

Product Data Sheet

HXK80AA

Revision 1

(Variant Code B)

1 Application

| Application | Refrigerant | Expansion Device | Cooling Type |
|-------------|-------------|------------------|--------------|
| LBP | R600a | Capillary | Static |

1.1 Application Conditions

| | | |
|--|------|-----|
| Max. Ambient temp. ¹ | [°C] | 43 |
| Max. Steady discharge temp. ² | [°C] | 120 |
| Max. Peak discharge temp. ^{2, 5} | [°C] | 135 |
| Max. Steady condensing temp. ³ | [°C] | 60 |
| Max. Peak condensing temp. ^{3, 5} | [°C] | 70 |
| Max. Winding temp. ⁴ | [°C] | 130 |

¹...static

²...measured on discharge tube, 50 mm from the shell

³...measured in the middle of condenser

⁴...calculated out of the measured difference of resistance

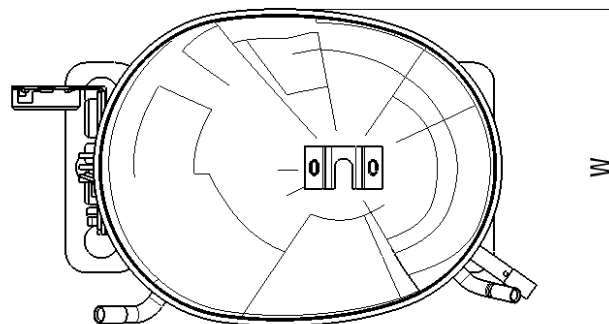
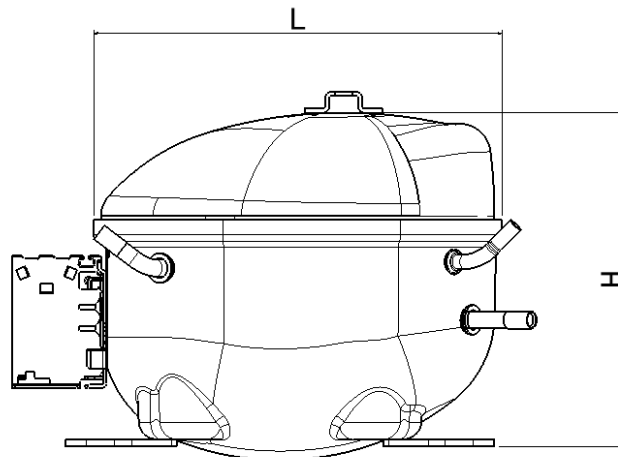
⁵...max 5% of lifetime

Variant code according to Label; see General Product Documentation

2 Mechanical Data

| | | |
|-------------------------|--------------------|-------------|
| Displacement | [cm ³] | 8,1 |
| Net Weight ¹ | [kg] | 8,4 |
| Oil Type | | mineral |
| Oil Charge | [ml] | 165 |
| Oil Viscosity | [cst] | 5 |
| Suction muffler | | Semi direct |
| Free Gas Volume | [cm ³] | 1500 |
| Length L | [mm] | 194,2 |
| Width W | [mm] | 151,5 |
| Height H | [mm] | 167 |

¹...Compressor without accessories



3 Electrical Data

| | | |
|---|-------------|-----------|
| Power supply | [V] | 220 - 240 |
| Voltage range¹ | [V] | 187 - 264 |
| Frequency | [Hz] | 50 |
| Phase | [ph] | 1 |
| Motor type | | RSCR |
| Locked rotor current @ steady state | [A] | 3,5 |
| Max. Locked rotor current / measured after 4 sec | [A] | 9,8 / 4,0 |
| Main wind. Resistance @ 25°C | [Ω] | 25,2 |
| Start wind. Resistance @ 25°C | [Ω] | 17,4 |

¹...Operating and starting (starting condition @ +43°C windings temperature, 3,5 barA equalized pressure)

All data measured according to EN 60335

3.1 Electrical Component Data

| | | |
|------------------------|-------------|-------|
| Terminal board | | ECC |
| Starting device | Code | K120 |
| PTC | Type | A |
| Run Capacitor | [μF] | 3 ; 4 |

3.2 Motor Protector

| | | |
|------------------------|------------|------------|
| Motor Protector | BDG | Senbao |
| Type | AE 24 FW x | B45 120 xx |
| Code | F4 | MP |

4 Performance Data

4.1 Cooling Capacity, COP and Input Power

Performance Table Cooling Capacity @ ASHRAE / EN12900 (CECOMAF); 220V, 50Hz; [W]:

| Evap. temp. [°C] | | | -35 | -30 | -25 | -23,3 | -20 | -15 | -10 |
|--------------------|------------------------|-----|------|-------|-------|-------|-------|-------|-------|
| Condensing temp. @ | ASHRAE [°C] | 40 | 79,9 | 106,5 | 138,4 | 150,5 | 175,8 | 218,5 | 266,5 |
| | | 45 | 76,7 | 103,0 | 134,9 | 147,0 | 172,4 | 215,6 | 264,4 |
| | | 50 | 73,5 | 99,5 | 131,3 | 143,5 | 169,1 | 212,7 | 262,2 |
| | | 55 | 70,4 | 96,0 | 127,8 | 140,0 | 165,7 | 209,8 | 260,0 |
| | | 60 | 67,2 | 92,5 | 124,2 | 136,5 | 162,4 | 206,9 | 257,8 |
| | EN12900 (CECOMAF) [°C] | C55 | 58,0 | 79,0 | 105,0 | 115,0 | 136,0 | 173,0 | 214,0 |

Performance Table COP with RC @ ASHRAE / EN12900 (CECOMAF); 220V, 50Hz; [W/W]:

| Evap. temp. [°C] | | | -35 | -30 | -25 | -23,3 | -20 | -15 | -10 |
|--------------------|------------------------|-----|------|------|------|-------|------|------|------|
| Condensing temp. @ | ASHRAE [°C] | 40 | 1,57 | 1,83 | 2,09 | 2,17 | 2,34 | 2,60 | 2,86 |
| | | 45 | 1,50 | 1,75 | 2,00 | 2,08 | 2,24 | 2,49 | 2,74 |
| | | 50 | 1,44 | 1,67 | 1,91 | 1,99 | 2,14 | 2,38 | 2,61 |
| | | 55 | 1,37 | 1,59 | 1,82 | 1,90 | 2,04 | 2,27 | 2,49 |
| | | 60 | 1,30 | 1,52 | 1,73 | 1,80 | 1,94 | 2,16 | 2,37 |
| | EN12900 (CECOMAF) [°C] | C55 | 1,13 | 1,31 | 1,50 | 1,56 | 1,68 | 1,87 | 2,05 |

Performance Table Input Power with RC @ ASHRAE / EN12900 (CECOMAF); 220V, 50Hz; [W]:

| Evap. temp. [°C] | | | -35 | -30 | -25 | -23,3 | -20 | -15 | -10 |
|--------------------|------------------------|-----|------|------|------|-------|------|------|-------|
| Condensing temp. @ | ASHRAE [°C] | 40 | 50,9 | 58,2 | 66,4 | 69,3 | 75,0 | 84,0 | 93,3 |
| | | 45 | 51,0 | 58,9 | 67,6 | 70,7 | 76,9 | 86,6 | 96,7 |
| | | 50 | 51,2 | 59,5 | 68,9 | 72,2 | 78,9 | 89,4 | 100,3 |
| | | 55 | 51,4 | 60,2 | 70,3 | 73,9 | 81,1 | 92,5 | 104,3 |
| | | 60 | 51,6 | 61,0 | 71,9 | 75,8 | 83,6 | 95,9 | 108,8 |
| | EN12900 (CECOMAF) [°C] | C55 | 51,4 | 60,2 | 70,3 | 73,9 | 81,1 | 92,5 | 104,3 |

| Test Conditions @ 220V/50Hz | | ASHRAE | EN12900 (CECOMAF) |
|-----------------------------|------|--------|-------------------|
| Evaporating temp. | [°C] | -23,3 | -25 |
| Condensing temp. | [°C] | 55 | 55 |
| Sub cooling temp. | [°C] | 32 | 55 |
| Suction temp. | [°C] | 32 | 32 |
| Ambient temp. | [°C] | 32 | 32 |

Tolerance Range:

COP ± 5%
Cooling Capacity ± 5%

4.2 Rated current @ 55°C condensing temperature

| | | | | |
|-------------------------|------|------|-------|------|
| Evaporating temperature | [°C] | -30 | -23,3 | -10 |
| Rated current with RC | [A] | 0,29 | 0,35 | 0,48 |

5 Reliability Tests

| | |
|------------------------------------|--------|
| High Temperature CECOMAF GT4 – 002 | passed |
| Wear CECOMAF GT4 – 003 | passed |
| On – Off CECOMAF GT4 – 004 | passed |
| Transport test ASTM D4728 | passed |