# MACROMATIC

## INDUSTRIAL CONTROL & Monitoring Products

Better. By Design.

ACROMATIC

# 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



- 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

# VOLTAGE MONITOR RELAYS

#### **PROTECT EQUIPMENT AGAINST ABNORMAL VOLTAGE**



- Monitored ranges include 24-240V 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

## 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 of seal leakage

### 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



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## 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
- 4 mounting configurations: Plug-in, Encapsulated, 1/16 DIN, 17.5mm



Plug-in

1/16 DIN



Encapsulated



### CUSTOM ENGINEERED PRODUCTS FOR SPECIAL REQUIREMENTS

- Provides engineering and design assistance with documentation
- 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
- HVAC
- Compacting

### WHY CHOOSE MACROMATIC?

- Five-year warranty
- Short lead-times
- Advanced technical support



## VISIT WWW.MACROMATIC.COM

• FAQs

• Product data sheet

Installation sheet

• Where to buy

- Cross-reference guide
- Knowledge base
- Product catalog
- Interactive product builder

• Superior customer service

