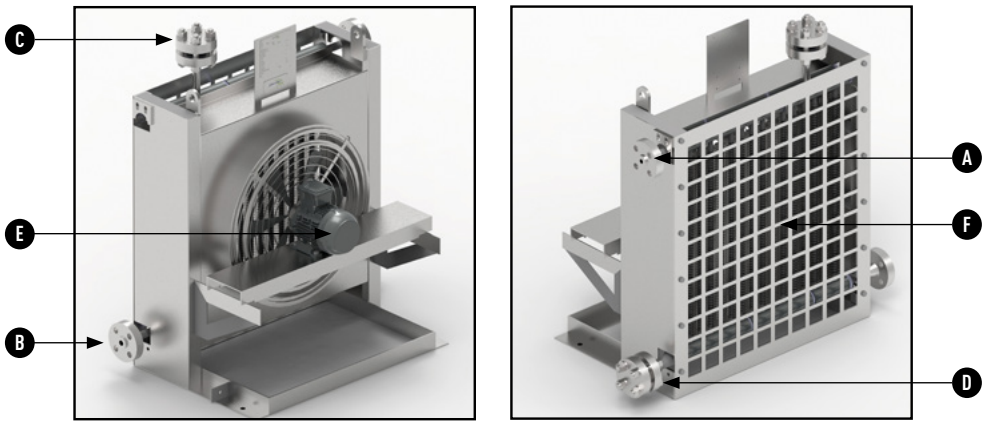
# THERMADRAFT

## FORCED DRAFT HEAT EXCHANGER

**A** – Process inlet connection
**B** – Process outlet connection
**C** – Vent connection
**D** – Drain connection
**E** – Fan and motor
**F** – Finned tube array




## Design features/benefits

- Heat exchanger for use in mechanical seal support systems.
- Air cooled heat exchanger provides cooling without cooling water.
- Motor driven fan ensures continuous air flow.
- Meets requirements of ASME Sec VIII, API 682 and API 661.

## Options

- Three sizes available for different heat loads
- Connections are available flanged up to #2500 flanges, or with threaded connections
- Fins available in marine grade aluminium

## Applications

- Refinery
- Petrochemical
- Chemical processing
- Pipeline
- Power generation

## Materials of construction

- 316 Stainless Steel enclosure and whetted parts
- Aluminum Fins. Marine grade available

## Performance capabilities

- Max Pressure: 206 barg (3000 psig)
- Max Temperature: 365 °C (690 °F)
- Ambient Temperature Range: -20 °C to +60 °C (-15 °F to +140 °F)

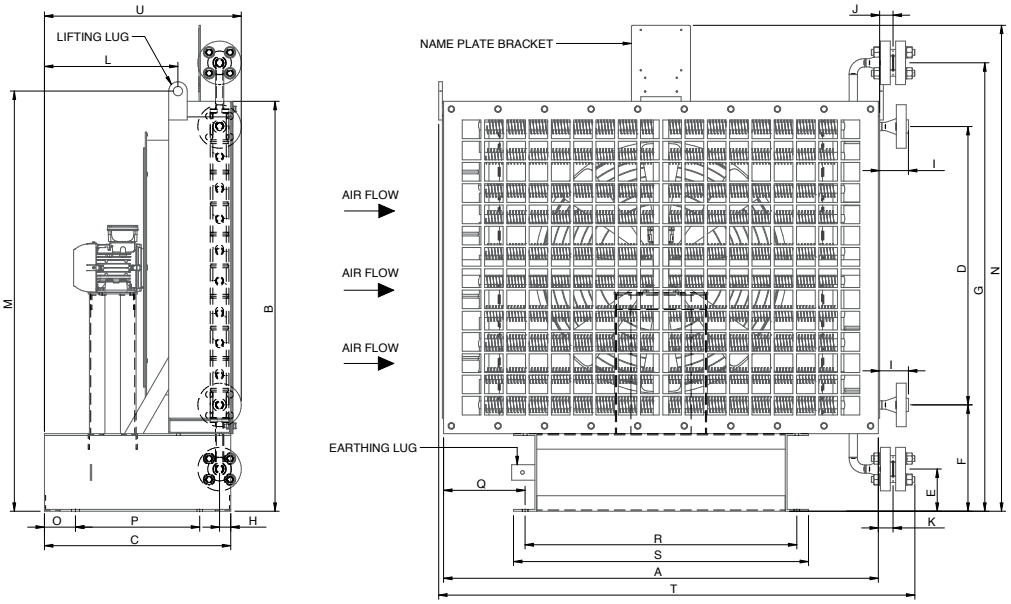
### Sizes available

| Model | Fan diameter (mm / inch) | Cooling area ($m^2$ / $ft^2$) | Motor size (kW / Hp) |
|---|---|---|---|
| 1 | 450 / 17.7 | 6.96 / 74.9 | 0.37 / 0.5 |
| 2 | 575 / 22.6 | 10.4 / 111.9 | 0.56 / 0.75 |
| 3 | 800 / 31.5 | 21.03 / 226.4 | 0.75 / 1 |

# THERMADRAFT

## FORCED DRAFT HEAT EXCHANGER

### Dimensional data




| Dimensions (mm) | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Description** | **A** | **B** | **C** | **D** | **E** | **F** | **G** | **H** | **I** | **J** | **K** | **L** | **M** | **N** | **O** | **P** | **Q** | **R** | **S** | **T** | **U** |
| MODEL-1 | 650 | 999 | 600 | 924 | 120 | 136 | 1118 | 50 | 103 | 199 | 112 | 375 | 1047 | 1170 | 95 | 437 | 30 | 590 | 651 | 935 | 620 |
| MODEL-2 | 892 | 999 | 600 | 788 | 119 | 134 | 1117 | 50 | 102 | 244 | 115 | 375 | 1047 | 1170 | 95 | 437 | 30 | 832 | 892 | 1176 | 620 |
| MODEL-3 | 1400 | 1320 | 600 | 896 | 136 | 343 | 1444 | 36 | 93 | 43 | 47 | 430 | 1353 | 1565 | 100 | 400 | 263 | 875 | 950 | 1533 | 634 |

| Dimensions (inches) | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Description** | **A** | **B** | **C** | **D** | **E** | **F** | **G** | **H** | **I** | **J** | **K** | **L** | **M** | **N** | **O** | **P** | **Q** | **R** | **S** | **T** | **U** |
| MODEL-1 | 25.59 | 39.33 | 23.62 | 36.37 | 4.72 | 5.35 | 44.01 | 1.96 | 4.05 | 7.83 | 4.40 | 14.76 | 41.22 | 46.06 | 3.74 | 17.20 | 1.18 | 23.22 | 25.62 | 36.81 | 24.40 |
| MODEL-2 | 35.11 | 39.33 | 23.62 | 31.02 | 4.68 | 5.27 | 43.97 | 1.96 | 4.01 | 9.60 | 4.52 | 14.76 | 41.22 | 46.06 | 3.74 | 17.20 | 1.18 | 32.75 | 35.11 | 46.29 | 24.40 |
| MODEL-3 | 55.11 | 51.96 | 23.62 | 35.27 | 5.35 | 13.50 | 56.85 | 1.41 | 3.66 | 1.69 | 1.85 | 16.92 | 53.26 | 61.61 | 3.93 | 15.74 | 10.35 | 34.44 | 37.40 | 60.35 | 24.96 |

**North America**
United States of America
Tel: 1-847-967-2400

**Europe**
United Kingdom
Tel: 44-1753-224002

**Latin America**
Brazil
Tel: 55-11-3371-2500

**Middle East & Africa**
United Arab Emirates
Tel: 971-481-27800

**Asia Pacific**
Singapore
Tel: 65-6518-1800

If the products featured will be used in a potentially dangerous and/or hazardous process, your John Crane representative should be consulted prior to their selection and use. In the interest of continuous development, John Crane Companies reserve the right to alter designs and specifications without prior notice. It is dangerous to smoke while handling products made from PTFE. Old and new PTFE products must not be incinerated. ISO 9001 and ISO 14001 Certified, details available on request.