

Model

NL10FT

Sales code:

105G6817

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         |
|------------------------|-----------------|-----------------|
| Motor configuration    | CSIR            | RSIR            |
| Power supply (nominal) | 220-240 V/50 Hz | 220-240 V/50 Hz |
| Number of phases       | 1               | 1               |
| Voltage range          | 187-254 V       | 187-254 V       |
| Approvals              | CB, VDE         | CB, VDE         |
| Starting torque        | HST             | LST             |
| Refrigerant            | R134a           | R134a           |
| Application            | LBP             | LBP             |

Application Notes

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

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### Compressor Design

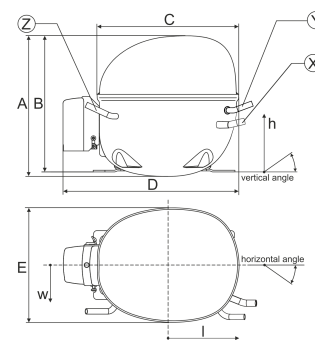
|                       |                                    |                         |               |
|-----------------------|------------------------------------|-------------------------|---------------|
| Oil type              | POE                                | Winding resistance main | 8.200 Ohm     |
| Oil viscosity         | 32cSt                              | Winding resistance aux  | 14.70 Ohm     |
| Oil quantity          | 298 / 10.08fl.oz                   | Max. winding temp.      | 125 °C        |
| Free gas volume comp. | 2,360 cm <sup>3</sup> / 79.80fl.oz | Max. discharge temp.    | 130°C / 266°F |
| Motor protection      | internal                           |                         |               |

### Compressor Dimensions

#### Housing

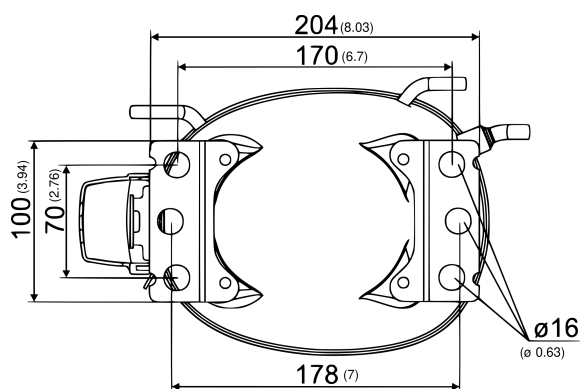
|                   |                 |
|-------------------|-----------------|
| A Height          | 203mm / 7.99in  |
| B Height          | 197mm / 7.76in  |
| C Length shell    | 205mm / 8.07in  |
| D Length w. cover | 254mm / 10.00in |
| E Width           | 166mm / 6.54in  |

[Find 3D Model here](#)

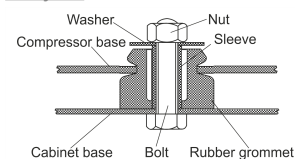


| Connectors            | Suction X                        | Discharge Y                     | Process Z                        |
|-----------------------|----------------------------------|---------------------------------|----------------------------------|
| Diameter [mm]         | øi 8.11–8.29 / 0.32–0.33in       | øi 6.11–6.29 / 0.24–0.25in      | 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                      |

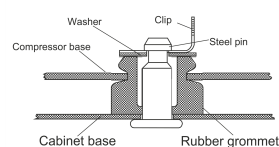
### Mounting Accessories



#### 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   |

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Configuration 1

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### Configuration

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

### Ambient/ machine room temperatures minimum /maximum

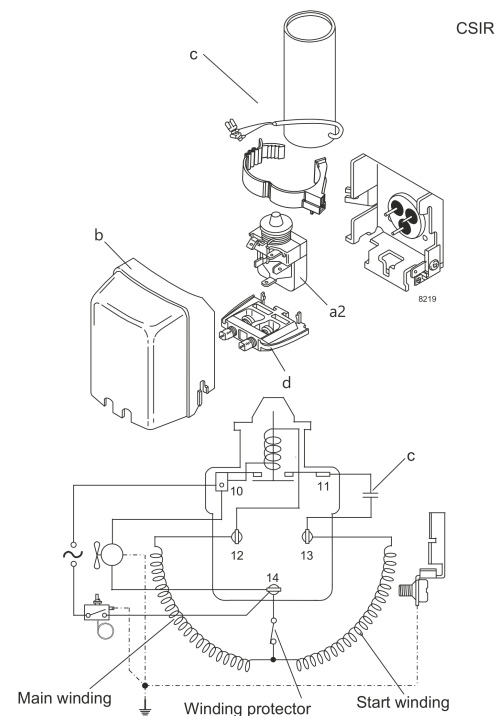
Ambient temperature range: 10 - 43°C / 50 - 109°F

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

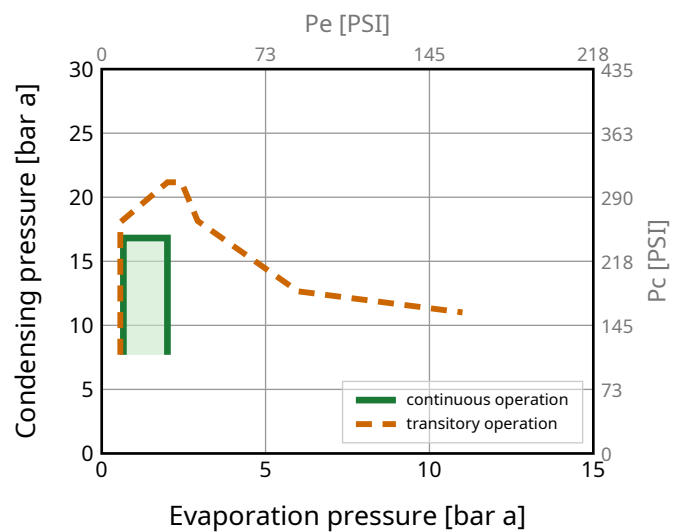
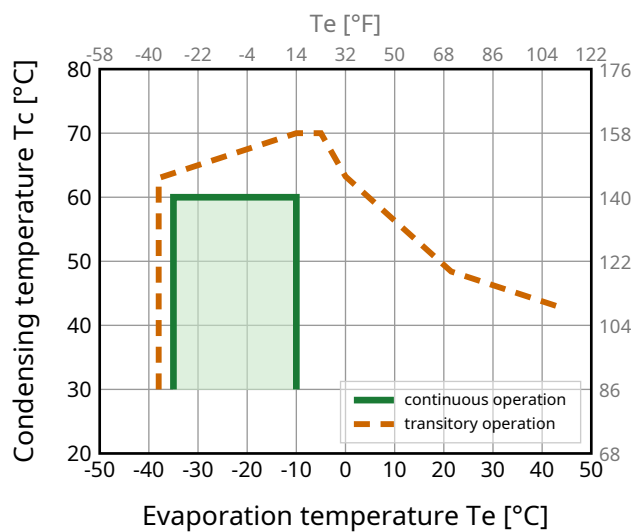
**b** plastic cover 103N2010

**d** cord relief 103N1010

### Alternative components

**b** plastic cover 103N2011

### Operation Pressure Range



Model

NL10FT

Configuration 1

Sales code:

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Standard Conditions

R134a, 220 V/50 Hz, CSIR, static

| pe           | pc            | RGT          | Tliq          | Cooling capacity |         |          | COP   | EER      | P   | I    | m      |             |
|--------------|---------------|--------------|---------------|------------------|---------|----------|-------|----------|-----|------|--------|-------------|
| [°C]<br>[°F] | [°C]<br>[°F]  | [°C]<br>[°F] | [°C]<br>[°F]  | [W]              | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [W] | [A]  | [kg/h] |             |
| -23.3<br>-10 | 54.4<br>129.9 | 32.2<br>90   | 32.2<br>90    | 284              | 968     | 244      | 1.25  | 4.26     | 227 | 1.54 | 5.51   | ASHRAE LBP  |
| -25<br>-13   | 55<br>131     | 32<br>89.6   | 55<br>131     | 210              | 718     | 181      | 0.98  | 3.34     | 215 | 1.50 | 5.02   | CECOMAF LBP |
| -35<br>-31   | 40<br>104     | 20<br>68     | 40<br>104     | 152              | 520     | 131      | 0.96  | 3.26     | 159 | 1.36 | 3.33   | EN12900 LBP |
| -23.3<br>-10 | 48.8<br>119.8 | 4.4<br>39.9  | 48.8<br>119.8 | 232              | 793     | 200      | 1.02  | 3.48     | 228 | 1.55 | 6.10   | ARI540 LBP  |
| -23.3<br>-10 | 40.6<br>105.1 | 32.2<br>90   | 32.2<br>90    | 314              | 1070    | 270      | 1.44  | 4.91     | 218 | 1.52 | 6.09   | AHAM LBP    |
| -25<br>-13   | 45<br>113     | 32<br>89.6   | 45<br>113     | 249              | 849     | 214      | 1.17  | 3.97     | 214 | 1.50 | 5.38   | 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:  
**105G6817**

### Configuration

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

### Ambient/ machine room temperatures minimum /maximum

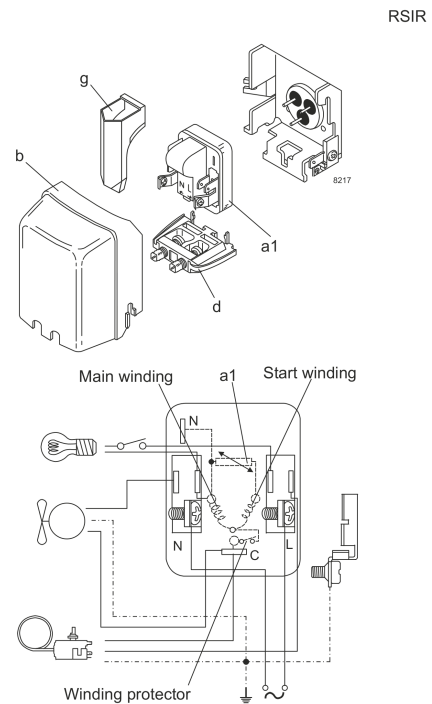
Ambient temperature range: 10 - 43°C / 50 - 109°F

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 103N2011

**d** cord relief 103N1010

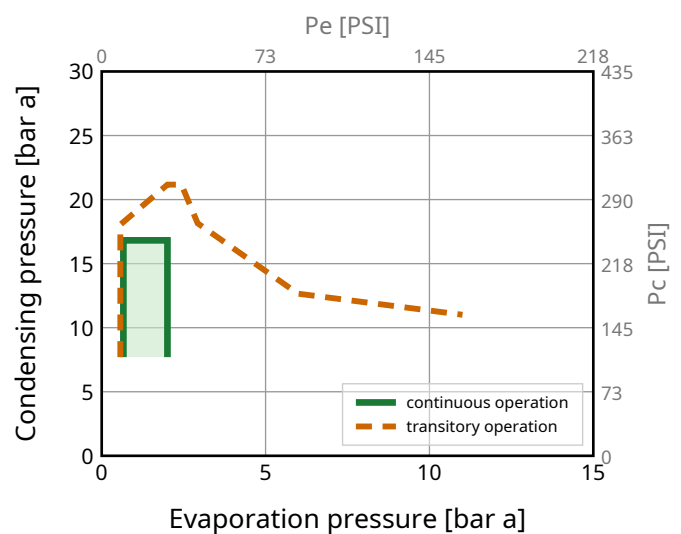
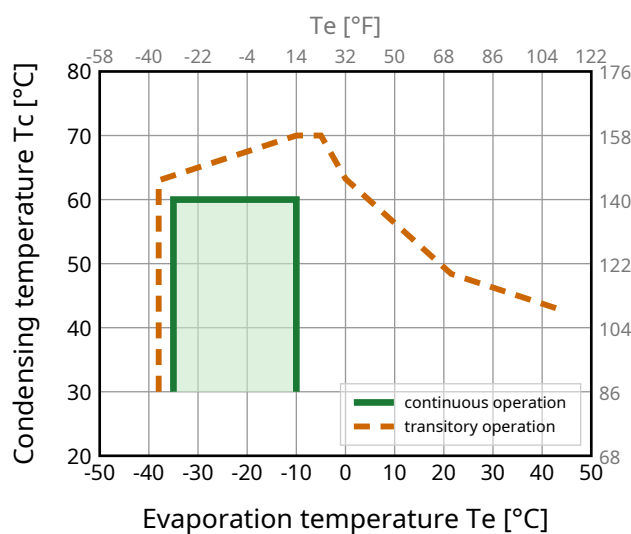
**g** protection screen for PTC 103N0476

### Alternative components

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

**b** plastic cover 103N2010

### Operation Pressure Range



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Configuration 2

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Standard Conditions

R134a, 220 V/50 Hz, RSIR, static

| pe           | pc            | RGT          | Tliq          | Cooling capacity |         |          | COP   | EER      | P   | I    | m      |             |
|--------------|---------------|--------------|---------------|------------------|---------|----------|-------|----------|-----|------|--------|-------------|
| [°C]<br>[°F] | [°C]<br>[°F]  | [°C]<br>[°F] | [°C]<br>[°F]  | [W]              | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [W] | [A]  | [kg/h] |             |
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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] |
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pc= 55/131 | RGT= 32/89.6 | Tliq= 55/131 | °C/°F

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