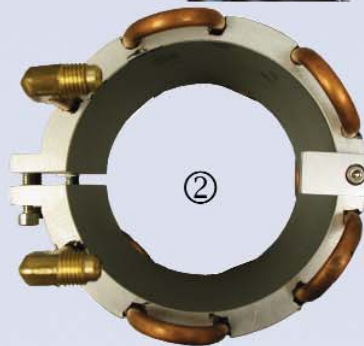




Refrigerate Don't Irrigate Your Cold Plate



400 watts (1,360 BTU's)

Hot Side "HS" Refrigerated Cold Plate Cooling Module

Thermoelectric, Machine Vision, Computer & Electronic Applications

CHILLER MODULE FEATURES

K-O Concepts Model HS-4

- **Cold Plate Cooling**

K-O Concepts HS series cooling modules provide R134a refrigerant for cold plate applications. A cold plate is used for heat sinking the hot side of thermoelectric (Peltier) devices for high ambient operation of these devices. Cold plates can also be used to sink hot spots in electronic cabinets i.e. rack style cabinets.

- **Optional Air Conditioning Applications**

K-O Concepts offers an optional remote forced air evaporator assembly for electronics cabinet air conditioning applications in small or hard to reach places.

- **Small & Lightweight**

The HS cooling module is in a standard 19 inch rack mount configuration weighing only 26 lbs. Request interface control drawing (ICD) number 25432650 for detailed dimensions.

- **Accurate Refrigerant Temperature Control**

K-O Concepts uses the latest in refrigeration technology to maintain the R134a refrigerant at a specific temperature to within $\pm 0.5^{\circ}\text{C}$. The refrigerant temperature can be operated at a range from $7\text{-}20^{\circ}\text{C}$ ($45\text{-}68^{\circ}\text{F}$).

- **CFC Free Refrigerant**

All models use environmentally friendly R134a (HFC-134a) refrigerant. Units using this refrigerant can be sold into Europe and Asia. This is the same refrigerant used in all new automobiles.

- **HS “Hot Side” Series**

Listed are the descriptions and applications of the cooling devices shown on the front of the HS brochure:

(①)Catalog cold plates are used to heat sink electrical components & the hot side of thermoelectric (peltier) devices.

(②)Customer supplied custom cold plates are installed typically at no charge. The custom cold plate shown cools a fluid-filled beaker.

(③)The forced-air evaporator unit is used as an air conditioner in cabinet cooling (i.e. computer waste heat), machine vision compartments, and other precise cooling requirements .

(④)Refrigerant is transported via hoses, to & from the cooling devices. Optional quick-disconnects are used when the devices require separation during assembly or maintenance.

Chiller Module Specifications & Options

K-O Concepts Model HS-4

| | |
|--|--|
| K-O Concepts Inc. Chiller Part Number | 2543-2650 |
| Cooling Capacity 115 VAC, 60 Hz Model | 400 watts / 1,360 BTU typical capacity w/ 20°C refrigerant 250 watts / 850 BTU typical capacity w/ 10°C refrigerant |
| Cooling Capacity 220 VAC, 50 / 60 Hz Model | 400 watts / 1,360 BTU typical capacity w/ 20°C refrigerant @ 60 Hz 300 watts / 1,025 BTU typical capacity w/ 20°C refrigerant @ 50 Hz |
| Refrigerant Delivery | Type R134a refrigerant delivered via 8 ft. long flexible hoses. |
| Optional Cooling Applications | Remote forced air evaporator assembly available for electronics cabinet cooling applications. |
| Mounting | Standard 19-inch rack-mounted configuration. |
| Environment | Indoor operation w/ unrestricted ambient air from 15-30°C/59-86°F w/ relative humidity from 10-90% (non condensing). |
| Temperature Stability | Refrigerant temperature operational range: 7-20°C ±0.5°C. |
| Heat Dissipation | To air (air-cooled) |
| Condenser Fan | AC Axial Type: 70 CFM @ 0.12 inches static pressure typical |
| Compressor Type | Hermetic |
| Environment | Indoor operation w/ unrestricted ambient air from 15-30°C/59-86°F. |
| Refrigerant Type | All models use R134a (HFC-134a). Refrigerant is CFC - Free. |
| Input Voltage & Frequency Requirements | Model HS-4 / 115: 115 VAC, 1Ø, 60 Hz Model HS-4 / 220: 220 VAC, 1Ø, 50 Hz |
| Current Draw | Model HS-4 / 115: 3.2 A @ 60 Hz (Typical) Model HS-4 / 220: 1.8 A @ 50 Hz (Typical) |
| Circuit Breaker | Model HS-4 / 115: 7 A @ 250 VAC (single pole) Model HS-4 / 220: 5 A @ 250 VAC (single pole) |
| AC Power Inlet | IEC 60320 compatible |
| Air Filter | Cleanable filter installed and spare filter pack shipped with unit. |
| Cabinet Dimensions (H x W x D) | All Models: 6.5 x 17.5 x 7.5 inches |
| Front Panel Dimensions (H x W) | All Models: 7.0 (4 units) x 19.0 inches |
| Dry Weight | 26.0 lbs / 11.8 kg |

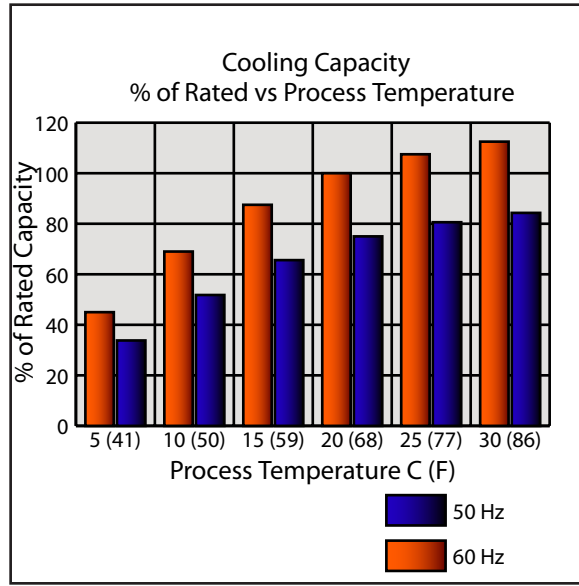
Notes:

- * Cooling capacity ratings are with 30°C / 86°F.
- * Call for cooling capacities @ return air temperatures other than those listed.
- * See Thermal Performance chart for cooling capacities @ other process temperatures.
- * Specifications are subject to change without notice.

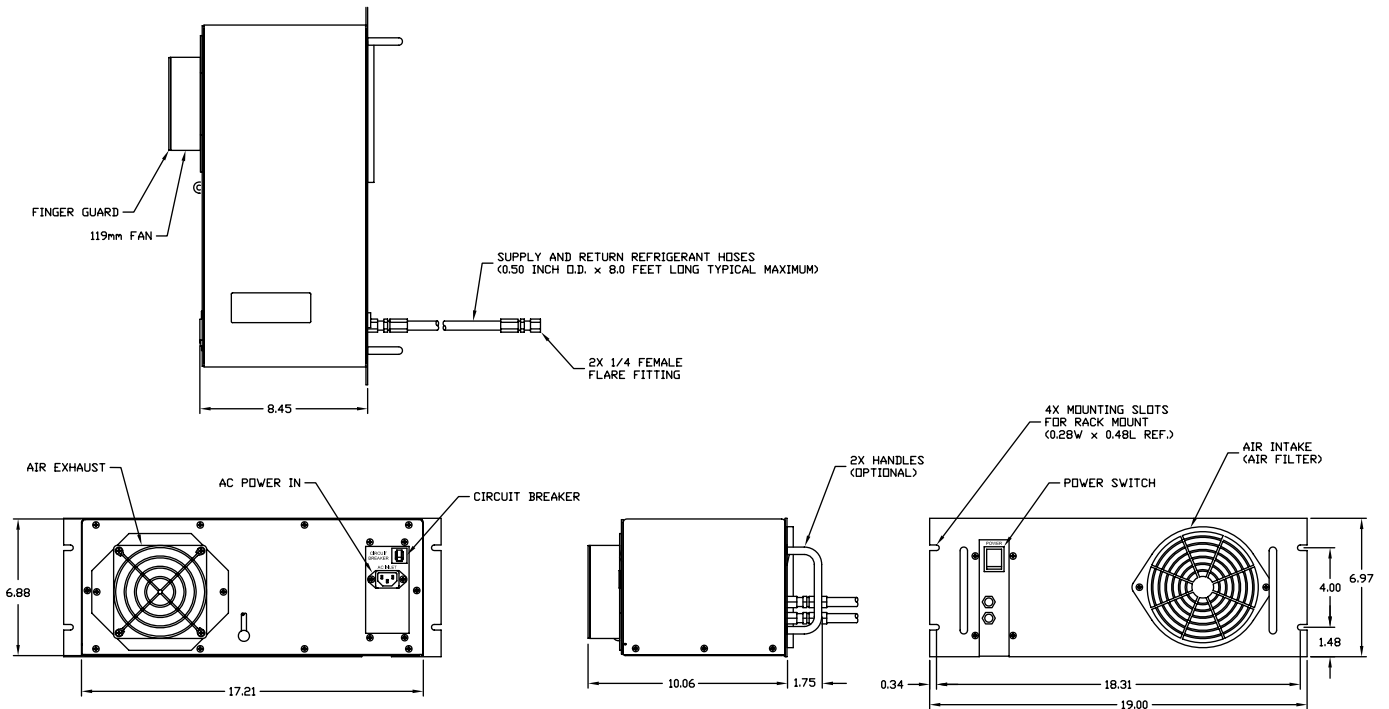
CHILLER MODULE PERFORMANCE DATA

K-O Concepts Model HS-4

Thermal Performance



FEATURES & DIMENSIONS (All Models)



K-O Concepts, Incorporated
 4375 South Street
 Titusville, Florida, 32780
 Phone: 407/296-7788 • Fax: 321/567-0046
 E-Mail: Sales@K-OConcepts • Web: www.K-OConcepts.com

