

Ordering Information

Model	Code	Description
	TB822E	Delay on Energise Timer
	TB822EI	Delay on Energise Timer with Instant Contact
	TB822A	Delay on De-energise Timer
	TB822N	Interval Timer
	TB822C	Cyclic Symmetrical Timer
	TB822CA	Cyclic Asymmetrical Timer
	TB822B	Flasher Timer
	TB822AH	Delay after Supply Off Timer
	TB822S	Star/Delta Timer
	TB822MA	Multi-attempt Start Timer

Time Range	Code	Description
	0.03-1 sec	0.03 to 1 second
	0.1-3 sec	0.1 to 3 seconds
	0.3-10 sec	0.3 to 10 seconds
	1-30 sec	1 to 30 seconds
	2-60 sec	2 to 60 seconds
	3-100 sec	3 to 100 seconds
	10-300 sec	10 to 300 seconds
	20-600 sec	20 to 600 seconds
	1-30 min	1 to 30 minutes
	2-60 min	2 to 60 minutes
	0.1-3 hours	0.1 to 3 hours
	0.3-10 hours	0.3 to 10 hours (N/A TB822AH)
	N/A	TB822S and TB822MA

Auxiliary Power	Code	Description
	12V	12Vdc
	24V	24Vac/dc
	110V	110Vac
	230V	230Vac
	415V	415Vac
	Other	Specify (subject to technical viability)

Output / Options	Code	Description
	1C/O	1 Pole Change-over Relay Output
	2C/O	2 Pole Change-over Relay Output
	Preset	Factory Preset Fixed Time Range (specify)

Example	TB822A - 1-30 min - 230V - 2C/O
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Options

Timer Relay Output

All timers are supplied with a single pole changeover relay output however a two pole changeover relay output is available as an option (not available on the TB822EI and TB822MA).

Terminal Cover

Available for all TB822 timers is the PC55-10 plastic terminal cover to finger-proof the terminals.

Fixed Time Range

Timers can be supplied with a factory preset time range fixed during manufacture and a blanking plug fitted replacing the front control knob.

Specification

Repeat Accuracy:

- $\pm 0.5\%$ at constant ambient
- $\pm 3\%$ to temperature spec. VDE 0435
- Setting accuracy $\pm 15\%$

Power Supply Voltage:

- 24Vac/dc, 110Vac, 230Vac ($\pm 15\%$)
- 12Vdc, 415Vac ($\pm 15\%$)

Burden:

- $< 2VA$

Frequency:

- 50/60Hz

Relay Output:

- 1 or 2 pole changeover contact(s)

Contact Rating:

- 1 Pole: 10A at 250Vac/30Vdc
- 2 Pole: 5A at 250Vac/30Vdc

Contact Life:

- 1,000,000 operations at 5A
- 10,000,000 operations at 1A

Reset Time:

- 100ms approximately

Operating Temperature:

- $0^{\circ}C$ to $60^{\circ}C$

Enclosure:

- 55mm wide black ABS
- Mount: 35mm DIN rail (DIN-EN 50022)

Enclosure Code:

- Case IP40, terminals IP10

Vibration Resistance:

- To VDE 0160

Weight:

- 175g

Markings:

- CE marked

Specification subject to change without notice.

Timeswitches



Global Suppliers of Measurement and Protection Equipment for Industry



Quartz Analogue Timeswitches

Quartz analogue timeswitches offer accuracy and flexibility making them suitable for a large range of industrial control applications. The timeswitches are powered from a large choice of AC or DC auxiliary power options and have a voltage free changeover relay contact. The universal mounting enclosure allows the SPHQ to be panel, DIN rail or surface mounted.

In the event of a mains shut down or power failure the SPHQ will continue to operate, accurate to the second, due to a 100 hour battery power reserve. The face of the timeswitch clearly indicates the time and a rotating disc at the centre indicates operation. There is a manual override facility on both SPHQ models. Extra pairs of tappets (pegs) are available for both 24 hour and 7 day models.

Models Available

SPHQ/24HOUR 24 Hour Timeswitch

SPHQ/7DAY 7 Day Timeswitch

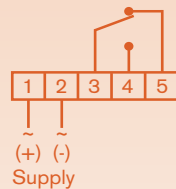
Product Features

- 24 hour or 7 day versions
- Quartz accuracy
- ON/OFF tappets:
 - 24 hour - 2 pairs (up to 24 on request)
 - 7 day - 6 pairs (up to 28 on request)
- Minimum switching interval
 - 24 hour - 30 minutes
 - 7 day - 3 hours
- Panel, DIN rail and surface mounting
- 100 hour NiMH battery reserve
- Standard DIN square size
- Screw type terminals

For dimensions see page 115

For timing control of daily or weekly events and processes

Connections



Ordering information

Code	Timeswitch Type	Auxiliary Voltage	Options
SPHQ/24HOUR	24 Hour Analogue Timeswitch	–	–
SPHQ/7DAY	7 Day Analogue Timeswitch	–	–
Specify	–	12 or 24Vac/dc	–
Specify	–	110, 230 or 415Vac	–
Specify	–	Other (specify)	–
TPS/24HOUR	–	–	Extra Pair Tappets - 24 Hour
TPS/7DAY	–	–	Extra Pair Tappets - 7 Day
Example	SPHQ/24HOUR	110Vac	4xTPS/24HOUR

Specification

Accuracy:

- ± 1 sec in 24 hours (quartz timebase)

Adjustability:

- 15 minutes (24 hour), 1 hour (7 day)

Supply Voltage:

- 12Vac/dc, 24Vac/dc (-15% to +10%)
- 110, 230, 415Vac (-15% to +10%)

Burden:

- 1.5VA (AC) or 1.5W (DC)

Frequency:

- 45 to 65Hz or DC

Battery Reserve:

- 100 hours (after 48 hours charge)

Relay Output:

- 1 voltage free changeover relay contact

Contact Rating:

- 10A (resistive), 6A (inductive/capacitive)
- 250Vac maximum
- Contact life 10,000,000 operations

Operating Temperature:

- 0°C to 55°C

Enclosure:

- DIN72 flame retardant grey ABS
- Panel, DIN rail or surface mounting
- IP40 enclosure code

Weight:

- 200g

Markings:

- CE marked

Specification subject to change without notice.



Digital Timeswitch - DIN Rail Mounting

Models Available

TM848 LCD Digital Timeswitch

Product Features

- Quartz accuracy
- Up to 8 on and 8 off operations
- 1 minute minimum switching interval
- Daily, 7 day week, 5 day week and weekend modes
- Liquid crystal display
- DIN rail or surface mounting
- Screw type terminals
- 500 hour lithium battery reserve
- Programming instructions supplied

For dimensions see page 115

The TM848 digital timeswitch offers quartz accuracy and flexibility making it suitable for a large range of industrial control applications. The timeswitch can be powered from a large choice of AC or DC auxiliary power options and has a voltage free changeover relay contact. The enclosure allows the TM848 to be DIN rail or surface mounted.

In the event of a mains shut down or power failure the TM848 will maintain programme memory and continue to operate, accurate to the second, due to a 500 hour battery power reserve. The TM848 is very simple to programme through a step-by-step push button sequence and flexible programming enables individual day or weekend programs. The timeswitch has a permanent override function and an LED to indicate relay status.

For digital timing control of daily or weekly events and processes

Specification

Accuracy:

- ± 1 sec in 24 hours (quartz timebase)

Display:

- Liquid crystal - 5mm high characters

Supply Voltage:

- 12Vac/dc, 24Vac/dc (-15% to +10%)
- 110, 230, 415Vac (-15% to +10%)

Burden:

- 5VA (AC) or 1.2W (DC)

Frequency:

- 45 to 65Hz or DC

Battery Reserve:

- 500 hours (display/memory, not output)

Relay Output:

- 1 voltage free changeover relay contact

Contact Rating:

- 16A (resistive), 3A (inductive/capacitive)
- 250Vac maximum
- Contact life 10,000,000 operations

Operating Temperature:

- -10°C to 55°C

Enclosure:

- 36mm wide flame retardant grey ABS
- 35mm DIN rail (DIN-EN 50022) or surface mounting
- IP40 enclosure code

Weight:

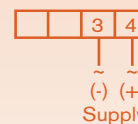
- 100g

Markings:

- CE marked

Specification subject to change without notice.

Connections



Ordering information

Code	Timeswitch Type	Auxiliary Voltage
TM848	Digital Timeswitch - DIN Rail Mounting	-
Specify	-	12 or 24Vac/dc
Specify	-	110, 230 or 415Vac
Specify	-	Other (specify)
Example	TM848	12Vac/dc



Digital Timeswitch - 2 Channel

The TM812 digital timeswitch offers quartz accuracy and flexibility making it suitable for a large range of industrial control applications. The timeswitch can be powered from a large choice of AC or DC auxiliary power options, has two independently programmable voltage free changeover relay contacts and can be DIN rail or surface mounted.

In the event of a mains shut down or power failure the TM812 will maintain programme memory and continue to operate, accurate to the second, due to a 500 hour battery power reserve. The TM812 is very simple to programme each channel through a step-by-step push button sequence and flexible programming enables individual day or weekend programs. The timeswitch has a permanent override function and two LED's to indicate each channel relay status.

Models Available

TM812 LCD 2 Channel Digital Timeswitch

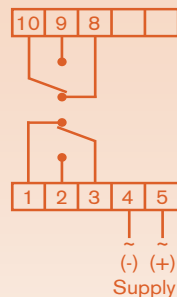
Product Features

- 2 independent channels
- Quartz accuracy
- Up to 8 on and 8 off operations
- 1 minute minimum switching interval
- Daily, 7 day week, 5 day week and weekend modes
- Liquid crystal display
- DIN rail or surface mounting
- Screw type terminals
- 500 hour lithium battery reserve
- Programming instructions supplied

For dimensions see page 115

For digital timing control of daily or weekly events and processes

Connections



Ordering information

Code	Timeswitch Type	Auxiliary Voltage
TM812	Digital Timeswitch - 2 Channel	-
Specify	-	12 or 24Vac/dc
Specify	-	110, 230 or 415Vac
Specify	-	Other (specify)
Example	TM812	230Vac

Specification

Accuracy:

- ± 1 sec in 24 hours (quartz timebase)

Display:

- Liquid crystal - 6mm high characters

Supply Voltage:

- 12Vac/dc, 24Vac/dc (-15% to +10%)
- 110, 230, 415Vac (-15% to +10%)

Burden:

- 6VA (AC) or 1.5W (DC)

Frequency:

- 45 to 65Hz or DC

Battery Reserve:

- 500 hours (display/memory, not output)

Relay Output:

- 2 voltage free changeover relay contacts

Contact Rating:

- 16A (resistive), 3A (inductive/capacitive)
- 250Vac maximum
- Contact life 10,000,000 operations

Operating Temperature:

- -10°C to 45°C

Enclosure:

- 52.5mm wide flame retardant grey ABS
- 35mm DIN rail (DIN-EN 50022)
- or surface mounting
- IP40 enclosure code

Weight:

- 140g

Markings:

- CE marked

Specification subject to change without notice.



Digital Timeswitch - Panel Mounting

Models Available

TM823 LCD Panel Mounting
Digital Timeswitch

Product Features

- Quartz accuracy
- Up to 8 on and 8 off operations
- 1 minute minimum switching interval
- Daily, 7 day week, 5 day week and weekend modes
- Liquid crystal display
- Panel mounting
- Spade terminals - 6.3mm
- 500 hour lithium battery reserve
- Programming instructions supplied

For dimensions see page 115

The TM823 digital timeswitch offers quartz accuracy and flexibility making it suitable for a large range of industrial control applications. The timeswitch can be powered from a large choice of AC or DC auxiliary power options, has a voltage free changeover relay contact and is panel mounted. An optional 96mm x 83mm mounting bezel is also available.

In the event of a mains shut down or power failure the TM823 will maintain programme memory and continue to operate, accurate to the second, due to a 500 hour battery power reserve. The TM823 is very simple to programme through a step-by-step push button sequence and flexible programming enables individual day or weekend programs. The timeswitch has a permanent override function and an LED to indicate relay status.

For digital timing control of daily or weekly events and processes

Specification

Accuracy:

- ± 1 sec in 24 hours (quartz timebase)

Display:

- Liquid crystal - 6mm high characters

Supply Voltage:

- 12Vac/dc, 24Vac/dc (-15% to +10%)
- 110, 230, 415Vac (-15% to +10%)

Burden:

- 5VA (AC) or 1.2W (DC)

Frequency:

- 45 to 65Hz or DC

Battery Reserve:

- 500 hours (display/memory, not output)

Relay Output:

- 1 voltage free changeover relay contact

Contact Rating:

- 16A (resistive), 3A (inductive/capacitive)
- 250Vac maximum
- Contact life 10,000,000 operations

Operating Temperature:

- -10°C to 55°C

Enclosure:

- Flame retardant black ABS
- Panel mounting - 60x48mm cut out
- IP40 enclosure code

Weight:

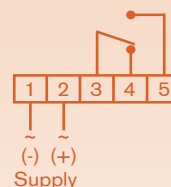
- 100g

Markings:

- CE marked

Specification subject to change without notice.

Connections



Ordering information

Code	Timeswitch Type	Auxiliary Voltage	Options
TM823	Digital Timeswitch - Panel Mounting	-	
Specify	-	12 or 24Vac/dc	
Specify	-	110, 230 or 415Vac	
Specify	-	Other (specify)	
TM823BK	-	96 x 83mm Mounting Bezel	
Example	TM823	230Vac	TM823BK