

SC12CNX.2 LBP/MBP Compressor R290 115V 60Hz

General

| | |
|-----------------------|---------------------------|
| Code number | 104H7270 |
| Approvals | UL984, EN 60335-2-34, EAC |
| Compressors on pallet | 80 |

Application

| Application | LBP/MBP | | | |
|--|---------|----|-----------|--|
| | Hz | 50 | 60 | |
| Frequency | Hz | 50 | 60 | |
| Evaporating temperature | °F | - | -49 to 45 | |
| Voltage range | V | - | 95 - 135 | |
| Max. condensing temperature continuous (short) | °F | - | 131 (149) | |
| Max. winding temperature continuous (short) | °F | - | 257 (275) | |

Cooling requirements

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

Motor

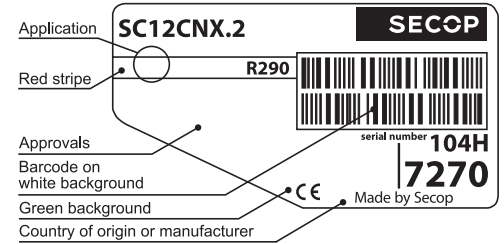
| Motor type | CSIR | | |
|---|------|------|-----|
| LRA (rated after 4 sec. UL984), HST LST | A | 41.9 | - |
| Cut in Current, HST LST | A | 41.9 | - |
| Resistance, main start winding (77°F) | Ω | 1.0 | 4.3 |

Design

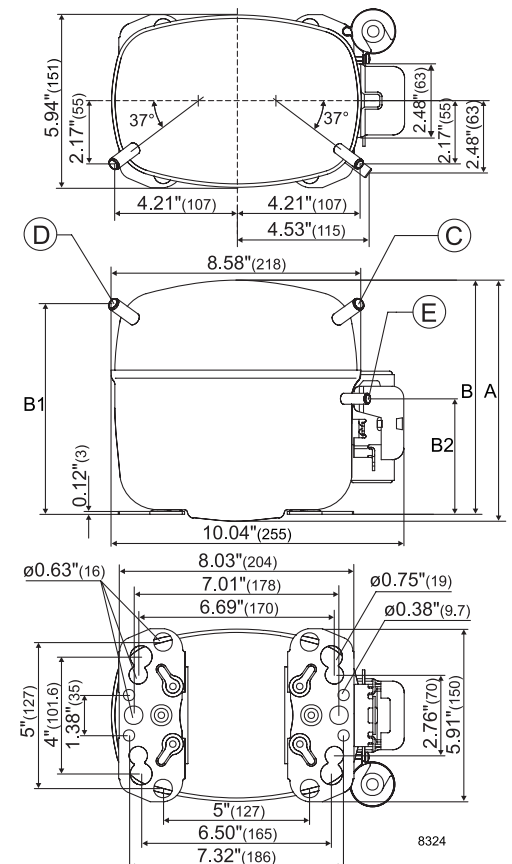
| | | |
|-------------------------------------|--------|--------------------|
| Displacement | cu.in | 0.78 |
| Oil quantity (type) | fl.oz. | 18.6 (polyolester) |
| Maximum refrigerant charge | oz. | 5.3 |
| Free gas volume in compressor | fl.oz. | 49.4 |
| Weight without electrical equipment | lbs. | 27.8 |

Dimensions

| Height | inch | A | 8.23 |
|----------------------|----------------------------|--------------------|----------------------|
| | | B | 8.00 |
| Suction connector | location, I.D. in. angle | C | 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 | E | 0.252-0.259 37° |
| | | material comment | Copper Rubber plug |
| Oil cooler connector | location, I.D. in. angle | F | - |
| | | material comment | - |
| Remarks: | | | |



- S = Static cooling normally sufficient
- O = Oil cooling
- F₁ = Fan cooling 1.5 m/s (compressor compartment temperature equal to ambient temperature)
- F₂ = Fan cooling 3.0 m/s necessary
- SG = Suction gas cooling normally sufficient
- = not applicable in this area



ASHRAE LBP

115V, 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 | 268 | 589 | 1005 | 1500 | 1899 | 2085 | 2776 | 3587 | 3949 | 4533 | 5627 | 6887 | 7022 | 7583 | | | |
| Power cons. in W | 179 | 259 | 339 | 411 | 456 | 475 | 533 | 586 | 606 | 635 | 682 | 726 | 731 | 748 | | | |
| Current cons. in A | 4.77 | 5.06 | 5.39 | 5.74 | 6.00 | 6.11 | 6.49 | 6.89 | 7.06 | 7.31 | 7.74 | 8.18 | 8.23 | 8.41 | | | |
| EER in BTU/Wh | 1.50 | 2.27 | 2.97 | 3.65 | 4.16 | 4.39 | 5.21 | 6.12 | 6.51 | 7.13 | 8.25 | 9.48 | 9.61 | 10.14 | | | |

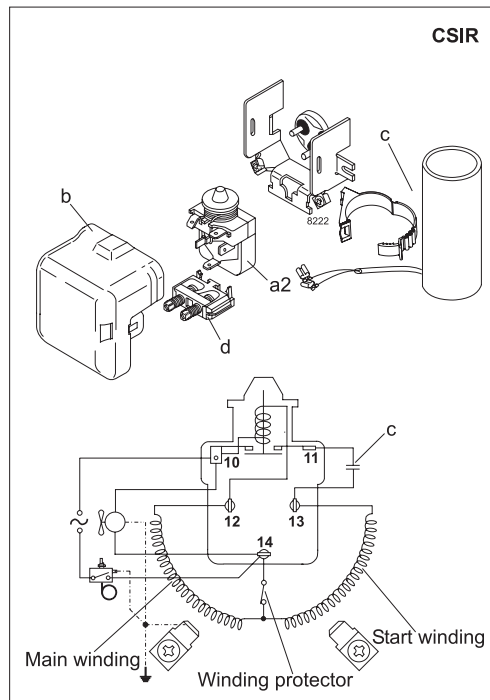
ASHRAE HBP/MBP

115V, 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 | 239 | 524 | 895 | 1334 | 1689 | 1855 | 2468 | 3187 | 3506 | 4023 | 4990 | 6101 | 6220 | 6714 | | | |
| Power cons. in W | 179 | 259 | 339 | 411 | 456 | 475 | 533 | 586 | 606 | 635 | 682 | 726 | 731 | 748 | | | |
| Current cons. in A | 4.77 | 5.06 | 5.39 | 5.74 | 6.00 | 6.11 | 6.49 | 6.89 | 7.06 | 7.31 | 7.74 | 8.18 | 8.23 | 8.41 | | | |
| EER in BTU/Wh | 1.34 | 2.02 | 2.64 | 3.25 | 3.70 | 3.90 | 4.63 | 5.43 | 5.78 | 6.33 | 7.32 | 8.40 | 8.51 | 8.98 | | | |

EN 12900 Household (CECOMAF)* 115V, 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 W | 131 | 212 | 320 | 448 | 552 | 600 | 780 | 990 | 1084 | 1235 | 1516 | 1838 | 1872 | 2015 | | | |
| Power cons. in W | 226 | 288 | 349 | 404 | 439 | 453 | 497 | 537 | 553 | 576 | 613 | 649 | 653 | 668 | | | |
| Current cons. in A | 4.99 | 5.20 | 5.45 | 5.72 | 5.91 | 6.00 | 6.30 | 6.61 | 6.74 | 6.94 | 7.28 | 7.64 | 7.68 | 7.83 | | | |
| COP in W/W | 0.58 | 0.74 | 0.91 | 1.11 | 1.26 | 1.33 | 1.57 | 1.84 | 1.96 | 2.14 | 2.47 | 2.83 | 2.87 | 3.02 | | | |



| Accessories for | SC12CNX.2 | Figure | Code number | Test conditions | ASHRAE LBP | ASHRAE HBP/MBP | EN 12900/CECOMAF* |
|---------------------------|-------------------------|--------|-------------|-----------------------------|------------|----------------|-------------------|
| PTC starting device | 1/4 in. spade connect. | - | - | Condensing temp. | 130°F | 130°F | 113°F |
| | 3/16 in. spade connect. | | - | Ambient temp. | 90°F | 90°F | 90°F |
| Starting relay | 1/4 in. spade connect. | a2 | 117U7020 | Suction gas temp | 90°F | 95°F | 90°F |
| Cover | | b | 103N2008 | Liquid temperature | 90°F | 115°F | no subcooling |
| Start. capacitor 240 µF | 1/4 in. spade connect. | c | 117U5023 | Mounting accessories | | | |
| Cord relief | | d | 103N1004 | Code number | | | |
| Protection screen for PTC | | - | - | Bolt joint for one comp. | 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 | |

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