

Model

Designation	NL6.1FT	220-240V/50Hz 1~	Sales code:	105G6621
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Compressor design

Oil type	Polyolester	Refrigerant(s)	R134a
Oil viscosity	22cST	Displacement	6,13cm ³ / 0,37cu.in
Oil quantity	276cm ³ / 9,3fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	400g / 14,1oz		
Free gas volume comp.	2270cm ³ / 76,8fl.oz		
Weight	9,3kg / 20,5lbs		
Motor protection	1# internal		
Winding resistance main	15,4Ω (at 25°C)		
Winding resistance aux	15,2Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	130°C / 266°F		



General - Configurations with NL6.1FT

	Conf. 1	Conf. 2
Motorconfiguration	RSIR	CSIR
Power supply (nominal)	220-240V/50Hz	220-240V/50Hz
Number of phases	1	1
Voltage range	187-254V	187-254V
Approvals	VDE, CCC, EAC	VDE, CCC, EAC
Starting torque	LST	HST
Note	- / -	

Applications with NL6.1FT

	Conf. 1	Conf. 2
Refrigerant	R134a	R134a
Application	LBP	LBP
System cooling	static	static
Hot gas defrost	- / -	- / -
Long interval pull down	- / -	- / -

Electrical data - Configurations with NL6.1FT

	Conf. 1	Conf. 2
Starting device type	PTC	relay
Run capacitor	- / -	- / -
Start capacitor	- / -	80μF
LRA (locked rotor amps / 4s)	5,7A	7,7A
RLA (rated load amps / 1s)	1,1A	1,1A
Cut in current	10,1A	10,1A

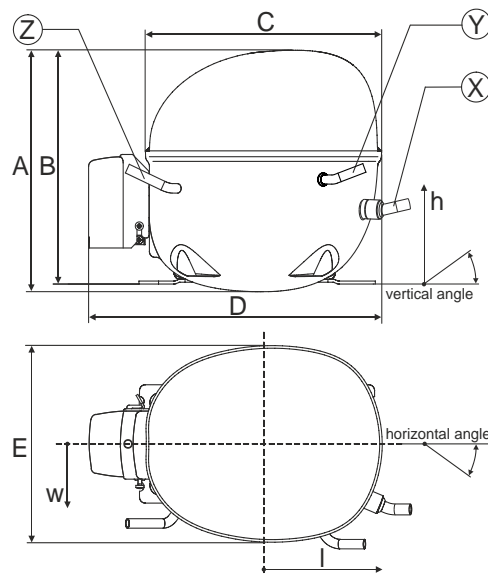
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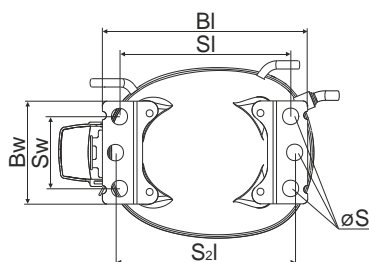
Compressor dimensions

Housing	A Height	187,5mm / 7,38in
	B Height	181,5mm / 7,15in
	C Length shell	205mm / 8,07in
	D Length w. cover	254mm / 10in
	E Width	166mm / 6,54in

Connectors		Suction	Discharge	Process
		X	Y	Z
Diameter	[mm]	øi 6,11-6,29	øi 5,12-5,22	øi 6,11-6,29
	(i:inside, o:outside) [in]	øi 0,24-0,25	øi 0,2-0,21	øi 0,24-0,25
Material		copper	copper	copper
Horizontal angle	±2°	0°	0°	0°
Vertical angle	±2°	15°	35°	155°
Position l/h/w	[mm]	126/76/78	133/103/54	-107/94/72
	[in]	4,9/3/3,1	5,2/4/2,1	-4,2/3,7/2,8
Straight tube l.	[mm]	12	12	12
	[in]	0,5	0,5	0,5

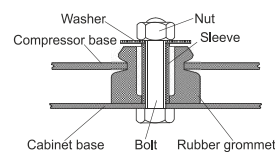


Compressor fixation

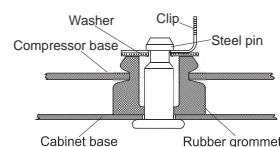


Baseplate	[mm]	[inch]
BI	204	8.03
BW	100	3.94
Small holes	[mm]	[inch]
SI	170	6.7
SW	70	2.76
S2l	178	7
øS	ø 16	ø 0.63

Bolt joint



Snap-on



Mounting accessories	one comp.	multi pack
Bolt joint M6 ø16mm	118-1917	118-1918
Bolt joint ø1/4" ø16mm	118-1946	
Bolt joint ø1/4" ø19mm	118-1949	
Snap-on ø7,3 ø16mm	118-1947	118-1919

Model

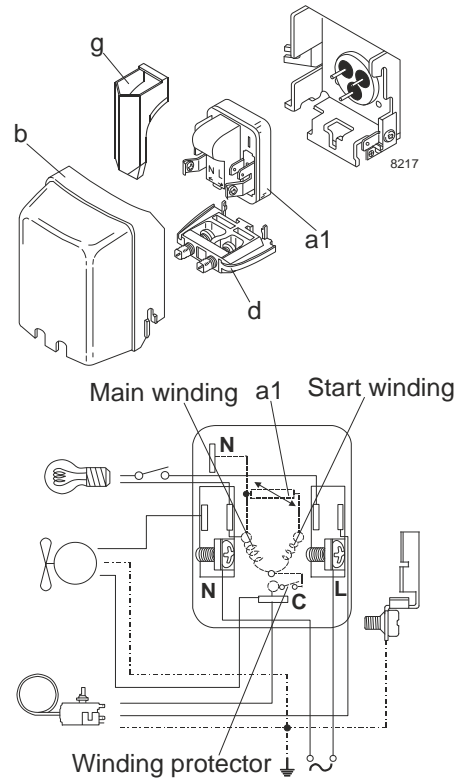
Designation	NL6.1FT	220-240V/50Hz	Conf. 1	Sales code:	105G6621
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Configuration

Motorconfiguration	RSIR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R134a
Application	LBP
Voltage range	187-254V
Starting torque	LST
Approvals	VDE
	CCC
	EAC

Electrical accessories / wiring diagram

RSIR

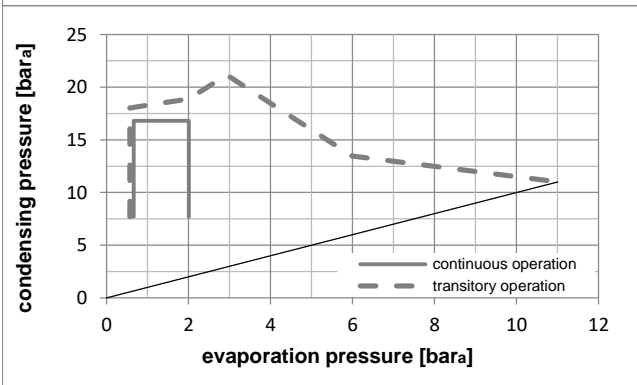
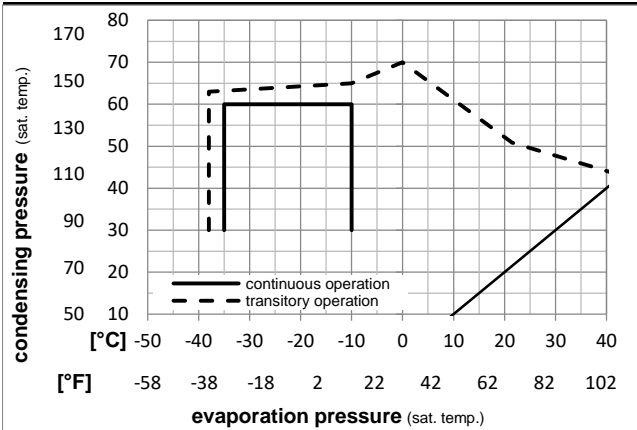


Ambient temperatures / system cooling

Ambient temperature min.:	10°C / 50°F
Ambient temperature max.:	43°C / 110°F

System cooling (n/a: outside limits)			
T ambient	LBP	MBP	HBP
32°C / 90°F	static	n/a	n/a
38°C / 100°F	static	n/a	n/a
43°C / 110°F	static	n/a	n/a

Operation pressure range



Components

a1	PTC starter (220V, 250hm, 4.8mm)	103N0018
b	plastic cover	103N2010
d	cord relief	103N1010
g	protection screen for PTC	103N0476

Alternative components

a1	PTC starter (220V, 250hm, 6.3mm)	103N0011
b	plastic cover	103N2011
d	cord relief	103N1010
g	protection screen for PTC	103N0476

Model

Designation **NL6.1FT 220-240V/50Hz** Conf. 1 Sales code: **105G6621**

Optimization + standard conditions

R134a, 220V/50Hz, RSIR, static, VDE, CCC, EAC

Evaporating pressure (saturation temperature)		Condensing pressure (saturation temperature)				Return gas temp.		Liquid temp.		Cooling capacity			COP	EER	Power consumption		Ref. mass flow m	ASHRAE LBP
pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	P1	I	[kg/h]						
[°C]	[°F]	[°C]	[°F]	[°C]	[°F]	[°C]	[°F]	[°C]	[°F]	[W]	[A]	[kg/h]						
-23,3	54,4	32,2	32,2	156,3	534	134,5	1,21	4,12	1,04	129,5	0,86	3,03	ASHRAE LBP					
-10	130	90	90															
-25	55	32	55	114,9	392	98,9	0,93	3,18	0,80	123,3	0,84	2,75	cecomaf LBP					
-13	131	89,6	131															
-35	40	20	40	80,0	273	68,9	0,87	2,98	0,75	91,7	0,77	1,76	EN12900 LBP					
-31	104	68	104															
-23,3	48,9	4,44	48,9	128,8	440	110,8	1,00	3,41	0,86	128,8	0,87	3,40	ARI540 LBP					
-10	120	40	120															
-23,3	40,6	32,2	32,2	175,8	601	151,3	1,41	4,82	1,22	124,5	0,86	3,41	AHAM LBP					
-10	105	90	90															
-35	45	32	45	74,8	256	64,4	0,81	2,75	0,69	92,9	0,78	1,61	opt					
-31	113	89,6	113															

Performance tables

R134a, 220V/50Hz, RSIR, static, VDE, CCC, EAC

[°C / °F]	pe	Cooling capacity			COP	EER	P1	I	m		
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]
-35	-31	74,8	256	64,4	0,81	2,75	0,69	92,9	0,78	1,61	
cond. pressure	-30	-22	103,1	352	88,7	0,97	3,32	0,84	106,0	0,81	2,23
pc= 45/113	-25	-13	138,3	472	119,1	1,14	3,89	0,98	121,4	0,85	3,00
return gas temp.	-23,3	-10	152,1	519	130,9	1,20	4,09	1,03	127,1	0,87	3,30
RGT= 32/90	-20	-4	181,6	620	156,3	1,31	4,48	1,13	138,5	0,90	3,95
liquid temp	-15	5	233,8	799	201,2	1,49	5,10	1,29	156,5	0,96	5,10
Tliq= 45/113	-10	14	296,0	1011	254,7	1,69	5,78	1,46	174,9	1,03	6,48
-35	-31	60,1	205	51,7	0,65	2,21	0,56	92,7	0,77	1,43	
cond. pressure	-30	-22	84,4	288	72,7	0,79	2,71	0,68	106,6	0,80	2,01
pc= 55/131	-25	-13	114,9	392	98,9	0,93	3,18	0,80	123,3	0,84	2,75
return gas temp	-23,3	-10	126,8	433	109,2	0,98	3,34	0,84	129,5	0,85	3,04
RGT= 32/90	-20	-4	152,4	521	131,2	1,07	3,66	0,92	142,2	0,89	3,66
liquid temp	-15	5	198,0	676	170,4	1,22	4,16	1,05	162,7	0,96	4,77
Tliq= 55/131	-10	14	252,5	862	217,3	1,37	4,69	1,18	184,1	1,04	6,11

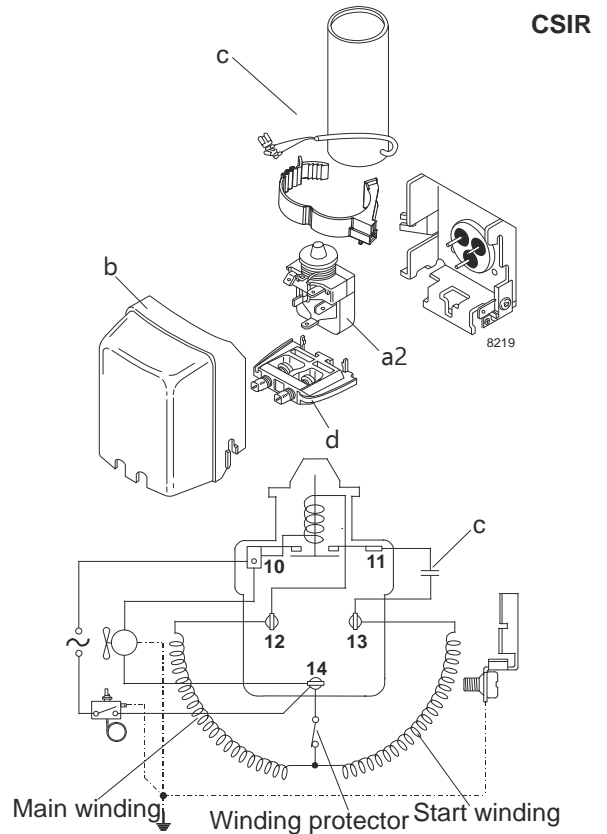
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Designation	NL6.1FT	220-240V/50Hz	Conf. 2	Sales code:	105G6621
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Configuration

Motorconfiguration	CSIR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R134a
Application	LBP
Voltage range	187-254V
Starting torque	HST
Approvals	VDE
	CCC
	EAC

Electrical accessories / wiring diagram

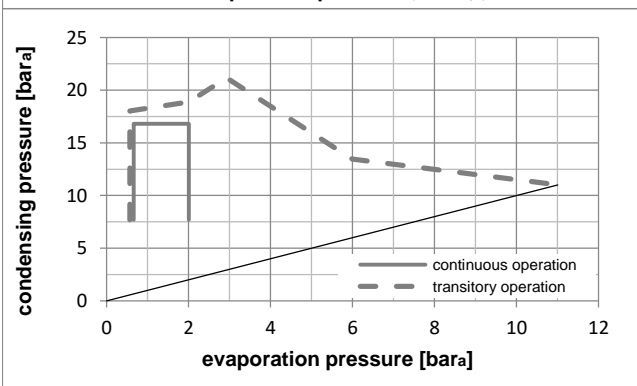
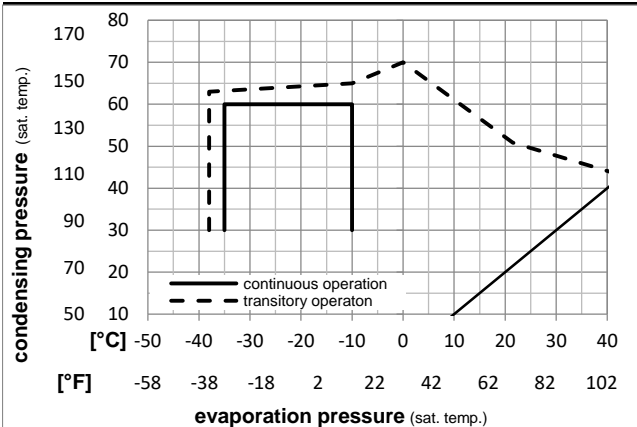


Ambient temperatures / system cooling

Ambient temperature min.:	10°C / 50°F
Ambient temperature max.:	43°C / 110°F

System cooling (n/a: outside limits)			
T ambient	LBP	MBP	HBP
32°C / 90°F	static	n/a	n/a
38°C / 100°F	static	n/a	n/a
43°C / 110°F	static	n/a	n/a

Operation pressure range



Components

a2	relay	117U6000
c	start capacitor (80µF)	117U5015
b	plastic cover	103N2010
d	cord relief	103N1010

Alternative components

b	plastic cover	103N2011
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Optimization + standard conditions

R134a, 220V/50Hz, CSIR, static, VDE, CCC, EAC

Evaporating pressure (saturation temperature)					Condensing pressure (saturation temperature)						Power consumption			ASHRAE LBP	
					Return gas temp.			Liquid temp.			Current consumption				Ref. mass flow ṁ
					Cooling capacity			COP	EER	P1	I				
pe	pc	RGT	Tliq		[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]		
[°C]	-23	54,4	32,2	32,2	156,3	534	134,5	1,21	4,12	1,04	129,5	0,86	3,03		
[°F]	-10	130	90	90											
[°C]	-25	55	32	55	114,9	392	98,9	0,93	3,18	0,80	123,3	0,84	2,75	cecomaf LBP	
[°F]	-13	131	89,6	131											
[°C]	-35	40	20	40	80,0	273	68,9	0,87	2,98	0,75	91,7	0,77	1,76	EN12900 LBP	
[°F]	-31	104	68	104											
[°C]	-23	48,9	4,44	48,9	128,8	440	110,8	1,00	3,41	0,86	128,8	0,87	3,40	ARI540 LBP	
[°F]	-10	120	40	120											
[°C]	-23	40,6	32,2	32,2	175,8	601	151,3	1,41	4,82	1,22	124,5	0,86	3,41	AHAM LBP	
[°F]	-10	105	90	90											
[°C]	-35	45	32	45	74,8	256	64,4	0,81	2,75	0,69	92,9	0,78	1,61	opt	
[°F]	-31	113	89,6	113											

Performance tables

R134a, 220V/50Hz, CSIR, static, VDE, CCC, EAC

	pe		Cooling capacity			COP	EER	P1	I	m	
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]
[°C / °F]	-35	-31	74,8	256	64,4	0,81	2,75	0,69	92,9	0,78	1,61
cond. pressure	-30	-22	103,1	352	88,7	0,97	3,32	0,84	106,0	0,81	2,23
pc= 45/113	-25	-13	138,3	472	119,1	1,14	3,89	0,98	121,4	0,85	3,00
return gas temp.	-23	-10	152,1	519	130,9	1,20	4,09	1,03	127,1	0,87	3,30
RGT= 32/90	-20	-4	181,6	620	156,3	1,31	4,48	1,13	138,5	0,90	3,95
liquid temp	-15	5	233,8	799	201,2	1,49	5,10	1,29	156,5	0,96	5,10
Tliq= 45/113	-10	14	296,0	1011	254,7	1,69	5,78	1,46	174,9	1,03	6,48
[°C / °F]	-35	-31	60,1	205	51,7	0,65	2,21	0,56	92,7	0,77	1,43
cond. pressure	-30	-22	84,4	288	72,7	0,79	2,71	0,68	106,6	0,80	2,01
pc= 55/131	-25	-13	114,9	392	98,9	0,93	3,18	0,80	123,3	0,84	2,75
return gas temp	-23	-10	126,8	433	109,2	0,98	3,34	0,84	129,5	0,85	3,04
RGT= 32/90	-20	-4	152,4	521	131,2	1,07	3,66	0,92	142,2	0,89	3,66
liquid temp	-15	5	198,0	676	170,4	1,22	4,16	1,05	162,7	0,96	4,77
Tliq= 55/131	-10	14	252,5	862	217,3	1,37	4,69	1,18	184,1	1,04	6,11