

# LOGIC CONTROLLER

A Year 2000 compatible realtime calendar clock as standard on the whole range, with 350 programmable ON/OFF cycles! When setting the date, the day of the week is calibrated automatically, plus automatic changeover between winter/summer time!

> replace expensive programming clocks.



## Part numbers

1

| Power consumption | Maximum micro-cut | Maximum inrush current | Inputs / Outputs     | Power supply                       |            |
|-------------------|-------------------|------------------------|----------------------|------------------------------------|------------|
| 3 VA              | 10 ms             | 0,7 A - 1,5 A          | 4E - 2S Relay        | 100-240 VAC + 10 % - 15 % 50/60 Hz | 89 750 001 |
| 4 VA              | 10 ms             | 0,7 A - 1,5 A          | 6E - 4S Relay        | 100-240 VAC + 10 % - 15 % 50/60 Hz | 89 750 002 |
| 3 W               | 5 ms              | 7 A                    | 6E - 4S Relay        | 24 VDC + 20 % - 15 %               | 89 750 003 |
| 3 W               | 5 ms              | 7 A                    | 6E - 4S Solid state  | 24 VDC + 20 % - 15 %               | 89 750 013 |
| 8 VA              | 10 ms             | 0,7 A - 1,5 A          | 12E - 8S Relay       | 100-240 VAC + 10 % - 15 % 50/60 Hz | 89 750 004 |
| 6 W               | 5 ms              | 7 A                    | 12E - 8S Relay       | 24 VDC + 20 % - 15 %               | 89 750 005 |
| 6 W               | 5 ms              | 7 A                    | 12E - 8S Solid state | 24 VDC + 20 % - 15 %               | 89 750 015 |

## Accessories

2

|  |            |
|--|------------|
| Millenium programming software - CD-ROM          | 89 750 100 |
| PC-module interface, length 3 m                  | 89 750 101 |
| EEPROM memory module                             | 89 750 102 |
| Faceplate for mounting on front panel MAS 6 - 10 | 89 750 103 |
| Faceplate for mounting on front panel MAS 20     | 89 750 109 |

## AC INPUT CHARACTERISTICS

|                                   |                                   |
|-----------------------------------|-----------------------------------|
| Input voltage                     | 100-240 VAC + 10 %-15 %, 50-60 Hz |
| Input impedance                   | > or = 800 kOhms                  |
| Pull-in voltage at logic state 1  | ≥ 80 V                            |
| Drop-out voltage at logic state 0 | ≤ 40 V                            |
| Response time                     | 50 ms                             |
| Status indicator                  | YES on LCD screen                 |

## DC INPUT CHARACTERISTICS

|                                   |                        |
|-----------------------------------|------------------------|
| Input voltage                     | 24 VDC + 20 %-15 %     |
| Input current                     | 5 mA                   |
| Pull-in voltage at logic state 1  | ≥ 18 V                 |
| Drop-out voltage at logic state 0 | ≤ 4 V                  |
| Response time                     | 15 ms                  |
| Status indicator                  | YES on LCD screen      |
| Sensor type                       | NPN or PNP 2 or 3-wire |

## ANALOGUE INPUT CHARACTERISTICS

|                          |                          |
|--------------------------|--------------------------|
| MAS 10                   | 6 inputs from I01 to I06 |
| MAS 20                   | 8 inputs from I01 to I08 |
| Measurement range        | 0-255                    |
| Resolution               | 8 bits - 10 000 / 256 mV |
| Conversion time          | 10 ms                    |
| Input voltage            | 0-10 VDC                 |
| Input impedance          | 150 kOhms min.           |
| Precision                | +/- 5 % (0.5 VDC)        |
| Temp. dependent derating | +/- 3 LSB                |

## RELAY OUTPUT CHARACTERISTICS

|                       |  |
|-----------------------|--|
| Max. breaking voltage | 250 VAC - 30 VDC   |
| Breaking voltage      | 8 A (10 A for 110 VAC outputs)   |
| Service life          | 100,000 operations at 8 A / 240 VAC or 24 VDC<br>30,000 operations at 10 A / 110 VAC |
| Minimum load          | 50 mW (10 mA at 5 VDC)   |
| Response time         | 10 ms  |
| Status indicator      | YES on LCD screen  |

## SOLID STATE OUTPUT CHARACTERISTICS

|                        |  |
|------------------------|--|
| Breaking voltage       | 5 - 30 VDC   |
| Breaking current       | 1 A / point (8 - 30 VDC),<br>0,1 A / point (5 - 8 VDC) |
| Minimum load           | 1 mA   |
| Max. inductive load    | 1 A / 24 VDC (24 W)                                    |
| Max. incandescent load | 0,125 A / 24 VDC (3 W)                                 |
| Off-state leakage      | =<0,1 mA / 30 VDC                                      |
| Response time          | =<1 ms   |
| Insulation             | Non  |
| Status indicator       | YES on LCD screen                                      |

## ELECTRICAL - ENVIRONMENTAL SPECIFICATIONS

|                        |  |
|------------------------|--|
| Insulation             | 7 MOhms at 500 VDC between connectors according to EN 60730-1                |
| Safety class           | II   |
| Earthing               | None   |
| Protection             | IP 20  |
| Certifications         | CE, UL/cUL   |
| Conformity with        | UL 508<br>EN 60730-1<br>EN 61010-1<br>EN 50081-1<br>EN 50082-1<br>EN 50082-2 |
| Programming method     | Function blocks  |
| Program size           | 64 function blocks or 1,500 bytes  |
| Program memory         | EEPROM built-in as standard  |
| Removable memory       | YES - optional EEPROM cartridge  |
| Data memory            | Backed up for 20 days  |
| Operating temperature  | 0-55 °C  |
| Storage temperature    | - 30 to + 70 °C  |
| Humidity               | 35 - 85 % relative humidity without condensation                             |
| Dimensions (l x h x d) | 6-10 : 71.2 x 90 x 55 mm<br>20 : 124.6 x 90 x 55 mm                          |

## To order, specify :

### Standard products

1

Part number

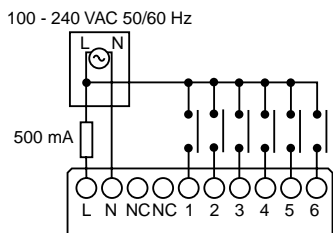
3

Accessory

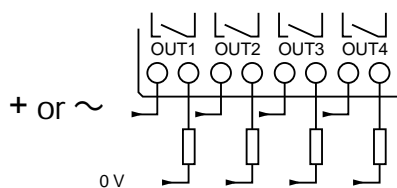
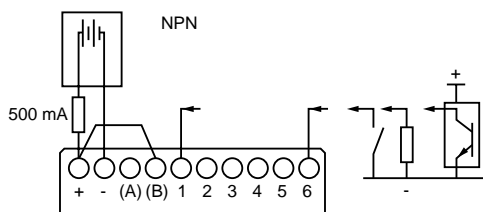
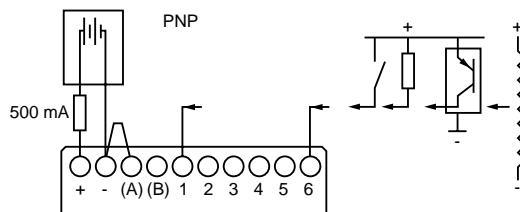
### Standard products, non stocked

Example : Simple automation control modules - 89 750 001 - 89 750 100

**Connections**



Caution : Do not invert phase (L) and neutral (N) on the inputs



**Dimensions**

