

Model

| | | | | |
|-------------|---------------|------------------|-------------|-----------------|
| Designation | NF10FX | 115-127V/60Hz 1~ | Sales code: | 105G5952 |
|-------------|---------------|------------------|-------------|-----------------|

Compressor design

| | | | |
|----------------------------|---------------------------------|-----------------------|----------------------------------|
| Oil type | Polyolester | Refrigerant(s) | R134a |
| Oil viscosity | 32cST | Displacement | 10,09cm ³ / 0,62cu.in |
| Oil quantity | 298cm ³ / 10,1fl.oz | Compressors on pallet | 80 |
| Refr. charge - tech. limit | 460g / 16,2oz | | |
| Free gas volume comp. | 2360cm ³ / 79,8fl.oz | | |
| Weight | 10kg / 22lbs | | |
| Motor protection | external | | |
| Winding resistance main | 1,62Ω (at 25°C) | | |
| Winding resistance aux | 4,9Ω (at 25°C) | | |
| Max. winding temp. | 125°C / 257°F | | |
| Max. discharge temp. | 110°C / 230°F | | |



General - Configurations with NF10FX

| | |
|------------------------|---|
| | Conf. 1 |
| Motorconfiguration | CSIR |
| Power supply (nominal) | 115-127V/60Hz |
| Number of phases | 1 |
| Voltage range | 95-135V |
| Approvals | UL |
| Starting torque | HST |
| Note | Electrical equipment is included and pre-assembled to compressor. |

Applications with NF10FX

| | |
|-------------------------|----------------|
| | Conf. 1 |
| Refrigerant | R134a |
| Application | LBP+MBP |
| System cooling | fan 1,5m/s |
| Hot gas defrost | OK |
| Long interval pull down | OK |

Electrical data - Configurations with NF10FX

| | |
|------------------------------------|----------------|
| | Conf. 1 |
| Starting device type | relay |
| Run capacitor | -/- |
| Start capacitor | 320μF |
| LRA (locked rotor amps / 4s/ U(N)) | 30,8A |
| RLA (rated load amps / 1s/ U(N)) | 4,9A |
| Cut in current (U(N)) | 30,8A |

Model

Designation

NF10FX

115-127V/60Hz 1~

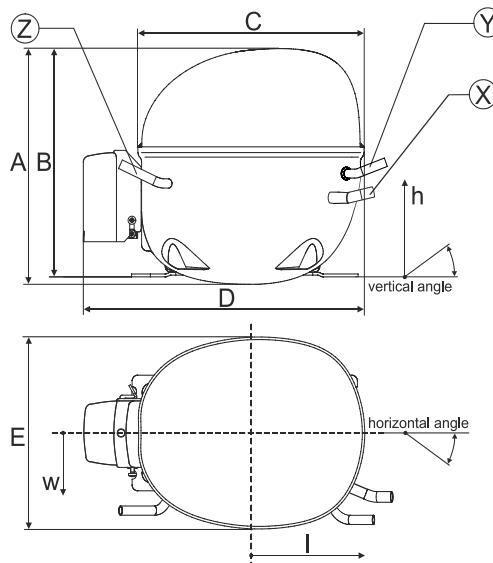
Sales code:

105G5952

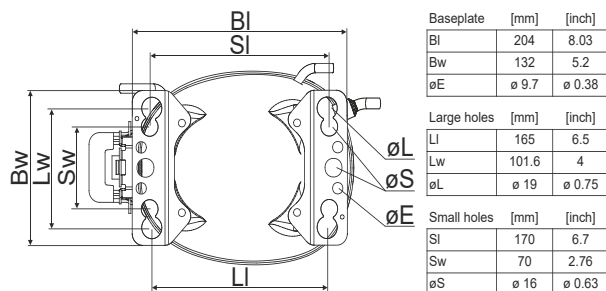
Compressor dimensions

| 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 |

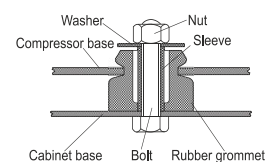
| Connectors | | Suction | Discharge | Process |
|-----------------------|------|--------------|--------------|--------------|
| | | X | Y | Z |
| Diameter | [mm] | øi 8,11-8,29 | øi 6,41-6,59 | øi 6,41-6,59 |
| (i:inside, o:outside) | [in] | øi 0,32-0,33 | øi 0,25-0,26 | øi 0,25-0,26 |
| Material | | 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 |



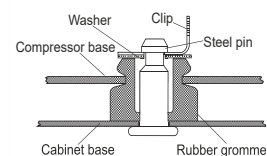
Compressor fixation



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

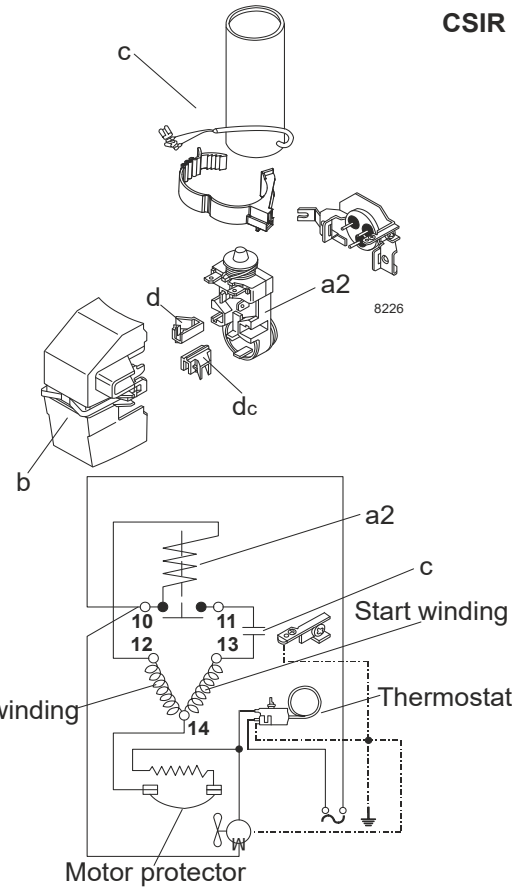
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Configuration

| | |
|------------------------|------------------|
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| Application | LBP+MBP |
| Voltage range | 95-135V |
| Starting torque | HST |
| Approvals | UL |

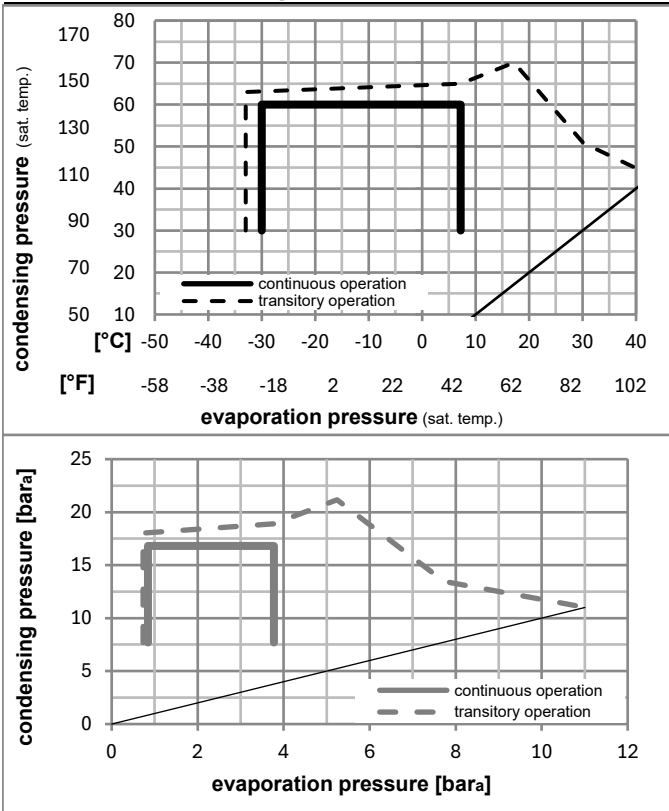
Electrical accessories / wiring diagram



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: | fan 3m/s |

Operation pressure range



Components (already pre-assembled)

| | | |
|------|-----------------------------|----------|
| a2 | current relay (MRT22AFZ-6) | 117U4129 |
| c | start capacitor (320µF) | 117U5022 |
| b | plastic cover | 117U1021 |
| d/dc | cord relief | 117U0349 |
| d/dc | cord relief | 117U0349 |

Model

Designation **NF10FX** **115-127V/60Hz** Conf. 1 Sales code: **105G5952**

Optimization + standard conditions

R134a, 115V/60Hz, CSIR, fan 3m/s, UL

| | Evaporating pressure (saturation temperature) | | | | Cooling capacity | | | COP | EER | P1 | Power consumption | | ASHRAE LBP |
|------|---|------|------|-------|------------------|----------|----------|----------|-----------|-------|-------------------|--------|-------------|
| | pe | pc | RGT | Tliq | [W] | [Btu/h] | [kcal/h] | | | | I | m | |
| [°C] | [°C] | [°C] | [°C] | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | [W] | [A] | [kg/h] | |
| [°F] | [°F] | [°F] | [°F] | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | [W] | [A] | [kg/h] | ASHRAE LBP |
| -23 | 54 | 32 | 32 | 306,9 | 1048 | 264,1 | 1,17 | 4,01 | 1,01 | 261,4 | 3,71 | 5,96 | ASHRAE LBP |
| -10 | 130 | 90 | 90 | | | | | | | | | | |
| -25 | 55 | 32 | 55 | 226,6 | 774 | 195,0 | 0,91 | 3,09 | 0,78 | 250,4 | 3,64 | 5,42 | cecomaf LBP |
| -13 | 131 | 90 | 131 | | | | | | | | | | |
| -35 | 40 | 20 | 40 | 144,9 | 495 | 124,7 | 0,81 | 2,76 | 0,70 | 179,3 | 3,33 | 3,18 | EN12900 LBP |
| -31 | 104 | 68 | 104 | | | | | | | | | | |
| -7 | 54 | 35 | 46 | 626,9 | 2141 | 539,5 | 1,60 | 5,48 | 1,38 | 390,7 | 4,55 | 13,68 | ASHRAE MBP |
| 20 | 130 | 95 | 115 | | | | | | | | | | |
| -10 | 55 | 32 | 55 | 488,2 | 1667 | 420,2 | 1,34 | 4,58 | 1,15 | 363,8 | 4,37 | 11,81 | cecomaf MBP |
| 14 | 131 | 90 | 131 | | | | | | | | | | |
| -10 | 45 | 20 | 45 | 541,0 | 1848 | 465,6 | 1,56 | 5,32 | 1,34 | 347,2 | 4,24 | 12,66 | EN12900 MBP |
| 14 | 113 | 68 | 113 | | | | | | | | | | |

Performance tables

R134a, 115V/60Hz, CSIR, fan 3m/s, UL

| | pe | | Cooling capacity | | | COP | EER | P1 | I | m | |
|------------------|------|------|------------------|---------|----------|------|------|------|-------|------|-------|
| | [°C] | [°F] | [W] | [Btu/h] | [kcal/h] | | | | | | |
| [°C / °F] | -30 | -22 | 189,5 | 647 | 163,1 | 0,89 | 3,05 | 0,77 | 212,3 | 3,46 | 4,10 |
| cond. pressure | -23 | -10 | 284,2 | 971 | 244,6 | 1,12 | 3,81 | 0,96 | 254,9 | 3,69 | 6,16 |
| pc= 45/113 | -15 | 5 | 441,6 | 1508 | 380,1 | 1,42 | 4,84 | 1,22 | 311,9 | 4,02 | 9,63 |
| return gas temp. | -9 | 15 | 575,9 | 1967 | 495,6 | 1,64 | 5,60 | 1,41 | 351,1 | 4,26 | 12,61 |
| RGT= 32/90 | -4 | 25 | 737,6 | 2519 | 634,8 | 1,89 | 6,45 | 1,62 | 390,7 | 4,53 | 16,24 |
| liquid temp | 0 | 32 | 868,9 | 2967 | 747,8 | 2,08 | 7,09 | 1,79 | 418,3 | 4,73 | 19,21 |
| Tliq= 45/113 | 7,2 | 45 | 1156,7 | 3950 | 995,4 | 2,47 | 8,43 | 2,13 | 468,4 | 5,13 | 25,84 |
| [°C / °F] | -30 | -22 | 165,4 | 565 | 142,4 | 0,76 | 2,59 | 0,65 | 218,5 | 3,43 | 3,94 |
| cond. pressure | -23 | -10 | 249,4 | 852 | 214,6 | 0,95 | 3,25 | 0,82 | 261,8 | 3,72 | 5,97 |
| pc= 55/131 | -15 | 5 | 385,5 | 1317 | 331,8 | 1,19 | 4,07 | 1,03 | 323,5 | 4,11 | 9,28 |
| return gas temp | -9 | 15 | 500,7 | 1710 | 430,9 | 1,36 | 4,64 | 1,17 | 368,4 | 4,40 | 12,11 |
| RGT= 32/90 | -4 | 25 | 639,4 | 2184 | 550,3 | 1,54 | 5,26 | 1,32 | 415,6 | 4,72 | 15,56 |
| liquid temp | 0 | 32 | 752,3 | 2569 | 647,5 | 1,67 | 5,71 | 1,44 | 449,6 | 4,95 | 18,40 |
| Tliq= 55/131 | 7,2 | 45 | 1000,9 | 3418 | 861,4 | 1,95 | 6,65 | 1,68 | 514,2 | 5,40 | 24,76 |