

Model  
NF7.3FX.2

Sales code:  
105G5722

Compressor Data

|                            |                      |
|----------------------------|----------------------|
| Refrigerant(s)             | R134a / R513A        |
| Refr. charge - tech. limit | 400g / 14.11oz       |
| Weight                     | 10.00 kg / 22.05lbs  |
| Displacement               | 7.27 cm3 / 0.44cu.in |
| Compressors on pallet      | 80                   |



General – Configurations With NF7.3FX.2

| -                       | Conf. 1         | Conf. 2         |
|-------------------------|-----------------|-----------------|
| Motor configuration     | CSIR            | CSIR            |
| Power supply (nominal)  | 115-127 V/60 Hz | 115-127 V/60 Hz |
| Number of phases        | 1               | 1               |
| Voltage range           | 95-135 V        | 95-135 V        |
| Approvals               | UL, EAC         | UL, EAC         |
| Starting torque         | HST             | HST             |
| Refrigerant             | R134a           | R513A           |
| Application             | LBP+MBP         | LBP+MBP         |
| Long interval pull down | OK              | OK              |

Application Notes

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

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### Compressor Design

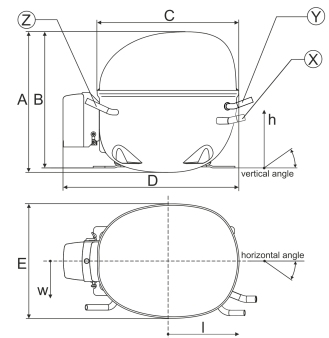
|                       |                                    |                      |               |
|-----------------------|------------------------------------|----------------------|---------------|
| Oil type              | POE                                | Motor protection     | external      |
| Oil viscosity         | 32cSt                              | Max. winding temp.   | 125 °C        |
| Oil quantity          | 268 / 9.06fl.oz                    | Max. discharge temp. | 130°C / 266°F |
| Free gas volume comp. | 2,360 cm <sup>3</sup> / 79.80fl.oz |                      |               |

### Compressor Dimensions

#### Housing

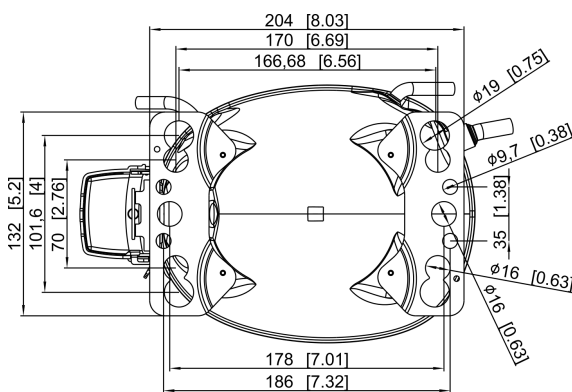
|                   |                 |
|-------------------|-----------------|
| A Height          | 197mm / 7.76in  |
| B Height          | 191mm / 7.52in  |
| C Length shell    | 205mm / 8.07in  |
| D Length w. cover | 254mm / 10.00in |
| E Width           | 166mm / 6.54in  |

[Find 3D Model here](#)

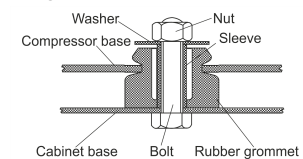


| Connectors            | Suction X                        | Discharge Y                     | Process Z                        |
|-----------------------|----------------------------------|---------------------------------|----------------------------------|
| Diameter [mm]         | øi 8.11–8.29 / 0.32–0.33in       | øi 6.41–6.59 / 0.25–0.26in      | øi 6.41–6.59 / 0.25–0.26in       |
| 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                      |

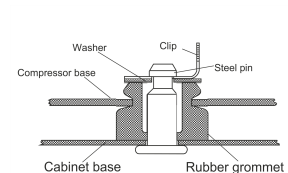
### Mounting Accessories



#### 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  | -          |
| Bolt joint   ø1/4"   ø19mm | 118-1949  | -          |
| 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>115-127 V/60 Hz 1~</b> |
| Refrigerant            | <b>R134a</b>              |
| Application            | <b>LBP+MBP</b>            |
| Voltage range          | <b>95-135 V</b>           |
| Starting torque        | <b>HST</b>                |
| Approvals              | <b>UL, EAC</b>            |
| Starting device type   | <b>relay</b>              |
| Run capacitor          | <b>-/-</b>                |
| Start capacitor        | <b>280 µF</b>             |

### Ambient/ machine room temperatures minimum /maximum

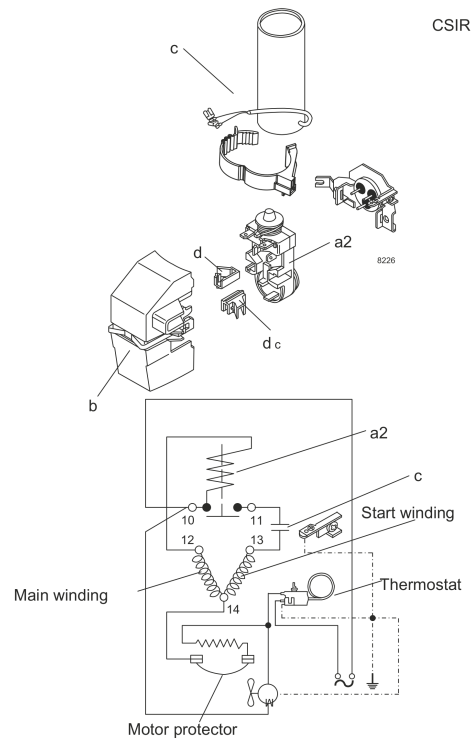
Ambient temperature range: 10 - 43°C / 50 - 109°F

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

### System Cooling

fan 1,5m/s

### Electrical Accessories / Wiring Diagram



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### Components

**a2** relay (protector: TI MRP30AEN-6) 117U4061

**c** start capacitor (280µF) 117U5025

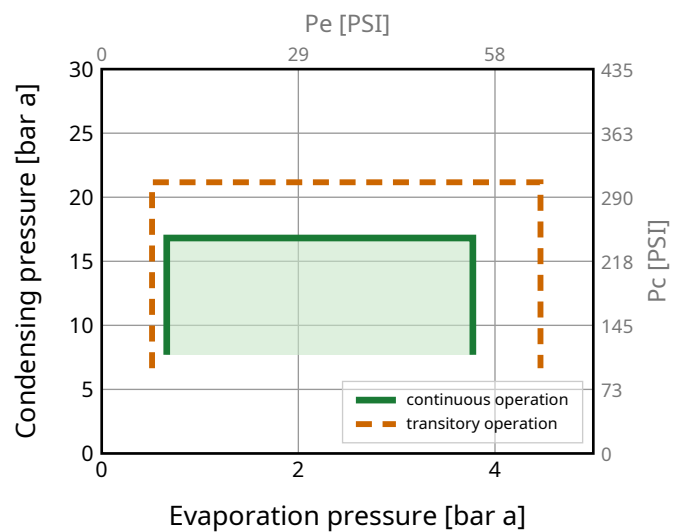
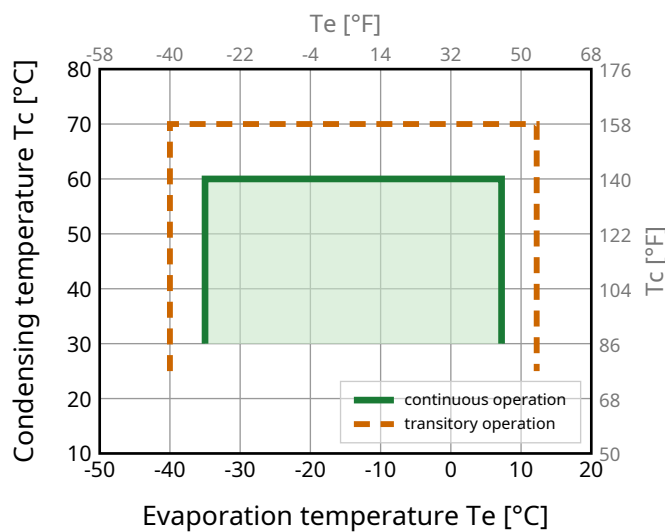
**b** plastic cover + clamp 117U1021

**d/dc** cord relief 117U0349

### Alternative components

**b** assy. terminal board 6.3mm 117U1024

### Operation Pressure Range



Model

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Configuration 1

Sales code:

105G5722

Standard Conditions

R134a, 115 V/60 Hz, CSIR, fan 1,5m/s

| 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   | 262              | 893     | 225      | 1.16  | 3.95     | 226 | 3.57 | 5.08   | ASHRAE LBP  |
| -25<br>-13   | 55<br>131     | 32<br>89.6   | 55<br>131    | 190              | 649     | 164      | 0.88  | 3.01     | 216 | 3.53 | 4.54   | CECOMAF LBP |
| -35<br>-31   | 40<br>104     | 20<br>68     | 40<br>104    | 128              | 436     | 110      | 0.76  | 2.58     | 169 | 3.35 | 2.79   | EN12900 LBP |
| -6.7<br>20   | 54.4<br>129.9 | 35<br>95     | 46.1<br>115  | 547              | 1867    | 471      | 1.70  | 5.80     | 322 | 4.11 | 11.91  | ASHRAE MBP  |
| -10<br>14    | 55<br>131     | 32<br>89.6   | 55<br>131    | 426              | 1452    | 366      | 1.40  | 4.79     | 303 | 4.00 | 10.26  | CECOMAF MBP |
| -10<br>14    | 45<br>113     | 20<br>68     | 45<br>113    | 480              | 1638    | 413      | 1.66  | 5.67     | 289 | 3.90 | 11.19  | EN12900 MBP |

Performance Tables

R134a, 115 V/60 Hz, CSIR, fan 1,5m/s

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  | 117              | 400     | 101      | 0.71  | 2.43     | 164 | 3.34 | 2.52   |
| -30  | -22  | 170              | 581     | 147      | 0.89  | 3.03     | 192 | 3.41 | 3.68   |
| -20  | -4   | 308              | 1052    | 265      | 1.28  | 4.35     | 242 | 3.62 | 6.69   |
| -10  | 14   | 497              | 1696    | 428      | 1.72  | 5.87     | 289 | 3.90 | 10.86  |
| 0    | 32   | 747              | 2549    | 643      | 2.20  | 7.49     | 340 | 4.25 | 16.49  |
| 7.2  | 45   | 971              | 3313    | 835      | 2.53  | 8.64     | 383 | 4.54 | 21.64  |

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

|     |     |     |      |     |      |      |     |      |       |
|-----|-----|-----|------|-----|------|------|-----|------|-------|
| -35 | -31 | 91  | 312  | 79  | 0.61 | 2.07 | 151 | 3.31 | 2.17  |
| -30 | -22 | 136 | 464  | 117 | 0.74 | 2.51 | 184 | 3.41 | 3.23  |
| -20 | -4  | 256 | 873  | 220 | 1.04 | 3.56 | 246 | 3.67 | 6.12  |
| -10 | 14  | 426 | 1452 | 366 | 1.40 | 4.79 | 303 | 4.00 | 10.26 |
| 0   | 32  | 656 | 2237 | 564 | 1.80 | 6.14 | 364 | 4.40 | 15.98 |
| 7.2 | 45  | 864 | 2949 | 743 | 2.09 | 7.13 | 414 | 4.73 | 21.31 |

Model  
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Configuration 2

Sales code:  
**105G5722**

### Configuration

|                        |                           |
|------------------------|---------------------------|
| Motor configuration    | <b>CSIR</b>               |
| Power supply (nominal) | <b>115-127 V/60 Hz 1~</b> |
| Refrigerant            | <b>R513A</b>              |
| Application            | <b>LBP+MBP</b>            |
| Voltage range          | <b>95-135 V</b>           |
| Starting torque        | <b>HST</b>                |
| Approvals              | <b>UL, EAC</b>            |
| Starting device type   | <b>relay</b>              |
| Run capacitor          | <b>-/-</b>                |
| Start capacitor        | <b>280 µF</b>             |

### Ambient/ machine room temperatures minimum /maximum

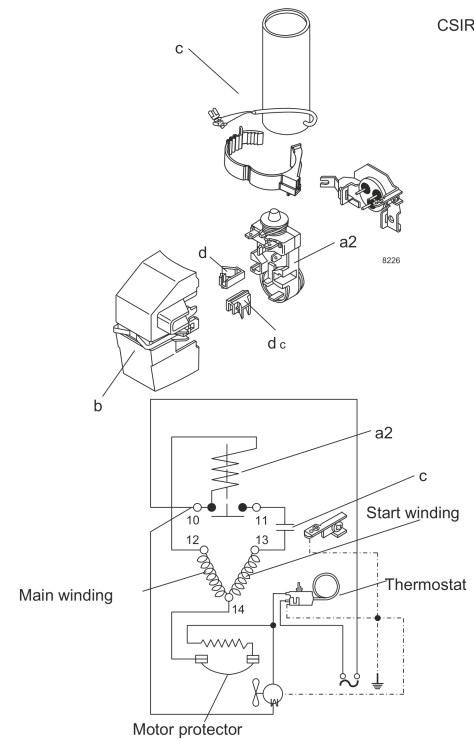
Ambient temperature range: 10 - 43°C / 50 - 109°F

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### System Cooling

fan 1,5m/s

### Electrical Accessories / Wiring Diagram



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### Components

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**c** start capacitor (280µF) 117U5025

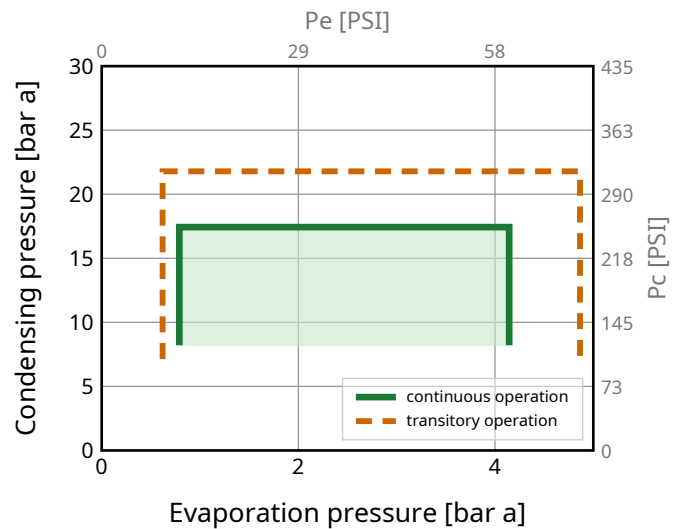
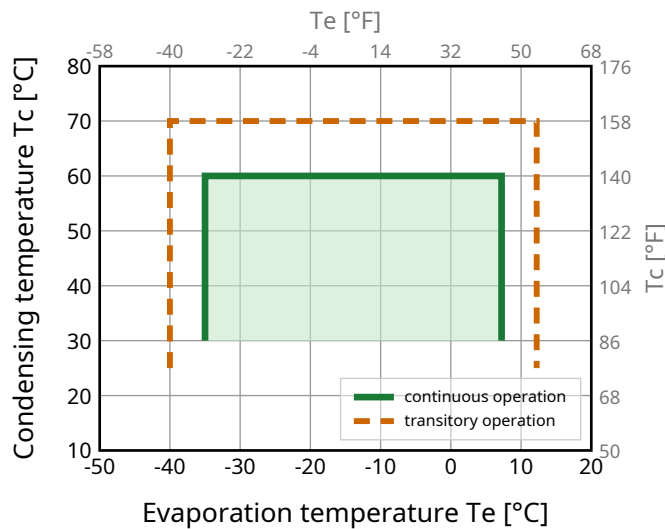
**b** plastic cover + clamp 117U1021

**d/dc** cord relief 117U0349

### Alternative components

**b** assy. terminal board 6.3mm 117U1024

### Operation Pressure Range



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Configuration 2

Sales code:  
105G5722

Standard Conditions

R513A, 115 V/60 Hz, CSIR, fan 1,5m/s

| 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   | 288              | 984     | 248      | 1.18  | 4.03     | 244 | 3.88 | 6.31   | ASHRAE LBP  |
| -25<br>-13   | 55<br>131     | 32<br>89.6   | 55<br>131    | 205              | 699     | 176      | 0.88  | 2.99     | 234 | 3.81 | 5.67   | CECOMAF LBP |
| -35<br>-31   | 40<br>104     | 20<br>68     | 40<br>104    | 142              | 485     | 122      | 0.78  | 2.65     | 183 | 3.68 | 3.57   | EN12900 LBP |
| -6.7<br>20   | 54.4<br>129.9 | 35<br>95     | 46.1<br>115  | 574              | 1957    | 493      | 1.69  | 5.75     | 340 | 4.40 | 14.30  | ASHRAE MBP  |
| -10<br>14    | 55<br>131     | 32<br>89.6   | 55<br>131    | 441              | 1506    | 380      | 1.37  | 4.67     | 322 | 4.30 | 12.38  | CECOMAF MBP |
| -10<br>14    | 45<br>113     | 20<br>68     | 45<br>113    | 499              | 1703    | 429      | 1.63  | 5.57     | 306 | 4.20 | 13.52  | EN12900 MBP |

Performance Tables

R513A, 115 V/60 Hz, CSIR, fan 1,5m/s

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  | 132              | 449     | 113      | 0.74  | 2.52     | 178 | 3.62 | 3.24   |
| -30  | -22  | 188              | 641     | 162      | 0.91  | 3.09     | 208 | 3.76 | 4.64   |
| -20  | -4   | 331              | 1130    | 285      | 1.28  | 4.37     | 259 | 3.99 | 8.22   |
| -10  | 14   | 524              | 1787    | 450      | 1.71  | 5.84     | 306 | 4.20 | 13.11  |
| 0    | 32   | 775              | 2644    | 666      | 2.17  | 7.41     | 357 | 4.47 | 19.63  |
| 7.2  | 45   | 998              | 3405    | 858      | 2.50  | 8.52     | 400 | 4.74 | 25.57  |

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

|     |     |     |      |     |      |      |     |      |       |
|-----|-----|-----|------|-----|------|------|-----|------|-------|
| -35 | -31 | 103 | 350  | 88  | 0.62 | 2.12 | 166 | 3.39 | 2.83  |
| -30 | -22 | 149 | 508  | 128 | 0.74 | 2.52 | 201 | 3.62 | 4.11  |
| -20 | -4  | 271 | 926  | 233 | 1.03 | 3.50 | 264 | 3.99 | 7.54  |
| -10 | 14  | 441 | 1506 | 380 | 1.37 | 4.67 | 322 | 4.30 | 12.38 |
| 0   | 32  | 669 | 2282 | 575 | 1.75 | 5.97 | 382 | 4.65 | 19.01 |
| 7.2 | 45  | 874 | 2980 | 751 | 2.02 | 6.91 | 431 | 4.95 | 25.16 |