

### THREE-PHASE MONITOR RELAYS

#### PROTECT MOTORS AGAINST PREMATURE FAILURE

- Variety of products offer protection against phase loss, phase reversal, phase unbalance & under/over voltage

- Line-line voltages from 120-575V AC

- True RMS voltage measurement ensures accurate sensing across more applications

- Bi-color LED status indication for normal & fault conditions

- Protection against single phasing regardless of any regenerative voltages

- Retains fault indication & continues monitoring all voltages even with phase loss



### ALTERNATING RELAYS

#### EQUALIZE THE RUN-TIME OF MULTIPLE PUMPS & COMPRESSORS

- Duplexor (2 loads) in SPDT, DPDT & DPDT Cross-Wired output

- Triplexor (3 loads) with 3PNO output

- Optional top-mounted switch for normal or lock-out modes

- LED indication of alternating sequence



### SEAL LEAK & TEMPERATURE RELAYS

#### MONITOR SUBMERSIBLE PUMPS FOR SEAL LEAKAGE & OVERTEMPERATURE

- Seal Leak Relays indicate leaking seal before pump failure

- Both Single & Dual channel versions available to monitor 1 or 2 pumps

- Dual function relay monitors for both seal leak & over temperature condition of a single pump

- Two sensitivity ranges: 4.7K to 100K ohms & 1K to 250K ohms

- Bi-color LED status indication



### VOLTAGE MONITOR RELAYS

#### PROTECT EQUIPMENT AGAINST ABNORMAL VOLTAGE

- Monitored ranges include 120-480V AC single-phase & 12-110V DC

- Both fixed or adjustable hysteresis & time delay on drop-out

- Bi-color LED status indication for normal & fault conditions



### CURRENT SENSING RELAYS

#### PROTECT EQUIPMENT OR CONTROL A PROCESS

- Monitored AC current ranges from 0.1-50A (extend range using external current transformer)

- Fixed or adjustable hysteresis & time delay on pick-up/drop-out available

- LED status indication for normal & fault conditions



### LIQUID LEVEL CONTROL RELAYS

#### DETECT & MONITOR LEVELS OF CONDUCTIVE LIQUIDS

- Pump Up & Pump Down versions available

- Single & Dual Probe applications

- Two sensitivity ranges: 4.7K to 100K ohms & 1K to 250K ohms

- Bi-color LED status indication

- Factory-fixed time delays





# INDUSTRIAL CONTROL & MONITORING PRODUCTS

Better. By Design.

## TIME DELAY RELAYS

THE LEADER IN TIME DELAY RELAYS | MOST EXTENSIVE LINE IN INDUSTRY

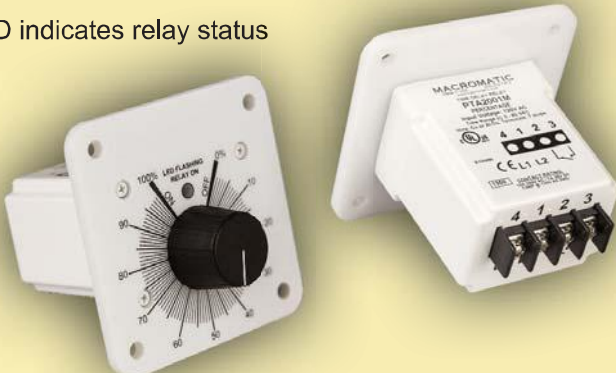
- Single or multi-function versions
- Single or programmable time ranges
- Analog or digital-set time delay
- Available with standard and custom functionality for all applications



## PERCENTAGE TIMERS

RELIABLE ACCURATE TIMING FOR CRITICAL APPLICATIONS

- Retains timing sequence in the event of power loss
- Onboard potentiometer for easy time delay adjustment
- Memory and no memory options available
- LED indicates relay status



## CUSTOM ENGINEERED PRODUCTS

FOR SPECIAL REQUIREMENTS

- Provides engineering and design assistance for unique applications
- Quick turnaround on prototypes and production
- Knowledge and experience to obtain agency approval on custom products
- Specials may be included under the approval of Macromatic's own standard products which saves time and money

## ABOUT MACROMATIC

Macromatic is a highly-responsive, independently owned manufacturer of industrial control and monitoring products. Located in Menomonee Falls, Wisconsin, Macromatic's highly trained team uses state-of-the-art equipment and proven quality control methods to produce products with superior performance.

With over 40 years of experience, Macromatic makes it easy to find a cost-effective solution for your application.



## INDUSTRIES SERVED - PLUS MORE

- Water/Wastewater
- Motor Control & Protection
- Material Handling
- Generator Control
- Food & Beverage Processing
- Irrigation
- Elevator Control
- Pump Control
- Packaging Equipment
- Car Wash Systems
- HVACR
- Compacting

## WHY CHOOSE MACROMATIC?

- Five-year warranty
- Short lead-times
- Advanced technical support
- Superior customer service

