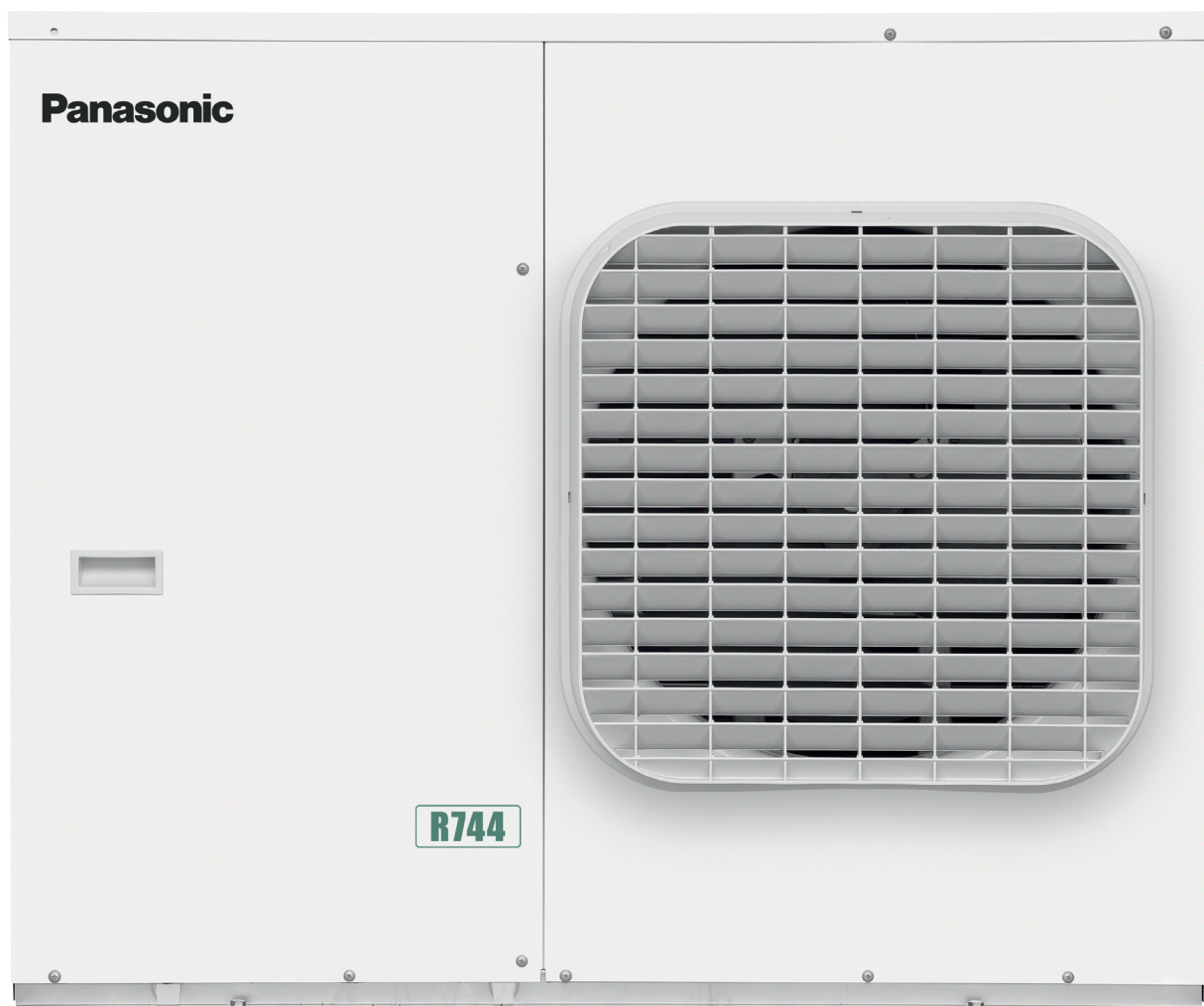


PANASONIC TRANSCRITICAL CO2 OUTDOOR CONDENSING UNIT

4HP MT/LT

OCU-CR400VF8A STANDARD COATING



ENHANCED ENERGY EFFICIENCY
& VERSATILITY

HUSSmann®



SCOPE OF APPLICATION, SPECIFICATIONS

This refrigeration unit operates with a rotary compressor.

| USE THE REFRIGERATION UNIT WITHIN THE RANGE SHOWN BELOW | | | |
|--|---|--------------------|---|
| Item | Standard Value | | Remarks |
| | OCU-CR400VF8 | OCU-CR400VF8A | |
| Refrigerant | R744 | | The charge supply amount shall be adequate |
| Evaporating temperature | -20 °C to -5 °C | -45 °C to -5 °C | Temperature conversion of inlet pressure |
| Suction pressure | 1.87MPa to 2.95MPa | 0.73MPa to 2.95MPa | Unit inlet pressure |
| Compressor rotational speed | 40 s ⁻¹ to 80 s ⁻¹ | | *(RPS) |
| Suction gas temperature | 18 °C or below | | Unit inlet (suction gas) pipe temperature |
| Superheat at suction | 10 K or above | | Difference between evaporating temperature and compressor inlet temperature |
| Discharge pressure | 12 MPa or below | | Compressor outlet pressure |
| Discharge gas temperature | 115 °C or below | | Compressor outlet temperature |
| Oil temperature | 100 °C or below (Ambient temperature +10 K or above) | | |
| Ambient temperature | -20°C to +45 °C | | Gas cooler intake air temperature |
| Power source | 50 Hz 380 V / 400 V / 415 V 3N ~ | | Within ± 10 % of Rate Voltage |
| Installation inclination angle | 1° or below | | |
| ON/OFF cycle period | 10 minutes or longer for ON/OFF cycle | | Oil return shall be ensured |
| Installation | Outdoor | | The foundation shall be rigid enough |
| Climatic class | 0/1/2/3/4/6/8 | | Please see below "CLIMATIC CLASS" |
| Net Weight | 136 kg | 149kg | |
| Intermediate cooler | 8.28 Liter | | |
| Maximum refrigerant charge for the entire refrigeration system | 12.0 kg | | Adequate charge amount should be calculated by tool provided by Panasonic |
| Sound pressure level(A-weight) | 33.0dB(A) | 36.1dB(A) | 10m distance (calculated value from a measured value at a distance of 1m) |

* Operation may not be possible depending on the installed condition.

| CLIMATIC CLASS | | | | |
|----------------------------|----------------------------|------------------------|-----------------|--------------------------------------|
| Test room Climate class | Dry bulb temperature °C | Relative humidity % | Dew point °C | Water vapour mass in dry air g/kg |
| 0 | 20 | 50 | 9.3 | 7.3 |
| 1 | 16 | 80 | 12.6 | 9.1 |
| 2 | 22 | 65 | 15.2 | 10.8 |
| 3 | 25 | 60 | 16.7 | 12.0 |
| 4 | 30 | 55 | 20.0 | 14.8 |
| 6 | 27 | 70 | 21.1 | 15.8 |
| 8 | 23.9 | 55 | 14.3 | 10.2 |

Excerpt from: EN ISO 23953

| PERFORMANCES (400 V) | | | | | | |
|----------------------|-----------------------------------|------------------|-------------------------|---------------|--------|-------|
| Ambient temperature | Item | Symbol | Evaporating temperature | | | Unit |
| | | | OCU-CR400VF8 | OCU-CR400VF8A | | |
| | | | -10 °C | -10 °C | -35 °C | |
| | Annual electricity consumption | Q | 13384 | 14488 | 16255 | kWh/a |
| | Seasonal energy performance ratio | SEPR | 3.17 | 3.20 | 1.73 | - |
| 32 °C | Rated Cooling capacity | P _A | 6.90 | 7.64 | 3.80 | kW |
| | Rated Power input | D _A | 3.97 | 4.22 | 3.67 | kW |
| | Rated COP | COP _A | 1.74 | 1.81 | 1.04 | - |
| 25 °C | Cooling capacity | P _B | 7.41 | 8.14 | 4.05 | kW |
| | Power input | D _B | 3.50 | 3.88 | 3.38 | kW |
| | COP | COP _B | 2.12 | 2.10 | 1.20 | - |
| 15°C | Cooling capacity | P _C | 7.87 | 8.64 | 4.29 | kW |
| | Power input | D _C | 2.76 | 3.23 | 2.81 | kW |
| | COP | COP _C | 2.85 | 2.67 | 1.53 | - |
| 5°C | Cooling capacity | P _D | 8.35 | 9.25 | 4.60 | kW |
| | Power input | D _D | 1.93 | 2.11 | 1.84 | kW |
| | COP | COP _D | 4.33 | 4.38 | 2.50 | - |
| 43°C | Cooling capacity | P ₃ | 5.42 | 4.76 | 3.10 | kW |
| | Power input | D ₃ | 4.63 | 3.66 | 4.17 | kW |
| | COP | COP ₃ | 1.17 | 1.30 | 0.74 | - |

Compressor rotational speed : Variable speed, Suction superheat : 10K

NOTE

In case Heat Recovery is to be installed, please contact your sales representative.

External heat exchanger is to be selected and delivered by installer to the end user.

Safety and compliance of installation is under the sole responsibility of installer.

SOUND PRESSURE LEVEL

The A-weighted sound pressure level does not exceed 70 dB(A). (at a distance of 1m from surface of product)

CO2 REFRIGERANT GRADE

Charge CO2 refrigerant (R744) that is compatible with following specifications.

| Item | Specifications |
|----------------------------|---------------------|
| Purity | > 99.9 % (volume) |
| Moisture | < 0.005 % (volume) |
| Total sulfur | < 0.03 ppm (weight) |
| Inert gas (H2, N2, O2, Ar) | < 0.01 % (volume) |

COUNTERMEASURES IN A COLD WEATHER OPERATION

In order to prevent excessive reduction of high pressure in a cold weather location, surrounding around the refrigeration unit should be made.

RATED SPECIFICATIONS

| Item | Rating | | Unit |
|--------------|----------------------------------|----------------|------|
| | OCU-CR400VF8 | OCU-CR400VF8A | |
| Power source | 50 Hz 380 V / 400 V / 415 V 3N ~ | | V |
| Power input | 4.00/4.00/4.00 | 4.51/4.51/4.51 | kW |
| Current | 6.48/6.14/5.93 | 7.18/6.91/6.67 | A |

CONDITIONS

1. Evaporating temperature: -10 °C
2. Ambient temperature: 32 °C
3. Compressor rotational speed : 80 s⁻¹
4. Suction superheat : 10K

**Additional Information**

All Dimensions shown in Millimetres (mm) unless otherwise stated. Dimensions and features are subject to change. Please obtain current technical information prior to order confirmation.

NOTE: We reserve the right to change or revise specifications and product design in connection with any feature of our products. Such changes do not entitle the buyer to corresponding changes, improvements, additions or replacements for equipment previously sold or Shipped.

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