

NON-REFRIGERATED RE-CIRCULATING HEAT EXCHANGERS / ISOLATORS

OTI Series – Portable Fluid to Air

A Partial List of Process Cooling Markets: Aero. & Defense, Digital Printing, Food & Beverage, Mobile Imaging, Plastics Photonics, Research, & Semi-Conductor.



Model OTI-1A to 30A shown

Features:

- 1 to 30 kW of cooling capacity
- Opti Temp modulated temperature control
- Micro-processor based PID auto tuning controller with digital display
- Programmable high temp or high/low temp alarm
- Temp output in °C or °F
- Dual frequency compatible
- Operating temperature ranges up to 40°C
- Non-ferrous wetted construction standard
- Rugged powder coated steel cabinetry
- Stainless steel MNPT process connections
- Swivel casters standard
- Removable cover and side access panels
- NEMA 1 electrical enclosure standard
- S.S. brazed plate evaporator
- Power cord provided
- One year limited warranty

Contact Information:

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Models OTI-1A to 30A 1 to 30 kW

Options:

Controls / Interlocks

- PLC controller
- RS232 and RS485 communication
- Ethernet ready controller
- Remote start/stop
- Audible alarm with silence
- Visual alarm beacon
- Remote control
- Fluid monitoring and control devices

Electrical

- NEMA 4 (outdoor) controls
- 24V control systems
- Phase monitor
- Power cord extension
- CE compliance
- NRTL certifications

Mechanical

- Specialty wetted construction materials
- Multiple pump upgrades
- Anti-drain back prevention
- Particle filters
- UV filters
- Immersion heaters
- Remote temp sensing
- Fluid circuit insulation
- Manifolds
- Drain kits
- Extended warranty

Other

- Fluid conductivity control systems
- Automatic fluid pH control systems
- OPTISHIELD® corrosion inhibitors

**Please contact our sales & applications department
for a more complete list of available options.**

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Specifications⁽¹⁾

| Model | | OTI-1A | OTI-2A | OTI-5A | OTI-10A | OTI-15A | OTI-20A | OTI-30A |
|------------------------------------|-----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Cooling Capacity ² | KW | 1 | 2 | 5 | 10 | 15 | 20 | 30 |
| | MBTU/HR | 3.4 | 6.8 | 17.1 | 34.1 | 51.2 | 68.3 | 102.3 |
| | Ton | 0.28 | 0.57 | 1.42 | 2.84 | 4.27 | 5.69 | 8.53 |
| Flow: Process Side | GPM (L/min) | 2 (7.6) | 4 (15.1) | 4 (15.1) | 12 (45.2) | 12 (45.2) | 18 (68.1) | 26 (98.4) |
| Required Air Flow | CFM | 380 | 440 | > 440 | 5,050 | 6,450 | 6,450 | 13,700 |
| Std. Process Pump ³ | Type | P1 | P3 | P3 | C1 | C1 | C2 | C3 |
| Size | HP | 1/3 | 1/3 | 1/3 | 1/2 | 1/2 | 1.5 | 1.5 |
| Pump Pressure ⁴ | PSI | 65 | 65 | 65 | 30 | 30 | 43 | 48 |
| Full Load Amps. ⁵ | 115/1/60 | 9.8 | 9.8 | 9.8 | N/A | N/A | N/A | N/A |
| | 208-230/1/60 | 4.9 | 4.9 | 4.9 | 8.0 | 8.0 | 10.0 | 10.0 |
| | 208-230/3/60 | N/A | N/A | N/A | 3.6 | 3.6 | 5.2 | 5.2 |
| | 460/3/60 | N/A | N/A | N/A | 1.8 | 1.8 | 2.6 | 2.6 |
| Process Pipe Size | NPT; in | ½ | ½ | ½ | 1 | 1 | 1- ¼ | 1- ¼ |
| High Temp. Limit ⁶ | °F (°C) | 104 (40) | 104 (40) | 104 (40) | 104 (40) | 104 (40) | 104 (40) | 104 (40) |
| Temp. Stability ⁷ | °F (C) | ±0.2 (±0.1) | ±0.2 (±0.1) | ±0.2 (±0.1) | ±0.2 (±0.1) | ±0.2 (±0.1) | ±0.2 (±0.1) | ±0.2 (±0.1) |
| Dimensions ⁸ | Length; in (cm) | 24.00 (60.96) | 24.00 (60.96) | 24.00 (60.96) | 24.00 (60.96) | 24.00 (60.96) | 24.00 (60.96) | 24.00 (60.96) |
| | Width; in (cm) | 24.63 (62.56) | 24.63 (62.56) | 24.63 (62.56) | 24.63 (62.56) | 24.63 (62.56) | 24.63 (62.56) | 24.63 (62.56) |
| | Height; in (cm) | 22.00 (55.88) | 22.00 (55.88) | 22.00 (55.88) | 22.00 (55.88) | 22.00 (55.88) | 22.00 (55.88) | 22.00 (55.88) |
| External Heat Exchanger Dimensions | Length; in (cm) | Internal | Internal | Internal | 39.75 | 49.75 | 49.75 | 89.75 |
| | Width; in (cm) | Internal | Internal | Internal | 43.00 | 43.00 | 43.00 | 43.00 |
| | Height; in (cm) | Internal | Internal | Internal | 40.50 | 40.50 | 40.50 | 40.50 |
| Construction ⁹ | Wetted | NF | NF | NF | NF | NF | NF | NF |
| Approx. Ship Weight | Lbs (kg) | 225 (102) | 225 (102) | 225 (102) | 480 (218) | 535 (243) | 535 (243) | 695 (315) |

(1) As a result of continuous improvement efforts, specifications are subject to change without notice or liability. (2) Pump pressures at pump discharge. (3) Capacity based on 10°C approach differential temperature. (4) Full load amps for models with standard pumps. Consult applications engineering for models with optional pumps. (5) Full load amps must be used for sizing disconnects and supply wiring. Contact factory for 50 Hz applications engineering. (6) Dimensions are approximate and do not include filters. 2.5" height casters are used on models OTI-1W to 30W. 5" height casters used on models OTI-40W to 100W. (7) Cooling stability only. Optional heating stability: ± 2.0°F.

Pump Curves:

