

RADIATOR TEMPERATURE CONTROLLER

MX-490 & MX-495



SPECIFICATIONS

Model	ASHE MX-495.
Type	Micro-controller based Dual-input multi-point Radiator Temperature Controller.
Input Signal	Two isolated signals of 4 to 20 mA DC. (HT and LT water temperature).
System	Two wire.
Scale Range	0 to 200°C.
Display	Seven-segment ½" red LED display.
Outputs	Twelve nos. independently settable Relay change-over contacts.
Contact Rating	10 Ampere @ 230 VAC (Resistive loads).
Control Logic	As per attached sheet.
Hysteresis	Common for all 12 relays, programmable.
Indications	Actual and Set temperatures on two digital 4 - digit displays. Twelve bi-colour LEDs for display of fan on/off status.
Settings	By Membrane Switchpad (four keys).
Time Delay	On start-up > one fan at a time in three-second intervals to prevent overloading on power supply.
Response time	Typically 200 m-Second to within one count of the final value.
Power Supply	230 VAC (10%), 50 Hz (5%).
Auxillary Power supply	24 V DC to Transmitter.
Bezel Dimensions	96 x 96 mm.
Cut-out Dimensions	92 x 92 mm.
Depth	150 mm.
Enclosure	Industrial grade ABS.
Execution	Front-panel mounting.
Weight	Approximately 1.0 kgs.

OVERVIEW

The ASHE MX-495 is a micro-controller based Digital Temperature Controller for Radiator applications in a highly compact, rugged and reliable execution. The instrument has two input signals – one each from the water inlet and the outlet of the Radiator. Two digital displays are provided on the front panel – the HT water temperature and the LT water temperature.

The instrument has upto twelve control Relay outputs which are connected to twelve cooling fans in the vicinity of the Radiator. The status of the twelve Cooling Fans is indicated on an array of twelve dual colour LEDs on the instrument front panel. A four-key Membrane Keypad may be used to enter the control settings for LT and HT sensor locations.

The water temperature at the inlet and outlet locations of the Radiator are measured with RTD Pt-100 Sensors, whose Transmitters provide current signal inputs of 4 to 20 mA DC. The instrument operates on AC Mains Power Supply. The micro-controller based Radiator Temperature Controller Model MX-495 monitors the temperature at the inlet and outlet and allows for selective cooling so as to regulate the temperature to within acceptable limits.

This enhances its versatility and accuracy in process control, besides other superior characteristics like total immunity to shocks, dust, ambient temperatures, and humidity. It is available in 1/4 DIN standard housings. The instrument is manufactured using selected high-grade components which guarantee its functionality and long operational life.

All ASHE range of instruments carry a lifetime warranty for design and workmanship.

FEATURES

- Microcontroller based design.
- Multi-point switching for Radiator control
- High accuracy and linearity to input signal
- Dual 4-digit seven-segment LED displays
- Very low power consumption and heat dissipation
- LED Array for parameter annunciation
- Fully configurable
- Dual Transmitter powering
- On-Off control action
- Rugged, industrial grade ABS enclosure
- High Noise immunity.
- Panel / Field / Hazardous-area installation in IP65 execution
- Proven record of several thousand installations
- Lifetime warranty on design and workmanship