EC3-X33 Superheat Controller

The EC3 is a stand-alone universal superheat controller for stable superheat control with stepper motor driven electronic control valves and is used for air conditioning, refrigeration and industrial applications such as chillers, industrial process cooling rooftops, heat pumps, package units, close controls, cold room, food process and air driers. The EC3-X33 requires the use of the ECD-002 display key pad unit for setting up the controller.
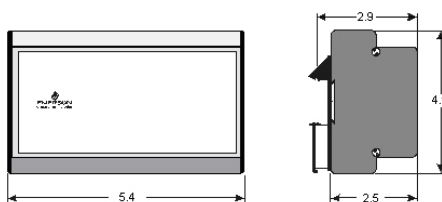
Features
- Superheat control in conjuction with Emerson stepper motor driven electrical control valves EX4-EX8
- Limitation of evaporating pressure (MOP)
- Low and high superheat alarm
- Monitoring of sensors and sensor wiring and detection of sensor and wiring failures
- Intelligent alarm management to protect the compressor, i.e fail safe operation
- Integral rechargeable battery to close EX control valves in case of power loss.
- Electrical connection via plug-in type screw terminal
- Aluminum housing for DIN rail mounting

Specifications
- Supply Voltage: 24VAC ± 10%, 50/60 Hz
- Digital Input: 24VAC ± 10%, 50-60 Hz, 24VDC ± 10%
- Power Consumption: 25 VA max. including connected EX valve and display/keyboard
- Internal battery
  charging time: Approx. 2 hours if battery is fullly empty
- Plug-in connector size: Removable screw version wire size 12-20 AWG
- Ground connection: 1.4 in. spade earth connector
- Applied Directive: EMC, LVD, RoHS
                             EN 61326, EN 50081, EN 61000-6-2,
                             EN 61000-4-2, EN 61000-4-3,
                             EN 610004-4, EN61000-4-5,
                             EN 61000-4-6, EN 61000-4-11)
- Marking: CE
- Temperatures: Storage: -5°F to +150°F
                             Operating: 32°F to +140°F
- Humidity: 0 – 80% R.H. non condensing

Ordering Information

Description	Type	Reference #	PCN
Superheat Controller	EC3-X33	807783	097707
Terminal Kit	K03-X33	807645	097745
Temperature Sensor	ECN-N60	804497	097714
Electrical Control Valve	EX4-EX8**	**	**
Pressure Sensors (R-22/R-124/R-134a/R-404A/R-407C/R507C)	PT5-07M	802350	097748
Pressure Sensor (R-410A)	PT5-18M	802851	097749
Pressure Sensor (R-744)	PT5-30M	802352	097753
Plug and Cable Assembly for Pressure Sensor	PT4-M60	804805	097717
Optional Display/Keypad	ECD-002	807657	097712
Cable Connection between EC3-X33 and ECD-002	ECC-N30 or any standard Cat 5 patch cord with RJ45 connectors	807861	097713
Replacement Battery	EC3	807790	097693

**For further details refer to the EX4-EX8 product page.

Dimensional Data