



SC18MLX MBP Compressor R404A/R507 208-230V 60Hz

General

| Code number | 104L2138 |
|-----------------------|----------|
| Approvals | UL984 |
| Compressors on pallet | 80 |

Application

| Application | | LBP/ | MBP |
|--|----|------|-----------|
| Frequency | Hz | 50 | 60 |
| Evaporating temperature | °F | _ | -10 to 45 |
| Voltage range | V | _ | 187 - 254 |
| Max. condensing temperature continuous (short) | °F | _ | 131 (140) |
| Max. winding temperature continuous (short) | °F | _ | 257 (275) |

Cooling requirements

| Frequency | Hz | | 50 | | | 60 | |
|-------------------------|----|-----|-----|-----|-----|----------------|-----|
| Application | | LBP | MBP | HBP | LBP | MBP | НВР |
| 90°F | | _ | _ | _ | _ | F ₂ | _ |
| 100°F | | _ | _ | _ | _ | F ₂ | _ |
| 110°F | | _ | _ | _ | _ | F ₂ | _ |
| Remarks on application: | | | | | | | |

Motor

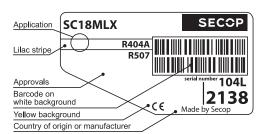
| Motor type | | CS | SR |
|---|---|------|-----|
| LRA (rated after 4 sec. UL984), HST LST | Α | 32.5 | _ |
| Cut in Current, HST LST | Α | 32.5 | _ |
| Resistance, main start winding (77°F) | Ω | 2.0 | 6.6 |

Design

| Displacement | cu.in | 1.08 |
|-------------------------------------|--------|--------------------|
| Oil quantity (type) | fl.oz. | 20.3 (polyolester) |
| Maximum refrigerant charge | OZ. | 45.5 |
| Free gas volume in compressor | fl.oz. | 49.4 |
| Weight without electrical equipment | lbs. | 30.9 |

Dimensions

| Dillicitatoria | | | |
|----------------------|----------------------------|----|----------------------|
| Height | inch | Α | 8.62 |
| | | В | 8.39 |
| | | В1 | 7.60 |
| | | B2 | 4.33 |
| Suction connector | location, I.D. in. angle | С | 0.378-0.385 37° |
| | material comment | | Copper Rubber plug |
| Process connector | location, I.D. in. angle | D | 0.252-0.259 37° |
| | material comment | | Copper Rubber plug |
| Discharge connector | location, I.D. in. angle | Е | 0.252-0.259 37° |
| | material comment | | Copper Rubber plug |
| Oil cooler connector | location, I.D. in. angle | F | _ |
| | material comment | | _ |
| Remarks: | | | |
| | | | |





= Static cooling normally sufficient

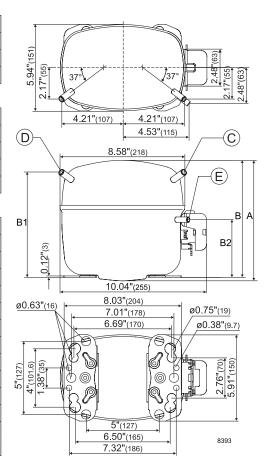
O = Oil cooling

F₁ = Fan cooling 1.5 m/s (compressor compartment temperature equal to ambient temperature)

 F_2 = Fan cooling 3.0 m/s necessary

SG = Suction gas cooling normally sufficent

= not applicable in this area



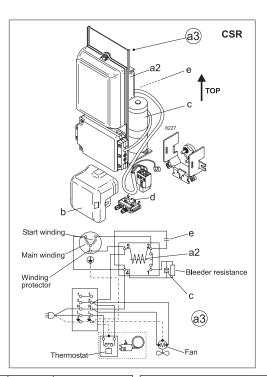
ASHRAE MBP

230V, 60Hz, fan cooling F₂

| Evap. temp. in °F | -49 | -40 | -30 | -20 | -13 | -10 | 0 | 10 | 14 | 20 | 30 | 40 | 41 | 45 | 50 | 59 | 68 |
|--------------------|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|-------|----|----|----|
| Capacity in BTU/h | | | | | | 2997 | 3894 | 4984 | 5481 | 6296 | 7855 | 9691 | 9891 | 10722 | | | |
| Power cons. in W | | | | | | 860 | 970 | 1080 | 1124 | 1191 | 1303 | 1419 | 1430 | 1478 | | | |
| Current cons. in A | | | | | | 5.08 | 5.44 | 5.83 | 6.00 | 6.27 | 6.74 | 7.25 | 7.30 | 7.52 | | | |
| EER in BTU/Wh | | | | | | 3.49 | 4.01 | 4.62 | 4.88 | 5.29 | 6.03 | 6.83 | 6.91 | 7.26 | | | |

| EN 12900 Household | (CECOMAF)* | 230V, 60Hz, fan cooling F ₂ |
|--------------------|------------|--|
|--------------------|------------|--|

| Evap. temp. in °F | -49 | -40 | -30 | -20 | -13 | -10 | 0 | 10 | 14 | 20 | 30 | 40 | 41 | 45 | 50 | 59 | 68 |
|--------------------|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|----|----|----|
| Capacity in W | | | | | | 985 | 1255 | 1583 | 1732 | 1975 | 2437 | 2976 | 3034 | 3276 | | | |
| Power cons. in W | | | | | | 828 | 920 | 1013 | 1051 | 1108 | 1206 | 1307 | 1317 | 1359 | | | |
| Current cons. in A | | | | | | 5.08 | 5.36 | 5.67 | 5.81 | 6.02 | 6.41 | 6.84 | 6.88 | 7.07 | | | |
| COP in W/W | | | | | | 1.19 | 1.36 | 1.56 | 1.65 | 1.78 | 2.02 | 2.28 | 2.30 | 2.41 | | | |



| Accessories for | SC18MLX (60Hz) | Figure | Code number |
|------------------------|-----------------------|--------|-------------|
| Starting device | 18.5 in. cable length | a3 | 117-7066 |
| Cover | | b | 103N2008 |
| Starting relay | | a2 | Components |
| Start. capacitor 80 µF | | С | of starting |
| Run capacitor 10 µF | | е | device |
| Cord relief | | d | 103N1004 |

| Test conditions | ASHRAE MBP | EN 12900/CECOMAF* |
|-------------------------|------------|-------------------|
| Condensing temperature | 130°F | 113°F |
| Ambient temperature | 95°F | 90°F |
| Suction gas temperature | 95°F | 90°F |
| Liquid temperature | 115°F | no subcooling |

| Mounting accessories | | Code number |
|-------------------------------|------------|-------------|
| Bolt joint for one compressor | Ø: 5/8 in. | 118-1917 |
| Bolt joint in quantities | Ø: 5/8 in. | 118-1918 |
| Snap-on in quantities | Ø: 5/8 in. | 118-1919 |

Nidec GA Compressors accepts no responsibility for possible errors in catalogs, brochures, and other printed material. Nidec GA Compressors reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequential changes being necessary to specifications already agreed. All trademarks in this material are the property of the respective companies. Secop and the Secop logotype are trademarks of Nidec Global Appliance Germany GmbH. All rights reserved. www.secop.com