



# **OVERCURRENT** & EARTH FAULT **RELAYS**

**PROGRAMMABLE** 

**MODBUS OPTION** 

IDMT, IDT, DT **TRIPPING CHARACTERISTICS** 

**OVERCURRENT DETECTION** 

**EARTH FAULT DETECTION** 

VOLTAGE, FREQUENCY POWER, POWER FACTOR, HOURS RUN



### P9690

# NEW

### Combined Overcurrent/Earth Fault with Voltage Monitoring

#### **Key Features:**

- True R.M.S. measurements
- Rear pluggable connectors provide quick and convenient method of installation
- Low-set and High-set trip thresholds for both Overcurrent and Earth Fault detection
- 6 selectable IDMT (Inverse Definite Minimum Time) characteristic curves or adjustable DT (Definite Time) in accordance with IEC 60255-151
- Last trip memory (up to 10 events)
- Three phase Overcurrent and Earth Fault detection
- Measurement and live display of individual phase and earth fault currents
- Pre-defined selectable CT ratio's (5:5....6000:5)
- Display of measured phase to neutral or phase to phase voltages
- Display of measured frequency, power, power factor and hours run
- Microprocessor based (self checking) with non-volatile memory
- Supply voltage options: 18 55V AC/18 72V DC or 85 265V AC/85 370V DC



Dims: W x H. 96 x 96mm (front) W x H. 89.5 x 89.5mm (main body) L. 107mm



### P9680

### Combined Overcurrent and Earth Fault

#### **Key Features:**

- True R.M.S. measurements
- Rear pluggable connectors provide quick and convenient method of installation
- Low-set and High-set trip thresholds for both Overcurrent and Earth Fault detection
- 6 selectable IDMT (Inverse Definite Minimum Time) characteristic curves or adjustable DT (Definite Time) in accordance with IEC 60255-151
- Last trip memory (up to 10 events)
- Three phase Overcurrent and Earth Fault detection
- Measurement and live display of individual phase and earth fault currents
- Pre-defined selectable CT ratio's (5:5....6000:5)
- "Ecosmart" Energy efficient power supply design
- Supply voltage options: 18 55V AC/18 72V DC or 85 265V AC/85 370V DC



Dims: W x H. 96 x 96mm (front) W x H. 89.5 x 89.5mm (main body) L. 107mm



### P9670

# Overcurrent Relay

#### **Key Features:**

- True R.M.S. measurements
- Rear pluggable connectors provide quick and convenient method of installation
- Low-set and High-set trip thresholds
- 6 selectable IDMT (Inverse Definite Minimum Time) characteristic curves or adjustable DT (Definite Time) in accordance with IEC 60255-151
- Last trip memory (up to 10 events)
- Three phase Overcurrent detection
- Measurement and live display of individual phase currents
- Pre-defined selectable CT ratio's (5:5....6000:5)
- Microprocessor based (self checking) with non-volatile memory
- "Ecosmart" Energy efficient power supply design
- Supply voltage options: 18 55V AC/18 72V DC or 85 265V AC/85 370V DC



Dims: W x H. 96 x 96mm (front) W x H. 89.5 x 89.5mm (main body) L. 107mm





### Definite Time (DT) Earth Fault Relay

#### **Key Features:**

- True R.M.S. measurements
- Adjustable Low-set tripping threshold
- Adjustable High-set tripping threshold with option to disable
- Adjustable Definite Time setting (applicable to Low-set triggering only)
- Instantaneous tripping on High-set triggering
- Test and Reset buttons for simulating and clearing of fault condition
- Red LED indication of Low-set or High-set triggering and tripping
- Green LED indication for Auxiliary power supply presence
- Microprocessor based (self checking) with non-volatile memory
- Terminals suitable for 2 x 2.5mm<sup>2</sup> wires (complete with protective cover)
- Supply voltage options: 115V AC or 230V AC



Dims: W x H. 96 x 96mm (front) W x H. 89.5 x 89.5mm (main body) L. 107mm

### P9640

# Inverse Definite Minimum Time (IDMT) Earth Fault Relay

#### **Key Features:**

- True R.M.S. measurements
- Adjustable Low-set and High-set trip thresholds (option to disable High-set trip)
- Adjustable Time Multiplier for defining curve tripping characteristic (applicable to Low-set triggering only)
- Normal Inverse 3/10 tripping characteristics (Low-set threshold only) (1.3/10 curve also available)
- Instantaneous tripping on High-set triggering
- Test and Reset buttons for simulating and clearing of fault condition
- Red LED indication of Low-set or High-set triggering and tripping
- Green LED indication for Auxiliary power supply presence
- Microprocessor based (self checking) with non-volatile memory
- Terminals suitable for 2 x 2.5mm<sup>2</sup> wires (complete with protective cover)
- Supply voltage options: 115V AC or 230V AC



Dims: W x H. 96 x 96mm (front) W x H. 89.5 x 89.5mm (main body) L. 107mm

# P9660

# Earth Fault Relay

#### **Key Features:**

- True R.M.S. measurements
- Rear pluggable connectors provide quick and convenient method of installation
- Low-set and High-set tripping thresholds
- 6 selectable IDMT (Inverse Definite Minimum Time) characteristic curves or adjustable DT (Definite Time) in accordance with IEC 60255-151
- Last trip memory (up to 10 events)
- Earth Fault detection
- Measurement and live display of earth fault current
- Pre-defined selectable CT ratio's (5:5....6000:5)
- Microprocessor based (self checking) with non-volatile memory
- "Ecosmart" Energy efficient power supply design
- Supply voltage options: 18 55V AC/18 72V DC or 85 265V AC/85 370V DC



Dims: W x H. 96 x 96mm (front) W x H. 89.5 x 89.5mm (main body) L. 107mm



### P9625

# Definite Time (DT) Overcurrent Relay

### **Key Features:**

- True R.M.S. measurements
- Individual Trip Level adjustment for each phase
- Adjustable Delay setting
- Test and Reset buttons for simulating and clearing of fault condition
- Red LED indication of which phase has been triggered
- Red LED indication of actual tripped condition
- Green LED indication for Auxiliary power supply presence
- Microprocessor based (self checking) with non-volatile memory
- Terminals suitable for 2 x 2.5mm<sup>2</sup> wires (complete with protective cover)
- Supply voltage option: 115V AC or 230V AC



Dims: W x H. 96 x 96mm (front) W x H. 89.5 x 89.5mm (main body) L. 107mm

# P9630

### Inverse Definite Time (IDT) Overcurrent Relay

#### **Key Features:**

- True R.M.S. measurements
- Adjustable Low-set tripping threshold
- Adjustable High-set tripping threshold with option to disable
- Adjustable Time Multiplier for defining curve tripping characteristic (Low-set only)
- Instantaneous tripping on High-set triggering
- Test and Reset buttons for simulating and clearing of fault condition
- Red LED indication of Low-set or High-set triggering and tripping
- Green LED indication for Auxiliary power supply presence
- Microprocessor based (self checking) with non-volatile memory
- Terminals suitable for 2 x 2.5mm<sup>2</sup> wires (complete with protective cover)
- Supply voltage option: 115V AC or 230V AC



Dims: W x H. 96 x 96mm (front) W x H. 89.5 x 89.5mm (main body) L. 107mm

# P9650

# Inverse Definite Minimum Time (IDMT) Overcurrent Relay

#### **Key Features:**

- True R.M.S. measurements
- Adjustable Low-set and High-set trip thresholds (High-set trip disable option)
- Adjustable Time Multiplier for defining curve tripping characteristic (Low-set only)
- Normal Inverse 3/10 tripping characteristics (Low-set threshold only)
- Instantaneous tripping on High-set triggering
- Test and Reset buttons for simulating and clearing of fault condition
- Red LED indication of Low-set or High-set triggering and tripping
- Green LED indication for Auxiliary power supply presence
- Microprocessor based (self checking) with non-volatile memory
- Terminals suitable for 2 x 2.5mm<sup>2</sup> wires (complete with protective cover)
- Supply voltage option: 115V AC or 230V AC



Dims: W x H. 96 x 96mm (front) W x H. 89.5 x 89.5mm (main body) L. 107mm



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