

MIDLAND JAY MAINS RESTORATION "BROWN OUT" TIMERS

TYPES: GBPxxxx (spco)

PRODUCT GROUP JJ

FEATURES

- Din rail mounted
- Timer resets when voltage dips below 80%* of Un
- Ultra fast response 1mSec reset time (also 5mSec reset)
- Monitors the supply which is its own supply
- Three function options: delay on, pulse, delayed pulse
- Bi-colour LED indication
- Ideal for water authority applications
- CE marked

DESCRIPTION & MODE OF OPERATION

Din rail mounted SPCO "mains restoration auto restart timers". The voltage and supply sensing built into these units are designed to sense voltage dips and momentary loss of supply referred to as "Brown Outs". This phenomena is a particular threat in the water industry and regularly occurs at remote pumping locations, especially during electrical storms. Left unchecked, a supply dip can "lock out" all or part of a control system, causing system malfunctions over a wide area necessitating engineer's site visits, just to reset and restart a control system. By monitoring the supply these tried and proven units will provide the "auto restart" signal to reset and restart the control system without the need for a site visit.

These timers are designed and operate in such a way that they reset far quicker (1mSec), than standard contactor and relay coils. They are offered in a choice of three functions:

Delay On "function 4" – on the application of the supply voltage the relay will energise after the set time delay. Should the supply be momentarily lost or dip below 80%* of the nominal supply voltage, the relay will de-energise and will commence timing again when the supply voltage is restored within 85%* or better of the nominal supply.

Pulse "function 5" – on the application of the supply voltage the relay will energise for the set delay time and then de-energise. The timer will then remain de-energised until reset by switching off normally, or by a momentary loss of the supply or dip below 80%* of the nominal supply voltage. The relay will again energise for the set delay time on restoration of a supply voltage within 85%* or better of the nominal supply.

Delayed Pulse "function 6" – on the application of the supply voltage the relay will after the set delay time pulse on for a fixed time of 500mSec. Should a momentary loss of the supply occur, or dips below 80%* of the nominal supply voltage the timer will be reset and on restoration of a supply voltage within 85%* or better of the nominal supply, the timer will commence with another set delay time after which the relay will energise for 500mSec.

*5mSec response time version - the voltage dip level is 70% of Un and the reset level is 80%



SPECIFICATIONS

Timing:

- Repeat accuracy:
 - constant ambient: ±0.5% of set value
 - across temp range: ±3%
- Setting accuracy: 0 to +30%
- Response time: 1mSec (also 5mSec version available)

Supply voltage:

- Supply volts tolerance: + 15%
- Power consumption: 4VA
- Trip level: 80% of Un
- Reset level: 85% of Un

Relay output:

- Output contact: SPCO
- Contact rating: 8 Amps/250V AC1
- Max switching voltage: 250VAC, 250VDC
- Mechanical life: 20 Million ops
- Electrical life: 50K ops at max rated load
- Isolation voltage: 2KV AC for 1 min

General

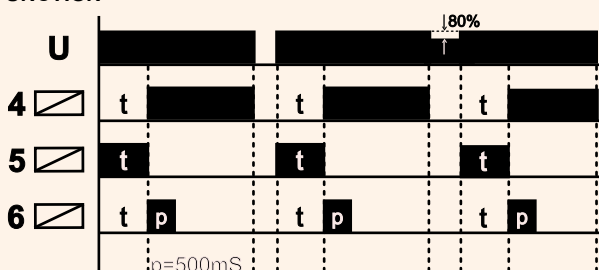
- Green LED: Supply healthy
- Red LED: Supply fault or Unit timing
- Operating temp: -20°C to +65°C
- CE marked: Yes
- Housing material: Polycarbonate, Auto extinguishable to UL 94 V-0

ORDERING INFORMATION

TYPE	TIME RANGE	FUNCTION	VOLTAGE
GBP	1 0.3-3 sec	4 Delay on	37 24VDC
	2 1-10 sec	5 Pulse	41 48VDC
	3 3-30 sec	6 Delayed pulse	07 24VAC
	4 6-60 sec		11 48VAC
	5 12-120 sec	1 Delay on (5mS)	01 110VAC
	6 18-180 sec	2 Pulse (5mS)	50 230VAC
	7 1-10 mins	3 Delayed pulse (5mS)	
	8 3-30 mins		
	9 6-60 mins		

Example: GBP1401: 0.3-3Sec, Delay on, 110VAC, 1mS reset

FUNCTION



CONNECTIONS

