

## Single Pack NL10FT 220-240V 50Hz CSIR

Single pack code number: **195B4368**

Position	Title	Code	Amount
1	Compressor NL10FT	105G6188	1
2	Starting relay	117U6002	1
3	Starting capacitor (80 $\mu$ F 220V, 6.3mm)	117U5015	1
4	Cord relief	103N1010	1
5	Cover	103N2010	1
6	Bolt joint for one compressor   M6   $\varnothing$ 16mm	118-1917	1

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## Model

Designation	<b>NL10FT</b>	<b>220-240V/50Hz 1~</b>	Sales code:	<b>105G6188</b>
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## Compressor design

Oil type	Polyolester	Refrigerant(s)	<b>R134a</b>
Oil viscosity	32cST	Displacement	10,09cm <sup>3</sup> / 0,62cu.in
Oil quantity	300cm <sup>3</sup> / 10,1fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	400g / 14,1oz		
Free gas volume comp.	2360cm <sup>3</sup> / 79,8fl.oz		
Weight	10,5kg / 23,1lbs		
Motor protection	1# internal		
Winding resistance main	8,2Ω (at 25°C)		
Winding resistance aux	14,7Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	130°C / 266°F		



## General - Configurations with NL10FT

	<b>Conf. 1</b>	<b>Conf. 2</b>
Motorconfiguration	CSIR	RSIR
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	HST	LST
Note	- / -	

## Applications with NL10FT

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

## Electrical data - Configurations with NL10FT

	<b>Conf. 1</b>	<b>Conf. 2</b>
Starting device type	relay	PTC
Run capacitor	- / -	- / -
Start capacitor	80μF	- / -
LRA (locked rotor amps / 4s)	10,4A	9,2A
RLA (rated load amps / 1s)	1,8A	1,8A
Cut in current	13,6A	13,6A

## Model

Designation

**NL10FT**

220-240V/50Hz 1~

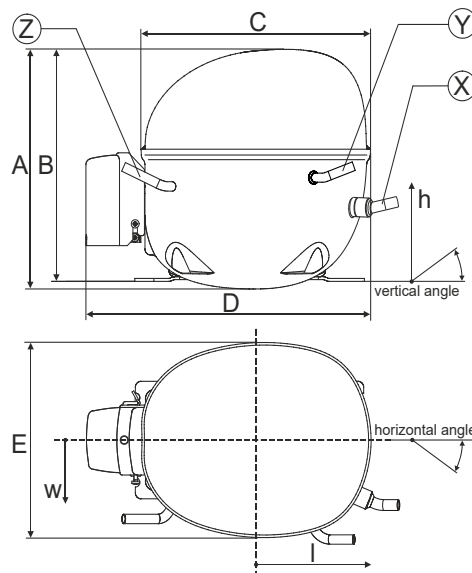
Sales code:

**105G6188**

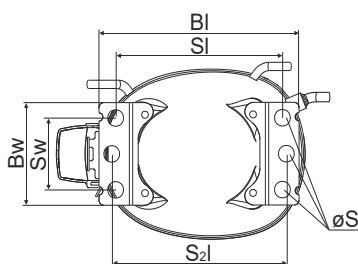
## Compressor dimensions

Housing	A Height	203mm / 7,99in
	B Height	197mm / 7,76in
	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 8,11-8,29	øi 6,11-6,29	øi 6,11-6,29
(i:inside, o:outside)	[in]	øi 0,32-0,33	øi 0,24-0,25	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

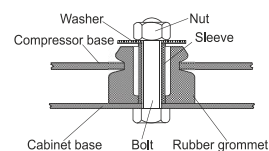


## Compressor fixation



Baseplate	[mm]	[inch]
BI	204	8.03
BW	100	3.94
Small holes		
SI	170	6.7
SW	70	2.76
S1	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	
Snap-on   ø7,3   ø16mm	118-1947	118-1919

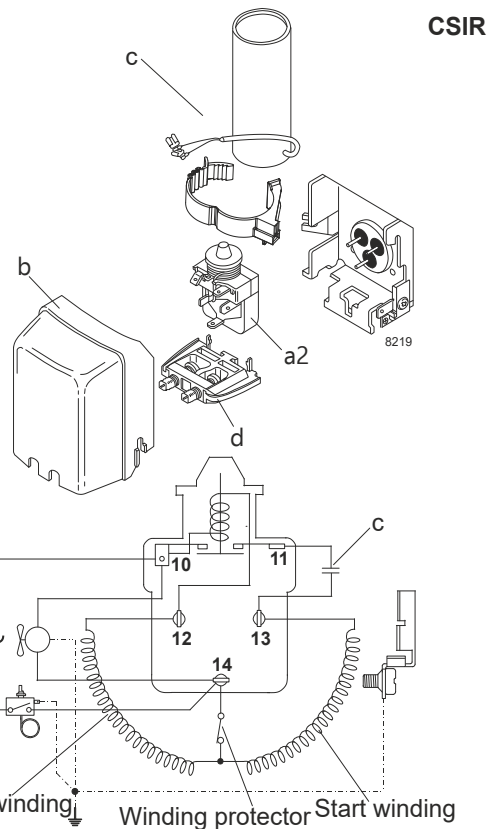
## Model

Designation	<b>NL10FT</b>	<b>220-240V/50Hz</b>	<b>Conf. 1</b>	Sales code:	<b>105G6188</b>
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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

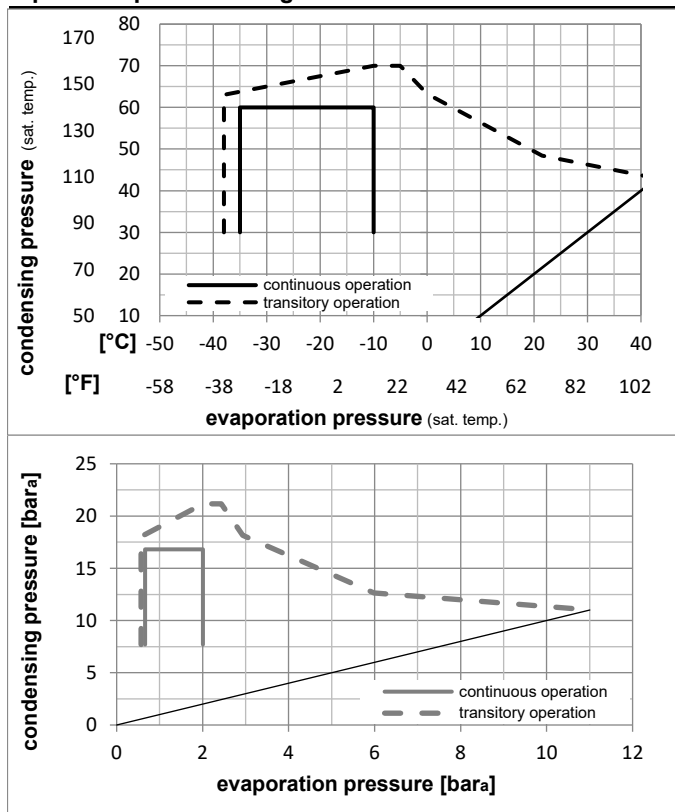


## Ambient temperatures / system cooling

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	fan 1,5m/s	n/a	n/a
43°C / 110°F	fan 3m/s	n/a	n/a

## Operation pressure range



## Components

a2	assy. relay	117U6002
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	<b>NL10FT</b>	<b>220-240V/50Hz</b>	<b>Conf. 1</b>	Sales code:	<b>105G6188</b>
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## Optimization + standard conditions

R134a, 220V/50Hz, CSIR, 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	
	pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]						P1	I	m		
[°C]	[°F]	[°C]	[°F]	[°C]	[°F]	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	
	-23	54	32	32	283,8	969	244,2	1,25	4,27	1,08	227,0	1,54	5,51				ASHRAE LBP
	-10	130	90	90													
	-25	55	32	55	210,3	718	181,0	0,98	3,34	0,84	215,1	1,50	5,03				cecomaf LBP
	-13	131	90	131													
	-35	40	20	40	152,2	520	131,0	0,95	3,26	0,82	159,4	1,36	3,34				EN12900 LBP
	-31	104	68	104													
	-23	49	4,4	49	230,8	788	198,6	1,01	3,46	0,87	227,9	1,55	6,10				ARI540 LBP
	-10	120	40	120													
	-23	41	32	32	313,4	1070	269,7	1,44	4,91	1,24	217,9	1,52	6,08				AHAM LBP
	-10	105	90	90													
	-35	45	32	45	141,9	484	122,1	0,88	3,00	0,76	161,5	1,36	3,06				opt
	-31	113	90	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	141,9	484	122,1	0,88	3,00	0,76	161,5	1,36	3,06
cond. pressure	-30	-22	189,6	648	163,2	1,03	3,51	0,88	184,6	1,42	4,10
pc= 45/113	-25	-13	248,7	849	214,0	1,16	3,98	1,00	213,5	1,50	5,39
return gas temp.	-23	-10	271,6	928	233,7	1,21	4,14	1,04	224,2	1,54	5,89
RGT= 32/90	-20	-4	320,6	1095	275,9	1,31	4,46	1,12	245,4	1,61	6,97
liquid temp	-15	5	407,2	1391	350,4	1,47	5,01	1,26	277,5	1,72	8,88
Tliq= 45/113	-10	14	510,1	1742	439,0	1,66	5,68	1,43	306,8	1,83	11,16
[°C / °F]	-35	-31	114,8	392	98,8	0,72	2,47	0,62	158,9	1,35	2,73
cond. pressure	-30	-22	157,7	538	135,7	0,86	2,93	0,74	183,9	1,41	3,76
pc= 55/131	-25	-13	210,3	718	181,0	0,98	3,34	0,84	215,1	1,50	5,03
return gas temp	-23	-10	230,8	788	198,6	1,02	3,48	0,88	226,5	1,54	5,52
RGT= 32/90	-20	-4	274,5	937	236,2	1,10	3,76	0,95	249,4	1,62	6,58
liquid temp	-15	5	351,7	1201	302,7	1,24	4,23	1,07	284,2	1,74	8,47
Tliq= 55/131	-10	14	443,7	1515	381,9	1,40	4,79	1,21	316,4	1,87	10,73

## Model

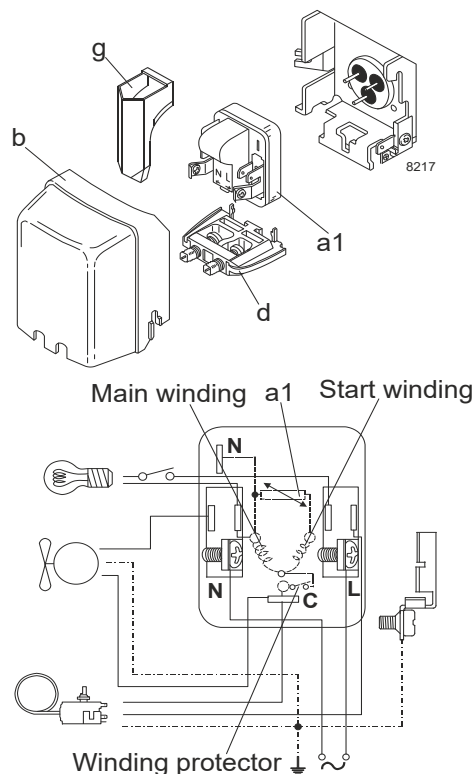
Designation	<b>NL10FT</b>	<b>220-240V/50Hz</b>	<b>Conf. 2</b>	Sales code:	<b>105G6188</b>
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## Configuration

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

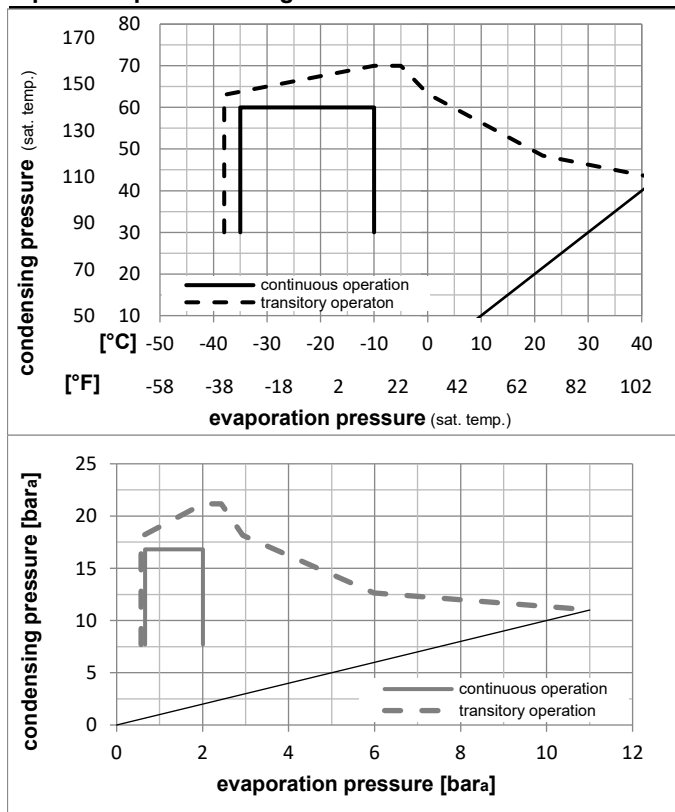


## Ambient temperatures / system cooling

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	fan 1,5m/s	n/a	n/a
43°C / 110°F	fan 3m/s	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 **NL10FT** **220-240V/50Hz** Conf. 2 Sales code: **105G6188**

## Optimization + standard conditions

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

	pe	pc	RGT	Tliq	Cooling capacity	COP	EER	P1	I	Ref. mass flow	
	[°C]	[°C]	[°C]	[°C]	[W]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
	[°F]	[°F]	[°F]	[°F]	[Btu/h]	[kcal/h]	[kcal/Wh]	[W]	[A]	[kg/h]	
ASHRAE LBP	-23	54	32	32	283,8	1,25	1,08	227,0	1,54	5,51	
	-10	130	90	90							
cecomaf LBP	-25	55	32	55	210,3	0,98	0,84	215,1	1,50	5,03	
	-13	131	90	131							
EN12900 LBP	-35	40	20	40	152,2	0,95	0,82	159,4	1,36	3,34	
	-31	104	68	104							
ARI540 LBP	-23	49	4,4	49	230,8	1,01	0,87	227,9	1,55	6,10	
	-10	120	40	120							
AHAM LBP	-23	41	32	32	313,4	1,44	1,24	217,9	1,52	6,08	
	-10	105	90	90							
opt	-35	45	32	45	141,9	0,88	0,76	161,5	1,36	3,06	
	-31	113	90	113							

## Performance tables

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

	pe	Cooling capacity	COP	EER	P1	I	m
	[°C]	[W]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
	[°F]	[Btu/h]	[kcal/h]	[kcal/Wh]	[W]	[A]	[kg/h]
[°C / °F]	-35 -31	141,9 484	0,88 3,00	0,76 0,76	161,5 1,36	1,36 3,06	3,06 3,06
cond. pressure	-30 -22	189,6 648	1,03 3,51	0,88 0,88	184,6 1,42	1,42 4,10	4,10 4,10
pc= 45/113	-25 -13	248,7 849	1,16 3,98	1,00 1,00	213,5 1,50	1,50 5,39	5,39 5,39
return gas temp.	-23 -10	271,6 928	1,21 4,14	1,04 1,04	224,2 1,54	1,54 5,89	5,89 5,89
RGT= 32/90	-20 -4	320,6 1095	1,31 4,46	1,12 1,12	245,4 1,61	1,61 6,97	6,97 6,97
liquid temp	-15 5	407,2 1391	1,47 5,01	1,26 1,26	277,5 1,72	1,72 8,88	8,88 8,88
Tliq= 45/113	-10 14	510,1 1742	1,66 5,68	1,43 1,43	306,8 1,83	1,83 11,16	11,16 11,16
[°C / °F]	-35 -31	114,8 392	0,72 2,47	0,62 0,62	158,9 1,35	1,35 2,73	2,73 2,73
cond. pressure	-30 -22	157,7 538	0,86 2,93	0,74 0,74	183,9 1,41	1,41 3,76	3,76 3,76
pc= 55/131	-25 -13	210,3 718	0,98 3,34	0,84 0,84	215,1 1,50	1,50 5,03	5,03 5,03
return gas temp	-23 -10	230,8 788	1,02 3,48	0,88 0,88	226,5 1,54	1,54 5,52	5,52 5,52
RGT= 32/90	-20 -4	274,5 937	1,10 3,76	0,95 0,95	249,4 1,62	1,62 6,58	6,58 6,58
liquid temp	-15 5	351,7 1201	1,24 4,23	1,07 1,07	284,2 1,74	1,74 8,47	8,47 8,47
Tliq= 55/131	-10 14	443,7 1515	1,40 4,79	1,21 1,21	316,4 1,87	1,87 10,73	10,73 10,73



# NL Compressors

**SECOP**







## Service/Repair – R600a, R290



8545

## Brazing on Suction Connectors (Direct Intake)

representative image



**! max. 150°C/302°F !  
at socket**  
brazing solder: phosphor (LP7) or silver

Refer to Product Bulletin:  
**Brazing on Suction Connectors  
(Compressors with Direct Suction Intake)**

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