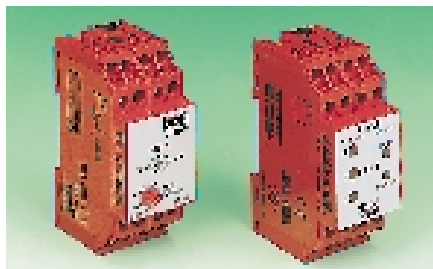


Phase Sequence/Failure Relays



Phase sequence/failure relay
H = 90, W = 35, D = 59

Three phase indicator
H = 90, W = 35, D = 59

Two devices for monitoring three phase power supplies. The orange ABS housings conform to the dimensional requirements of **DIN43880** and can either be mounted on symmetric 35mm DIN rail or screw mounted, using 2 M4 screws.

The phase sequence/failure relay is energised when all three phases are present and in the correct rotation, it is released on failure of any phase. A potentiometer on the module allows the trip voltage to be set and there are LED's for power supply and when all phases are correct.

The three phase indicator module shows phase presence by means of a red LED for each energised phase. A green LED is illuminated when all phases are present and in sequence, another red LED indicates breakdown of phase sequence.

| | Phase Sequence/Failure Relay | Three Phase Indicator |
|--------------------------|---|---|
| Contact arrangement | SPDT | — |
| Contact rating max | 250V ac 8A | — |
| Supply voltage monitored | 300 to 500V ac phase to phase 48 to 63Hz | 300 to 500V ac phase to phase 48 to 63Hz |
| Temperature range | -20°C to +60°C | -20°C to +60°C |
| Approvals | UL & CUL | UL & CUL |
| Terminal protection | IP20 | IP20 |
| Flame retard. rating | UL94V-0 | UL94V-0 |

Mfrs. List No. M3PR = 178-871, M3PPI = 178-872

PLC23

| | Order Code | Price Each | | | |
|------------------------|-----------------|------------|----|-----|-----|
| | | 1+ | 5+ | 10+ | 25+ |
| Sequence/failure relay | .178-871 | | | | |
| Three phase indicator | .178-872 | | | | |

DIN Meters

Kilowatt Hour



- For use with 3 phase, 4 wire unbalanced system
- Operates from a standard 5A secondary current transformer
- Pulsed output versions are able to send signals to PLCs data loggers and computers
- **CE Marked**

Aux. voltage 230V
Frequency 50Hz
V.T. Ratio 400V

DIN 96: H = 96, W = 96, D = 89 (inc. bezel)
Panel cut-out 92 92

PM76X

| C.T. Ratio | Order Code | Price Each | | | |
|-------------------------------|----------------|------------|----|-----|-----|
| | | 1+ | 5+ | 10+ | 25+ |
| Standard Versions | | | | | |
| 100/5A | 723-642 | | | | |
| 200/5A | 723-654 | | | | |
| 400/5A | 723-666 | | | | |
| 600/5A | 723-678 | | | | |
| 800/5A | 723-680 | | | | |
| Pulsed Output Versions | | | | | |
| 100/5A | 723-691 | | | | |
| 200/5A | 723-708 | | | | |
| 400/5A | 723-710 | | | | |
| 600/5A | 723-721 | | | | |
| 800/5A | 723-733 | | | | |

Multifunction



DIN 96: H = 96, W = 94, D = 139 (inc. bezel)
Panel cut-out 92 x 92

- 3 phase multifunction system for measuring electrical parameters
- Very easy 2 button operation
- Bright LCD display with backlighting
- Relay pulsed output corresponding to Watt hour or VAR hour consumption
- Fully programmable, can accept any C.T. or V.T. ratio
- RS232 link available on selected models for computers, data loggers etc.
- **CE Marked**



Parameters measured Voltage (V), Current (I), Frequency (Hz), Active Power (W), Reactive Power (VAR), Apparent Power (VA), Active Energy (Wh), Reactive Energy (VArh), Power Factor (PF)

Input voltage 230Vac
Input current 5A
Aux. voltage 230Vac 50Hz

PM82

| Type | Aux. Voltage | Order Code | Price Each | | | |
|----------------------------------|--------------|----------------|------------|----|-----|-----|
| | | | 1+ | 5+ | 10+ | 25+ |
| 3 Phase 4 Wire Unbalanced | | | | | | |
| Standard | 230Vac | 938-816 | | | | |
| RS485 | 230Vac | 938-830 | | | | |

Process Timers

Multifunction Timer



- Multifunction timer with 5 functions and 4 time ranges
- The function and time range are selectable via 2 front mounted rotary switches
- Time ranges cover 0,6sec-0,60min or 0,6min-60hrs
- Can be directly connected to the supply in the range of 10,5-265Vdc
- Single or double relay output with LED induction of energised relay
- 11-pole plug-mounting

| Functions | Time Ranges | Supply Voltage |
|---------------------------------------|-------------------------------|-----------------|
| On delay | 0,6 sec - 60 min | 10,5-265V ac/dc |
| Release delay | 0,6 sec - 60 hrs | |
| On pulse (without control switch) | (Time range sub-divided in 4) | |
| On pulse (with control switch) | | |
| Symmetrical recycler with pause start | | |

pro520

| Output | Mfrs. List No. | Order Code | Price Each | | | |
|-----------------|----------------|-----------------|------------|----|-----|-----|
| | | | 1+ | 5+ | 10+ | 25+ |
| SPDT 8A/240V ac | XMW-S1 | 723-3681 | | | | |
| DPDT 5A/240V ac | XMW-S2 | 723-3693 | | | | |

Electronic Rotary Positioners

H8PS



H = 96, W = 96, D (behind panel) = 53mm

- Easy to use electronic replacement for traditional cam box
- Absolute encoder attaches to machine shaft
- Dwell angles are set up on panel front display for up to 8 NPN transistor outputs
- Program changes are easily made, even with encoder in operation
- 96mm 96mm DIN standard mounting
- Backlit LCD is easy to read in all lighting conditions
- Display shows rotational position and status of outputs
- Encoder supplied with 2m plug in lead. Optional shaft coupling available

Supply voltage 24V dc -15% +10%
Outputs: 8 cams (output no. 1 to 8), NPN transistors 30V dc, 100mA
Run turns on in run and test modes, off in programm mode or error
Tachometer 60ppr signal for external r.p.m. meter 30V dc, 30mA

Operating temperature -10°C to +55°C
Encoder Resolution 256
Mfrs. List No. H8PS-8B = 474-538, E6CP-AG5C-C = 474-540

PLC108X

| | Order Code | Price Each | | |
|----------------|----------------|------------|----|-----|
| | | 1+ | 5+ | 10+ |
| Positioner | 474-538 | | | |
| Encoder | 474-540 | | | |
| Shaft Coupling | 651-916 | | | |