

## Single Pack NF7MLX 220-240V 50Hz / 208-230V 60Hz CSIR

Single pack code number: **195B4438**

| Position | Title   | Code     | Amount |
|----------|---|----------|--------|
| 1        | Compressor NF7MLX                             | 105F3721 | 1      |
| 2        | Starting relay (overload protector MRP56EN-6) | 117U4139 | 1      |
| 3        | Starting capacitor (125µF 220V, 6.3mm)        | 117U5018 | 1      |
| 4        | Cord relief                                   | 117U0349 | 1      |
| 5        | Cover   | 117U1021 | 1      |
| 6        | Bolt joint for one compressor   M6   ø16mm    | 118-1917 | 1      |

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## NF7MLX MBP Compressor R404A/R507 220-240V 50Hz & 208-230V 60Hz

### General

|                       |               |
|-----------------------|---------------|
| Code number           | 105F3721      |
| Approvals             | EN 60335-2-34 |
| Compressors on pallet | 80            |

### Application

| Application                                    | MBP |           |              |  |
|--|-----|-----------|--------------|--|
| Frequency                                      | Hz  | 50        | 60           |  |
| Evaporating temperature                        | °C  | -15 to 10 | -23.3 to 7.2 |  |
| Voltage range                                  | V   | 187 - 254 | 187 - 254    |  |
| Max. condensing temperature continuous (short) | °C  | 55 (60)   | 55 (60)      |  |
| Max. winding temperature continuous (short)    | °C  | 125 (135) | 125 (135)    |  |

### Cooling requirements

|   |    |     |                |     |     |                |     |
|---|----|-----|----------------|-----|-----|----------------|-----|
| Frequency   | Hz | 50  |                |     | 60  |                |     |
| Application   |    | LBP | MBP            | HBP | LBP | MBP            | HBP |
| 32°C  |    | —   | F <sub>2</sub> | —   | —   | F <sub>2</sub> | —   |
| 38°C  |    | —   | F <sub>2</sub> | —   | —   | F <sub>2</sub> | —   |
| 43°C  |    | —   | F <sub>2</sub> | —   | —   | F <sub>2</sub> | —   |
| Remarks on application: 220V 50Hz nominal below -10°C evaporating temperature |    |     |                |     |     |                |     |

### Motor

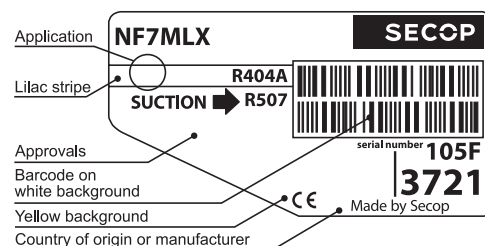
|   |      |      |      |
|---|------|------|------|
| Motor type                                | CSIR |      |      |
| LRA (rated after 4 sec. UL984), HST   LST | A    | 21.0 | —    |
| Cut in Current, HST   LST                 | A    | 21.0 | —    |
| Resistance, main   start winding (25°C)   | Ω    | 4.5  | 12.8 |

### Design

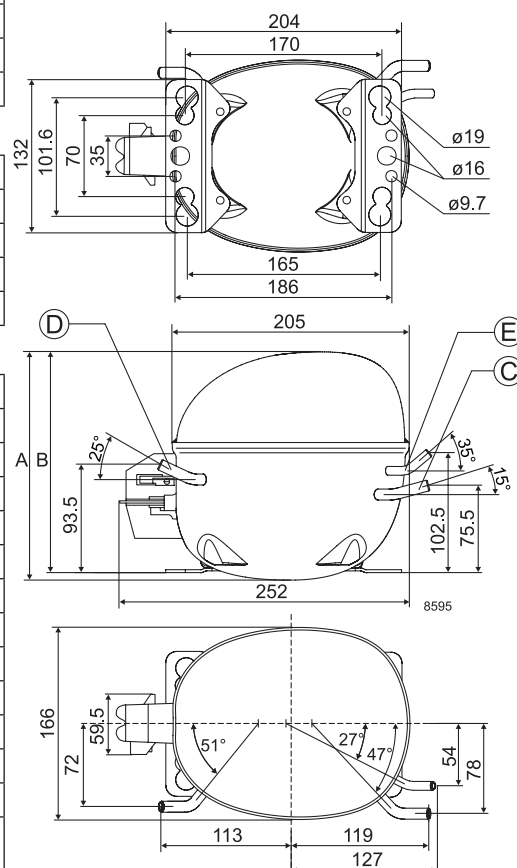
|                                     |                 |                   |
|-------------------------------------|-----------------|-------------------|
| Displacement                        | cm <sup>3</sup> | 7.27              |
| Oil quantity (type)                 | cm <sup>3</sup> | 300 (polyolester) |
| Maximum refrigerant charge          | g               | 400               |
| Free gas volume in compressor       | cm <sup>3</sup> | 2310              |
| Weight without electrical equipment | kg              | 10.5              |

### Dimensions

|                      |                          |                      |           |
|----------------------|--------------------------|----------------------|-----------|
| Height               | mm                       | A                    | 203       |
|                      |                          | B                    | 197       |
|                      |                          | B1                   | —         |
|                      |                          | B2                   | —         |
| Suction connector    | location/I.D. mm   angle | C                    | 8.2   15° |
|                      | material   comment       | Copper   Rubber plug |           |
| Process connector    | location/I.D. mm   angle | D                    | 6.2   25° |
|                      | material   comment       | Copper   Rubber plug |           |
| Discharge connector  | location/I.D. mm   angle | E                    | 6.2   35° |
|                      | material   comment       | Copper   Rubber plug |           |
| Oil cooler connector | location/I.D. mm   angle | F                    | —         |
|                      | material   comment       | —                    |           |
| Connector tolerance  | I.D. mm                  | ±0.09                |           |
| Remarks:             |                          |                      |           |



- S = Static cooling normally sufficient
- O = Oil cooling
- F<sub>1</sub> = Fan cooling 1.5 m/s (compressor compartment temperature equal to ambient temperature)
- F<sub>2</sub> = Fan cooling 3.0 m/s necessary
- SG = Suction gas cooling normally sufficient
- = not applicable in this area



**ASHRAE MBP**230V, 60Hz, fan cooling F<sub>2</sub>

|                    |     |     |     |     |     |       |      |      |      |      |      |      |      |      |    |    |    |
|--------------------|-----|-----|-----|-----|-----|-------|------|------|------|------|------|------|------|------|----|----|----|
| Evap. temp. in °C  | -45 | -40 | -35 | -30 | -25 | -23.3 | -20  | -15  | -10  | -6.7 | -5   | 0    | 5    | 7.2  | 10 | 15 | 20 |
| Capacity in W      |     |     |     |     |     | 363   | 438  | 563  | 708  | 815  | 874  | 1065 | 1284 | 1390 |    |    |    |
| Power cons. in W   |     |     |     |     |     | 368   | 398  | 445  | 494  | 529  | 547  | 603  | 663  | 691  |    |    |    |
| Current cons. in A |     |     |     |     |     | 2.38  | 2.51 | 2.70 | 2.89 | 3.02 | 3.09 | 3.29 | 3.50 | 3.59 |    |    |    |
| COP in W/W         |     |     |     |     |     | 0.99  | 1.10 | 1.27 | 1.43 | 1.54 | 1.60 | 1.77 | 1.94 | 2.01 |    |    |    |

**EN 12900 Household (CECOMAF)**230V, 60Hz, fan cooling F<sub>2</sub>

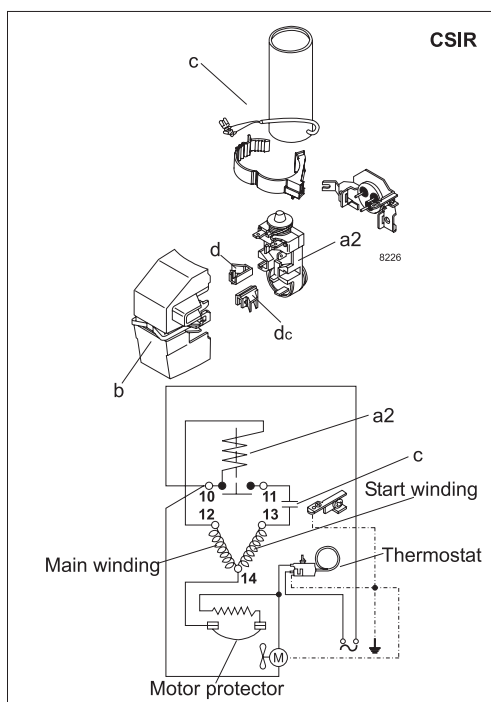
|                    |     |     |     |     |     |       |      |      |      |      |      |      |      |      |    |    |    |
|--------------------|-----|-----|-----|-----|-----|-------|------|------|------|------|------|------|------|------|----|----|----|
| Evap. temp. in °C  | -45 | -40 | -35 | -30 | -25 | -23.3 | -20  | -15  | -10  | -6.7 | -5   | 0    | 5    | 7.2  | 10 | 15 | 20 |
| Capacity in W      |     |     |     |     |     | 413   | 489  | 618  | 768  | 879  | 940  | 1137 | 1362 | 1470 |    |    |    |
| Power cons. in W   |     |     |     |     |     | 358   | 385  | 428  | 473  | 504  | 521  | 573  | 629  | 656  |    |    |    |
| Current cons. in A |     |     |     |     |     | 2.37  | 2.47 | 2.62 | 2.78 | 2.89 | 2.94 | 3.11 | 3.28 | 3.35 |    |    |    |
| COP in W/W         |     |     |     |     |     | 1.15  | 1.27 | 1.45 | 1.62 | 1.74 | 1.80 | 1.98 | 2.16 | 2.24 |    |    |    |

**ASHRAE MBP**220V, 50Hz, fan cooling F<sub>2</sub>

|                    |     |     |     |     |     |       |     |      |      |      |      |      |      |      |      |    |    |
|--------------------|-----|-----|-----|-----|-----|-------|-----|------|------|------|------|------|------|------|------|----|----|
| Evap. temp. in °C  | -45 | -40 | -35 | -30 | -25 | -23.3 | -20 | -15  | -10  | -6.7 | -5   | 0    | 5    | 7.2  | 10   | 15 | 20 |
| Capacity in W      |     |     |     |     |     |       |     | 466  | 585  | 673  | 722  | 880  | 1061 | 1148 | 1268 |    |    |
| Power cons. in W   |     |     |     |     |     |       |     | 397  | 434  | 458  | 470  | 504  | 536  | 549  | 565  |    |    |
| Current cons. in A |     |     |     |     |     |       |     | 3.06 | 3.17 | 3.24 | 3.28 | 3.40 | 3.52 | 3.57 | 3.64 |    |    |
| COP in W/W         |     |     |     |     |     |       |     | 1.17 | 1.35 | 1.47 | 1.54 | 1.75 | 3.52 | 2.09 | 2.24 |    |    |

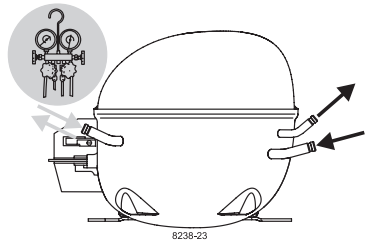
**EN 12900 Household (CECOMAF)**220V, 50Hz, fan cooling F<sub>2</sub>

|                    |     |     |     |     |     |       |     |      |      |      |      |      |      |      |      |    |    |
|--------------------|-----|-----|-----|-----|-----|-------|-----|------|------|------|------|------|------|------|------|----|----|
| Evap. temp. in °C  | -45 | -40 | -35 | -30 | -25 | -23.3 | -20 | -15  | -10  | -6.7 | -5   | 0    | 5    | 7.2  | 10   | 15 | 20 |
| Capacity in W      |     |     |     |     |     |       |     | 511  | 635  | 726  | 777  | 940  | 1125 | 1215 | 1336 |    |    |
| Power cons. in W   |     |     |     |     |     |       |     | 374  | 406  | 425  | 435  | 463  | 488  | 498  | 511  |    |    |
| Current cons. in A |     |     |     |     |     |       |     | 3.01 | 3.10 | 3.17 | 3.20 | 3.29 | 3.39 | 3.43 | 3.49 |    |    |
| COP in W/W         |     |     |     |     |     |       |     | 1.37 | 1.57 | 1.71 | 1.78 | 2.03 | 2.31 | 2.44 | 2.62 |    |    |



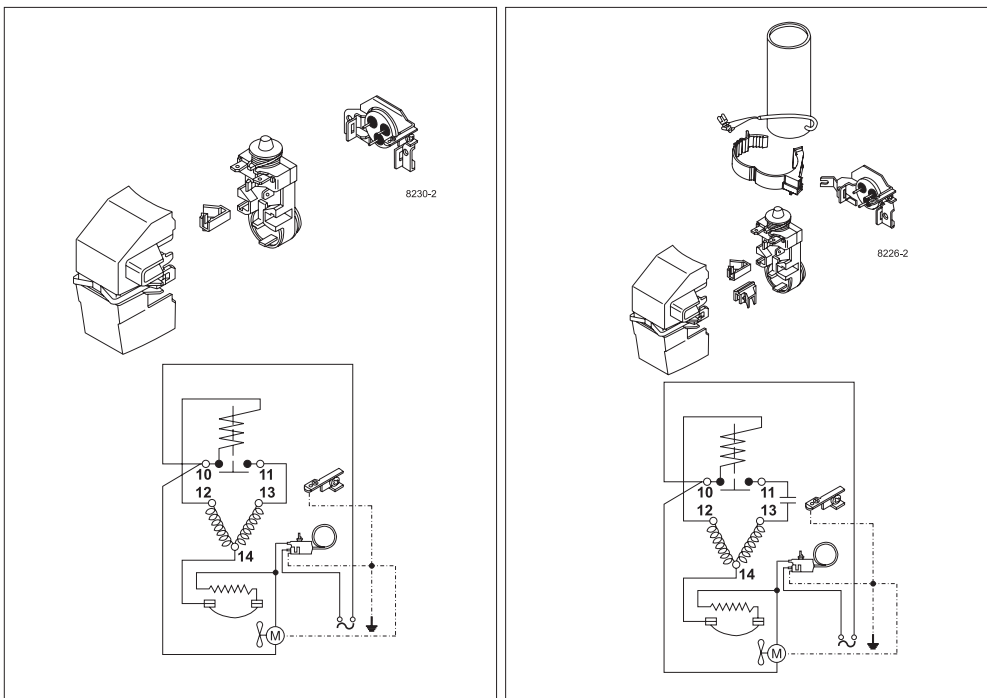
| Accessories for NF7MLX    |                         | Figure      | Code number | Test conditions  | EN 12900/CECOMAF | ASHRAE MBP |                      |  |             |                          |          |          |                          |          |          |                       |          |          |
|---------------------------|-------------------------|-------------|-------------|--|------------------|------------|----------------------|--|-------------|--------------------------|----------|----------|--------------------------|----------|----------|-----------------------|----------|----------|
| Starting relay            | 6.3 mm spade connectors | a1          | 117U4139    | Condensing temperature   | 43.3°C           | 54.4°C     |                      |  |             |                          |          |          |                          |          |          |                       |          |          |
| (protector incl.)         |                         |             | MRP56EN-6   | Ambient temperature  | 32°C             | 35°C       |                      |  |             |                          |          |          |                          |          |          |                       |          |          |
| Protector 3/4 in.         | Texas Instruments       |             |             | Suction gas temperature  | 32°C             | 35°C       |                      |  |             |                          |          |          |                          |          |          |                       |          |          |
| Cover (UL approved)       |                         | b           | 117U1021    | Liquid temperature   | no subcooling    | 46.1°C     |                      |  |             |                          |          |          |                          |          |          |                       |          |          |
| Start. capacitor 125 µF   | 6.3 mm spade connectors | c           | 117U5018    | <table><tr><th colspan="2">Mounting accessories</th><th>Code number</th></tr><tr><td>Bolt joint for one comp.</td><td>Ø: 16 mm</td><td>118-1917</td></tr><tr><td>Bolt joint in quantities</td><td>Ø: 16 mm</td><td>118-1918</td></tr><tr><td>Snap-on in quantities</td><td>Ø: 16 mm</td><td>118-1919</td></tr></table> |                  |            | Mounting accessories |  | Code number | Bolt joint for one comp. | Ø: 16 mm | 118-1917 | Bolt joint in quantities | Ø: 16 mm | 118-1918 | Snap-on in quantities | Ø: 16 mm | 118-1919 |
| Mounting accessories      |                         | Code number |             |  |                  |            |                      |  |             |                          |          |          |                          |          |          |                       |          |          |
| Bolt joint for one comp.  | Ø: 16 mm                | 118-1917    |             |  |                  |            |                      |  |             |                          |          |          |                          |          |          |                       |          |          |
| Bolt joint in quantities  | Ø: 16 mm                | 118-1918    |             |  |                  |            |                      |  |             |                          |          |          |                          |          |          |                       |          |          |
| Snap-on in quantities     | Ø: 16 mm                | 118-1919    |             |  |                  |            |                      |  |             |                          |          |          |                          |          |          |                       |          |          |
| Cord relief               |                         | d           | 117U0349    |  |                  |            |                      |  |             |                          |          |          |                          |          |          |                       |          |          |
| Cord relief for capacitor |                         | dc          | 117U0349    |  |                  |            |                      |  |             |                          |          |          |                          |          |          |                       |          |          |

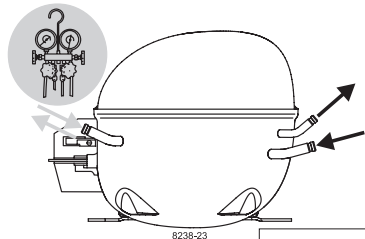
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# NF Compressors

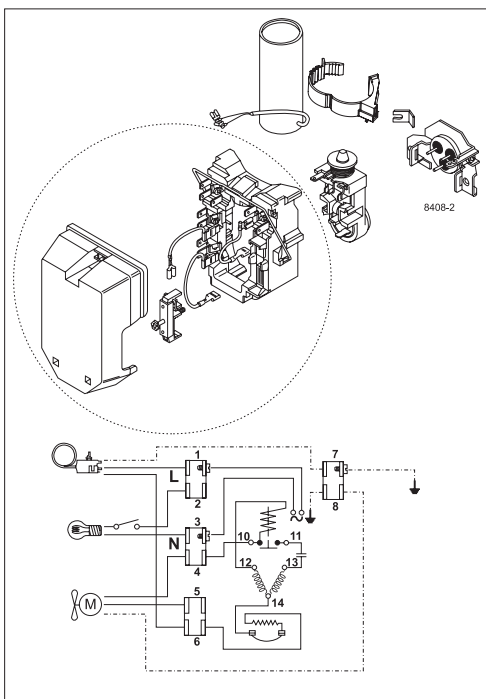
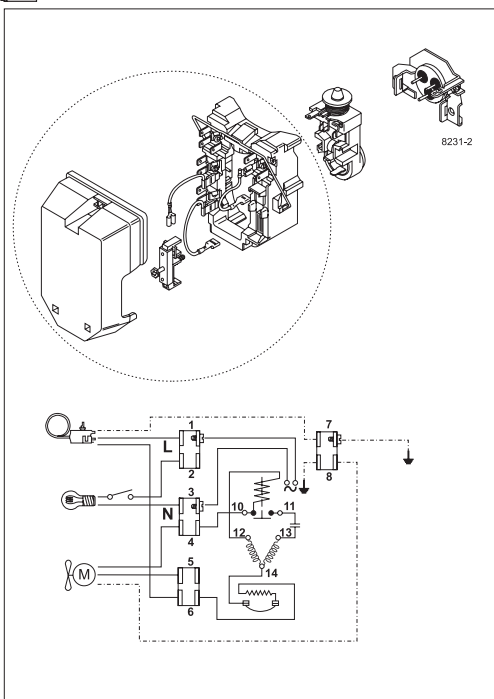
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