

Superheat Controllers Series EC3-X32 / EC3-X33

For stable superheat control with stepper motor driven electrical control valves Series EX4 - EX8

Digital Superheat Controllers Series EC3-D72 / EC3-D73

For stable superheat control with EX4...EX6 electrical control valves and automatic synchronisation of the PWM capacity control valve incorporated into the Copeland Scroll Digital™ compressor technology

Features

- Limitation of evaporating pressure (MOP)
- Feed-through of 4 ... 20mA signal of evaporating pressure transmitter to operate third party controllers with a common pressure transmitter
- Intelligent alarm management, superheat alarm
- Monitoring of sensors and sensor wiring, detection of sensor and wiring failures
- Integral rechargeable battery to close Electrical Control Valve in case of power loss
- Electrical connection via plug-in type screw terminals
- Aluminum housing for DIN rail mounting



EC3-X33 with ECD-002

- Freeze protection
- Low and high superheat alarm
- Low pressure switch function/alarm

Additional features EC3-X32 and EC3-D72 with TCP/IP

- WebServer functionality allows monitoring and configuration of controllers through a standard Web browser (e.g. Internet Explorer®)
- Internal data logging
- Multiple language support (www.emersonclimate.eu)

ECD-002 Display Unit

- Front panel mounted interface for parameter and status read-out and controller setup via keypad
- Indicator LEDs for valve opening/closing, external ON and alarm

Selection Chart

Description	TCP/IP			Stand alone		
	Type	Part No. single unit	Part No. Kit*	Type	Part No. single unit	Part No. Kit*
Superheat Controller	EC3-X32	807 782	808 037	EC3-X33	807 783	808 036
Terminal Kit for EC3-X32/-X33	K03-X32	807 644		K03-X33	807 645	
Digital Superheat Controller	EC3-D72	807 805	808 042	EC3-D73	807 804	808 041
Terminal Kit for EC3-D72/-D73	K03-331	807 648		K03-331	807 648	

* Kits contain terminal kit, pressure transmitter PT5-07M with cable assembly, NTC sensor 6m, transformer 60VA (see chapter 'Accessories & Spare Parts')

Accessories

Description	Type	Part No.	Note
Display	ECD-002	807 657	
Connection cable EC3 to ECD	ECC-N10	807 860	1m cable length
	ECC-N30	807 861	3m cable length
	ECC-N50	807 862	5m cable length
Pressure Transmitter	PT5-07M	802 350	for R134a, R22, R404A, R407C, R507C, R124
	PT5-18M	802 351	for R410A only
	PT5-30M	802 352	for R744
Cable Assembly for PT5	PT4-M60	804 805	other cable lengths see Pressure Transmitter Series PT5
Temperature Sensor NTC	ECN-N30	804 496	3m cable length
	ECN-N60	804 497	6m cable length
	ECN-N99	804 499	12m cable length
Transformer 25VA 230V/24V AC 60VA	ECT-323	804 424	for EX4 to EX7
	ECT-623	804 421	for EX8, DIN rail mounting

Typical Ordering Package

System with 100 kW cooling capacity and refrigerant R22 requires the following parts:

EX6	Electronic Expansion Valve	ECN-N60	NTC Temperature Sensor
EXV-M60	Electrical Cable and Plug assembly	PT5-07M	Pressure Transmitter
EC3-X33	Superheat Controller Stand-alone	PT4-M60	Cable assembly PT5 6.0m
K03-X33	Terminal Kit for EC3-X33	ECD-002	Display (optional)
ECT-323	Transformer 25VA	ECC-N30	Connection cable EC3 to ECD (opt.)



PT5 PT4-Mxx



ECT-323