/ U(N))	1.2 A
Cut in current (U(N))	10.5 A

Ambient/ machine room temperatures minimum /maximum

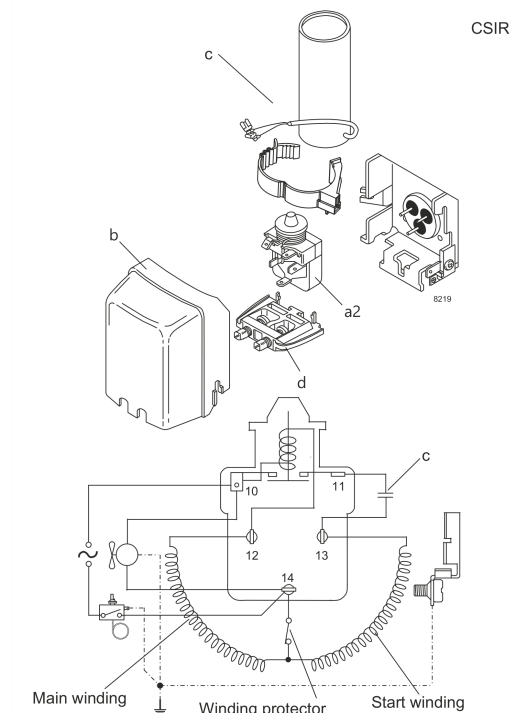
Ambient temperature range: 10 - 43°C / 50 - 109°F

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

System Cooling

static

Electrical Accessories / Wiring Diagram


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Components

a2 relay 117U6000

c start capacitor (80µF) 117U5015

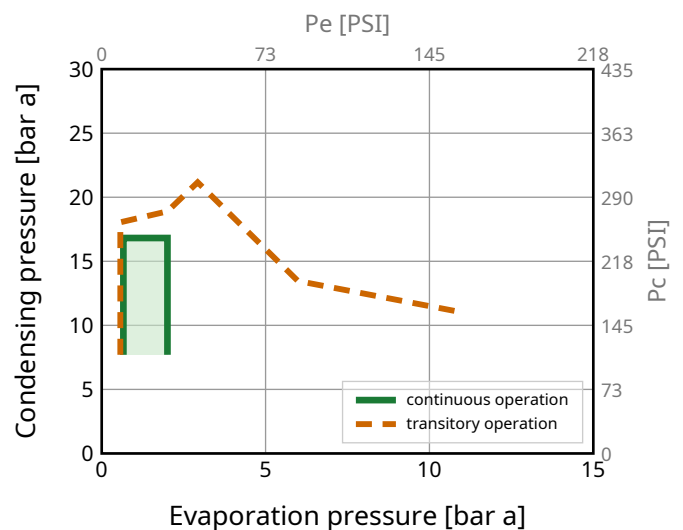
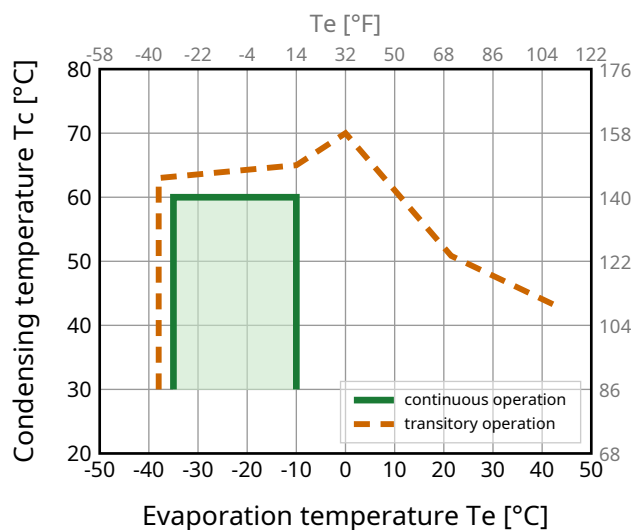
b plastic cover 103N2010

d cord relief 103N1010

Alternative components

b plastic cover 103N2011

Operation Pressure Range



Model
NL6FT

Configuration 1

Sales code:
105G6628

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	156	533	134	1.21	4.11	130	0.86	3.03	ASHRAE LBP
-25 -13	55 131	32 89.6	55 131	115	392	99	0.93	3.18	123	0.84	2.74	CECOMAF LBP
-35 -31	40 104	20 68	40 104	80	273	69	0.87	2.98	92	0.77	1.75	EN12900 LBP
-23.3 -10	48.8 119.8	4.4 39.9	48.8 119.8	130	443	112	1.01	3.44	129	0.87	3.40	ARI540 LBP
-23.3 -10	40.6 105.1	32.2 90	32.2 90	176	601	151	1.41	4.82	125	0.86	3.42	AHAM LBP
-25 -13	45 113	32 89.6	45 113	138	472	119	1.14	3.89	121	0.85	2.99	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	75	255	64	0.81	2.75	93	0.78	1.61
-30	-22	103	352	89	0.97	3.32	106	0.81	2.22
-25	-13	138	472	119	1.14	3.89	121	0.85	2.99
-20	-4	182	620	156	1.31	4.47	138	0.91	3.94
-15	5	234	798	201	1.49	5.10	156	0.96	5.09
-10	14	296	1010	255	1.69	5.77	175	1.03	6.46

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

-35	-31	60	205	52	0.65	2.21	93	0.77	1.43
-30	-22	84	288	73	0.79	2.70	107	0.80	2.01
-25	-13	115	392	99	0.93	3.18	123	0.84	2.74
-20	-4	152	520	131	1.07	3.66	142	0.89	3.65
-15	5	198	676	170	1.22	4.15	163	0.96	4.75
-10	14	252	862	217	1.37	4.68	184	1.04	6.09

Model

NL6FT

Configuration 2

Sales code:

105G6628

Configuration

Motor configuration	CSIR
Power supply (nominal)	208-230 V/60 Hz 1~
Refrigerant	R134a
Application	LBP
Voltage range	198-254 V
Starting torque	HST
Approvals	VDE, EAC
Starting device type	relay
Run capacitor	-/-
Start capacitor	80 µF
LRA (locked rotor amps / 4s/ U(N))	7.5 A
RLA (rated load amps / 1s/ U(N))	1.2 A
Cut in current (U(N))	10.5 A

Ambient/ machine room temperatures minimum /maximum

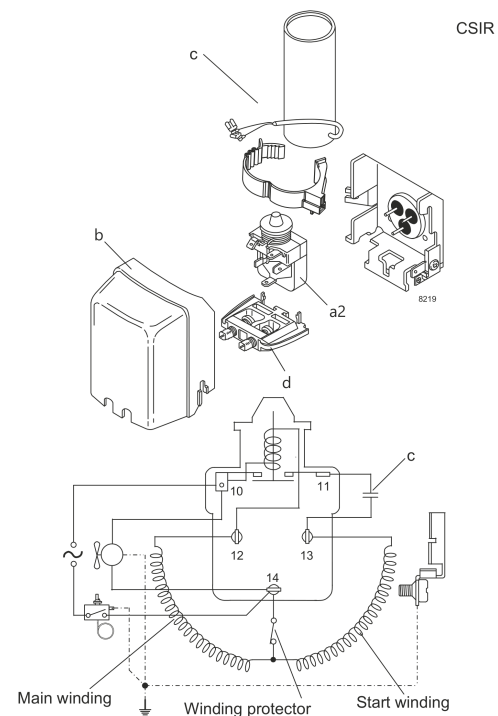
Ambient temperature range: 10 - 43°C / 50 - 109°F

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

System Cooling

static

Electrical Accessories / Wiring Diagram


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Components

a2 relay 117U6000

c start capacitor (80µF) 117U5015

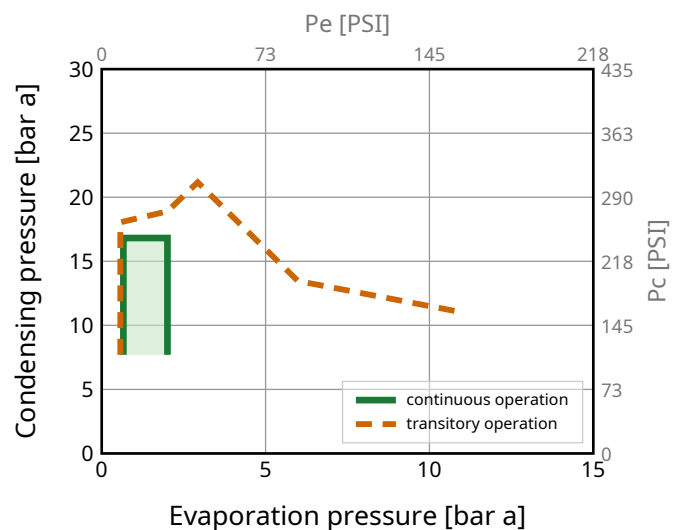
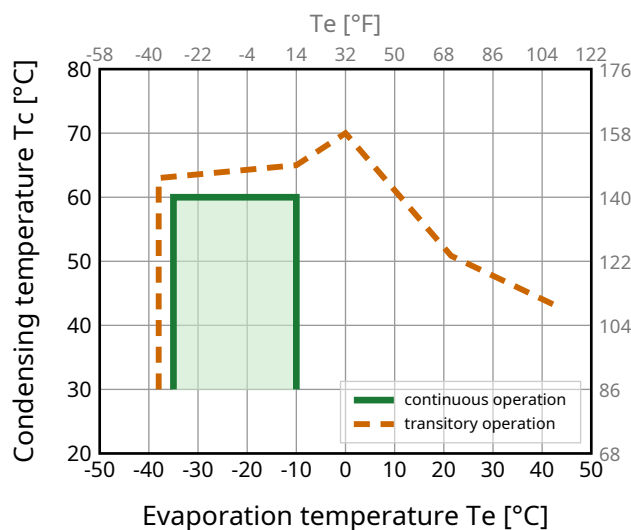
b plastic cover 103N2010

d cord relief 103N1010

Alternative components

b plastic cover 103N2011

Operation Pressure Range



Model
NL6FT

Configuration 2

Sales code:
105G6628

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	161	550	139	1.22	4.15	132	0.91	3.13	ASHRAE LBP
-25 -13	55 131	32 89.6	55 131	119	406	102	0.94	3.22	126	0.90	2.84	CECOMAF LBP
-35 -31	40 104	20 68	40 104	78	267	67	0.91	3.09	86	0.81	1.71	EN12900 LBP
-23.3 -10	48.8 119.8	4.4 39.9	48.8 119.8	133	455	115	1.01	3.46	132	0.91	3.50	ARI540 LBP
-23.3 -10	40.6 105.1	32.2 90	32.2 90	180	615	155	1.41	4.81	128	0.91	3.50	AHAM LBP
-25 -13	45 113	32 89.6	45 113	142	486	122	1.14	3.90	124	0.90	3.08	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	73	250	63	0.84	2.86	87	0.82	1.58
-30	-22	106	360	91	0.99	3.38	107	0.86	2.28
-25	-13	142	486	122	1.14	3.90	124	0.90	3.08
-20	-4	185	631	159	1.31	4.48	141	0.93	4.01
-15	5	235	801	202	1.50	5.14	156	0.97	5.11
-10	14	293	1001	252	1.72	5.88	170	1.01	6.41

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

-35	-31	59	201	51	0.68	2.31	87	0.81	1.40
-30	-22	87	298	75	0.81	2.78	107	0.85	2.07
-25	-13	119	406	102	0.94	3.22	126	0.90	2.84
-20	-4	156	532	134	1.08	3.68	144	0.94	3.73
-15	5	199	680	171	1.23	4.20	162	0.99	4.78
-10	14	251	855	216	1.40	4.77	179	1.04	6.04

Model

NL6FT

Configuration 3

Sales code:

105G6628

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, EAC
Starting device type	PTC
Run capacitor	-/-
Start capacitor	-/-
LRA (locked rotor amps / 4s/ U(N))	7.5 A
RLA (rated load amps / 1s/ U(N))	1.2 A
Cut in current (U(N))	10.5 A

Ambient/ machine room temperatures minimum /maximum

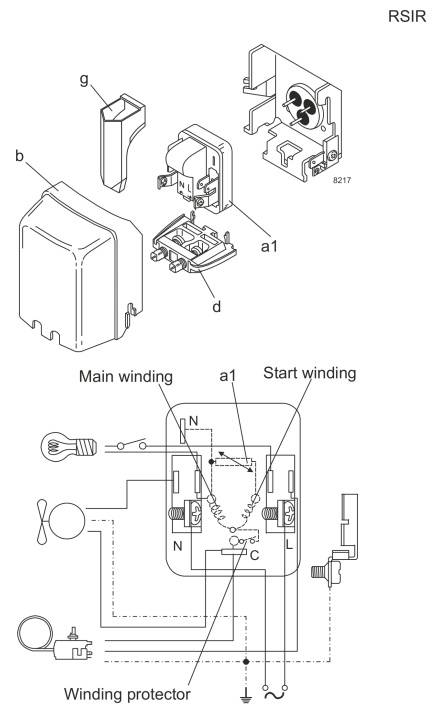
Ambient temperature range: 10 - 43°C / 50 - 109°F

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

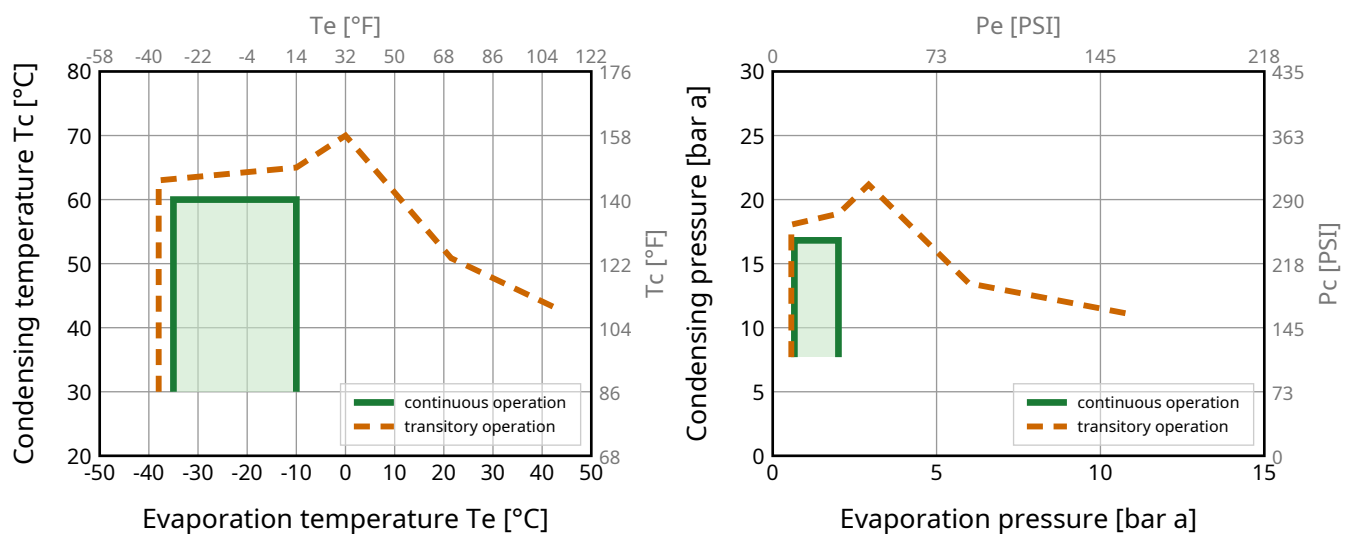
g protection screen for PTC 103N0476

Alternative components

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

b plastic cover 103N2011

Operation Pressure Range



Model
NL6FT

Configuration 3

Sales code:
105G6628

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	156	533	134	1.21	4.11	130	0.86	3.03	ASHRAE LBP
-25 -13	55 131	32 89.6	55 131	115	392	99	0.93	3.18	123	0.84	2.74	CECOMAF LBP
-35 -31	40 104	20 68	40 104	80	273	69	0.87	2.98	92	0.77	1.75	EN12900 LBP
-23.3 -10	48.8 119.8	4.4 39.9	48.8 119.8	130	443	112	1.01	3.44	129	0.87	3.40	ARI540 LBP
-23.3 -10	40.6 105.1	32.2 90	32.2 90	176	601	151	1.41	4.82	125	0.86	3.42	AHAM LBP
-25 -13	45 113	32 89.6	45 113	138	472	119	1.14	3.89	121	0.85	2.99	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	75	255	64	0.81	2.75	93	0.78	1.61
-30	-22	103	352	89	0.97	3.32	106	0.81	2.22
-25	-13	138	472	119	1.14	3.89	121	0.85	2.99
-20	-4	182	620	156	1.31	4.47	138	0.91	3.94
-15	5	234	798	201	1.49	5.10	156	0.96	5.09
-10	14	296	1010	255	1.69	5.77	175	1.03	6.46

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

-35	-31	60	205	52	0.65	2.21	93	0.77	1.43
-30	-22	84	288	73	0.79	2.70	107	0.80	2.01
-25	-13	115	392	99	0.93	3.18	123	0.84	2.74
-20	-4	152	520	131	1.07	3.66	142	0.89	3.65
-15	5	198	676	170	1.22	4.15	163	0.96	4.75
-10	14	252	862	217	1.37	4.68	184	1.04	6.09

Model

NL6FT

Configuration 4

Sales code:

105G6628

Configuration

Motor configuration	RSIR
Power supply (nominal)	208-230 V/60 Hz 1~
Refrigerant	R134a
Application	LBP
Voltage range	198-254 V
Starting torque	LST
Approvals	VDE, EAC
Starting device type	PTC
Run capacitor	-/-
Start capacitor	-/-
LRA (locked rotor amps / 4s/ U(N))	7.5 A
RLA (rated load amps / 1s/ U(N))	1.2 A
Cut in current (U(N))	10.5 A

Ambient/ machine room temperatures minimum /maximum

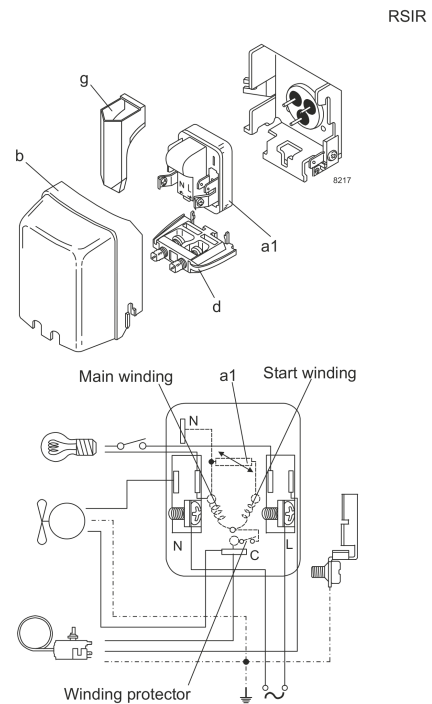
Ambient temperature range: 10 - 43°C / 50 - 109°F

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

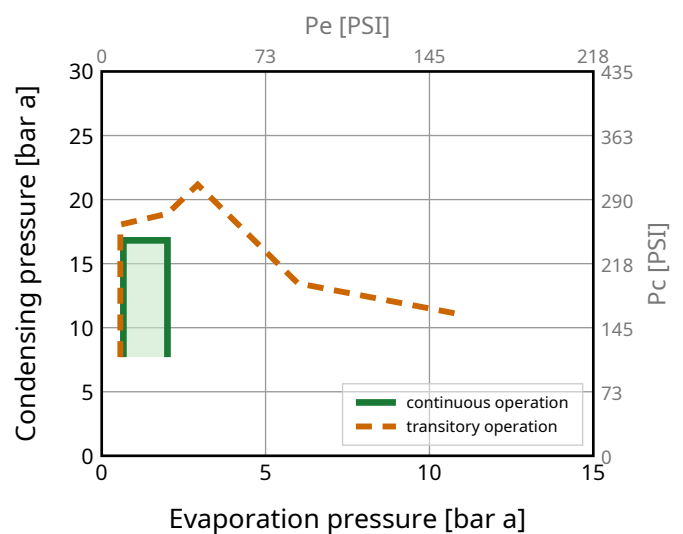
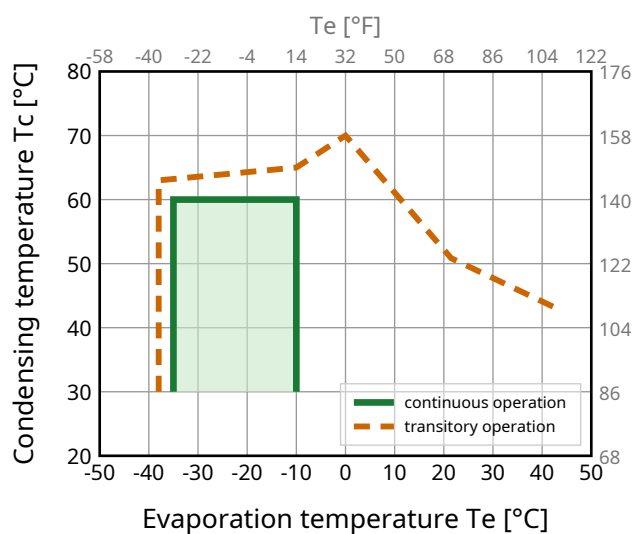
g protection screen for PTC 103N0476

Alternative components

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

b plastic cover 103N2011

Operation Pressure Range



Model
NL6FT

Configuration 4

Sales code:
105G6628

Standard Conditions

R134a, 220 V/60 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	161	550	139	1.22	4.15	132	0.91	3.13	ASHRAE LBP
-25 -13	55 131	32 89.6	55 131	119	406	102	0.94	3.22	126	0.90	2.84	CECOMAF LBP
-35 -31	40 104	20 68	40 104	78	267	67	0.91	3.09	86	0.81	1.71	EN12900 LBP
-23.3 -10	48.8 119.8	4.4 39.9	48.8 119.8	133	455	115	1.01	3.46	132	0.91	3.50	ARI540 LBP
-23.3 -10	40.6 105.1	32.2 90	32.2 90	180	615	155	1.41	4.81	128	0.91	3.50	AHAM LBP
-25 -13	45 113	32 89.6	45 113	142	486	122	1.14	3.90	124	0.90	3.08	opt LBP

Performance Tables

R134a, 220 V/60 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	73	250	63	0.84	2.86	87	0.82	1.58
-30	-22	106	360	91	0.99	3.38	107	0.86	2.28
-25	-13	142	486	122	1.14	3.90	124	0.90	3.08
-20	-4	185	631	159	1.31	4.48	141	0.93	4.01
-15	5	235	801	202	1.50	5.14	156	0.97	5.11
-10	14	293	1001	252	1.72	5.88	170	1.01	6.41

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

-35	-31	59	201	51	0.68	2.31	87	0.81	1.40
-30	-22	87	298	75	0.81	2.78	107	0.85	2.07
-25	-13	119	406	102	0.94	3.22	126	0.90	2.84
-20	-4	156	532	134	1.08	3.68	144	0.94	3.73
-15	5	199	680	171	1.23	4.20	162	0.99	4.78
-10	14	251	855	216	1.40	4.77	179	1.04	6.04