

Model

Designation	NL7FT	220-240V/50Hz 1~	Sales code:	105G6718
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Compressor design

Oil type	Polyolester	Refrigerant(s)	R134a
Oil viscosity	32cSt	Displacement	7,27cm ³ / 0,44cu.in
Oil quantity	268cm ³ / 9,1fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	400g / 14,1oz		
Free gas volume comp.	2360cm ³ / 79,8fl.oz		
Weight	10kg / 22lbs		
Motor protection	1# internal		
Winding resistance main	11Ω (at 25°C)		
Winding resistance aux	13Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	130°C / 266°F		



General - Configurations with NL7FT

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

Applications with NL7FT

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

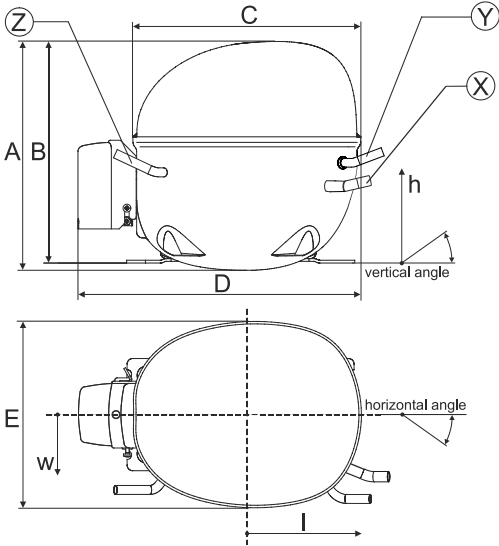
Electrical data - Configurations with NL7FT

	Conf. 1	Conf. 2
Starting device type	relay	PTC
Run capacitor	-/-	-/-
Start capacitor	80μF	-/-
LRA (locked rotor amps / 4s/ U(N))	8,7A	7,9A
RLA (rated load amps / 1s/ U(N))		
Cut in current (U(N))	10,9A	7,9A

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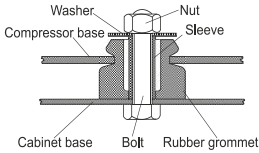
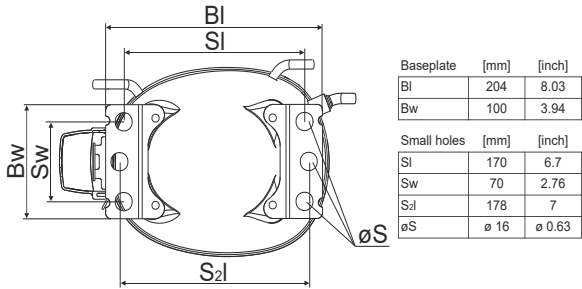
Compressor dimensions

Housing	A Height	197mm / 7,76in	
	B Height	191mm / 7,52in	
	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

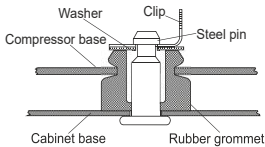


Compressor fixation

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

Application notes

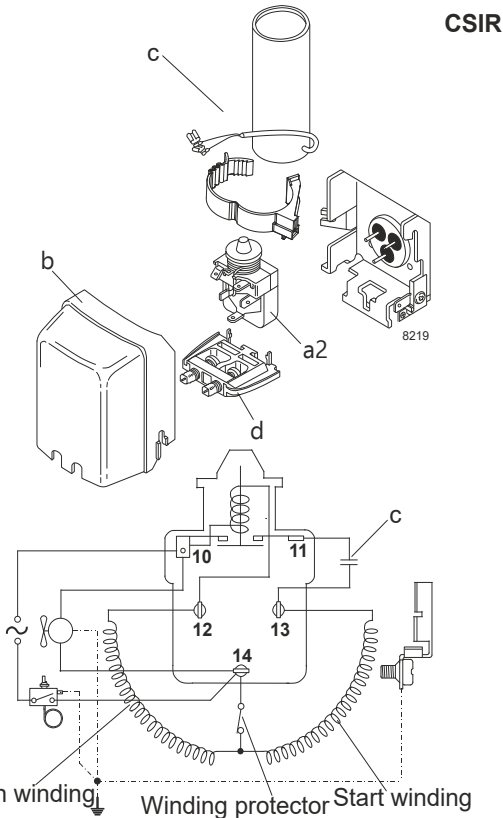
Provision for PE Grounding is located at the PE Stamp on the compressor

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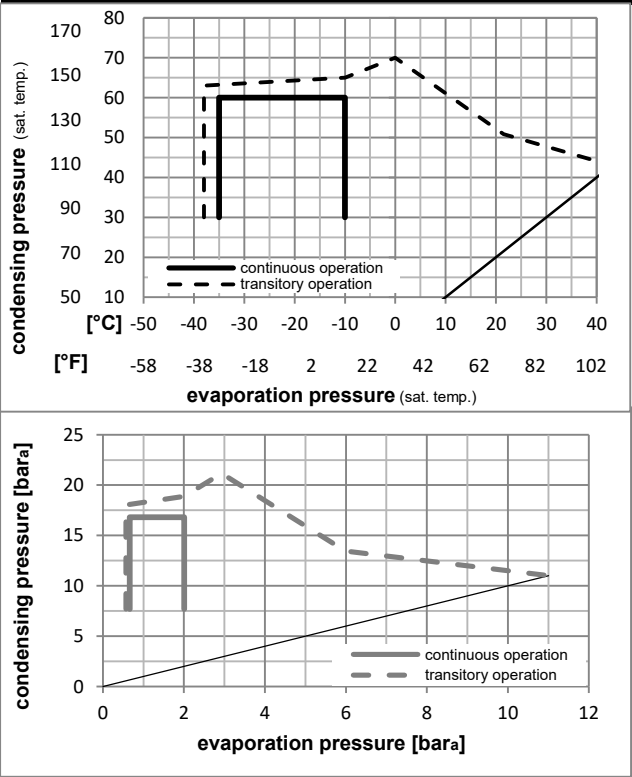
Configuration	Electrical accessories / wiring diagram				
Motor configuration	CSIR				
Power supply (nominal)	220-240V/50Hz 1~				
Refrigerant	R134a				
Application	LBP				
Voltage range	187-254V				
Starting torque	HST				
Approvals	CCC				
	EAC				
	VDE				

Ambient/ machine room temperatures minimum /maximum

Ambient temperature range:	10 - 43°C / 50 - 110°F
Machine room temperature range:	10 - 48°C / 50 - 119°F
Compressor cooling:	static



Operation pressure range



Components		
a2	current relay	117U6001
c	start capacitor (80μF)	117U5015
b	plastic cover	103N2010
d	cord relief	103N1010

Alternative components

b	plastic cover	103N2011
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Model

Designation **NL7FT** **220-240V/50Hz** Conf. 1 Sales code: **105G6718**

Optimization + standard conditions

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

Evaporating pressure (saturation temperature)					Condensing pressure (saturation temperature)						Power consumption				ASHRAE LBP																		
Return gas temp.					Current consumption						ASHRAE LBP																						
Liquid temp.					Ref. mass flow							ASHRAE LBP																					
Cooling capacity					COP								ASHRAE LBP																				
EER					P1						I			ṁ		ASHRAE LBP																	
[W]					[Btu/h]						[kcal/h]		[W/W]		[Btu/Wh]		[kcal/Wh]		[W]		[A]		[kg/h]		ASHRAE LBP								
[°C]					[°F]						[°C]		[°F]		[°C]		[°F]		[°C]		[°F]		[°C]			ASHRAE LBP							
-23					54						32		32		185,6		634		159,7		1,22		4,16		1,05		152,5		0,96		3,60		ASHRAE LBP
-10					130						90		90		185,6		634		159,7		1,22		4,16		1,05		152,5		0,96		3,60		
-25					55						32		55		136,2		465		117,2		0,94		3,21		0,81		144,7		0,94		3,26		cecomaf LBP
-13					131						90		131		136,2		465		117,2		0,94		3,21		0,81		144,7		0,94		3,26		
-35					40						20		40		93,9		321		80,9		0,88		3,01		0,76		106,6		0,84		2,06		EN12900 LBP
-31					104						68		104		93,9		321		80,9		0,88		3,01		0,76		106,6		0,84		2,06		
-23					49						4,4		49		153,6		525		132,2		1,01		3,46		0,87		151,7		0,95		4,06		ARI540 LBP
-10					120						40		120		153,6		525		132,2		1,01		3,46		0,87		151,7		0,95		4,06		
-23					41						32		32		207,5		709		178,6		1,41		4,83		1,22		146,7		0,94		4,03		AHAM LBP
-10					105						90		90		207,5		709		178,6		1,41		4,83		1,22		146,7		0,94		4,03		
-35					45						32		45		88,8		303		76,5		0,82		2,81		0,71		108,0		0,84		1,92		opt
-31					113						90		113		88,8		303		76,5		0,82		2,81		0,71		108,0		0,84		1,92		

Performance tables

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

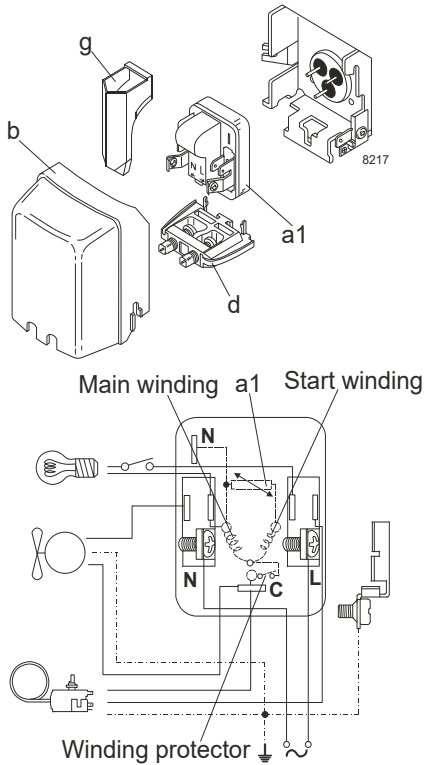
	pe		Cooling capacity			COP	EER		P1	I	m
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]
[°C / °F]	-35	-31	88,8	303	76,5	0,82	2,81	0,71	108,0	0,84	1,92
cond. pressure	-30	-22	122,4	418	105,4	0,99	3,38	0,85	123,6	0,87	2,65
pc= 45/113	-25	-13	164,2	561	141,3	1,15	3,93	0,99	142,7	0,92	3,56
return gas temp.	-23	-10	180,4	616	155,3	1,21	4,12	1,04	149,7	0,94	3,91
RGT= 32/90	-20	-4	215,3	735	185,3	1,31	4,49	1,13	163,9	0,99	4,68
liquid temp	-15	5	277,2	947	238,5	1,49	5,08	1,28	186,2	1,07	6,04
Tliq= 45/113	-10	14	350,9	1198	302,0	1,68	5,75	1,45	208,4	1,16	7,68
[°C / °F]	-35	-31	71,0	242	61,1	0,66	2,25	0,57	107,7	0,86	1,69
cond. pressure	-30	-22	100,1	342	86,1	0,81	2,75	0,69	124,1	0,88	2,39
pc= 55/131	-25	-13	136,2	465	117,2	0,94	3,21	0,81	144,7	0,94	3,26
return gas temp	-23	-10	150,3	513	129,4	0,99	3,37	0,85	152,4	0,96	3,60
RGT= 32/90	-20	-4	180,6	617	155,5	1,07	3,67	0,92	168,3	1,01	4,33
liquid temp	-15	5	234,6	801	201,9	1,21	4,14	1,04	193,6	1,11	5,65
Tliq= 55/131	-10	14	299,4	1022	257,6	1,36	4,66	1,17	219,6	1,21	7,24

Model					
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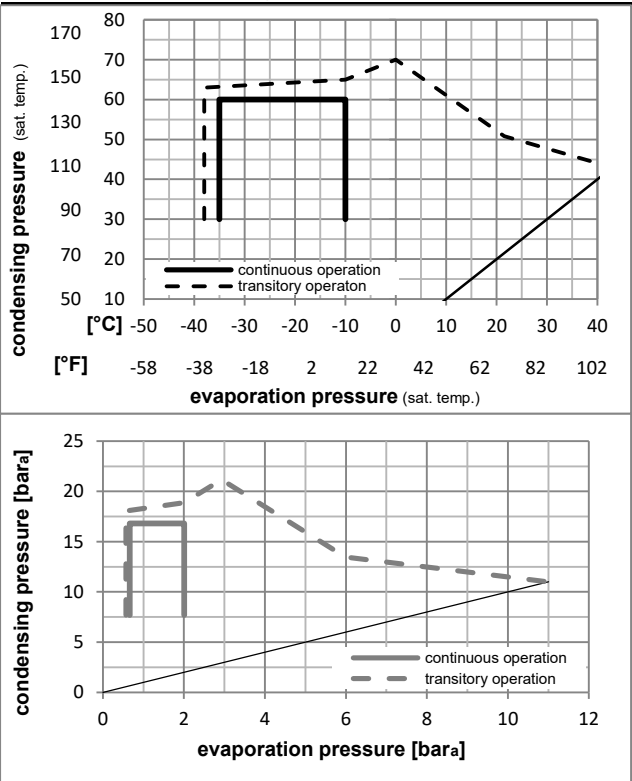
Configuration		Electrical accessories / wiring diagram			
Motor configuration	RSIR	RSIR			
Power supply (nominal)	220-240V/50Hz 1~				
Refrigerant	R134a				
Application	LBP				
Voltage range	187-254V				
Starting torque	LST				
Approvals	CCC				
	EAC				
	VDE				

Ambient/ machine room temperatures minimum /maximum

Ambient temperature range:	10 - 43°C / 50 - 110°F
Machine room temperature range:	10 - 48°C / 50 - 119°F
Compressor cooling:	static



Operation pressure range



Components		
a1	PTC starter (220V, 25Ohm, 4.8mm)	103N0018
b	plastic cover	103N2010
d	cord relief	103N1010
g	protection screen for PTC	103N0476

Alternative components		
a1	PTC starter (220V, 25Ohm, 6.3mm)	103N0011
b	plastic cover	103N2011
d	cord relief	103N1010
g	protection screen for PTC	103N0476

Model

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Optimization + standard conditions

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

Evaporating pressure (saturation temperature)					Condensing pressure (saturation temperature)						Power consumption			
Return gas temp.					Liquid temp.						Current consumption			
Cooling capacity					COP		EER		P1		I		Ref. mass flow	
pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]		
[°C]	-23	54	32	32	185,6	634	159,7	1,22	4,16	1,05	152,5	0,96	3,60	ASHRAE LBP
[°F]	-10	130	90	90										
[°C]	-25	55	32	55	136,2	465	117,2	0,94	3,21	0,81	144,7	0,94	3,26	cecomaf LBP
[°F]	-13	131	90	131										
[°C]	-35	40	20	40	93,9	321	80,9	0,88	3,01	0,76	106,6	0,84	2,06	EN12900 LBP
[°F]	-31	104	68	104										
[°C]	-23	49	4,4	49	153,6	525	132,2	1,01	3,46	0,87	151,7	0,95	4,06	ARI540 LBP
[°F]	-10	120	40	120										
[°C]	-23	41	32	32	207,5	709	178,6	1,41	4,83	1,22	146,7	0,94	4,03	AHAM LBP
[°F]	-10	105	90	90										
[°C]	-35	45	32	45	88,8	303	76,5	0,82	2,81	0,71	108,0	0,84	1,92	opt
[°F]	-31	113	90	113										

Performance tables

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

	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	88,8	303	76,5	0,82	2,81	0,71	108,0	0,84	1,92		
cond. pressure	-30	-22	122,4	418	105,4	0,99	3,38	0,85	123,6	0,87	2,65		
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