

A03

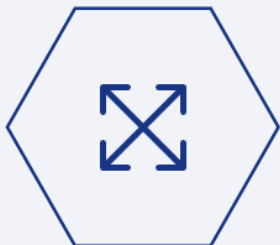


The A03 Airblast Cooler, part of Applied Thermal Control's comprehensive A-Series, is specifically designed for compact spaces and efficiency. Encased in the K3 enclosure, the A03 is shorter than its A02 counterpart, fitting comfortably under laboratory benches, making it an ideal solution for space-constrained environments such as research labs and medical facilities. This model caters to single-phase power systems, operating within a voltage range of 208 to 240V, thereby ensuring compatibility with a variety of laboratory and industrial electrical infrastructures. Notably, the A03 offers a cooling capacity of 3kW at a setpoint 10°C above ambient temperature.

In contrast to the A02, the A03 is not configured for use with centrifugal pumps. This makes the A03 suitable for applications with high back pressure, and also allows it to work with more viscous fluids such as minerals. This airblast cooling method, fundamental to the A03's operation, involves propelling ambient air over the process fluids – such as water, glycols, or oils – to effectively remove excess heat. This approach avoids the complexities of traditional refrigeration systems and is effective in maintaining process temperatures above ambient levels, ensuring that the A03 delivers reliable and consistent cooling performance.

The practical design and cooling capabilities of the A03 make it suitable for a range of specific applications, including materials testing, industrial computed tomography (CT), industrial X-ray systems, cancer therapy machines, welding robots, and PCR machines.

- ✓ Compact and Efficient Design
- ✓ Adaptable Power Compatibility
- ✓ Direct Cooling Method
- ✓ Versatile Application Suitability



Enclosure Size

540 x 550 x 713mm



Pump Options

Positive Displacement Pump



Power Supply Options

Single-Phase



Cooling Capacity

Setpoint 5°C above ambient –
1.5kW
Setpoint 10°C above ambient –
3kW
Setpoint 20°C above ambient –
6kW

Specifications

A03

Administrative Data	ATC Model Name	A03
	TE Model Number	AB-Compact 30
Physical Attributes	Physical Dimensions (mm)	L540 x W550 x H713mm
	Construction	Sheet steel gauge 1.5mm Epoxy polyester powder coat
	Mounting Type	Floorstanding on castors
	Acceptable Environment	Indoors or outdoors sheltered
	Dry Weight (kg)	65kg
	Wet Weight (kg)	70kg
	Noise Level (db(A)) at 1 metre	≤65
	Product IP Rating	24
	Toolless Access	No
	Enclosure Drawing Number	MA165
Temperature Control Attributes	Cooling/Refrigeration Technology	Airblast
	Evaporator Technology	N/A
	Duty at +20°C ambient, Setpoint +20°C (kW)	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	1.5kW
	Cooling Capacity with 'Setpoint' 10°C above Ambient/Primary	3kW
	Cooling Capacity with 'Setpoint' 20°C above Ambient/Primary	6kW
	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	5l/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	P5, P10, P17
	Visible Level Indicator	No
	Integrated Drain	No
	System Volume	5l
	Tank Type	Stainless steel, flow through
	Flow and Pressure Control	No
	Connection Size (Fittings to convert size as needed available)	1/2" BSPPF 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	–
	(460Vac, 3~, 60Hz) 4-spec	–
	5-spec	–
	(Switchable 208Vac, 1~/2~, 60Hz 220Vac, 1~/2~, 60Hz 230Vac, 1~, 50Hz) 6-spec	–
	(Switchable 115Vac, 1~, 60Hz 220Vac, 1~/2~, 60Hz 230Vac, 1~, 50Hz) 7-spec	–
	(208Vac, 3~, 60Hz) 8-spec	–
	(208-230Vac, 1~/2~, 50/60Hz) 9-spec	Available, 4A
	Overcurrent Fault-Cleared Restart Mode	Automatic
Safety Interlocks, Protections, Standards, 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	Not included
	Temperature Out of Range Alarm	Not included
	Compressor HP Switch	N/A
	Interlock Restored, Restart Mode	Automatic
	Overcurrent Protection	Standard, via MCB
	Motor Thermal Overload	Standard, via MCB
	Warranty Options	2 years parts, one year labour



WolfLabs

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.