

Single Pack NF11FX.2 115-127V 60Hz CSIR

Single pack code number: **195B4538**

| Position | Title | Code | Amount |
|----------|---|----------|--------|
| 1 | Compressor NF11FX.2 | 105G5916 | 1 |
| 2 | Starting relay (overload protector MRT16ADK-6) | 117U4151 | 1 |
| 3 | Starting capacitor (410 μ F 125V, 6.3mm) | 117U5028 | 1 |
| 4 | Cord relief | 117U0349 | 1 |
| 5 | Cover | 117U1021 | 1 |
| 6 | Bolt joint for one compressor M6 \varnothing 16mm | 118-1917 | 1 |

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Model

| | | | | |
|-------------|-----------------|-------------------------|-------------|-----------------|
| Designation | NF11FX.2 | 115-127V/60Hz 1~ | Sales code: | 105G5916 |
|-------------|-----------------|-------------------------|-------------|-----------------|

Compressor design

| | | | |
|----------------------------|---------------------------------|-----------------------|----------------------------------|
| Oil type | Polyolester | Refrigerant(s) | R134a, R513A |
| Oil viscosity | 32cST | Displacement | 11,25cm ³ / 0,69cu.in |
| Oil quantity | 294cm ³ / 10fl.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 | external | | |
| Winding resistance main | 1Ω (at 25°C) | | |
| Winding resistance aux | 2,9Ω (at 25°C) | | |
| Max. winding temp. | 125°C / 257°F | | |
| Max. discharge temp. | 130°C / 266°F | | |



General - Configurations with NF11FX.2

| | Conf. 1 | Conf. 2 |
|------------------------|----------------|----------------|
| Motorconfiguration | CSIR | CSIR |
| Power supply (nominal) | 115V/60Hz | 115V/60Hz |
| Number of phases | 1 | 1 |
| Voltage range | 95-135V | 95-135V |
| Approvals | UL, EAC | UL |
| Starting torque | HST | HST |
| Note | - / - | |

Applications with NF11FX.2

| | Conf. 1 | Conf. 2 |
|-------------------------|----------------|----------------|
| Refrigerant | R134a | R513A |
| Application | MBP | MBP |
| System cooling | fan 3m/s | fan 3m/s |
| Hot gas defrost | OK | OK |
| Long interval pull down | OK | OK |

Electrical data - Configurations with NF11FX.2

| | Conf. 1 | Conf. 2 |
|------------------------------|----------------|----------------|
| Starting device type | relay | relay |
| Run capacitor | - / - | - / - |
| Start capacitor | 410μF | 410μF |
| LRA (locked rotor amps / 4s) | 40A | 40A |
| RLA (rated load amps / 1s) | 7A | 7A |
| Cut in current | 40A | 40A |
| IP class | 21 | 21 |

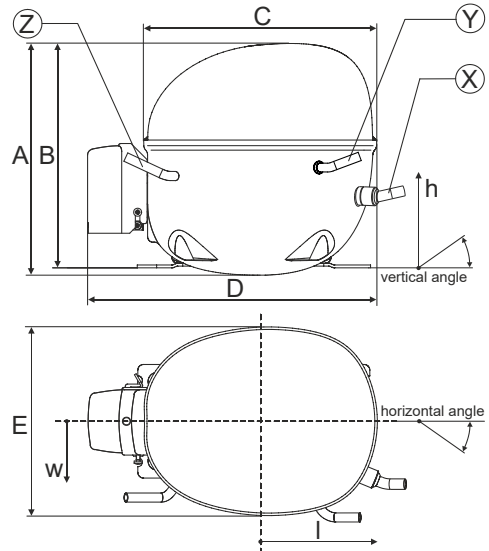
Model

| | | | | |
|-------------|-----------------|------------------|-------------|-----------------|
| Designation | NF11FX.2 | 115-127V/60Hz 1~ | Sales code: | 105G5916 |
|-------------|-----------------|------------------|-------------|-----------------|

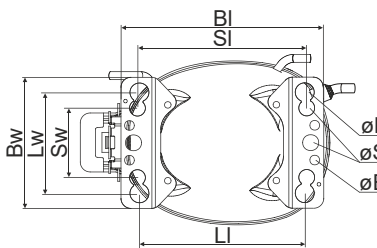
Compressor dimensions

| | | |
|----------------|-------------------|----------------|
| 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 6,41-6,59 | 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 |

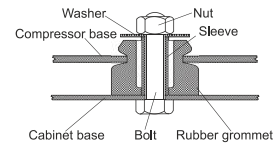


Compressor fixation

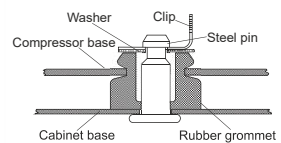


| Baseplate | [mm] | [inch] |
|-------------|-------|--------|
| BI | 204 | 8.03 |
| BW | 132 | 5.2 |
| øE | ø 9.7 | ø 0.38 |
| Large holes | [mm] | [inch] |
| LI | 165 | 6.5 |
| LW | 101.6 | 4 |
| øL | ø 19 | ø 0.75 |
| Small holes | [mm] | [inch] |
| SI | 170 | 6.7 |
| SW | 70 | 2.76 |
| øS | ø 16 | 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 | |
| Bolt joint ø1/4" ø19mm | 118-1949 | |
| Snap-on ø7,3 ø16mm | 118-1947 | 118-1919 |

Application notes

LRA value on compressor label and datasheet may differ due to different test conditions for UL approval.

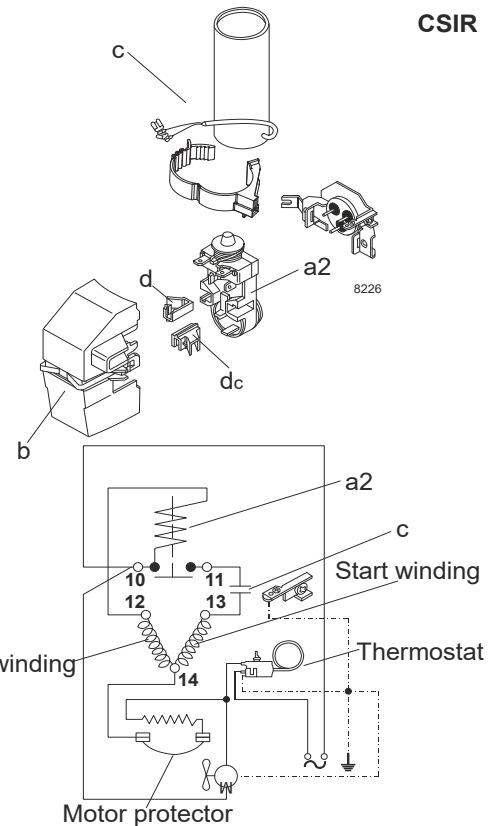
Model

| | | | | | |
|-------------|-----------------|------------------|----------------|-------------|-----------------|
| Designation | NF11FX.2 | 115V/60Hz | Conf. 1 | Sales code: | 105G5916 |
|-------------|-----------------|------------------|----------------|-------------|-----------------|

Configuration

| | |
|------------------------|--------------|
| Motorconfiguration | CSIR |
| Power supply (nominal) | 115V/60Hz 1~ |
| Refrigerant | R134a |
| Application | MBP |
| Voltage range | 95-135V |
| Starting torque | HST |
| Approvals | UL |
| | EAC |

Electrical accessories / wiring diagram

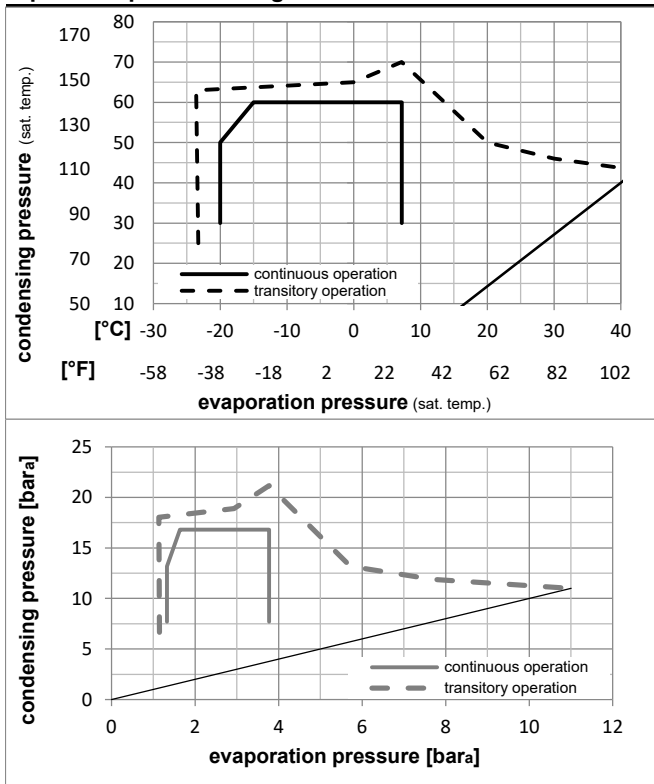


Ambient temperatures / system cooling

| | |
|---------------------------|--------------|
| 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 | n/a | fan 3m/s | n/a |
| 38°C / 100°F | n/a | fan 3m/s | n/a |
| 43°C / 110°F | n/a | fan 3m/s | n/a |

Operation pressure range



Components

| | | |
|------|-----------------------------|----------|
| a2 | assy. Relay (TI MRT16ADK-6) | 117U4151 |
| c | start capacitor (410µF) | 117U5028 |
| b | plastic cover | 117U1021 |
| d/dc | cord relief | 117U0349 |
| d/dc | cord relief | 117U0349 |

Model

Designation **NF11FX.2 115V/60Hz** Conf. 1 Sales code: **105G5916**

Optimization + standard conditions

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

| Evaporating pressure (saturation temperature) | | | | | | | | | | | | | | |
|---|-------|------|------|------|-------|---------|----------|-------|----------|-----------|-------|------|--------|-------------|
| Condensing pressure (saturation temperature) | | | | | | | | | | | | | | |
| Return gas temp. | | | | | | | | | | | | | | |
| Liquid temp. | | | | | | | | | | | | | | |
| Cooling capacity | | | | | | | | | | | | | | |
| COP | | | | | | | | | | | | | | |
| EER | | | | | | | | | | | | | | |
| Power consumption | | | | | | | | | | | | | | |
| Current consumption | | | | | | | | | | | | | | |
| Ref. mass flow | | | | | | | | | | | | | | |
| | pe | pc | RGT | Tliq | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | P1 | I | m | |
| [°C] | [°C] | [°C] | [°C] | [°C] | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | [W] | [A] | [kg/h] | |
| [°F] | -23,3 | 54,4 | 32,2 | 32,2 | 381,5 | 1303 | 328,3 | 1,16 | 3,95 | 0,99 | 330,2 | 5,21 | 7,41 | ASHRAE LBP |
| [°F] | -10 | 130 | 90 | 90 | | | | | | | | | | |
| [°C] | -25 | 55 | 32 | 55 | 277,9 | 949 | 239,2 | 0,89 | 3,02 | 0,76 | 313,9 | 5,14 | 6,65 | cecomaf LBP |
| [°F] | -13 | 131 | 89,6 | 131 | | | | | | | | | | |
| [°C] | -35 | 40 | 20 | 40 | 187,1 | 639 | 161,0 | 0,78 | 2,67 | 0,67 | 239,3 | 4,88 | 4,10 | EN12900 LBP |
| [°F] | -31 | 104 | 68 | 104 | | | | | | | | | | |
| [°C] | -6,66 | 54,4 | 35 | 46,1 | 795,8 | 2718 | 684,9 | 1,65 | 5,63 | 1,42 | 483,2 | 6,02 | 17,36 | ASHRAE MBP |
| [°F] | 20 | 130 | 95 | 115 | | | | | | | | | | |
| [°C] | -10 | 55 | 32 | 55 | 617,9 | 2110 | 531,8 | 1,36 | 4,66 | 1,17 | 453,3 | 5,84 | 14,94 | cecomaf MBP |
| [°F] | 14 | 131 | 89,6 | 131 | | | | | | | | | | |
| [°C] | -10 | 45 | 20 | 45 | 695,4 | 2375 | 598,5 | 1,62 | 5,52 | 1,39 | 430,3 | 5,70 | 16,28 | EN12900 MBP |
| [°F] | 14 | 113 | 68 | 113 | | | | | | | | | | |

Performance tables

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

| | pe | Cooling capacity | | | COP | EER | | P1 | I | m | | |
|------------------|------|------------------|------|--------|------|---------|----------|------|------|-------|-------|----------|
| | | [°C] | [°F] | [W] | | [Btu/h] | [kcal/h] | | | | [W/W] | [Btu/Wh] |
| [°C / °F] | -20 | -4 | | 448,6 | 1532 | 386,1 | 1,26 | 4,32 | 1,09 | 355,1 | 5,28 | 9,75 |
| cond. pressure | -15 | 5 | | 574,9 | 1963 | 494,8 | 1,46 | 5,00 | 1,26 | 392,5 | 5,48 | 12,53 |
| pc= 45/113 | -9,4 | 15 | | 739,1 | 2524 | 636,1 | 1,70 | 5,81 | 1,46 | 434,6 | 5,72 | 16,18 |
| return gas temp. | -6,7 | 20 | | 831,4 | 2839 | 715,5 | 1,82 | 6,22 | 1,57 | 456,3 | 5,86 | 18,25 |
| RGT= 32/90 | -3,9 | 25 | | 930,8 | 3179 | 801,1 | 1,94 | 6,64 | 1,67 | 478,8 | 6,00 | 20,49 |
| liquid temp | 0 | 32 | | 1082,9 | 3698 | 931,9 | 2,11 | 7,22 | 1,82 | 512,1 | 6,22 | 23,95 |
| Tliq= 45/113 | 7,2 | 45 | | 1407,6 | 4807 | 1211,4 | 2,42 | 8,27 | 2,09 | 580,9 | 6,66 | 31,44 |
| [°C / °F] | -20 | -4 | | 372,6 | 1273 | 320,7 | 1,03 | 3,52 | 0,89 | 361,3 | 5,35 | 8,94 |
| cond. pressure | -15 | 5 | | 485,3 | 1658 | 417,7 | 1,19 | 4,07 | 1,03 | 407,3 | 5,58 | 11,68 |
| pc= 55/131 | -9,4 | 15 | | 634,0 | 2165 | 545,6 | 1,38 | 4,72 | 1,19 | 458,5 | 5,87 | 15,34 |
| return gas temp | -6,7 | 20 | | 718,3 | 2453 | 618,2 | 1,48 | 5,06 | 1,28 | 484,6 | 6,03 | 17,43 |
| RGT= 32/90 | -3,9 | 25 | | 809,8 | 2765 | 696,9 | 1,58 | 5,41 | 1,36 | 511,3 | 6,20 | 19,71 |
| liquid temp | 0 | 32 | | 950,4 | 3246 | 817,9 | 1,73 | 5,90 | 1,49 | 550,3 | 6,44 | 23,25 |
| Tliq= 55/131 | 7,2 | 45 | | 1253,3 | 4280 | 1078,6 | 1,99 | 6,80 | 1,71 | 629,1 | 6,94 | 31,00 |

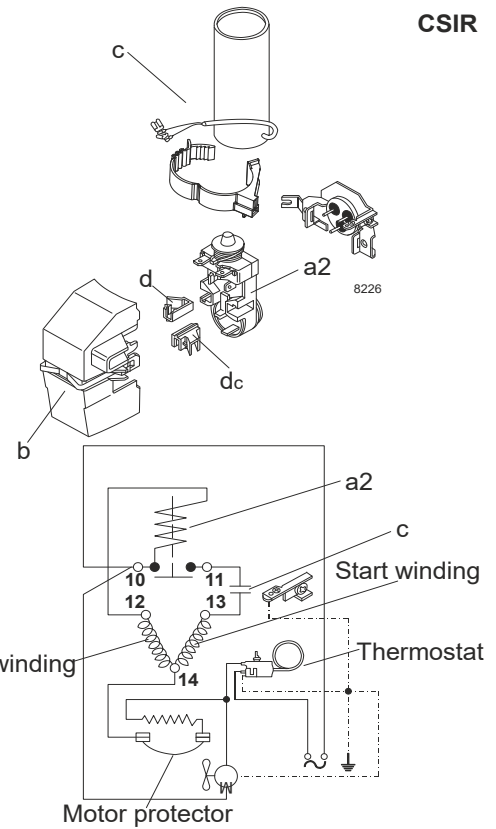
Model

| | | | | | |
|-------------|-----------------|------------------|----------------|-------------|-----------------|
| Designation | NF11FX.2 | 115V/60Hz | Conf. 2 | Sales code: | 105G5916 |
|-------------|-----------------|------------------|----------------|-------------|-----------------|

Configuration

| | |
|------------------------|--------------|
| Motorconfiguration | CSIR |
| Power supply (nominal) | 115V/60Hz 1~ |
| Refrigerant | R513A |
| Application | MBP |
| Voltage range | 95-135V |
| Starting torque | HST |
| Approvals | UL |

Electrical accessories / wiring diagram

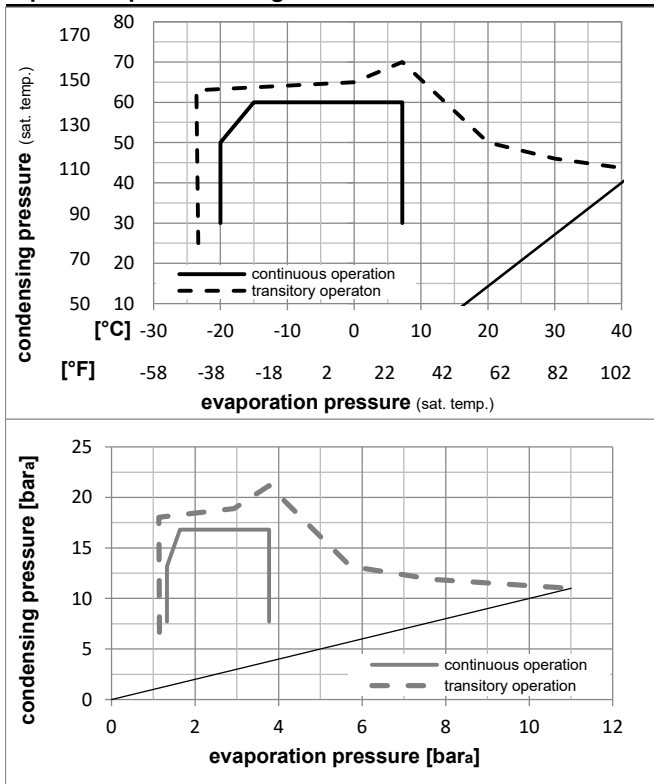


Ambient temperatures / system cooling

| | |
|---------------------------|--------------|
| 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 | n/a | fan 3m/s | n/a |
| 38°C / 100°F | n/a | fan 3m/s | n/a |
| 43°C / 110°F | n/a | fan 3m/s | n/a |

Operation pressure range



Components

| | | |
|------|-----------------------------|----------|
| a2 | assy. Relay (TI MRT16ADK-6) | 117U4151 |
| c | start capacitor (410µF) | 117U5028 |
| b | plastic cover | 117U1021 |
| d/dc | cord relief | 117U0349 |
| d/dc | cord relief | 117U0349 |

Model

Designation **NF11FX.2 115V/60Hz** Conf. **2** Sales code: **105G5916**

Optimization + standard conditions

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

| Evaporating pressure (saturation temperature) | | Condensing pressure (saturation temperature) | | | | Cooling capacity | | | COP | EER | P1 | Current consumption | | Ref. mass flow ṁ | |
|---|------|--|------|-------|---------|------------------|-------|----------|-----------|-------|------|---------------------|--------|---------------------|--|
| pe | pc | RGT | Tliq | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | [W] | I | | [kg/h] | | |
| [°C] | [°C] | [°C] | [°C] | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | [W] | [A] | [kg/h] | | | |
| -23,3 | 54,4 | 32,2 | 32,2 | 424,6 | 1450 | 365,4 | 1,17 | 3,99 | 1,01 | 363,3 | 5,35 | 9,14 | | ASHRAE LBP | |
| [°F] | | | | | | | | | | | | | | | |
| -10 | 130 | 90 | 90 | | | | | | | | | | | | |
| -25 | 55 | 32 | 55 | 301,5 | 1030 | 259,5 | 0,87 | 2,97 | 0,75 | 347,2 | 5,26 | 8,26 | | cecomaf LBP | |
| [°F] | | | | | | | | | | | | | | | |
| -13 | 131 | 89,6 | 131 | | | | | | | | | | | | |
| -35 | 40 | 20 | 40 | 211,9 | 724 | 182,3 | 0,79 | 2,70 | 0,68 | 268,2 | 4,80 | 5,24 | | EN12900 LBP | |
| [°F] | | | | | | | | | | | | | | | |
| -31 | 104 | 68 | 104 | | | | | | | | | | | | |
| -6,66 | 54,4 | 35 | 46,1 | 836,2 | 2856 | 719,6 | 1,62 | 5,55 | 1,40 | 514,8 | 6,23 | 20,48 | | ASHRAE MBP | |
| [°C] | | | | | | | | | | | | | | | |
| 20 | 130 | 95 | 115 | | | | | | | | | | | | |
| -10 | 55 | 32 | 55 | 642,0 | 2193 | 552,5 | 1,32 | 4,52 | 1,14 | 485,5 | 6,06 | 17,75 | | cecomaf MBP | |
| [°F] | | | | | | | | | | | | | | | |
| 14 | 131 | 89,6 | 131 | | | | | | | | | | | | |
| -10 | 45 | 20 | 45 | 727,5 | 2484 | 626,1 | 1,58 | 5,41 | 1,36 | 459,5 | 5,91 | 19,28 | | EN12900 MBP | |
| [°C] | | | | | | | | | | | | | | | |
| 14 | 113 | 68 | 113 | | | | | | | | | | | | |

Performance tables

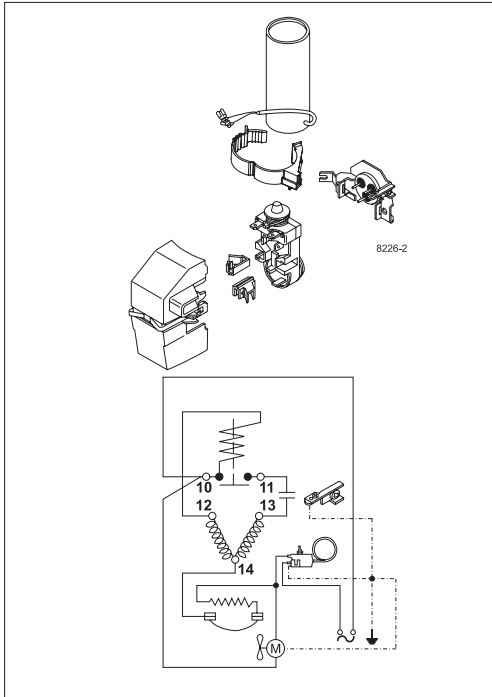
115V/60Hz, CSIR, fan 3m/s, UL

| | 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] | -20 | -4 | 483,4 | 1651 | 416,0 | 1,25 | 4,29 | 1,08 | 385,3 | 5,48 | 11,81 |
| cond. pressure | -15 | 5 | 612,3 | 2091 | 527,0 | 1,45 | 4,95 | 1,25 | 422,2 | 5,69 | 15,00 |
| pc= 45/113 | -9,4 | 15 | 778,5 | 2659 | 670,0 | 1,68 | 5,73 | 1,44 | 463,7 | 5,93 | 19,15 |
| return gas temp. | -6,7 | 20 | 871,4 | 2976 | 749,9 | 1,80 | 6,13 | 1,55 | 485,1 | 6,06 | 21,48 |
| RGT= 32/90 | -3,9 | 25 | 971,2 | 3317 | 835,8 | 1,91 | 6,54 | 1,65 | 507,3 | 6,19 | 24,00 |
| liquid temp | 0 | 32 | 1123,1 | 3836 | 966,6 | 2,08 | 7,10 | 1,79 | 540,2 | 6,38 | 27,86 |
| Tliq= 45/113 | 7,2 | 45 | 1445,7 | 4937 | 1244,2 | 2,38 | 8,11 | 2,04 | 608,6 | 6,77 | 36,16 |
| [°C / °F] | -20 | -4 | 397,2 | 1357 | 341,8 | 1,01 | 3,44 | 0,87 | 394,4 | 5,53 | 10,91 |
| cond. pressure | -15 | 5 | 510,1 | 1742 | 439,0 | 1,16 | 3,96 | 1,00 | 440,0 | 5,80 | 14,05 |
| pc= 55/131 | -9,4 | 15 | 657,9 | 2247 | 566,2 | 1,34 | 4,58 | 1,15 | 490,6 | 6,09 | 18,20 |
| return gas temp | -6,7 | 20 | 741,4 | 2532 | 638,0 | 1,44 | 4,90 | 1,24 | 516,4 | 6,24 | 20,56 |
| RGT= 32/90 | -3,9 | 25 | 831,6 | 2840 | 715,6 | 1,53 | 5,23 | 1,32 | 542,9 | 6,39 | 23,12 |
| liquid temp | 0 | 32 | 969,7 | 3312 | 834,5 | 1,67 | 5,70 | 1,44 | 581,4 | 6,62 | 27,08 |
| Tliq= 55/131 | 7,2 | 45 | 1265,7 | 4323 | 1089,3 | 1,92 | 6,55 | 1,65 | 659,7 | 7,07 | 35,68 |



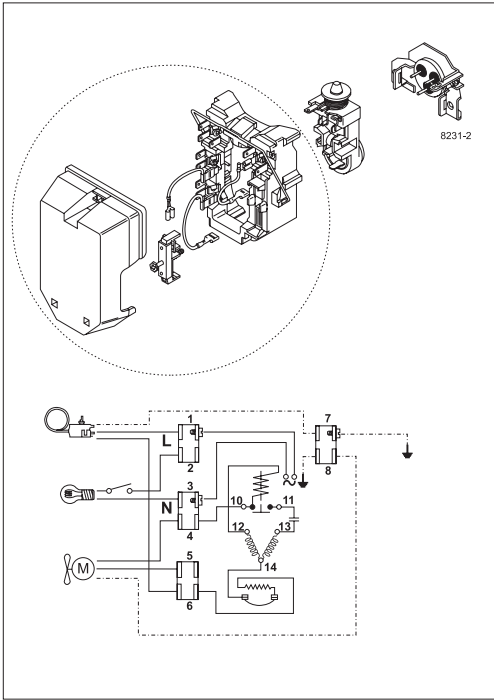
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NF Compressors





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