



## **A40**

The A40 Airblast Cooler, the largest in Applied Thermal Control's A-Series, is encased in a robust enclosure, making it particularly well-suited for outdoor installations. This large unit is designed to handle significant cooling tasks, making it an ideal choice for industrial applications that require extensive cooling capacity. Due to the high flow rates necessary for its operation, the A40 is specifically configured to accommodate centrifugal pumps, which are capable of handling the cooler's demanding requirements. Available in both single- and three-phase electrical configurations, the A40 offers versatility in terms of power compatibility, ensuring it can be effectively integrated into a wide range of industrial settings. With a cooling capacity of 40kW at a setpoint 10°C above ambient temperature, the A40 stands out for its ability to manage substantial cooling needs.

The design of the A40, focused on large-scale cooling, is ideal for applications where significant heat dissipation is essential. The outdoor-friendly enclosure ensures durability and resilience, making the A40 a reliable choice for challenging external environments where exposure to the elements is a factor. The inclusion of centrifugal pumps within the unit emphasises its suitability for processes that demand high flow rates, ensuring efficient and consistent cooling across various applications.

The A40 is particularly effective in applications such as cooling industrial furnaces, asphalt screening, and large motors used in mixing processes. Its capacity for hydrogen generation cooling also highlights its adaptability to specialised industrial processes.





#### **Enclosure Size**

1180 x 1180 x 1933mm



#### **Pump Options**

Centrifugal Pump



# Power Supply Options

Three-Phase



# Cooling Capacity

Setpoint 5°C above ambient – 30kW Setpoint 10°C above ambient – 40kW

Setpoint 20°C above ambient –

## **Specifications**

| A40                               |  |   |
|-----------------------------------|--|---|
| Administrative Data               | ATC Model Name   | A40   |
|                                   | TE Model Number  | AB400   |
| Physical Attributes               | Physical Dimensions (mm)                                       | W1180 x D1180 x H1933mm   |
|                                   | Construction   | Structural elements 1.5mm gauge Body covers in 1.2mm gauge Floorstanding, no castors 1.5mm CR4 MILD STEEL, Leatherette Semi-Gloss paint |
|                                   | Mounting Type  | Floorstanding, no castors   |
|                                   | Acceptable Environment   | Indoors or outdoors sheltered   |
|                                   | Dry Weight (kg)  | 160   |
|                                   | Wet Weight (kg)  | 400   |
|                                   | Noise Level (db(A)) at 1 metre                                 | ≤65   |
|                                   | Product IP Rating  | 24  |
|                                   | Toolless Access  | No  |
|                                   | Enclosure Drawing Number                                       | MA407   |
| Temperature Control<br>Attributes | Cooling/Refrigeration Technology                               | Airblast  |
|                                   | Evaporator Technology  | N/A   |
|                                   | Duty at +20°C ambient, Setpoint +20°C                          | N/A   |
|                                   | Duty at +30°C ambient, Setpoint +20°C (kW)                     | N/A   |
|                                   | Duty at +35°C ambient, Setpoint +20°C (kW)                     | N/A   |
|                                   | Cooling Capacity with 'Setpoint' 5°C Above<br>Ambient/Primary  | 20kW  |
|                                   | Cooling Capacity with 'Setpoint' 10°C Above<br>Ambient/Primary | 40kW  |
|                                   | Cooling Capacity with 'Setpoint' 20°C Above<br>Ambient/Primary | 80kW  |
|                                   | Refrigerant & Charge   | N/A   |
|                                   | Ambient Temperature Range (Standard)                           | -15°C to +50°C (setpoint dependent on load)   |
|                                   | Ambient Temperature Range (Extended)                           | -20°C to +55°C (setpoint dependent on load)   |
|                                   | Control Method   | None, continuous fan  |
|                                   | Temperature Stability (with Constant Load)                     | Load & ambient dependent  |
|                                   | Temperature Resolution   | N/A   |
|                                   | Maximum Total Heat Rejection                                   | Applied load, plus power in   |

| Water Circuit Attributes  | Designed Process Fluid Flow Rate   | 40l/min  |
|---|--|--|
|   | Designed Process Fluid Temperature   | up to 50°C   |
|   | Designed Pressure  | up to 8 bar  |
|   | Process Temperature Range (Standard)   | ambient to +60°C   |
|   | Process Temperature Range (Extended)   | ambient to 80°C  |
|   | Maximum Return Line Temperature (Standard)                                       | 60°C   |
|   | Maximum Return Line Temperature (Extended)                                       | 90°C   |
|   | Pump Options   | P40, P80, P120   |
|   | Visible Level Indicator  | No   |
|   | Integrated Drain   | No   |
|   | System Volume  | 2501   |
|   | Tank Type  | Stainless steel, flow through  |
|   | Flow and Pressure Control  | No   |
|   | Connection Size (Fittings to convert size as needed available)                   | 3/4"BSPPF, or 1"BSPPF<br>3/8" + 1/2" hose barbs                      |
|   | Construction Materials   | All metal parts stainless steel                                      |
|   | Fluid Compatibility  | Hexid Fluid, Sterile water, Propylene Glycol                         |
| Electrical Attributes   | 24VDC-Lspec  |  |
|   | (90-264Vac, 1~/2~, 50-60Hz) U-spec   |  |
|   | (230Vac, 1~, 50Hz) 0-spec  |  |
|   | (115Vac, 1~, 60Hz) 1-spec  |  |
|   | (208-220Vac, 1~/2~, 60Hz) 2-spec   |  |
|   | (400Vac, 3~, 50Hz) 3-spec  | Available  |
|   | (460Vac, 3~, 60Hz) 4-spec  |  |
|   | 200/100V, 50/60Hz, 1φ 5-spec   |  |
|   | (Switchable 208Vac, 1~/2~, 60Hz   220Vac, 1~/2~, 60Hz   230Vac, 1~, 50Hz) 6-spec |  |
|   | (Switchable 115Vac, 1~, 60Hz   220Vac, 1~/2~,<br>60Hz   230Vac, 1~, 50Hz) 7-spec |  |
|   | (208Vac, 3~, 60Hz) 8-spec  | Available  |
|   | (208-230Vac, 1~/2~, 50/60Hz) 9-spec  | Available  |
|   | Overcurrent Fault-Cleared Restart Mode   | Manual   |
| Safety Interlocks,<br>Protections, Standards,<br>and Indicators | 1st Party Approvals  | CE   |
|   | 3rd Party Approvals  |  |
|   | Empty Fluid Reservoir Alarm  | Not included   |
|   | Half-Full Fluid Reservoir Indicator  | Not included   |
|   | Low Fluid Flow Alarm   | Notincluded  |
|   | Temperature Out of Range Alarm   | Not included   |
|   | Compressor HP Switch   | N/A  |
|   | Interlock Restored, Restart Mode   | Manual by default. Specify automatic with 'A' suffix on model number |
|   | Overcurrent Protection   | Standard, via MCB  |
|   | Motor Thermal Overload   | Standard, via MCB  |
|   | Warranty Options   | 2 years parts, one year labour                                       |
|   | 1  | ,  |



Pricing on any accessories shown can be found by keying the part number into the search box on our website.

The specifications listed in this brochure are subject to change by the manufacturer and therefore cannot be guaranteed to be correct. If there are aspects of the specification that must be guaranteed, please provide these to our sales team so that details can be confirmed.

### www.wolflabs.co.uk

Tel: 01759 301142

Fax: 01759 301143

sales@wolflabs.co.uk

Please contact us if this literature doesn't answer all your questions.