



A12

The A12 Airblast Cooler, part of the diverse A-Series from Applied Thermal Control, is designed for high-capacity cooling and flexibility. Encased within the spacious K12 enclosure, the A12 incorporates three twin heat exchangers, totalling six fans to ensure efficient and reliable cooling performance. This ample enclosure space not only accommodates the substantial cooling mechanism but also allows for the addition of various optional features to tailor the cooler to specific requirements. The A12's adaptability is further enhanced by its compatibility with both centrifugal and positive displacement pumps, providing versatility to meet different cooling needs. Available in both single- and three-phase configurations, the A12 can integrate into various electrical systems. Offering a cooling capacity of 12kW above ambient temperature, the A12 is a robust unit suited for intensive cooling demands.

The design of the A12, with its multiple twin heat exchangers, ensures a high level of redundancy in its cooling mechanism. The presence of six fans guarantees that cooling processes remain uninterrupted, even if one of the fans encounters an issue. This design aspect is helpful for applications where consistent operation is vital, and downtime can have significant repercussions.

The A12's focus on reliable, continuous operation makes it an ideal choice for critical applications where steady and effective cooling is paramount.

Applications for the A12 Airblast cooler are diverse and include areas requiring substantial and dependable cooling solutions. These applications range from cooling furnaces and asphalt screening to providing temperature regulation for magnetic stirrers, large motors used in mixing processes, hydrogen electrolysis systems, Roots blowers, and helicopter motors.

- ✓ High-Capacity Cooling Design
- Versatile Pump Compatibility
- Robust Redundancy Features
- ✓ Wide Application Suitability



Enclosure Size

775 x 510 x 850mm



Pump Options

Positive Displacement Pump Centrifugal Pump



Power Supply Options

Single-Phase Three-Phase



Cooling Capacity

Setpoint 5°C above ambient – 6kW

Setpoint 10°C above ambient – 12kW

Setpoint 20°C above ambient – 24kW

Specifications

Administrative Data	ATC Model Name	A12
	TE Model Number	AB100
Physical Attributes	Physical Dimensions (mm)	L775 x W510 x H1130mm
	Construction	Sheet steel gauge 1.5mm Epoxy polyester powder coat
	Mounting Type	Floorstanding on castors
	Acceptable Environment	Indoors or outdoors sheltered
	Dry Weight (kg)	120
	Wet Weight (kg)	131
	Noise Level (db(A)) at 1 metre	≤65
	Product IP Rating	24
	Toolless Access	No
	Enclosure Drawing Number	MA252
Temperature Control 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 Ambient/Primary	6kW
	Cooling Capacity with 'Setpoint' 10°C Above Ambient/Primary	12kW
	Cooling Capacity with 'Setpoint' 20°C Above Ambient/Primary	24kW
	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	17l/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	P17, P15, P40
	Visible Level Indicator	No
	Integrated Drain	No
	System Volume	111
	Tank Type	Stainless steel, flow through
	Flow and Pressure Control	No
	Connection Size (Fittings to convert size as needed available)	1/2" BSPPF, 3/4"BSPPF, or 1"BSPPF 3/8" + 1/2" hose barbs
	Construction Materials	All metal parts stainless steel
	Fluid Compatibility	Hexid Fluid, Sterile water, Propylene Glycol
	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
Electrical Attributes	(400Vac, 3~, 50Hz) 3-spec (460Vac, 3~, 60Hz) 4-spec	Available
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