

Refrigerant R134a (HFC)

Series IDH



RoHS

The IDH is for use in Japan and the U.S.

How to Order



For use in ~~U.S.~~

IDH 6 - 10 -

For use in Europe and Southeast Asia

IDHA 6 - 23 -

Size

| Size | Rated air flow capacity | Air compressor size |
|------|-----------------------------|---------------------|
| 4 | 14.1 scfm (400 L/min [ANR]) | 3.7 kW |
| 6 | 21.2 scfm (600 L/min [ANR]) | 5.5 kW |

Option

| | |
|-----|----------------------------|
| Nil | None (Standard) |
| E | Auto drain normally closed |

Voltage

| Symbol | Voltage | Specification |
|--------|--------------------------------|--------------------------------------|
| 10 | Single-phase 100 VAC (50/60Hz) | For use in Japan |
| 20 | Single-phase 200 VAC (50/60Hz) | |
| 23 | Single-phase 230 VAC (50/60Hz) | For use in Europe and Southeast Asia |

Combination of built-in products

| Symbol | Regulator | Filter① (AMH) | Filter② (AME) |
|--------|-----------|---------------|---------------|
| Nil | ● | ● | ● |
| A | ● | ● | — |
| B | ● | — | — |

Optional Specifications

E

Option symbol

Auto drain normally closed

The auto drain which exhausts dehumidified drainage and the auto drain on the built-in filter are changed to the "normally closed" specification. Recommended for small flow rate (100 to 150 L/min).

| Descriptor | Filter details |
|----------------------|--|
| Filter① (AMH) | Micro mist separator with pre-filter · Nominal filtration rating: 0.01 μm (99.9% filtration efficiency) · Outlet oil mist concentration: MAX. 0.1 mg/m ³ [ANR] (≈0.08 ppm) |
| Filter② (AME) | Super mist separator · Nominal filtration rating: 0.01 μm (99.9% filtration efficiency) · Outlet oil mist concentration: MAX. 0.01 mg/m ³ [ANR] (≈0.008 ppm) · Outlet oil mist concentration: Particles of 0.3 μm or more: 3.5 particles/L [ANR] or less |

Construction (Pneumatic/Refrigerant Circuit)

Pneumatic circuit

Hot and humid air entering this product is cooled down by the cooler. The moisture condensed at this time is separated by the drain separator and exhausted automatically. The pressure of the dry air is adjusted by the regulator, and oil mist and solid particles are separated by the micro mist separator with pre-filter and super mist separator. ^{Note)} The temperature of the dry and high purity air is adjusted by the heater and supplied to the outlet side.

Note) The type without filter is not applicable.

Refrigerant circuit

The HFC gas contained in the refrigerant circuit is compressed by the compressor, and cooled and liquefied by the condenser. When passing through the capillary tube, the HFC gas is regulated and its temperature decreases. While passing through the cooler part, it evaporates rapidly, taking the heat from the compressed air, and is sucked in by the compressor. The capacity regulating valve opens when the compressed air has been cooled sufficiently, and prevents condensed water from being frozen by excessive cooling.

