

Single Pack NF10FX 220-240V 50Hz / 208-230V 60Hz CSIR

Single pack code number: **195B4479**

| Position | Title | Code | Amount |
|----------|---|----------|--------|
| 1 | Compressor NF10FX | 105G6846 | 1 |
| 2 | Starting relay (overload protector MRP56EN-6) | 117U4139 | 1 |
| 3 | Starting capacitor (125µF 220V, 6.3mm) | 117U5018 | 1 |
| 4 | Cord relief | 117U0317 | 1 |
| 5 | Cord relief | 117U0349 | 1 |
| 6 | Cover | 117U1021 | 1 |
| 7 | Bolt joint for one compressor M6 ø16mm | 118-1917 | 1 |

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Model

| | | | | |
|-------------|---------------|--|-------------|-----------------|
| Designation | NF10FX | 220-240V/50Hz 1~ 208-230V/60Hz 1~ | Sales code: | 105G6846 |
|-------------|---------------|--|-------------|-----------------|

Compressor design

| | | | |
|----------------------------|---------------------------------|-----------------------|----------------------------------|
| Oil type | Polyolester | Refrigerant(s) | R134a, R513A, 0 |
| 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 | 10,5kg / 23,1lbs | | |
| Motor protection | external | | |
| Winding resistance main | 4,5Ω (at 25°C) | | |
| Winding resistance aux | 12,8Ω (at 25°C) | | |
| Max. winding temp. | 125°C / 257°F | | |
| Max. discharge temp. | 110°C / 230°F | | |



General - Configurations with NF10FX

| | Conf. 1 | Conf. 2 | Conf. 3 | Conf. 4 |
|------------------------|-------------------|-------------------|-------------------|-------------------|
| Motorconfiguration | CSIR | CSIR | CSIR | CSIR |
| Power supply (nominal) | 220-240V/50Hz | 220-240V/50Hz | 208-230V/60Hz | 208-230V/60Hz |
| Number of phases | 1 | 1 | 1 | 1 |
| Voltage range | 198-242V | 198-242V | 198-242V | 198-242V |
| Approvals | UL, VDE, CCC, EAC | UL, VDE, CCC, EAC | UL, VDE, CCC, EAC | UL, VDE, CCC, EAC |
| Starting torque | HST | HST | HST | HST |
| Note | - / - | | | |

Applications with NF10FX

| | Conf. 1 | Conf. 2 | Conf. 3 | Conf. 4 |
|-------------------------|----------------|----------------|----------------|----------------|
| Refrigerant | R134a | R513A | R134a | R513A |
| Application | LBP+MBP | LBP+MBP | LBP+MBP | LBP+MBP |
| System cooling | fan 1,5m/s | fan 1,5m/s | fan 3m/s | fan 3m/s |
| Hot gas defrost | OK | OK | OK | OK |
| Long interval pull down | OK | OK | OK | OK |

Electrical data - Configurations with NF10FX

| | Conf. 1 | Conf. 2 | Conf. 3 | Conf. 4 |
|------------------------------------|----------------|----------------|----------------|----------------|
| Starting device type | relay | relay | relay | relay |
| Run capacitor | - / - | - / - | - / - | - / - |
| Start capacitor | 125μF | 125μF | 125μF | 125μF |
| LRA (locked rotor amps / 4s/ U(N)) | 20A | 20A | 19,4A | 19,4A |
| RLA (rated load amps / 1s/ U(N)) | 3,7A | 3,7A | 3,24A | 3,24A |
| Cut in current (U(N)) | 20A | 20A | 19,4A | 19,4A |

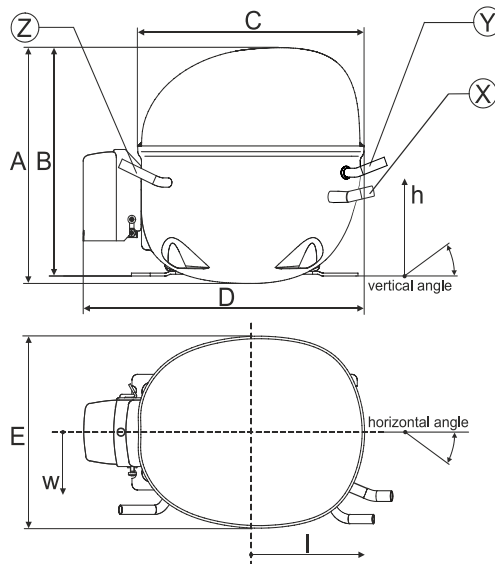
Model

| | | | | |
|-------------|---------------|-----------------------------------|-------------|-----------------|
| Designation | NF10FX | 220-240V/50Hz 1~ 208-230V/60Hz 1~ | Sales code: | 105G6846 |
|-------------|---------------|-----------------------------------|-------------|-----------------|

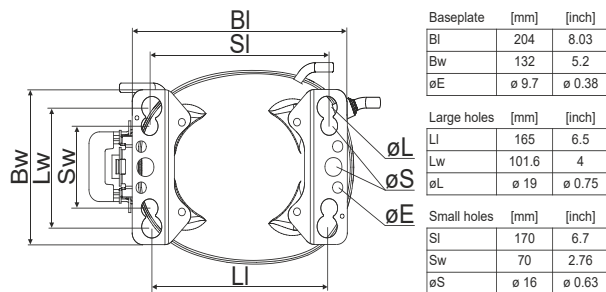
Compressor dimensions

| | | |
|----------------|-------------------|----------------|
| 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 |

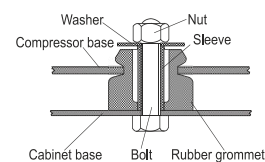
| Connectors | | Suction | Discharge | Process |
|-----------------------|------|--------------|--------------|--------------|
| | | X | Y | Z |
| Diameter | [mm] | øi 8,11-8,29 | øi 6,41-6,59 | øi 6,41-6,59 |
| (i:inside, o:outside) | [in] | øi 0,32-0,33 | øi 0,25-0,26 | øi 0,25-0,26 |
| Material |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



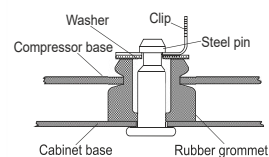
Compressor fixation



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

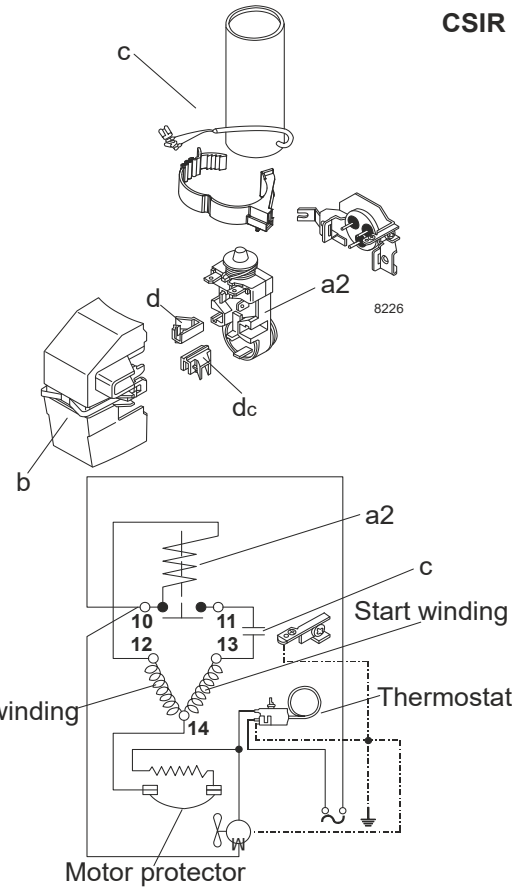
Model

| | | | | | |
|-------------|---------------|----------------------|----------------|-------------|-----------------|
| Designation | NF10FX | 220-240V/50Hz | Conf. 1 | Sales code: | 105G6846 |
|-------------|---------------|----------------------|----------------|-------------|-----------------|

Configuration

| | | |
|------------------------|------------------|--------|
| Motor configuration | CSIR | |
| Power supply (nominal) | 220-240V/50Hz 1~ | |
| Refrigerant | R134a | |
| Application | LBP+MBP | |
| Voltage range | 198-242V | |
| Starting torque | HST | |
| Approvals | UL | SA3693 |
| | VDE | |
| | CCC | |
| | EAC | |

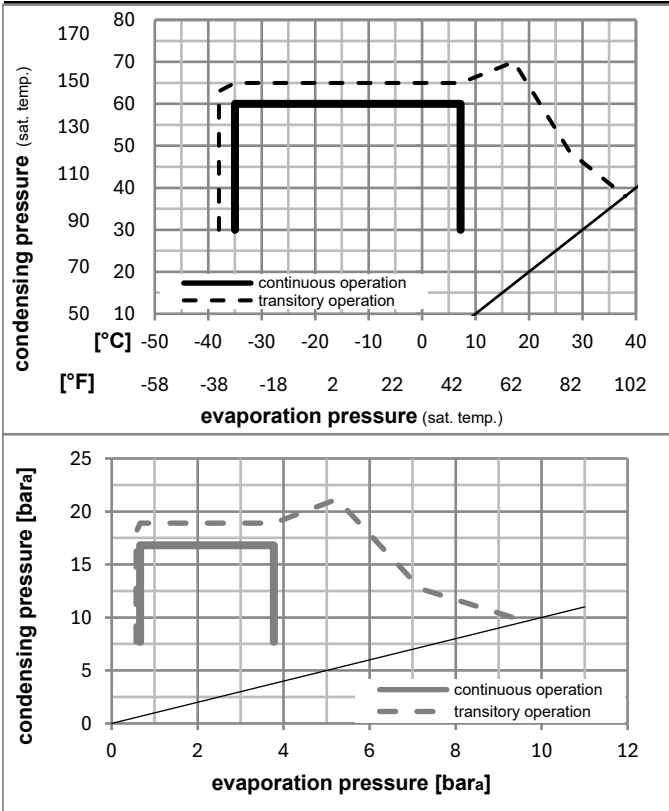
Electrical accessories / wiring diagram



Ambient/ machine room temperatures minimum /maximum

| | |
|---------------------------------|------------------------|
| Ambient temperature range: | 10 - 38°C / 50 - 101°F |
| Machine room temperature range: | 10 - 43°C / 50 - 110°F |
| Compressor cooling: | fan 1,5m/s |

Operation pressure range



Components

| | | |
|------|---------------------------------|----------|
| a2 | relay (protector: TI MRP56EN-6) | 117U4139 |
| c | start capacitor | 117U5018 |
| b | plastic cover | 117U1021 |
| d/dc | cord relief | 117U0349 |
| d/dc | cord relief | 117U0349 |

Alternative components

| | | |
|------|---------------------------------|----------|
| a2 | relay (protector: TI MRP56EN-6) | 117U4139 |
| c | start capacitor | 117U5018 |
| b | plastic cover | 117U1021 |
| d/dc | cord relief | 117U0349 |
| d | cord relief | 117U0317 |

Model

Designation **NF10FX** **220-240V/50Hz** Conf. 1 Sales code: **105G6846**

Optimization + standard conditions

R134a, 220V/50Hz, CSIR, fan 1,5m/s, UL, VDE, CCC, EAC

| | Evaporating pressure (saturation temperature) | | | | Condensing pressure (saturation temperature) | | | Return gas temp. | | | Liquid temp. | | | Cooling capacity | | | COP | EER | Power consumption | | |
|-------------|---|------|------|------|--|---------|----------|------------------|----------|-----------|--------------|------|---------------------|------------------|----------------|--|-----|-----|-------------------|--|--|
| | pe | pc | RGT | Tliq | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | P1 | I | Current consumption | | Ref. mass flow | | | | | | |
| | [°C] | [°C] | [°C] | [°C] | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | [W] | [A] | [A] | | [kg/h] | | | | | | |
| ASHRAE LBP | -23 | 54 | 32 | 32 | 266,5 | 910 | 229,4 | 0,94 | 3,22 | 0,81 | 282,7 | 2,75 | 5,18 | | | | | | | | |
| | [°F] | [°F] | [°F] | [°F] | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | [W] | [A] | [A] | | [kg/h] | | | | | | |
| cecomaf LBP | -25 | 55 | 32 | 55 | 196,4 | 671 | 169,0 | 0,72 | 2,47 | 0,62 | 271,1 | 2,73 | 4,70 | | | | | | | | |
| | [°C] | [°C] | [°C] | [°C] | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | [W] | [A] | [A] | | [kg/h] | | | | | | |
| | [°F] | [°F] | [°F] | [°F] | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | [W] | [A] | [A] | | [kg/h] | | | | | | |
| EN12900 LBP | -35 | 40 | 20 | 40 | 137,8 | 471 | 118,6 | 0,65 | 2,24 | 0,56 | 210,6 | 2,67 | 3,02 | | | | | | | | |
| | [°C] | [°C] | [°C] | [°C] | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | [W] | [A] | [A] | | [kg/h] | | | | | | |
| | [°F] | [°F] | [°F] | [°F] | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | [W] | [A] | [A] | | [kg/h] | | | | | | |
| ASHRAE MBP | -7 | 54 | 35 | 46 | 556,9 | 1902 | 479,3 | 1,42 | 4,86 | 1,23 | 391,1 | 2,96 | 12,15 | | | | | | | | |
| | [°C] | [°C] | [°C] | [°C] | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | [W] | [A] | [A] | | [kg/h] | | | | | | |
| | [°F] | [°F] | [°F] | [°F] | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | [W] | [A] | [A] | | [kg/h] | | | | | | |
| cecomaf MBP | -10 | 55 | 32 | 55 | 432,5 | 1477 | 372,2 | 1,17 | 4,01 | 1,01 | 368,4 | 2,91 | 10,46 | | | | | | | | |
| | [°C] | [°C] | [°C] | [°C] | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | [W] | [A] | [A] | | [kg/h] | | | | | | |
| | [°F] | [°F] | [°F] | [°F] | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | [W] | [A] | [A] | | [kg/h] | | | | | | |
| EN12900 MBP | -10 | 45 | 20 | 45 | 479,1 | 1636 | 412,3 | 1,34 | 4,58 | 1,15 | 357,3 | 2,85 | 11,21 | | | | | | | | |
| | [°C] | [°C] | [°C] | [°C] | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | [W] | [A] | [A] | | [kg/h] | | | | | | |
| | [°F] | [°F] | [°F] | [°F] | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | [W] | [A] | [A] | | [kg/h] | | | | | | |

Performance tables

R134a, 220V/50Hz, CSIR, fan 1,5m/s, UL, 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 | 128,4 | 439 | 110,5 | 0,60 | 2,05 | 0,52 | 213,8 | 2,67 | 2,77 |
| cond. pressure | -23 | -10 | 254,9 | 870 | 219,3 | 0,91 | 3,11 | 0,78 | 279,6 | 2,74 | 5,53 |
| pc= 45/113 | -15 | 5 | 392,2 | 1340 | 337,6 | 1,20 | 4,08 | 1,03 | 328,2 | 2,81 | 8,55 |
| return gas temp. | -9 | 15 | 509,8 | 1741 | 438,7 | 1,41 | 4,83 | 1,22 | 360,5 | 2,86 | 11,16 |
| RGT= 32/90 | -4 | 25 | 650,6 | 2222 | 559,9 | 1,66 | 5,67 | 1,43 | 392,2 | 2,92 | 14,32 |
| liquid temp | 0 | 32 | 764,2 | 2610 | 657,7 | 1,85 | 6,31 | 1,59 | 413,8 | 2,96 | 16,90 |
| Tliq= 45/113 | 7,2 | 45 | 1010,7 | 3452 | 869,9 | 2,24 | 7,63 | 1,92 | 452,2 | 3,05 | 22,58 |
| [°C / °F] | -35 | -31 | 103,5 | 353 | 89,0 | 0,49 | 1,67 | 0,42 | 211,0 | 2,65 | 2,46 |
| cond. pressure | -23 | -10 | 216,4 | 739 | 186,2 | 0,77 | 2,62 | 0,66 | 281,6 | 2,74 | 5,18 |
| pc= 55/131 | -15 | 5 | 338,8 | 1157 | 291,6 | 1,01 | 3,45 | 0,87 | 335,4 | 2,84 | 8,16 |
| return gas temp | -9 | 15 | 443,9 | 1516 | 382,1 | 1,19 | 4,08 | 1,03 | 372,1 | 2,92 | 10,74 |
| RGT= 32/90 | -4 | 25 | 570,4 | 1948 | 490,9 | 1,40 | 4,77 | 1,20 | 408,8 | 3,01 | 13,88 |
| liquid temp | 0 | 32 | 672,8 | 2298 | 579,0 | 1,55 | 5,29 | 1,33 | 434,3 | 3,07 | 16,46 |
| Tliq= 55/131 | 7,2 | 45 | 896,1 | 3060 | 771,2 | 1,86 | 6,36 | 1,60 | 480,8 | 3,21 | 22,16 |

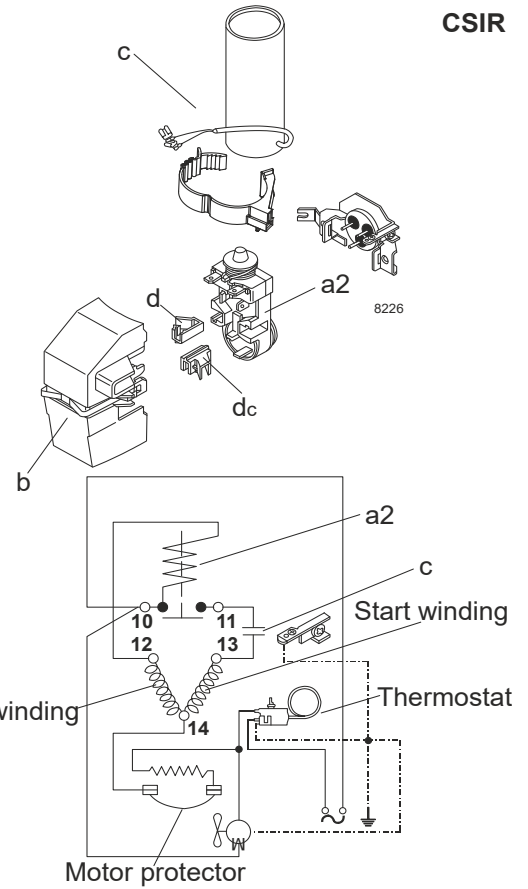
Model

| | | | | | |
|-------------|---------------|----------------------|----------------|-------------|-----------------|
| Designation | NF10FX | 220-240V/50Hz | Conf. 2 | Sales code: | 105G6846 |
|-------------|---------------|----------------------|----------------|-------------|-----------------|

Configuration

| | | |
|------------------------|------------------|--------|
| Motor configuration | CSIR | |
| Power supply (nominal) | 220-240V/50Hz 1~ | |
| Refrigerant | R513A | |
| Application | LBP+MBP | |
| Voltage range | 198-242V | |
| Starting torque | HST | |
| Approvals | UL | SA3693 |
| | VDE | |
| | CCC | |
| | EAC | |

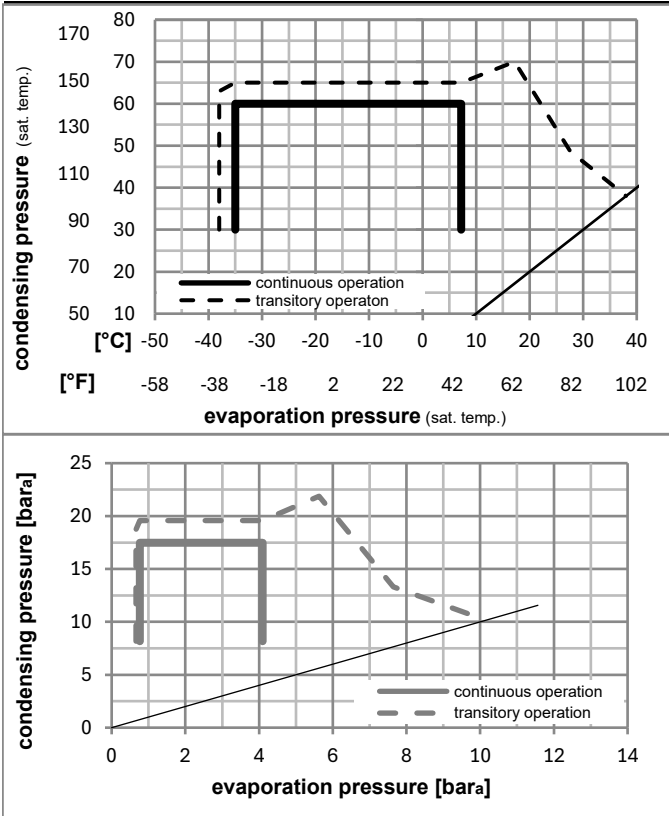
Electrical accessories / wiring diagram



Ambient/ machine room temperatures minimum /maximum

| | |
|---------------------------------|------------------------|
| Ambient temperature range: | 10 - 38°C / 50 - 101°F |
| Machine room temperature range: | 10 - 43°C / 50 - 110°F |
| Compressor cooling: | fan 1,5m/s |

Operation pressure range



Components

| | | |
|------|---------------------------------|----------|
| a2 | relay (protector: TI MRP56EN-6) | 117U4139 |
| c | start capacitor | 117U5018 |
| b | plastic cover | 117U1021 |
| d/dc | cord relief | 117U0349 |
| d/dc | cord relief | 117U0349 |

Alternative components

| | | |
|------|---------------------------------|----------|
| a2 | relay (protector: TI MRP56EN-6) | 117U4139 |
| c | start capacitor | 117U5018 |
| b | plastic cover | 117U1021 |
| d/dc | cord relief | 117U0349 |
| d | cord relief | 117U0317 |

Model

Designation **NF10FX** **220-240V/50Hz** Conf. 2 Sales code: **105G6846**

Optimization + standard conditions

R513A, 220V/50Hz, CSIR, fan 1,5m/s, UL, VDE, CCC, EAC

| | 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] | -23 | 54 | 32 | 32 | 294,2 | 1005 | 253,2 | 0,95 | 3,25 | 0,82 | 309,2 | 2,77 | 6,33 | |
| [°F] | -10 | 130 | 90 | 90 | | | | | | | | | | |
| [°C] | -25 | 55 | 32 | 55 | 211,0 | 721 | 181,6 | 0,71 | 2,42 | 0,61 | 297,7 | 2,75 | 5,78 | cecomaf LBP |
| [°F] | -13 | 131 | 90 | 131 | | | | | | | | | | |
| [°C] | -35 | 40 | 20 | 40 | 153,1 | 523 | 131,8 | 0,65 | 2,23 | 0,56 | 234,3 | 2,62 | 3,79 | EN12900 LBP |
| [°F] | -31 | 104 | 68 | 104 | | | | | | | | | | |
| [°C] | -7 | 54 | 35 | 46 | 583,4 | 1992 | 502,1 | 1,40 | 4,78 | 1,21 | 416,4 | 2,98 | 14,29 | ASHRAE MBP |
| [°F] | 20 | 130 | 95 | 115 | | | | | | | | | | |
| [°C] | -10 | 55 | 32 | 55 | 447,7 | 1529 | 385,3 | 1,14 | 3,88 | 0,98 | 393,9 | 2,94 | 12,38 | cecomaf MBP |
| [°F] | 14 | 131 | 90 | 131 | | | | | | | | | | |
| [°C] | -10 | 45 | 20 | 45 | 499,9 | 1707 | 430,2 | 1,31 | 4,48 | 1,13 | 381,3 | 2,91 | 13,25 | EN12900 MBP |
| [°F] | 14 | 113 | 68 | 113 | | | | | | | | | | |

Performance tables

R513A, 220V/50Hz, CSIR, fan 1,5m/s, UL, VDE, CCC, EAC

| | pe | | Cooling capacity | | | COP | EER | P1 | I | m | |
|------------------|------|------|------------------|---------|----------|------|------|------|-------|------|-------|
| | [°C] | [°F] | [W] | [Btu/h] | [kcal/h] | | | | | | |
| [°C / °F] | -35 | -31 | 143,8 | 491 | 123,8 | 0,60 | 2,05 | 0,52 | 239,0 | 2,63 | 3,49 |
| cond. pressure | -23 | -10 | 275,5 | 941 | 237,1 | 0,91 | 3,09 | 0,78 | 304,3 | 2,76 | 6,72 |
| pc= 45/113 | -15 | 5 | 416,3 | 1422 | 358,3 | 1,18 | 4,03 | 1,02 | 352,5 | 2,86 | 10,20 |
| return gas temp. | -9 | 15 | 535,6 | 1829 | 461,0 | 1,39 | 4,76 | 1,20 | 384,5 | 2,92 | 13,17 |
| RGT= 32/90 | -4 | 25 | 677,5 | 2314 | 583,1 | 1,63 | 5,57 | 1,40 | 415,7 | 2,98 | 16,74 |
| liquid temp | 0 | 32 | 791,3 | 2703 | 681,0 | 1,81 | 6,19 | 1,56 | 436,9 | 3,02 | 19,63 |
| Tliq= 45/113 | 7,2 | 45 | 1037,0 | 3542 | 892,5 | 2,19 | 7,47 | 1,88 | 474,2 | 3,10 | 25,94 |
| [°C / °F] | -35 | -31 | 116,0 | 396 | 99,8 | 0,49 | 1,66 | 0,42 | 238,4 | 2,63 | 3,16 |
| cond. pressure | -23 | -10 | 231,2 | 790 | 199,0 | 0,75 | 2,56 | 0,65 | 308,1 | 2,77 | 6,34 |
| pc= 55/131 | -15 | 5 | 354,3 | 1210 | 305,0 | 0,98 | 3,35 | 0,84 | 361,4 | 2,87 | 9,76 |
| return gas temp | -9 | 15 | 459,1 | 1568 | 395,1 | 1,15 | 3,94 | 0,99 | 397,6 | 2,95 | 12,70 |
| RGT= 32/90 | -4 | 25 | 584,3 | 1995 | 502,8 | 1,35 | 4,60 | 1,16 | 433,8 | 3,02 | 16,25 |
| liquid temp | 0 | 32 | 685,1 | 2340 | 589,6 | 1,49 | 5,10 | 1,28 | 458,9 | 3,07 | 19,13 |
| Tliq= 55/131 | 7,2 | 45 | 903,8 | 3087 | 777,8 | 1,79 | 6,12 | 1,54 | 504,3 | 3,16 | 25,48 |

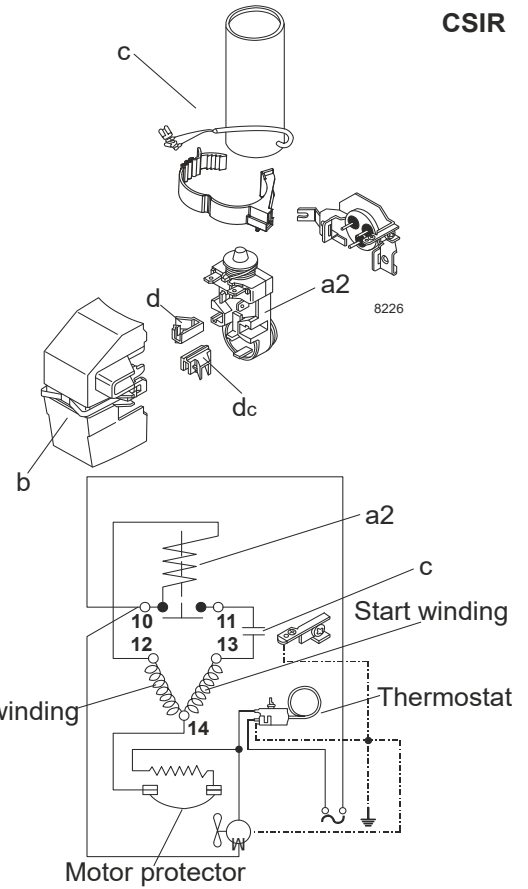
Model

| | | | | | |
|-------------|---------------|----------------------|----------------|-------------|-----------------|
| Designation | NF10FX | 208-230V/60Hz | Conf. 3 | Sales code: | 105G6846 |
|-------------|---------------|----------------------|----------------|-------------|-----------------|

Configuration

| | | |
|------------------------|------------------|--------|
| Motor configuration | CSIR | |
| Power supply (nominal) | 208-230V/60Hz 1~ | |
| Refrigerant | R134a | |
| Application | LBP+MBP | |
| Voltage range | 198-242V | |
| Starting torque | HST | |
| Approvals | UL | SA3693 |
| | VDE | |
| | CCC | |
| | EAC | |

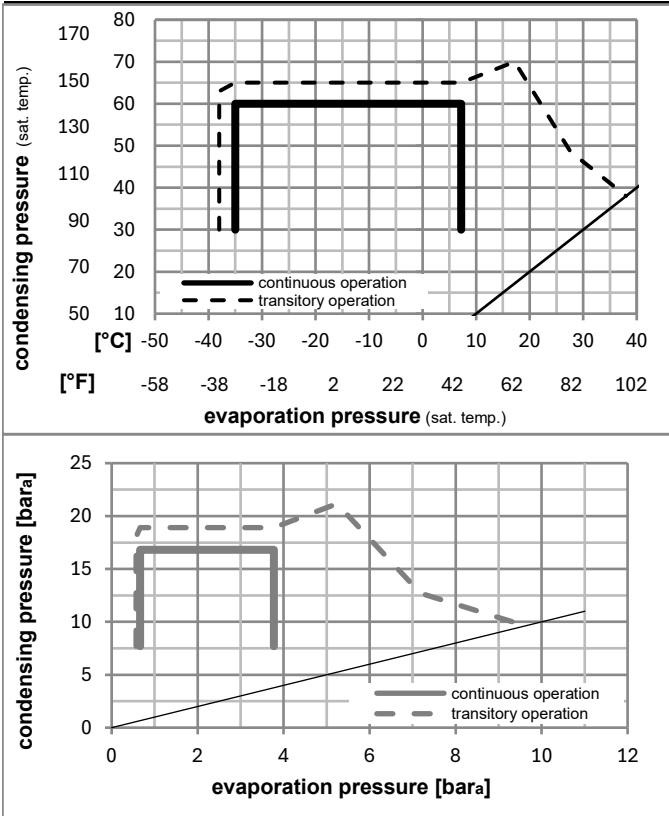
Electrical accessories / wiring diagram



Ambient/ machine room temperatures minimum /maximum

| | |
|---------------------------------|------------------------|
| Ambient temperature range: | 10 - 38°C / 50 - 101°F |
| Machine room temperature range: | 10 - 43°C / 50 - 110°F |
| Compressor cooling: | fan 3m/s |

Operation pressure range



Components

| | | |
|------|---------------------------------|----------|
| a2 | relay (protector: TI MRP56EN-6) | 117U4139 |
| c | start capacitor | 117U5018 |
| b | plastic cover | 117U1021 |
| d/dc | cord relief | 117U0349 |
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Alternative components

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| c | start capacitor | 117U5018 |
| b | plastic cover | 117U1021 |
| d/dc | cord relief | 117U0349 |
| d | cord relief | 117U0317 |

Model

Designation **NF10FX** **208-230V/60Hz** Conf. **3** Sales code: **105G6846**

Optimization + standard conditions

R134a, 230V/60Hz, CSIR, fan 3m/s, UL, VDE, CCC, EAC

| | Evaporating pressure (saturation temperature) | | | | Cooling capacity | | | COP | EER | | | Power consumption | | | ASHRAE LBP |
|--|---|------|------|------|------------------|---------|----------|------|-------|----------|-----------|-------------------|--------|-------------|------------|
| | pe | pc | RGT | Tliq | [W] | [Btu/h] | [kcal/h] | | [W/W] | [Btu/Wh] | [kcal/Wh] | P1 | I | m | |
| | [°C] | [°C] | [°C] | [°C] | | | | | | | [W] | [A] | [kg/h] | | |
| | -23 | 54 | 32 | 32 | 299,0 | 1021 | 257,4 | 1,14 | 3,90 | 0,98 | 262,0 | 1,86 | 5,81 | | |
| | [°F] | | | | | | | | | | | | | | |
| | -10 | 130 | 90 | 90 | | | | | | | | | | | |
| | [°C] | | | | | | | | | | | | | ASHRAE LBP | |
| | [°F] | | | | | | | | | | | | | | |
| | -25 | 55 | 32 | 55 | 223,1 | 762 | 192,0 | 0,89 | 3,03 | 0,76 | 251,1 | 1,82 | 5,33 | cecomaf LBP | |
| | [°C] | | | | | | | | | | | | | | |
| | [°F] | | | | | | | | | | | | | | |
| | -13 | 131 | 90 | 131 | | | | | | | | | | | |
| | [°C] | | | | | | | | | | | | | EN12900 LBP | |
| | [°F] | | | | | | | | | | | | | | |
| | -35 | 40 | 20 | 40 | 157,5 | 538 | 135,5 | 0,92 | 3,14 | 0,79 | 171,0 | 1,67 | 3,46 | | |
| | [°C] | | | | | | | | | | | | | | |
| | [°F] | | | | | | | | | | | | | | |
| | -31 | 104 | 68 | 104 | | | | | | | | | | | |
| | [°C] | | | | | | | | | | | | | ASHRAE MBP | |
| | [°F] | | | | | | | | | | | | | | |
| | -7 | 54 | 35 | 46 | 584,8 | 1997 | 503,3 | 1,53 | 5,23 | 1,32 | 381,6 | 2,27 | 12,76 | | |
| | [°C] | | | | | | | | | | | | | | |
| | [°F] | | | | | | | | | | | | | | |
| | 20 | 130 | 95 | 115 | | | | | | | | | | | |
| | [°C] | | | | | | | | | | | | | cecomaf MBP | |
| | [°F] | | | | | | | | | | | | | | |
| | -10 | 55 | 32 | 55 | 455,7 | 1556 | 392,2 | 1,28 | 4,37 | 1,10 | 356,6 | 2,18 | 11,02 | | |
| | [°C] | | | | | | | | | | | | | | |
| | [°F] | | | | | | | | | | | | | | |
| | 14 | 131 | 90 | 131 | | | | | | | | | | | |
| | [°C] | | | | | | | | | | | | | EN12900 MBP | |
| | [°F] | | | | | | | | | | | | | | |
| | -10 | 45 | 20 | 45 | 505,0 | 1725 | 434,6 | 1,48 | 5,07 | 1,28 | 340,3 | 2,12 | 11,82 | | |
| | [°C] | | | | | | | | | | | | | | |
| | [°F] | | | | | | | | | | | | | | |
| | 14 | 113 | 68 | 113 | | | | | | | | | | | |

Performance tables

R134a, 230V/60Hz, CSIR, fan 3m/s, UL, VDE, CCC, EAC

| | pe | | Cooling capacity | | | COP | EER | | P1 | I | m |
|------------------|------|------|------------------|---------|----------|------|-------|----------|-------|------|-------|
| | [°C] | [°F] | [W] | [Btu/h] | [kcal/h] | | [W/W] | [Btu/Wh] | | | |
| [°C / °F] | -35 | -31 | 144,8 | 495 | 124,6 | 0,83 | 2,83 | 0,71 | 174,7 | 1,66 | 3,12 |
| cond. pressure | -23 | -10 | 276,5 | 944 | 238,0 | 1,08 | 3,70 | 0,93 | 255,5 | 1,84 | 6,00 |
| pc= 45/113 | -15 | 5 | 415,1 | 1418 | 357,3 | 1,35 | 4,60 | 1,16 | 308,5 | 2,01 | 9,05 |
| return gas temp. | -9 | 15 | 537,4 | 1835 | 462,5 | 1,56 | 5,34 | 1,34 | 343,9 | 2,13 | 11,77 |
| RGT= 32/90 | -4 | 25 | 689,2 | 2354 | 593,2 | 1,81 | 6,18 | 1,56 | 381,0 | 2,26 | 15,17 |
| liquid temp | 0 | 32 | 815,7 | 2786 | 702,0 | 2,00 | 6,82 | 1,72 | 408,5 | 2,36 | 18,04 |
| Tliq= 45/113 | 7,2 | 45 | 1100,9 | 3760 | 947,4 | 2,37 | 8,09 | 2,04 | 465,0 | 2,56 | 24,59 |
| [°C / °F] | -35 | -31 | 121,9 | 416 | 104,9 | 0,67 | 2,28 | 0,57 | 182,6 | 1,62 | 2,90 |
| cond. pressure | -23 | -10 | 242,9 | 830 | 209,1 | 0,93 | 3,16 | 0,80 | 262,3 | 1,86 | 5,81 |
| pc= 55/131 | -15 | 5 | 362,7 | 1239 | 312,1 | 1,13 | 3,87 | 0,98 | 319,8 | 2,05 | 8,73 |
| return gas temp | -9 | 15 | 467,3 | 1596 | 402,1 | 1,30 | 4,42 | 1,11 | 360,8 | 2,20 | 11,30 |
| RGT= 32/90 | -4 | 25 | 597,2 | 2040 | 514,0 | 1,47 | 5,03 | 1,27 | 405,3 | 2,35 | 14,54 |
| liquid temp | 0 | 32 | 705,9 | 2411 | 607,5 | 1,61 | 5,49 | 1,38 | 439,3 | 2,47 | 17,27 |
| Tliq= 55/131 | 7,2 | 45 | 952,7 | 3254 | 819,9 | 1,87 | 6,38 | 1,61 | 510,2 | 2,70 | 23,56 |

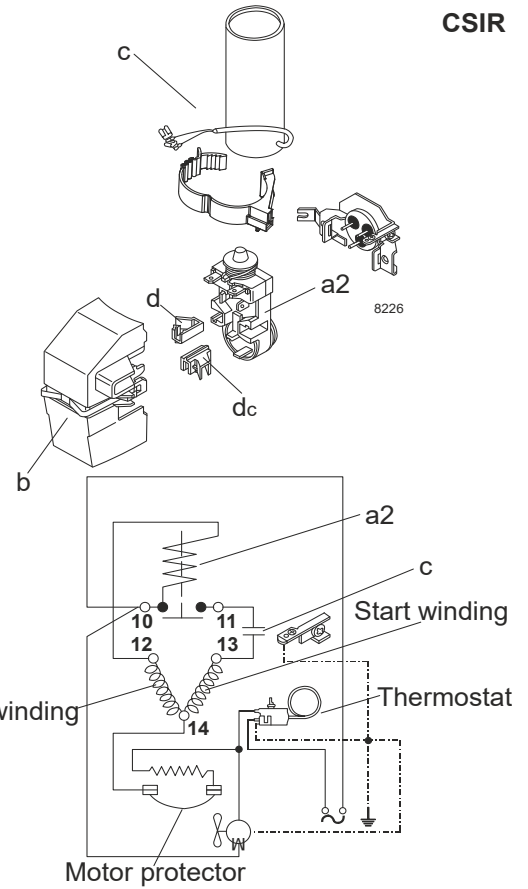
Model

| | | | | | |
|-------------|---------------|----------------------|----------------|-------------|-----------------|
| Designation | NF10FX | 208-230V/60Hz | Conf. 4 | Sales code: | 105G6846 |
|-------------|---------------|----------------------|----------------|-------------|-----------------|

Configuration

| | | |
|------------------------|------------------|--------|
| Motor configuration | CSIR | |
| Power supply (nominal) | 208-230V/60Hz 1~ | |
| Refrigerant | R513A | |
| Application | LBP+MBP | |
| Voltage range | 198-242V | |
| Starting torque | HST | |
| Approvals | UL | SA3693 |
| | VDE | |
| | CCC | |
| | EAC | |

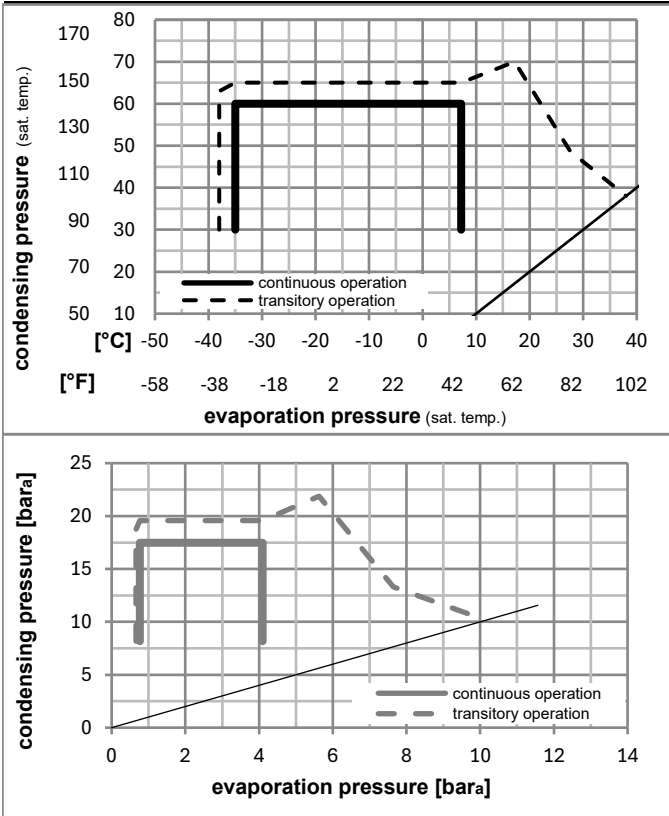
Electrical accessories / wiring diagram



Ambient/ machine room temperatures minimum /maximum

| | |
|---------------------------------|------------------------|
| Ambient temperature range: | 10 - 38°C / 50 - 101°F |
| Machine room temperature range: | 10 - 43°C / 50 - 110°F |
| Compressor cooling: | fan 3m/s |

Operation pressure range



Components

| | | |
|------|---------------------------------|----------|
| a2 | relay (protector: TI MRP56EN-6) | 117U4139 |
| c | start capacitor | 117U5018 |
| b | plastic cover | 117U1021 |
| d/dc | cord relief | 117U0349 |
| d/dc | cord relief | 117U0349 |

Alternative components

| | | |
|------|---------------------------------|----------|
| a2 | relay (protector: TI MRP56EN-6) | 117U4139 |
| c | start capacitor | 117U5018 |
| b | plastic cover | 117U1021 |
| d/dc | cord relief | 117U0349 |
| d | cord relief | 117U0317 |

Model

Designation **NF10FX** **208-230V/60Hz** Conf. 4 Sales code: **105G6846**

Optimization + standard conditions

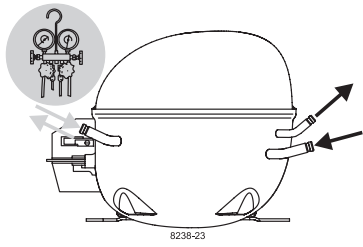
R513A, 230V/60Hz, CSIR, fan 3m/s, UL, VDE, CCC, EAC

| | 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] | | | | | | | | | | | | | | | | |
| | -23 | 54 | 32 | 32 | 330,1 | 1127 | 284,1 | 1,15 | 3,94 | 0,99 | 286,4 | 1,95 | 7,10 | ASHRAE LBP | | |
| | -10 | 130 | 90 | 90 | | | | | | | | | | | | |
| | -25 | 55 | 32 | 55 | 239,6 | 818 | 206,2 | 0,87 | 2,97 | 0,75 | 275,6 | 1,91 | 6,56 | cecomaf LBP | | |
| | -13 | 131 | 90 | 131 | | | | | | | | | | | | |
| | -35 | 40 | 20 | 40 | 176,3 | 602 | 151,7 | 0,93 | 3,18 | 0,80 | 189,6 | 1,63 | 4,36 | EN12900 LBP | | |
| | -31 | 104 | 68 | 104 | | | | | | | | | | | | |
| | -7 | 54 | 35 | 46 | 613,1 | 2094 | 527,7 | 1,51 | 5,15 | 1,30 | 406,4 | 2,34 | 15,02 | ASHRAE MBP | | |
| | 20 | 130 | 95 | 115 | | | | | | | | | | | | |
| | -10 | 55 | 32 | 55 | 472,3 | 1613 | 406,4 | 1,24 | 4,23 | 1,07 | 381,4 | 2,26 | 13,06 | cecomaf MBP | | |
| | 14 | 131 | 90 | 131 | | | | | | | | | | | | |
| | -10 | 45 | 20 | 45 | 527,3 | 1801 | 453,8 | 1,45 | 4,96 | 1,25 | 363,2 | 2,20 | 13,98 | EN12900 MBP | | |
| | 14 | 113 | 68 | 113 | | | | | | | | | | | | |

Performance tables

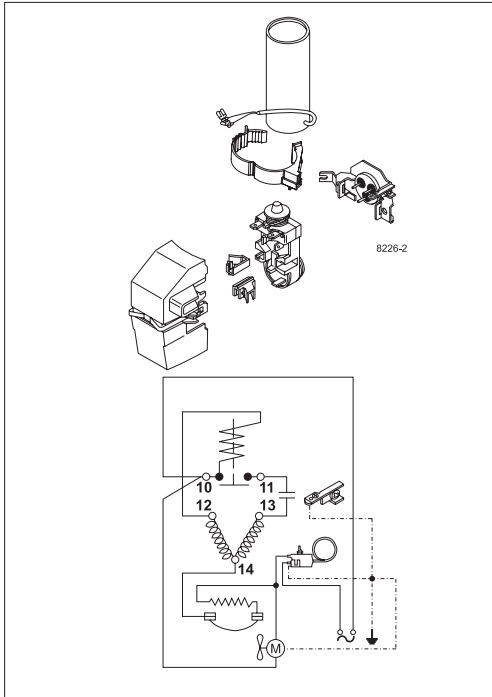
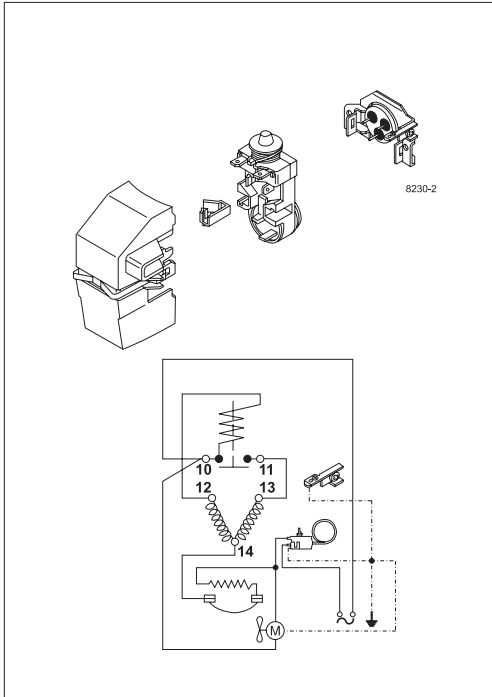
R513A, 230V/60Hz, CSIR, fan 3m/s, UL, VDE, CCC, EAC

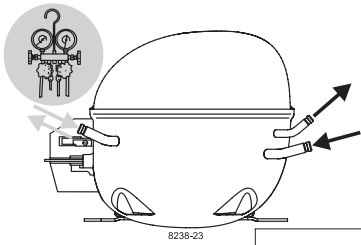
| | pe | | Cooling capacity | | | COP | EER | P1 | I | m | |
|------------------|------|------|------------------|---------|----------|-------|----------|-----------|-------|------|--------|
| | [°C] | [°F] | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | [W] | [A] | [kg/h] |
| [°C / °F] | -35 | -31 | 163,6 | 559 | 140,8 | 0,84 | 2,87 | 0,72 | 194,6 | 1,64 | 3,97 |
| cond. pressure | -23 | -10 | 299,1 | 1021 | 257,4 | 1,08 | 3,68 | 0,93 | 277,7 | 1,92 | 7,30 |
| pc= 45/113 | -15 | 5 | 440,9 | 1506 | 379,4 | 1,33 | 4,55 | 1,15 | 331,3 | 2,10 | 10,80 |
| return gas temp. | -9 | 15 | 565,1 | 1930 | 486,3 | 1,54 | 5,26 | 1,33 | 366,8 | 2,21 | 13,90 |
| RGT= 32/90 | -4 | 25 | 718,2 | 2453 | 618,1 | 1,78 | 6,07 | 1,53 | 403,9 | 2,33 | 17,75 |
| liquid temp | 0 | 32 | 845,2 | 2886 | 727,4 | 1,96 | 6,69 | 1,69 | 431,5 | 2,43 | 20,96 |
| Tliq= 45/113 | 7,2 | 45 | 1130,0 | 3859 | 972,5 | 2,32 | 7,91 | 1,99 | 488,0 | 2,61 | 28,26 |
| [°C / °F] | -35 | -31 | 137,5 | 469 | 118,3 | 0,67 | 2,28 | 0,57 | 206,0 | 1,68 | 3,75 |
| cond. pressure | -23 | -10 | 259,6 | 887 | 223,4 | 0,90 | 3,09 | 0,78 | 286,9 | 1,95 | 7,12 |
| pc= 55/131 | -15 | 5 | 379,7 | 1297 | 326,8 | 1,10 | 3,76 | 0,95 | 344,6 | 2,14 | 10,46 |
| return gas temp | -9 | 15 | 483,7 | 1652 | 416,3 | 1,25 | 4,28 | 1,08 | 385,7 | 2,27 | 13,38 |
| RGT= 32/90 | -4 | 25 | 612,2 | 2091 | 526,9 | 1,42 | 4,86 | 1,22 | 430,4 | 2,42 | 17,02 |
| liquid temp | 0 | 32 | 719,2 | 2456 | 619,0 | 1,55 | 5,29 | 1,33 | 464,6 | 2,54 | 20,09 |
| Tliq= 55/131 | 7,2 | 45 | 961,2 | 3283 | 827,2 | 1,79 | 6,12 | 1,54 | 536,1 | 2,77 | 27,10 |



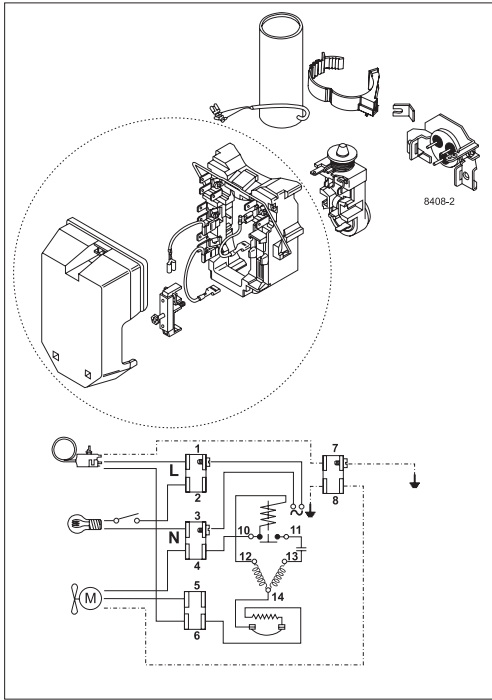
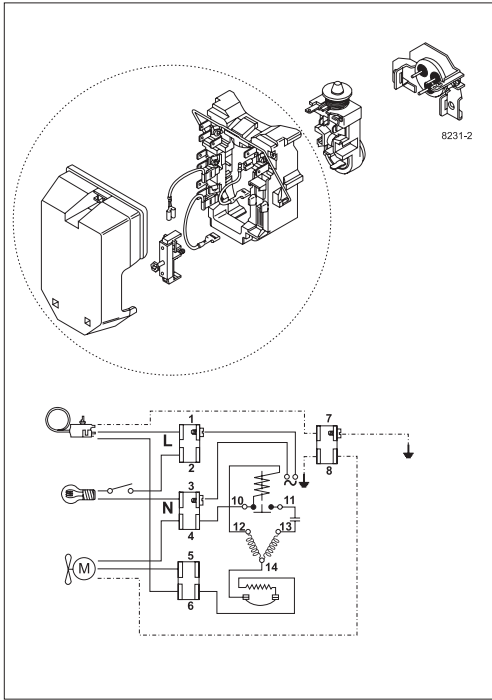
8238-23

NF Compressors





8238-23



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