

The XR-Series from Applied Thermal Control

The XR-Series is a self-contained system, comprised of a modulated primary supply, the water-to-water heat exchanger, and the coolant storage tank. A wide range of non-ferrous/stainless steel pumps are available, both positive displacement and centrifugal, with varying flows and pressures to suit a multitude of requirements. All pumps have fan-cooled electric motors and are supplied in 304 & 316 stainless steel as standard.

The XR-Series is suitable for use with a wide range of fluids including:

- Water
- Glycols
- Oils



Features of the XR-Series:

- Supplied complete with circuit breakers and on/off switches.
- Coolant pump starting contactors
- Pump motor protection
- IP54 protection
- 24V control circuit available
- Temperature gauge
- Pressure gauge
- Coolant safety bypass
- Visual tank level indicator

The XR-Series

XR04

The XR04 helps you to utilise otherwise wasted space within 19" electrical rack enclosures. It is designed to provide 4kW of cooling at 10°C above the temperature of the primary water circuit.

XR04

RACK MOUNTED WATER-TO-WATER HEAT EXCHANGER



HEIGHT OF UNIT

5U High



PUMP OPTIONS

Positive Displacement Pump



POWER SUPPLY OPTIONS

Single-phase



COOLING CAPACITY

4kW Cooling Capacity at 10°C
+/- 1 °C Temperature Stability



TEMPERATURE RANGE

+4°C to +70°C

Commonly requested options:

- High temperature pack, available to +75°C
- Non-return solenoid valves
- In-line deionising cartridge and fittings
- Castors to replace rubber feet
- CPC quick release connectors
- Installation kit
- Particulate filter
- Fan speed control (on/off)

The XR-Series

XR08

The XR08 allows space within existing 19" electrical rack enclosures to be utilised, reducing system footprint. It is able to provide 8kW of cooling at 10°C above the temperature of the primary water circuit.

XR08

RACK MOUNTED WATER-TO-WATER HEAT EXCHANGER



HEIGHT OF UNIT

5U High



PUMP OPTIONS

Positive Displacement Pump



POWER SUPPLY OPTIONS

Single-phase



COOLING CAPACITY

8kW Cooling Capacity at 10°C
+/- 1 °C Temperature Stability



TEMPERATURE RANGE

+4°C to +70°C

Commonly requested options:

- High temperature pack, available to +75°C
- Non-return solenoid valves
- In-line deionising cartridge and fittings
- Castors to replace rubber feet
- CPC quick release connectors
- Installation kit
- Particulate filter
- Fan speed control (on/off)

The XR-Series

XR15

The XR15 is designed to be mounted within 19" electrical racking, minimising system footprints and utilising otherwise wasted space. It provides 15kW of cooling at 10°C above the temperature of the primary water circuit.

XR15

RACK MOUNTED
WATER-TO-WATER
HEAT EXCHANGER



HEIGHT OF UNIT

5U High



PUMP OPTIONS

Positive Displacement Pump



POWER SUPPLY OPTIONS

Single-phase



COOLING CAPACITY

15kW Cooling Capacity at 10°C
+/- 1 °C Temperature Stability



TEMPERATURE RANGE

+4°C to +70°C

Commonly requested options:

- High temperature pack, available to +75°C
- Non-return solenoid valves
- In-line deionising cartridge and fittings
- Castors to replace rubber feet
- CPC quick release connectors
- Installation kit
- Particulate filter
- Fan speed control (on/off)
- Onboard RS485 data protocol

The XR-Series

Common Applications

Common Applications include:

- Laser systems
- X-ray sources
- Resistance welding machines
- High frequency generators
- Furnaces
- General process cooling



Nominal capacity at 10°K (i.e. return line 0°K above outlet) (i.e. outlet 10°K above house supply)	4kW	8kW	15kW
----------------------------------------------------------------------------------------------------------	-----	-----	------

Administrative Data

CAD assembly dwg no.	MA345	MA345	MA345
ATC new model name	XR04059	XR08109	XR15179

Physical attributes

Physical dimensions(mm)	19" rack, 5U high, 500mm deep	19" rack, 5U high, 500mm deep	19" rack, 5U high, 500mm deep
Weight (kg)	30	30	30
Toolless access	No	No	No

Temperature control attributes

Technology	Water-to-water heat exchanger	Water-to-water heat exchanger	Water-to-water heat exchanger
Temperature range (standard)	+4°C to +70°C	+4°C to +70°C	+4°C to +70°C
Maximum return line temperature	+65°C	+65°C	+65°C
Control method	Modulating valve	Modulating valve	Modulating valve
Temperature stability (with constant load)	±1°C	±1°C	±1°C
Settable temperature resolution	0.1°C	0.1°C	0.1°C

Water circuit attributes

System volume (L)	2.3	2.3	2.3
Pump Type	5L/min Rotary vane (PD)	10L/min Rotary vane (PD)	17L/min Rotary vane (PD)
Pump capability	6bar@5L/min	6bar@10L/min	6bar@17L/min
Pressure control (settable pressure relief valve)	Internal, PRV, 20-150psi	Internal, PRV, 20-150psi	Internal, PRV, 20-150psi
Standard fittings	1/2" BSPPF	1/2" BSPPF	1/2" BSPPF
Standard chemical compatibility	Hexid Fluid, Water, Propylene Glycol	Hexid Fluid, Water, Propylene Glycol	Hexid Fluid, Water, Propylene Glycol

Electrical attributes

(208-230Vac, 1/2, 50/60Hz) 9-spec	Yes, 4.5A	Yes, 4.5A	Yes, 4.5A
-----------------------------------	-----------	-----------	-----------

Safety and fault indicator

1st party approvals	CE	CE	CE
3rd party approvals	UL-ready	UL-ready	UL-ready
Empty fluid reservoir alarm	Safety Interlock	Safety Interlock	Safety Interlock
Low fluid flow alarm	Visual lamp	Visual lamp	Visual lamp
Temperature out of range alarm	N/A	N/A	N/A
Motor thermal overload	Standard	Standard	Standard
Emergency off	Standard, via fuse	Standard, via fuse	Standard, via Fuse
Warranty options	2 year parts, 1 year labour Enhanced warranty options	2 year parts, 1 year labour Enhanced warranty options	2 year parts, 1 year labour Enhanced warranty options
Interlock restored, restart mode	Automatic	Automatic	Automatic
Overcurrent fault-cleared restart mode	Manual	Manual	Manual

Options available

Remote alarm/power-off; SA00001	N/A	N/A	N/A
Low temperature pack; SA00002	N/A	N/A	N/A
High temperature pack; SA00003	Available, to +75°C	Available, to +75°C	Available, to +75°C
Water cooled KT; SA00004	N/A	N/A	N/A
Water cooled K1; SA00005	N/A	N/A	N/A
Water cooled K4/K6/K9/K12; SA00006	N/A	N/A	N/A
Water cooled K3; SA00007	N/A	N/A	N/A
Non-return solenoid pack; SA00008	Available	Available	Available
High temperature water circuit w/o heater; SA00009	N/A	N/A	N/A
Low flow alarm (KT); SA00010	Available	Available	Available
Onboard RS485 data protocol; SA00011	N/A	N/A	Available
Standard VFC set; SA00012	-	-	-
In-line Deionising cartridge and fittings; SA00013	Available	Available	Available
Stainless non-return solenoid valve; SA00014	-	-	-
Castors to replace rubber feet; SA00015	Available	Available	Available
CPC quick release connectors; SA00016	Available	Available	Available
Installation kit; SA00017	Available	Available	Available
Stainless steel pump and fittings; SA00018	-	-	-
KT filter kit; SA00019	-	-	-
Mod for outdoor use; SA00020	-	-	-
Particulate filter; SA00021	Available	Available	Available
Flow meter pack; SA00022	-	-	-
Fan speed control (on/off); SA00023	Available	Available	Available
Stainless enclosure; SA00029	Available	Available	Available



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.