EASY SERIES CONTROL RELAYS







Easy Operation with Maximum Benefits

The Eaton easy control relays provide basic functions that users could only implement previously with individually installed and wired devices. The EZD multi-function displays offer powerful visualisation functions.

The EZ intelligent relays bring timers, relays, counters, special functions, inputs and outputs into one compact device that is easily configured. The EZ family of products provides exceptional levels of flexibility together with substantial savings in commissioning time and effort.

The EZ intelligent relays are available in more than 20 different styles that support from 12 I/O up to 320 I/O points providing the ideal solution for lighting, energy management, industrial control, watering, pump control, HVAC and home automation.

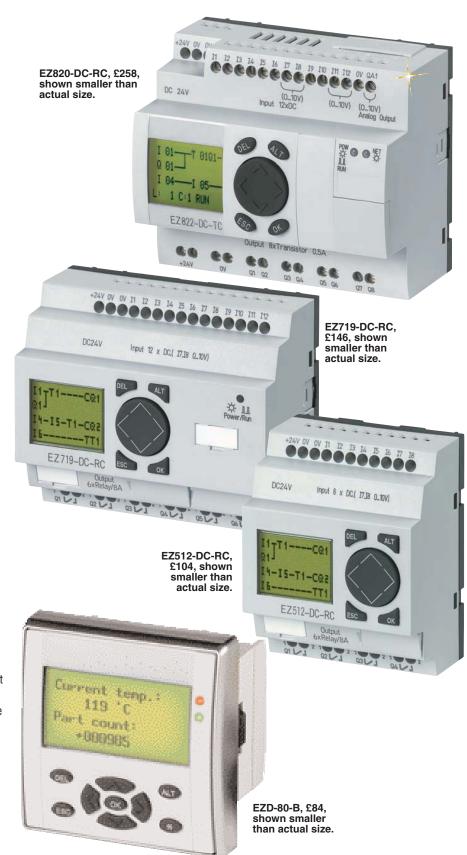
Once EZ products are installed, changes are easily accomplished through front panel programming, eliminating the need to change wiring and wiring diagrams increasing the savings realised.

Other terms often used for intelligent relay are relay replacer, control relay and smart relay.

Simplicity and User-Friendly Operation

EZ and EZD products are known for their user-friendly operation and programming. Every rung or circuit connection is wired just like you remember: Contact – Contact – Contact – Contact – Done! The devices allow the "wiring" of 128 or 256 rungs or circuit connections. Series and parallel connections, which make up a major part of a control circuit, are easily created without previous programming knowledge. Ready-to-use function blocks are simply integrated in the wiring with coils, and contacts are provided for additional functions.

Manufactured by Eaton for OMEGA





Everything Needed is Built-In

Depending on the device selected, EZ and EZD products provide users with timing relays, flash relays, counters, comparators, timer switches and other ready-to-use functions. The circuit diagram display of serial and parallel connections, unlike the

display of AND and OR operations in a function block diagram, offers a more manageable display of the circuit. Every EZ and EZD intelligent relay features an integrated power flow display to ensure safe operation during commissioning and helps identify errors in the circuit diagram. For ease-of-use, energised rungs are highlighted, and non-energised rungs are dimmed.

Security Means Safety

The finished circuit diagram is stored internally and can also be saved externally on a memory module (EEPROM) for transport, security and backup. Multi-level password protection secures your circuit diagram from unauthorised viewing, editing, copying or deleting.



EZ500 Series— for controlling small applications with up to 12 input/output signals. Models are available with and without displays. DIN rail mounted.

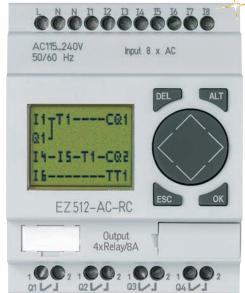
- 8 Digital Inputs
- 4 Digital Inputs
- 128 Rungs of 3 Contacts and 1 Coil Each
- 16 Operating and **Message Texts**
- 2 Analogue Inputs (10-Bit) Optional (Not with 240 Vac)
- 2 High-Speed Inputs, 1 kHz (Only DC Devices)



EZ512-DC-RC, £104, shown smaller than actual size.



EZ512-AC-RC, £104, shown smaller than actual size.



To Order (Specify Model Number)

MOST POPULAR MODELS HIGHLIGHTED!

					INPUT	3		OUTPUTS
MODEL NO.	PRICE	DESCRIPTION	24 Vac	110 to 240 Vac	12 Vdc	24 Vdc	ANALOGUE	RELAY
EZ512-AC-R	£96	12 I/O, no clock, display	_	8	_	_		4
EZ512-AC-RC	104	12 I/O, clock, display	_	8	_	_		4
EZ512-AC-RCX	80	12 I/O, clock, no display	_	8	_	_	_	4
EZ512-DC-R	96	12 I/O, no clock, display	_	_	_	8	2	4
EZ512-DC-RC	104	12 I/O, clock, display	_	_		8	2	4
EZ512-DC-RCX	80	12 I/O, clock, no display	_	_	_	8	2	4

Comes with complete installation guide.

Ordering Example: EZ512-AC-RCX, 12 I/O, clock, no display, £80.

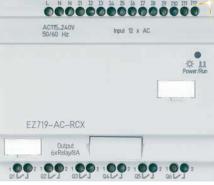
EZ700 Series— for controlling mediumsized applications with up to 40 input/output signals. DIN rail mounted.

- 12 Digital Inputs
- 6 Digital Relay Outputs
- 128 Rungs of 3 Contacts and 1 Coil Each
- 16 Operating and Message Texts
- 4 Analogue Inputs (10-Bit) Optional (Not with 230 Vac)
- 2 High-Speed Inputs, 1 kHz (Only DC Devices)
- 1 Digital Expansion or Network Connection



EZ700 Series Starts at £**125**

EZ719-AC-RCX, £125, shown smaller than actual size.



MOST POPULAR MODELS HIGHLIGHTED!

To Order (Specify Model Number)

				INPUTS			OUTPUTS		
MODEL NO.	PRICE	DESCRIPTION		24 Vac	110 to 240 Vac	12 Vdc	24 Vdc	ANALOGUE	RELAY
EZ719-AC-RC	£146	18 I/O, clock, disp	olay -	_	12	_	_	_	6
EZ719-AC-RCX	125	18 I/O, clock, no	display -	_	12	_	_	_	6
EZ719-DC-RC	146	18 I/O, clock, disp	olay -	_	_	_	12	4	6 170
EZ719-DC-RCX	125	18 I/O, clock, no	display -	-	_	_	12	4	6

Comes with complete installation guide. Ordering Example: EZ719-AC-RCX, 18 I/O, clock, no display, £125.



EZ800 Series— for controlling large scale applications with up to 320 input/output signals. Models are available with and without displays. DIN rail mounted.

- 12 Digital Inputs
- 6 Digital Relay Outputs

- 256 Rungs of 4 Contacts and 1 Coil Each
- 32 Operating and Message Texts
- 4 Analogue Inputs (10-Bit) Optional (Not with 230 Vac)
- 4 High-Speed Inputs, 3/5 kHz (Only DC Devices)
- 1 Digital Expansion or Network Connection
- Networkable via EZ-NET with Up to 8 Stations
- 1 Analogue Output (10 bit)



EZ819-AC-RC, £231, shown smaller than actual size.

To Order (Specify Model Number)

MOST POPULAR MODELS HIGHLIGHTED!

			INPUTS				OUTPUTS
MODEL NO.	PRICE	DESCRIPTION	110 to 240 Vac	12 Vdc	ANALOGUE	RELAY	ANALOGUE
EZ819-AC-RC	£231	18 I/O, clock, display	12	_	_	6	_
EZ819-AC-RCX	202	18 I/O, clock, no display	12	_	_	6	_
EZ819-DC-RC	231	18 I/O, clock, display	_	12	4	6	_
EZ819-DC-RCX	202	18 I/O, clock, no display	_	12	4	6	_
EZ820-DC-RC	258	19 I/O, clock, display	_	12	4	6	1
EZ820-DC-RCX	229	19 I/O, clock, no display	_	12	4	6	1

Comes with complete installation guide. Ordering Example: EZ819-DC-RCX, 18 I/O, clock, no display, £202.



EZD Modular Relays

The EZD modular intelligent relays allows you to assemble a system to meet your exact requirements. A system consists of the following components:

- 1. EZD display with or without buttons
- 2. CPU with or without clock; in a variety of power configurations
- 3. I/O module
- 12 Digital Inputs
- 4 Digital Relay Outputs
- 256 Rungs of 4 Contacts and 1 Coil Each
- 24 KB Mask Memory on a Fully Graphical, Backlit Display (64 x 132 Pixels)

- 4 Analogue Inputs (10-Bit) Optional (Not with 230 Vac)
- 4 High-Speed Inputs, 3/5 kHz (Only DC Devices)
- 1 Digital Expansion or Network Connection
- Networkable via EZ-NET with Up to 8 Stations
- 1 Analogue Output (10-Bit)



EZD Assembly. Display + CPU + I/O Module. Shown smaller than actual size.



EZD80-B, £84, shown smaller than actual size.



EZD-CP8-NT, £229, shown smaller than actual size.



EZD-R16, £80, shown smaller than actual size.

EZD Displays and CPU/Power Supply

To Order (Specify Model Number) AVAILABLE FOR FAST DELIVERY! PRICE MODEL NO. **DESCRIPTION** £78 **EZD-80** EZD display EZD-80-B 84 EZD display with buttons **EZD-CP8-ME** 190 EZD CPU with 24 Vdc, power supply, clock **EZD-CP8-NT** 229 EZD CPU with 24 Vdc, power supply, clock, EZ-Net **EZD-AC-CP8-ME** 190 EZD CPU with 100 to 240 Vac, power supply, clock

EZD CPU with 100 to 240 Vac, power supply, clock, EZ-Net

Comes with complete installation guide. Ordering Example: EZD-80-B, EZD display with buttons, £78.

EZD Controller I/O Modules

EZD-AC-CP8-NT

ELD CONTROLLE 1/C	Moduloo						
				INPUTS			OUTPUTS
MODEL NO.	PRICE	DESCRIPTION	110 to 240 Vac	12 Vdc	ALG	RY	ALG
EZD-AC-R16	£80	16 I/O	12	_	_	4	_
EZD-R16	80	16 I/O	_	12	4	4	_
EZD-RA17	105	17 I/O	_	12	4	4	1

Comes with complete installation guide. Ordering Example: EZD-RA17, 17 I/O, £105.

229

MODEL	EZD-AC-R16	EZD-R16	EZD-RA17		
SUPPLY VOLTAGE	S	Supply via EZD-CP8 modu	le		
HEAT DISSIPATION	0.5 W	0.5 W	0.5 W		
CONTINUOUS CURRENT OUTPUTS	8 A	8 A	8 A		
CONNECTION CABLES	0.2 to 4.0 mm² (AWG 22-12), solid 0.2 to 2.5 mm² (AWG 22-12), flexible				
DEGREE OF PROTECTIONS	IP20	IP20	IP20		
RFI SUPPRESSION	EN 55011, EN 55022 Class B, IEC 61000-6-1, 2, 3, 4				
AMBIENT OPERATING TEMPERATURE	-25 to 55°C	-25 to 55°C	-25 to 55°C		
TRANSPORT AND STORAGE TEMPERATURE	-40 to 70°C	-40 to 70°C	-40 to 70°C		
CERTIFICATION, STANDARDS	EN 50178, IEC/EN 60947, UL, CSA				
MOUNTING	Snap fitted to EZD-CP8 module				

Starts at £35

EXPANSION MODULES





Expansion modules are available for increasing the input/output of the EZ700/800 and EZD intelligent relays to 24 inputs and up to 16 outputs. Expansion modules can be mounted directly to the EZ/EZD unit.

EZ618-DC-RE, £102, shown conected to EZ820-DC-RC, £258 (see page 599), shown smaller than actual size.

To Order (Specify Model Number)

AVAILABLE FOR FAST DELIVERY!

			INPU7	rs	OUTPUTS
MODEL NO.	PRICE	DESCRIPTION	110 to 240 Vac	12 Vdc	RELAY
EZ202-RE	£35	2 I/O expansion	_	_	2
EZ618-AC-RE	102	18 I/O expansion	12	_	6
EZ618-DC-RE	102	18 I/O expansion	_	12	6

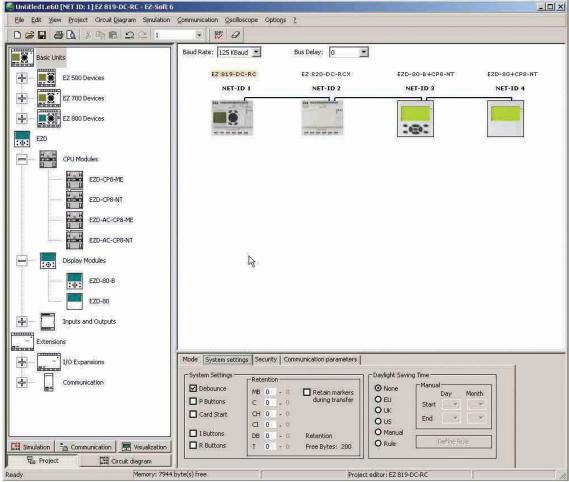
Comes with installation guide and EZ-LINK-DS to connect expansion module to intelligent relay. Ordering Example: EZ618-AC-RE, 18 I/O expansion, £102.

Accessories

MODEL NO.	PRICE	DESCRIPTION
EZ-PC-CAB	£37.50	EZ500/700 to PC cable
EZ800-PC-CAB	55.00	EZ800/EZD to PC cable
EZ200-POW	27.50	Power supply, 100-240 Vac input to 24 Vdc at 250 mA
EZ400-POW	44.50	Power supply, 100-240 Vac input to 24 Vdc at 1.25 A
EZ-M-32K	14.75	EZ500/700 32 K program storage module
EZ-M-256K	22.00	EZ800/EZD 256 K program storage module

MODEL	EZ202-RE	EZ618-AC-RE	EZ618-DC-RE		
SUPPLY VOLTAGE	_	100 to 240 Vac	24 Vac		
HEAT DISSIPATION	1 W	10 VA	4 W		
CONTINUOUS CURRENT OUTPUTS	8 A	8 A	8 A		
CONNECTION CABLES	0.2 to 4.0 mm² (AWG 22-12), solid 0.2 to 2.5 mm² (AWG 22-12), flexible				
DEGREE OF PROTECTIONS	IP 20	IP 20	IP 20		
RFI SUPPRESSION	EN 55011, EN 55022 Class B, IEC 61000-6-1,2,3,4				
AMBIENT OPERATING TEMPERATURE	-25 to 55°C -25 to 55°C -25				
TRANSPORT AND STORAGE TEMPERATURE	-40 to 70°C	-40 to 70°C	-40 to 70°C		
CERTIFICATION, STANDARDS	EN 50178, IEC/EN 60947, UL, CSA				
MOUNTING	On top-hat rail to DIN 50022, 35 mm or screw mounting with EZB4-101-GF1 fixing brackets				





EZSoft User-Friendly Circuit Diagram Editor

EZSoft makes things particularly easy for users. The graphical editor shows the circuit diagram immediately in the display format required. Selection menus and drag & drop functions simplify circuit diagram creation. Simply select contacts and coils and connect with the mouse – that's it! In addition to the editing functions, EZSoft is available for straightforward circuit diagram input. All software includes user-friendly menus and Help screens. EZSoft offers the following display formats for viewing, editing and printing out your program:

- IEC format, with contact and coil symbols using international standards
- EZ circuit diagram, same as what is seen when programming from the EZ front panel
- ANSI format, in compliance with American standards

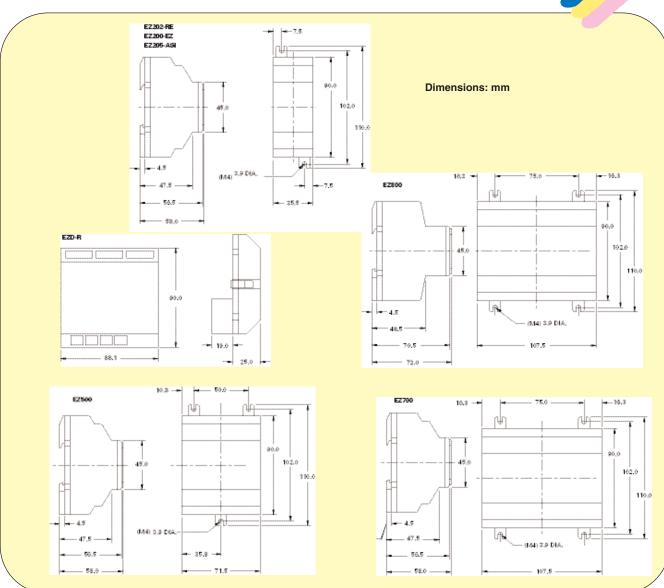
EZSoft supports users who are configuring, programming and defining parameters for EZ intelligent relays and creating visualisation functions for EZD displays. When intelligent relays are connected to EZ-NET, all connected devices can be accessed and their programs loaded from a single intelligent relay. The integrated offline simulation tool allows users to test the functionality of the circuit diagram before commissioning, without the need for a connected device. The comment function for contacts, coils and function blocks helps provide a clear overview of the circuit diagram. A cover sheet with a customised company logo and different text fields, as well as the cross-reference list with comments, can turn printouts into the perfect documentation for applications.

EZ is Maintenance-Free

The finished program is stored in EZ's non-volatile memory until modified. Additional auxiliary power or batteries are not required. The intelligent relays are entirely maintenance-free. Circuit diagrams and parameters are saved in the event of a power failure. If a power failure occurs, the EZ controller stores switch positions and values such as operating hours, metres, counters and timing relays. When power is restored the values are restored. This retentive feature for the different function blocks and data is available on all EZ intelligent relay models.

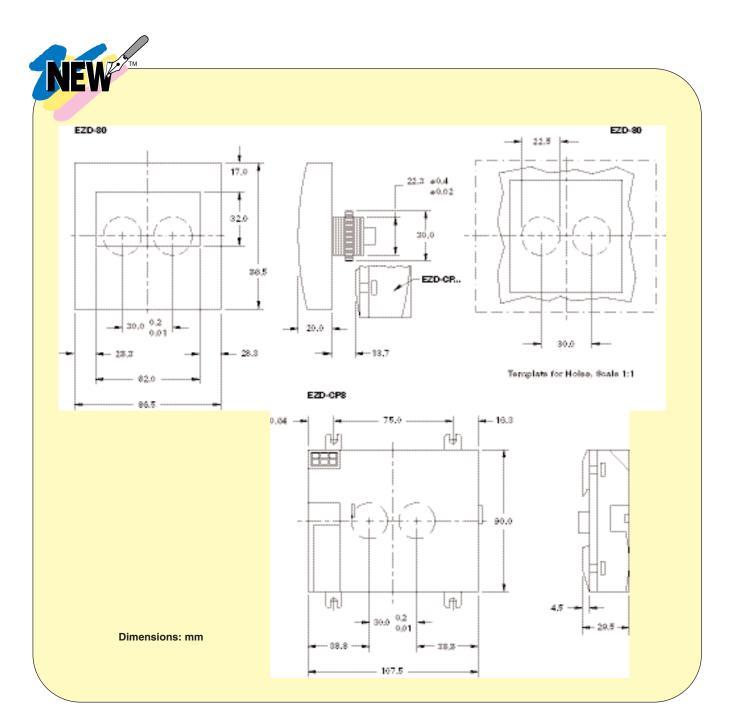
To Order (s)	pecify Model	Number)	IN STOCK FOR FAST DELIVERY!
MODEL NO.	PRICE	DESCR	IPTION
EZSOFT	£131	Prograr	nming software for EZ500/700/800 and EZD





EZ500, EZ700 and EZ800 Series

MODEL NO	E7540.40	E7540 DO D	E7740 AO	E7740 DO DO	E7010 A0	E7040 DO DO
MODEL NO.	EZ512-AC	EZ512-DC-R	EZ719-AC	EZ719-DC-RC	EZ819-AC	EZ819-DC-RC
SUPPLY VOLTAGE	100 to 240 Vac	24 Vdc	100 to 240 Vac	24 Vdc	100 to 240 Vac	24 Vdc
HEAT DISSIPATION	5 VA	2 W	10 VA	3.5 W	10 VA	3.4 W
CONTINUOUS CURRENT OUTPUTS (1)	8 A	8 A	8 A	8 A	8 A	8 A
MOUNTING				, 35 mm or screw 1 fixing brackets		h
CONNECTION CABLES	0.2 to 4.0 mm² (AWG 22-12), solid 0.2 to 2.5 mm² (AWG 22-12), flexible					
DEGREE OF PROTECTIONS	IP 20					
RFI SUPPRESSION	EN 55011, EN 55022 Class B, IEC 61000-6-1, 2, 3, 4					
AMBIENT OPERATING TEMPERATURE	-25 to 55°C					
TRANSPORT AND STORAGE TEMPERATURE	-40 to 70°C					
CERTIFICATION, STANDARDS	EN 50178, IEC/EN 60947, UL, CSA, Class 1, Div 2					



EZD Displays (EZD-80 and EZD-80B)

OUDDLY VOLTAGE	0 1 (570 000
SUPPLY VOLTAGE	Supply from EZD-CP8
HEAT DISSIPATION	3 W
MOUNTING	Front Mounting in 2 x 22.5 mm Standard Drill Holes
DEGREE OF PROTECTIONS	IP65
RFI SUPPRESSION	EN 55011, EN 55022 Class B, IEC 61000-6-1, 2, 3, 4
AMBIENT OPERATING TEMPERATURE	Clearly Legible at -5 to 50°C
TRANSPORT AND STORAGE TEMPERATURE	-40 to 70°C
CERTIFICATION, STANDARDS	EN 50178, IEC/EN 60947, UL, CSA, Class 1, Div 2

EZD CPU/Power Supply Module

MODEL	EZD-CP8	EZD-AC-CP8			
SUPPLY VOLTAGE	24 Vdc	100 to 240 Vac			
HEAT DISSIPATION	3 W	8 VA			
MOUNTING	Snap fitted to EZD-80 or on top-hat rail to DIN 50022, 35 mm or screw mounting with EZB4-101-GF1 fixing brackets				

omega.co.uk®

Your One-Stop Source for Process Measurement and Control!

Freephone 0800 488 488 | International +44(0) 161 777 6622

Fax +44(0) 161 777 6622

Sales@omega.co.uk

www.omega.co.uk



UNITED STATES

www.omega.com 1-800-TC-OMEGA Stamford, CT.

CANADA

www.omega.ca Laval(Quebec) 1-800-TC-OMEGA

GERMANY

www.omega.de Deckenpfronn, Germany 0800-8266342

UNITED KINGDOM

www. omega.co.uk Manchester, England 0800-488-488

FRANCE

www.omega.fr 088-466-342

CZECH REPUBLIC

www.omegaeng.cz Karviná, Czech Republic 596-311-899

BENELUX

www.omega.nl 0800-099-33-44



More than 100,000 Products Available!

Temperature

Calibrators, Connectors, General Test and Measurement Instruments, Handheld Instruments for Temperature Measurement, Ice Point References, Indicating Labels, Crayons, Cements and Lacquers, Infrared Temperature Measurement Instruments, Recorders, Relative Humidity Measurement Instruments, PT100 Probes, PT100 Elements, Temperature & Process Meters, Timers and Counters, Temperature and Process Controllers and Power Switching Devices, Thermistor Elements, Probes and Assemblies, Thermocouples, Thermowells and Head and Well Assemblies, Transmitters, Thermocouple Wire, RTD Probes

Flow and Level

Air Velocity Indicators, Doppler Flowmeters, Level Measurement, Magnetic Flowmeters, Mass Flowmeters, Pitot Tubes, Pumps, Rotameters, Turbine and Paddle Wheel Flowmeters, Ultrasonic Flowmeters, Valves, Variable Area Flowmeters, Vortex Shedding Flowmeters

pH and Conductivity

Conductivity Instrumentation, Dissolved Oxygen Instrumentation, Environmental Instrumentation, pH Electrodes and Instruments, Water and Soil Analysis Instrumentation

Data Acquisition

Auto-Dialers and Alarm Monitoring Systems, Communication Products and Converters, Data Acquisition and Analysis Software, Data Loggers Plug-in Cards, Signal Conditioners, USB, RS232, RS485 and Parallel Port Data Acquisition Systems, Wireless Transmitters and Receivers

Pressure, Strain and Force

Displacement Transducers, Dynamic Measurement Force Sensors, Instrumentation for Pressure and Strain Measurements, Load Cells, Pressure Gauges, Pressure Reference Section, Pressure Switches, Pressure Transducers, Proximity Transducers, Regulators, Pressure Transmitters, Strain Gauges, Torque Transducers, Valves

Heaters

Band Heaters, Cartridge Heaters, Circulation Heaters, Comfort Heaters, Controllers, Meters and Switching Devices, Flexible Heaters, General Test and Measurement Instruments, Heater Hook-up Wire, Heating Cable Systems, Immersion Heaters, Process Air and Duct, Heaters, Radiant Heaters, Strip Heaters, Tubular Heaters