

# EROELECTRONIC

JUST WHAT YOU NEED

GENERAL CATALOG



Welcome to the catalogue of ERO Electronic control and instrumentation solutions.

ERO Electronic has existed for over 30 years, establishing itself as a producer of application engineered industrial instrumentation.

Our basic core principals have always applied.

We strive to combine quality, reliability, manufacturing responsiveness and value for money in the products and control solutions we supply.

We do this by focussing on specific application markets, intelligently combining features not usually found in a single discrete instrument.

The secret to this success lies in the partnership we forge with our customers. Taking time to listen, understand and interpret our customers real needs, thereby providing a solution that is both business and application focused - just what you need.

A hand is shown holding a white, circular wipe-down fascia. The fascia is made of a flexible material and has a central opening. The hand is wearing a white glove with a metal buckle. The background is a blurred industrial setting with a brick wall and a metal structure.

Durable and functional design practically is the key.

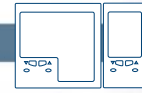
Materials and manufacturing methods are selected to provide the best combination of industrial strength and styling flexibly.

A good example of this approach is the wipe-down fascias we use on our panel mounted instruments, offering a multitude of possibilities for graphic design customisation, while providing the ideal solution for food and laboratory applications - both demanding environments requiring a solution that is easily cleanable and moisture tight.

Dependable, functionality engineered and quality tested by a team of industrial instrumentation specialists. ERO Electronic is the instrumentation solution supplier of choice for many industrial instrumentation market leaders.

■ COMPACT BASIC CONTROL

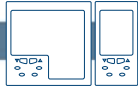
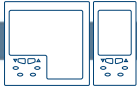
■ ■ MULTI - FUNCTION CONTROL



	FKS	LDE.LME	LDS.LMS.LHS	LFS	TMS	MKS.TKS
Dimensions	24x48	48x48	48x48	48x48	96x96	96x96 96x48
TC/RTD input		■	■		■	
Universal inputs TC/RTD/linear	■			■		■
Digital outputs (relay or SSR)	2	2	2	3	3	4
Analog outputs (control or ratransmission)				1		1
Servomotor control output						1
Transmitter power supply						■
Process alarms	■	■	■	■	■	■
SOFT START function	■	■	■	■	■	■
SMART tune function	■	■	■	■	■	■
Set point ramp	2			■	■	■
Multiple set point				2		4
Loop break alarm function	■					■
Programmer function						
Load failure detection (ct input)				■	■	■
Serial communication interface				■		■
Remote set point input						
PC configurable		■		■		■
100/240 V AC/DC power supply	■	■	■	■	■	■
24 V AC/DC power supply		■	■	■	■	■
Rear of board mounting (DIN-Rail)				■		

■ ■ ■ ADVANCED CONTROL - PROGRAMMER

□ INDICATOR



LFT

MKC.PKC

MKP.PKP

LHL

LHI

TIS

DPS

DPL

48x48

96x96  
96x48

96x96  
96x48

48x48

48x48

48x96

48x96

48x96

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# COMPACT BASIC CONTROL



## ■ FKS

- 24x48 mm**  
**COMPACT THERMAL CONTROLLER**
- SMART TUNE- PID CONTROL
  - UNIVERSAL INPUT, 3 WIRE- TC, RTD
  - 2 RELAY / SSR OUTPUTS
  - SOFT START- POWER LIMITER
  - PROCESS, BAND, DEVIATION AND CONTROL FAULT ALARMS



## ■ LDE . LME

- 48x48 mm**  
**COMPACT THERMAL CONTROLLER/ TIMER**
- SMART TUNE- PID CONTROL
  - UNIVERSAL INPUT, 3 WIRE- TC, RTD
  - 3 RELAY / SSR OUTPUTS
  - LOGIC INPUT OPTION
  - MULTI-FUNCTION RAMP- DWELL PROCESS TIMER
  - PROCESS, BAND, DEVIATION AND CONTROL FAULT ALARMS
  - SOFT START- POWER LIMITER
  - PC CONFIGURATION PORT
  - OPC BASED GRAPHICAL CONFIGURATION SOFTWARE
  - IP 65 AND NEMA 4X FRONT PROTECTION



## ■ LDS . LMS . LHS

- 48x48 mm**  
**COMPACT THERMAL CONTROLLER**
- SMART TUNE- PID CONTROL
  - UNIVERSAL INPUT, 3 WIRE- TC, RTD
  - PROCESS, BAND, DEVIATION AND CONTROL FAULT ALARMS
  - IP 65 AND NEMA 4X FRONT PROTECTION



## ■ LFS relay . mA . servo

48x48 mm

### COMPACT GENERAL PURPOSE CONTROLLERS

- SMART TUNE- PID CONTROL
- UNIVERSAL INPUT, 3 WIRE- TC, RTD AND LINEAR mA, mV, V
- 2 INDEPENDENT SET POINT RAMP UP/ DOWN PROFILES
- PROCESS, BAND, DEVIATION AND CONTROL FAULT ALARMS
- RS 485 MODBUS SERIAL COMMS OPTION
- DIN RAIL MOUNTING VERSION
- OPC BASED GRAPHICAL CONFIGURATION SOFTWARE
- IP 65 AND NEMA 4X FRONT PROTECTION

#### LFS - relay

- 3x RELAY/ SSR OUTPUTS
- LOGIC INPUT
- CT INPUT
- LOAD CURRENT DISPLAY WITH OUTPUT FAILURE ALARM
- SOFT START- POWER LIMITER

#### LFS - mA

- ISOLATED 20 mA OUTPUT (CONTROL/ RETRANS)
- 2x RELAY/ SSR OUTPUTS

#### LFS - servo

- INTERLOCKED VALVE OPEN/ CLOSE RELAY CONTACTS
- 2x RELAY/ SSR OUTPUTS
- 2x LOGIC INPUTS



## ■ TMS

48x96 mm

### PLASTICS THERMAL CONTROLLER

- SMART TUNE- PID CONTROL
- UNIVERSAL, 3 WIRE - TC, RTD
- 3 RELAY/ SSR UNIVERSAL OUTPUTS
- 2 INDEPENDENT SET POINT RAMP UP/ DOWN PROFILES
- SOFT START- POWER LIMITER
- CT INPUT
- LOAD CURRENT DISPLAY WITH OUTPUT FAILURE ALARM
- IP 65 AND NEMA 4X FRONT PROTECTION

# MULTI - FUNCTION CONTROL



## ■ ■ MKS . TKS relay . mA . servo

96x96 mm - 96x48 mm  
MULTI - FUNCTION CONTROLLERS

- SMART TUNE- PID CONTROL
- UNIVERSAL, 3 WIRE- TC, RTD AND LINEAR INPUT
- 2 INDEPENDENT SET POINT RAMP UP/ DOWN PROFILES
- PROCESS, BAND, DEVIATION AND CONTROL FAULT ALARMS
- RS 485 MODBUS SERIAL COMMS OPTION
- OPC BASED GRAPHICAL CONFIGURATION SOFTWARE

### MKS . TKS - relay

- 4x RELAY/ SSR OUTPUTS
- LOGIC INPUT
- CT INPUT
- LOAD CURRENT DISPLAY WITH OUTPUT FAILURE ALARM
- SOFT START- POWER LIMITER

### MKS . TKS - mA

- ISOLATED 20 mA LINEAR OUTPUT (CONTROL/ RETRANSMISSION)
- 3x RELAY/ SSR OUTPUTS

### MKS . TKS - servo

- INTERLOCKED VALVE OPEN/ CLOSE RELAY CONTACTS
- 2x RELAY/ SSR OUTPUTS
- 3x LOGIC INPUTS



## ■ ■ ■ LFT

48x48 mm  
PROGRAMMER CONTROLLER

- SMART TUNE- PID CONTROL
- UNIVERSAL, 3 WIRE- TC, RTD AND LINEAR INPUT
- 5 SEGMENT PROGRAM PROFILE + PROGRAM REPETITIONS
- GUARANTEED SOAK & RAMP TRACKING FUNCTIONS
- PROCESS, BAND, DEVIATION AND CONTROL FAULT ALARMS
- 3 RELAY/ SSR OUTPUTS
- LOGIC INPUT
- DIN RAIL MOUNTING VERSION
- IP 65 AND NEMA 4X FRONT PROTECTION





## ■ ■ ■ MKC . PKC

96x96 mm - 96x48 mm  
ADVANCED CONTROLLERS

- SMART TUNE- PID CONTROL
- UNIVERSAL, 3 WIRE- TC, RTD AND LINEAR INPUT
- AUX- REMOTE SET POINT/ TRIM INPUT
- 2x ISOLATED CONTROL AND RETRANSMISSION (mA) OUTPUTS
- 4x EVENT OR ALARM OUTPUTS (+10 OPTIONAL MKC)
- 3x LOGIC INPUTS (+8 OPTIONAL MKC)
- 24V DC TRANSMITTER POWER SUPPLY
- RS 485 MODBUS SERIAL COMMS OPTION
- OPC BASED GRAPHICAL CONFIGURATION SOFTWARE



## ■ ■ ■ MKP . PKP

96x96 mm - 96x48 mm  
ADVANCED PROGRAMMER CONTROLLERS

- SMART TUNE- PID CONTROL
- 200 STEP PROGRAMMER, UP TO 90 PROGRAMS, 5 PID GROUPS
- TRACKING AND GUARANTEED SOAK FUNCTIONS
- REAL TIME CLOCK AND CALENDAR
- UNIVERSAL, 3 WIRE- TC, RTD AND LINEAR INPUT
- AUX- REMOTE SET POINT/ TRIM INPUT
- 2x ISOLATED CONTROL AND RETRANSMISSION (mA) OUTPUTS
- 4x EVENT OR ALARM OUTPUTS (+10 OPTIONAL MKP)
- 3x LOGIC INPUTS (+8 OPTIONAL MKP)
- OUTPUT LINEARISATION
- 24V DC TRANSMITTER POWER SUPPLY
- RS 485 MODBUS SERIAL COMMS OPTION
- OPC BASED GRAPHICAL CONFIGURATION SOFTWARE

# INDICATOR - ALARM UNITS



## □ LHI . LHL

48x48 mm

### SAFETY LIMIT ALARMS & TRANSMITTERS

- UNIVERSAL, 3 WIRE- TC, RTD AND LINEAR INPUT
- APPROVED SAFETY FUNCTIONS
- RS 485 MODBUS SERIAL COMMS OPTION
- DIN RAIL MOUNTING VERSION
- IP 65 AND NEMA 4X FRONT PROTECTION

### LHL - LIMITROL® - FM APPROVED SAFETY LIMITER

- 2x HIGH/ LOW LIMIT ALARM WITH RESET FUNCTION
- TIME-IN-RESET MEMORY

### LHI - INDICATOR & LIMIT ALARM

- 2x INDEPENDENT HIGH/ LOW LIMIT ALARMS
- MANUAL OR AUTOMATIC RESET
- SILENCE FUNCTION

### LFS - mA - TRANSMITTER

- ISOLATED PV RETRANSMISSION
- 2x INDEPENDENT HIGH/ LOW LIMIT ALARMS
- MANUAL OR AUTOMATIC RESET



## □ TIS . DPS . DPL

48x96 mm

### TIS . PROGRAMMABLE INDICATOR

- UNIVERSAL, 3 WIRE- TC, RTD AND LINEAR INPUT
- INPUT FILTER AND RANGE SCALING
- ISOLATED PV RETRANSMISSION
- ISOLATED 24V TRANSMITTER POWER SUPPLY
- 2x INDEPENDENT ALARMS
- PEAK MAX/ MIN LEVEL MEMORY
- IP 65 AND NEMA 4X FRONT PROTECTION

48x96 mm

### DPS . PROGRAMMABLE INDICATOR & TRANSMITTER

- UNIVERSAL, 3 WIRE- TC, RTD AND LINEAR INPUT
- INPUT FILTER AND RANGE SCALING
- ISOLATED PV RETRANSMISSION
- 2 INDEPENDENT ALARMS
- PEAK MAX/ MIN LEVEL MEMORY
- 10-POINT LINEARISATION AND SQUARE ROOT
- ISOLATED 24V TRANSMITTER POWER SUPPLY
- RS 485 SERIAL INTERFACE OPTION
- IP 65 AND NEMA 4X FRONT PROTECTION

48x96 mm

### DPL . PROGRAMMABLE INDICATOR & TRANSMITTER

- LINEAR INPUT
- INPUT FILTER
- ISOLATED PV RETRANSMISSION
- ISOLATED 24V TRANSMITTER POWER SUPPLY
- 2x INDEPENDENT ALARMS WITH PEAK MAX/ MIN LEVEL MEMORY
- RS 485 MODBUS SERIAL COMMUNICATION
- IP 65 AND NEMA 4X FRONT PROTECTION



## ISR . ITR . ISL . ESR . ETR

### INDUSTRIAL SOLID STATE RELAYS

- RESISTIVE LOAD- ZERO CROSSING SWITCHING
- ON STATUS INDICATION
- THERMAL PROTECTION WITH STATUS INDICATION
- FRONT ACCESSIBLE IP20 PROTECTED TERMINALS

### ISR/ISR -T . ESR/ESR -T: SINGLE PHASE SOLID STATE RELAY

- MODELS 12A TO 80A, 240V; 400V AND 600V

### ITR . ETR: 3 PHASE SOLID STATE RELAY

- MODELS 20A TO 60A, 400V AND 600V

### ISL : LINEAR INPUT- SINGLE PHASE SOLID STATE RELAY

- SELF POWERED
- MODELS 25A to 80A; 400V AND 600V
- AUTOMATIC LINE FREQUENCY SYNCHRONIZATION
- SINGLE CYCLE OR FAST CYCLE SWITCHING MODES
- PROTECTION AGAINST INPUT SIGNAL OVERLOAD AND INVERSION



## MEMOCAL 2000

### PORTABLE PROCESS CALIBRATOR

- SIMULATES AND MEASURES THERMOCOUPLE AND RTD SENSORS, (15 THERMOCOUPLE TYPES, Pt100, NI100 RTDS)
- GENERATES AND MEASURES mA, mV, V AND OHM SIGNALS
- DIRECT INPUT CONNECTION (AUTOMATIC CJC FOR THERMOCOUPLE INPUTS)
- HIGH ACCURACY- (0.015% OF MEASUREMENT RANGE SPAN)
- LOW TEMPERATURE DRIFT 0.1 $\mu$ V/ $^{\circ}$ C
- 24V TRANSMITTER POWER SUPPLY
- AUTO-RANGING DISPLAY WITH PEAK DATA HOLD
- SQUARE ROOT EXTRACTION AND QUADRATIC SIGNAL GENERATION
- 50 STEP PROGRAMMABLE TEST SEQUENCER
- 24 HOUR CONTINUOUS BATTERY OPERATION (USING NI-MH CELLS)
- BUILT IN BATTERY CHARGER
- RS-232 INTERFACE OPTION
- DESKTOP STAND AND LEATHER CARRY CASE AVAILABLE

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