

ODHx, ODHxT

Series



Custom Electric Duct Heaters



Slip-in electric duct heater
ODHI (open coil element)
ODHIT (tubular element)



Flanged electric duct heater
ODHF (open coil element)
ODHFT (tubular element)



Round electric duct heater
ODHR (open coil element)
ODHRT (tubular element)

Features

| | |
|---------------------|--|
| Finishing | Unpainted galvanized steel |
| Tension | 120V, 208V, 240V, 277V, 347V, 480V, 600V, 1- or 3-phase |
| Construction | Heavy-duty, corrosion-resistant, galvanized steel enclosure, 20- to 16-gauge |
| | Easy-access junction box door |
| | Double thermal protection with manual and automatic reset |
| | Neoprene gasket (optional add-on) |
| | NEMA and NEMA4X control box (optional) |
| Element | Stainless steel heating element assembly (option SS) |
| | Two heating element models (0.1kW to 1000kW heating capacity): |
| | <ul style="list-style-type: none"> • Open coil element, nickel-chrome: up to 25.5kW/ft.² heating capacity • Tubular element (T), Incoloy 800: up to 13kW/ft.² heating capacity |
| Control | SCR-modulated elements to maintain a constant temperature using only the energy required |
| | Built-in temperature limit sensor, connected to the circuit board (option TT) Electronic air-flow sensor (option P) |

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| Control | For circuit board, sensor and electronic control options, refer to the options and controls table |
| | Control voltage: 010V, 210V (420 mA), 24VAC (PWM), 24VDC |
| | Heater interlocking terminal block included |
| Installation | Vertical, horizontal, upward or downward air flow |
| | Frame installation options: slip-in (I), 1in. flanged (25.4mm) (F) or with round collar (R) |
| | Round collar (ODHR): available for installation on 4in. to 40in. (102mm to 1,016mm) round ducts |
| | Rectangular collar (ODHI and ODHF): available for installation on ducts starting at 6in x 6in. (152mm x 152mm) |
| | Protective screens available for the left (option G) and right (option H) |
| | Maximum inlet air temperature: 27°C (81°F) |
| Maximum outlet air temperature: 93°C (200°F) | |
| | Designed and approved for zero-clearance to combustible materials |

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| Benefits | Customizable, fully configurable: available in multiple models, sizes and capacities; the duct heaters can be fully adapted to all configurations and installation requirements |
| | Application versatility: suitable for preheating ventilation air as well as space heating; easily adapts to a wide variety of commercial and OEM applications |
| | Reliable and rapid performance: supplies the energy required to quickly reach and maintain the desired temperature, ensuring constant comfort |
| | Optimal efficiency and precise control: the modulation system combined with a temperature sensor guarantees precise, stable output tailored to specific needs |

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| Warranty | 3-year warranty |
| Application | Residential, commercial, institutional and industrial |
| | Suitable for new installations and retrofits |

Technical Specifications

| Product – Code | Model Type | Power (kW) | Voltage (V) | Phase (Quantity) | Duct Dimensions (in.) | Qty |
|----------------|------------|-------------|-------------|------------------|-----------------------|-----|
| ODHI / ODHIT | Slip-in | Up to 1,000 | 120 to 600 | 1 or 3 | 6 × 6 | |
| ODHF / ODHFT | Flanged | Up to 1,000 | 120 to 600 | 1 or 3 | 6 × 6 | |
| ODHR / ODHRT | Round | Up to 1,000 | 120 to 600 | 1 or 3 | 4 | |

UL certification: 25.5kW/ft² for ODHx and 13kW/ft² for ODHxT

Electric Duct Heater Thermostats

| Product # Kit | Description | Qty |
|---------------|--|-----|
| D010 | Low Voltage Electronic Thermostat 24V | |
| D070 | Remote duct thermostat (use with CIR-048 only) | |
| ET120 | 0-10V electronic thermostat (Celsius only) | |
| ET180 | 24V electronic thermostat (Celsius only) | |

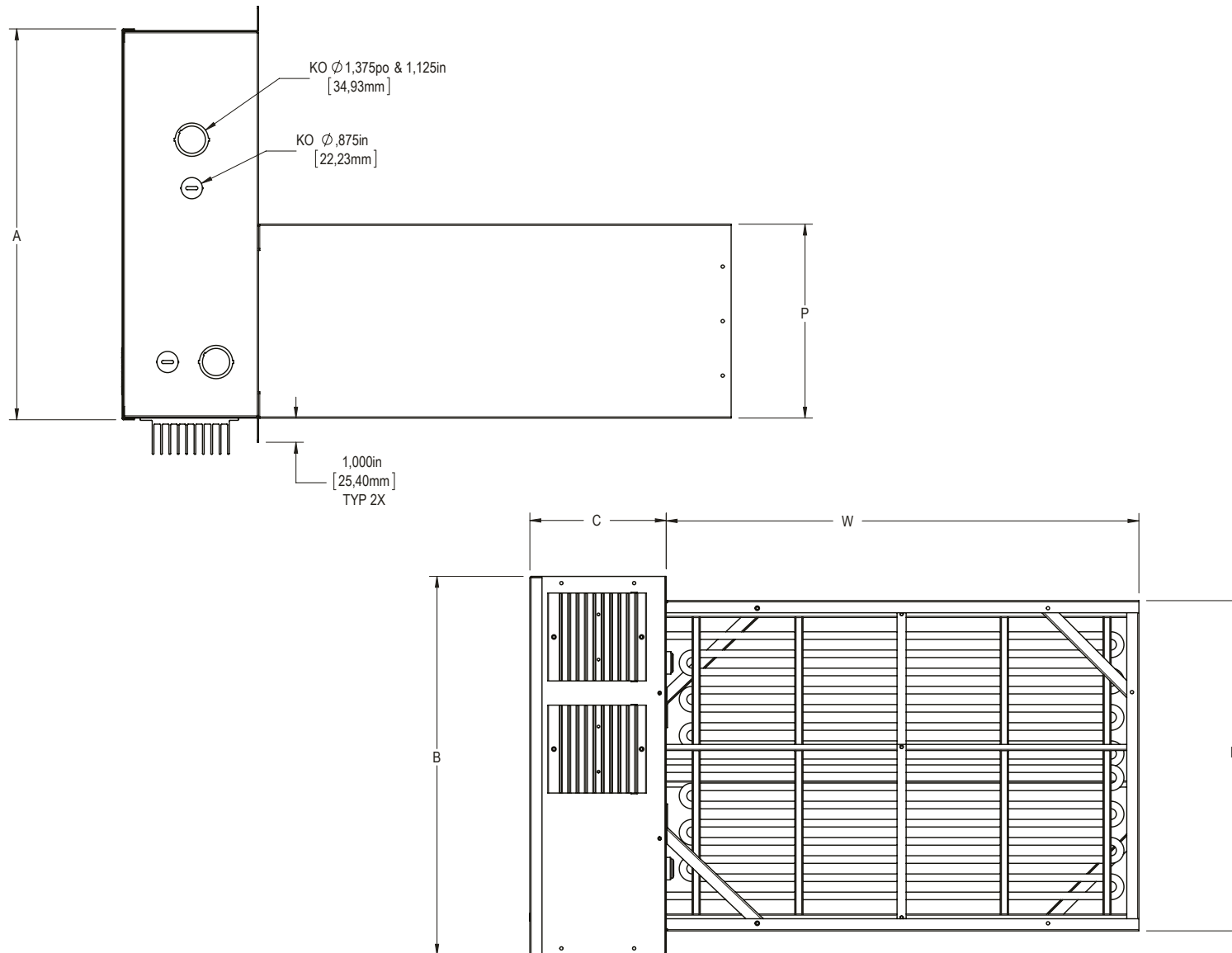
Available Options

| Option | Description | Option | Description | Option | Description |
|--------|--|--------|--|--------|---|
| D | Transformer not included | O | OEM | GG | 0.5in. perforated grille |
| E | Remote unit | P | External electronic air-flow sensor | HH | NEMA 4 or 4X control box (NEMA 12 included) |
| F | Vertical installation with horizontal air flow | R | Fan relay | II | Control box that matches duct height |
| G | Left-side protective screen | S | Horizontal installation with vertical air flow | JJ | Disconnect switch with door-release mechanism |
| H | Right-side protective screen | T | Supply duct temperature sensor | KK | Control fuse |
| I | Main circuit breaker | V | SCR rated for 2x amperage required | LL | SCR relay on each circuit |
| J | Main power disconnect switch | W | Indicator light | PP | Hinged door |
| K | Main power fuse | X | Grade A elements (80-20) | SS | Stainless steel heating element assembly |
| L | Power stage fuses | Y | Unbalanced 3-phase system | TT | Built-in temperature limit sensor |
| N | Adjustable differential pressure switch | CC | Heating element assembly same size as enclosure, left side | -# | Unique model identification |

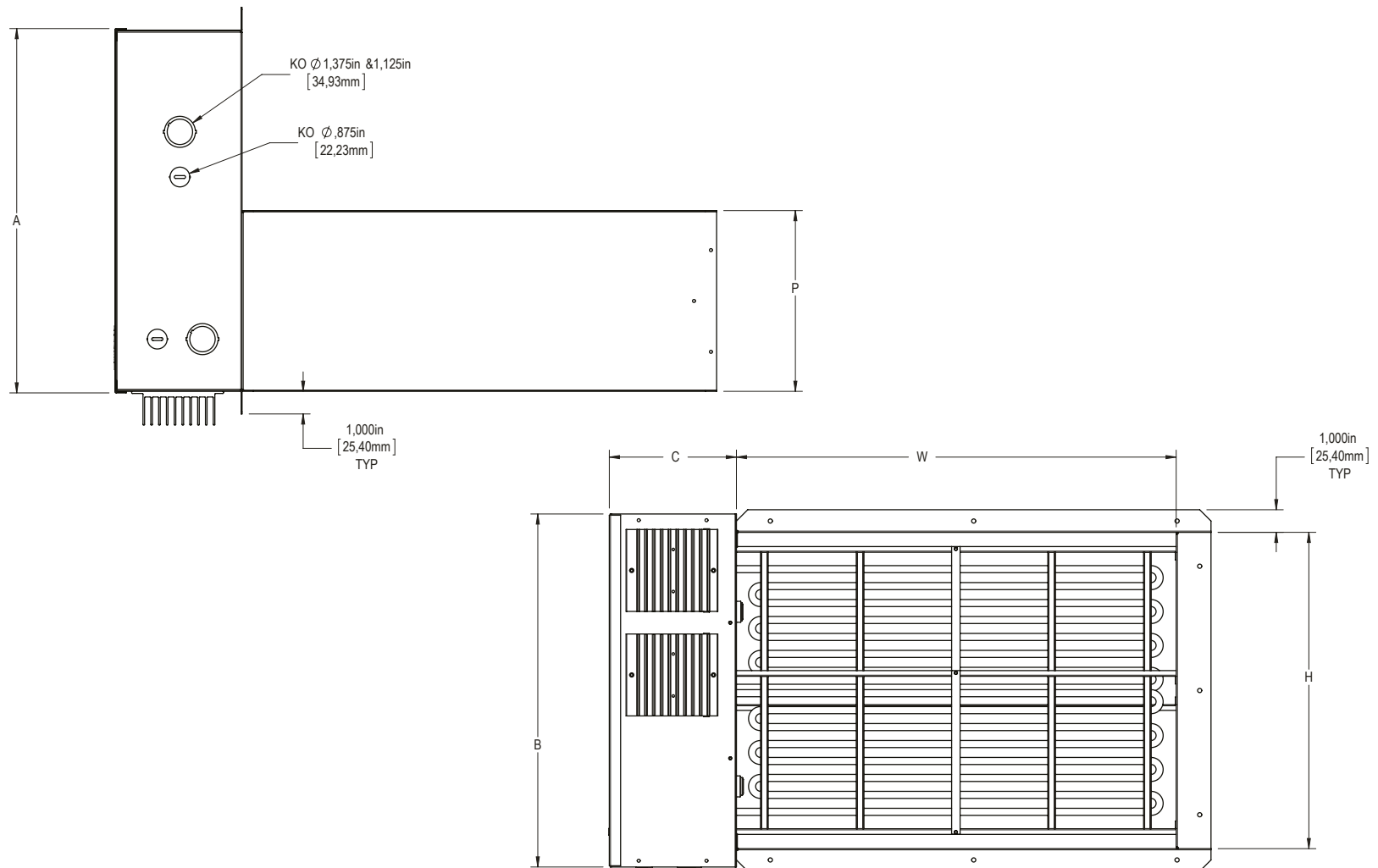
List of standard components

- Class II control transformer
- Magnetic contactors
- Relay and/or SCR (see wiring diagram)
- Automatic thermal protection
- Manual thermal protection

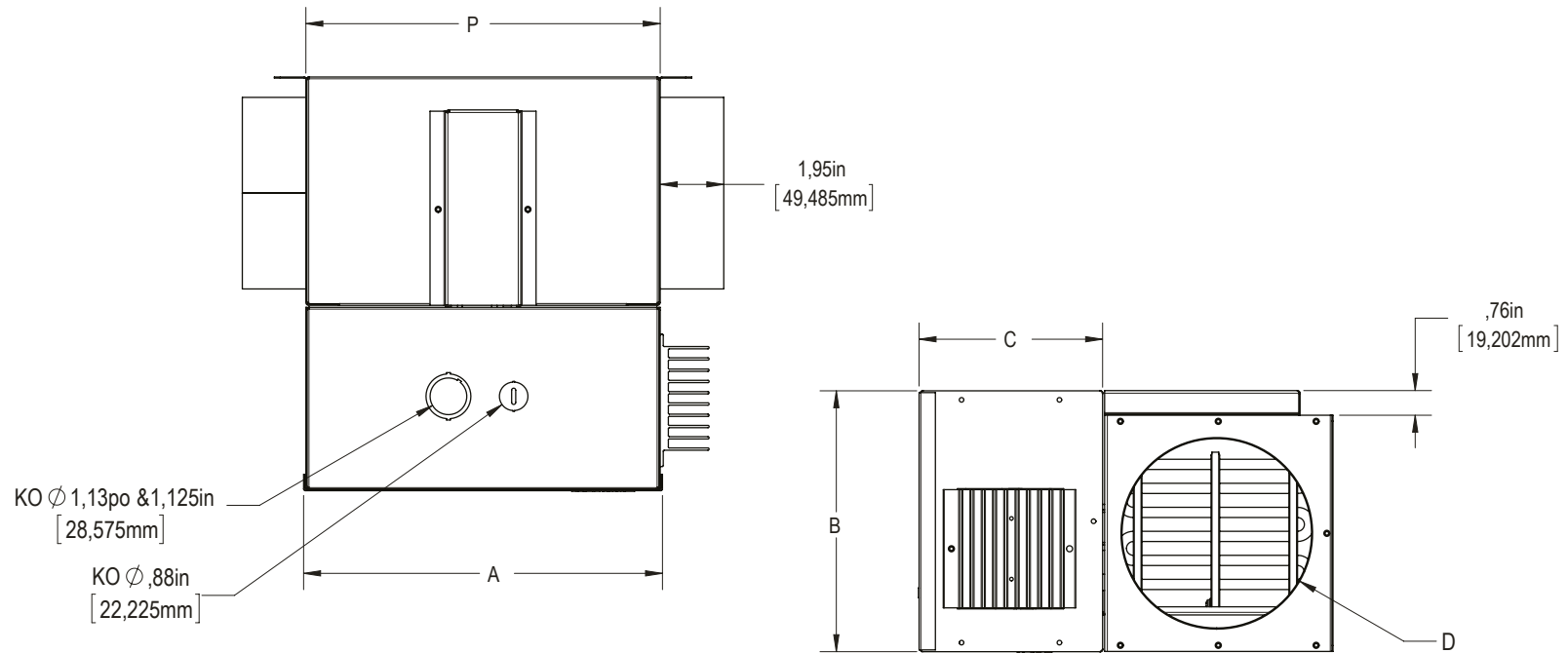
ODHI Technical Dimensions



ODHF Technical Dimensions



ODHR Technical Dimensions



Other

| Type | Quantity | Model and description Additional information | Volts | Phase | Watts | Length mm/in | Colour/installation information |
|------|----------|---|-------|-------|-------|-----------------|---------------------------------|
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Specifications are subject to change without notice

Contact details

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| Project: | | Approval / Information |
| Consulting Engineer: | | |
| Electrical contractor: | | |
| Supplier: | | |
| Date: | | |
| Ouellet reference: | | |
| Comments: | | |