

FUSION SERIES

Circuit Protection Timers









[DESCRIPTION] TME2

The TME2 electronic timer module is DIN rail mounted, 24 hour, 7 day programmable timer with 28 ON and OFF programmes with a 10 year lithium backup battery. Rated at 240V AC 16A, it is capable of carrying a 5A inductive load. Termination is a maximum cable size of 6mm².

[FEATURES]

- · 28 ON and OFF Programmes
- · 1NO and 1NC Contacts
- · 10 Year Lithium Backup Battery
- · Replaceable Battery
- DIN Rail Mounted

[COMPLIANCE]

IEC 60730

[IMAGES]





[TECHNICAL PARAMETERS]

Operation Voltage: 240V AC

AC Switching Capacity: 240V AC

· Inductive Load: 5A

Ambient Temperature: -10°C - 20°C

Accuracy: Type +- 1s/day at 20°C

Frequency: 50/60Hz

· Battery Backup: 10 Year Lithium

Minimum Programmable Time: 1 minute

Maximum Programmable Time: 168 hours

Maximum Programmes: 14 ON and 14 OFF

Cable Termination: 6mm²

Torque of Screw: 1.2Nm

[PROGRAMMING SETTING]

Serial	Key	Programming
1	Press P Once	Setting Channel (28 times ON/OFF settings are optional
2	Press D +	Select days of the week
3	Press H +	Setting hours
4	Press M+	Setting minutes
5	Press 'Clock' Symbol	Setting normal display time
6	Press Manual	Setting permanent ON/permanent OFF/permanent
7	Press Reset	Reset timer

[SETTING INSTRUCTIONS]

- 1. Restore Factory Settings
 - Press button <Reset> on timer before setting the program you require
- 2. Setting Current Time On Timer
 - Press and hold button <0> on timer to set day by pressing D+, H+, M+
- 3. Programme Setting
 - Press the button <P> on the timer once. Follow by presssing D+, H+, M+ to set the desired working programme and repeat the same step (for ON/OFF and multiple programming)

Example:

- 3.1) Press button <P> once = ON programming. Setting of Day/Hour/Minutes press D+, H+, M+
- 3.2)Press button <P> once again = OFF programing. Setting of Day/Hour/Minutes press D+, H+, M+
 - ◆Setting D+, there are 15 different combinations for week settings such as:

MO/TU/WE/TH/FR/SA/SU (each setting for each single day)

MO TU WE TH FR SA SU (from Monday to Sunday)

MO TU WE TH FR SA

MO TU WE TH FR

SA SU

MO WE FR

TU TH SA

MO TU WE

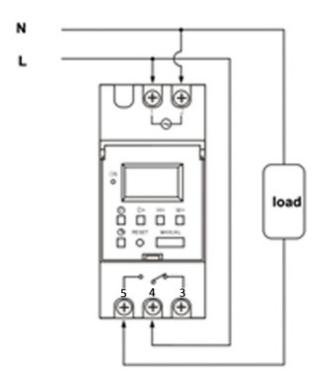
TU FR SA

- ◆Setting H+ from 1 to 24 hours setting -1, 2, 3, 4 ... 24 hours+
- ◆Setting M+ from 1 to 60 minutes settings 01, 02, 03, 04 ... 60 minutes
- 3.3) Repeat Above for programme setting 2 ... 14
- 4. Exit to Clock

To exit to normal display press < (1) > once



[WIRING DIAGRAM]



Terminal 5 - Normally Opened Contact Terminal 3 - Normally Closed Contact



[DESCRIPTION] TMA116

The TMAll6 24 hour analogue timer is ideal for residential and commercial applications. Say goodbye to expensive electricity bills by programming the timer to turn your electricity on when it's required, and turn it off when it's not. The 15 time intervals allow for flexibility in programming times. The single pole width means more space on the DIN rail, if you choose to install mulitple timers for different loads.

[FEATURES]

- Analogue
- Quartz Controlled
- NI-MH Rechargeable Backup Battery
- · Battery Life: 72 Hours
- · 1 Pole DIN Rail Mount
- · 24 Hour Cycle
- 15 Minute Increment ON/OFF Program Setting

[COMPLIANCE]

BS EN ISO9001:2008

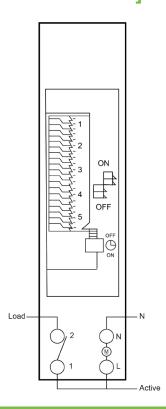
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[TECHNICAL PARAMETERS]

	Rated Voltage	240V AC
	Frequency	50Hz
	Drive Method	Quartz Controlled
	Accuracy	+/- 3 Sec / Day at 22°C
	Cycle	24 hours
	Power Consumption	1W
	Rechargeable Battery	72 Hours
	Auto ON/OFF	ON/AUTO/OFF Switch
	Resistive Load	13A
Load	Incandescent Lamp	1000W
Capacity	Inductive (COS Φ = 0.6)	4A
	Energy Saving Lamps	150W
Time	ON/OFF Program Setting	15 Minutes
Setting	Min. Interval	15 Minutes
	No. of ON/OFF Operations	96 Operations
	Ambient Temperature	-10°C ~ + 50°C
	Ambient Humidity	Max 85%

[WIRING DIAGRAM]





[DESCRIPTION] TME116

The TME116 electronic timer is ideal for residential and commercial applications. Say goodbye to expensive electricity bills by programming the timer to turn your electricity on when it's required, and turn it off when it's not. This DIN rail mounted timer is a 24 hour, 7 day programmable timer with 16 ON/OFF programmes, 10 ON/OFF holiday programs and lithium backup battery. Rated at 240V AC 16A, it is capable of carrying a 4A inductive load. The single pole width means more space on the DIN rail, if you choose to install mulitple timers for different loads.

[FEATURES]

- LCD Display
- · 18mm Module Width
- · 35mm DIN Rail Mount
- 16 ON/OFF Programs
- 10 ON/OFF Holiday Programs
- 32 Pulse Outputs with Countdown
- Lithium Backup Battery
- Battery Life: 1.5 2 Years

[COMPLIANCE]

IEC 60730

[IMAGES]





Scan the QR to download the wiring instructions or visit www.connectedswitchgear.com.au/technical-downloads/

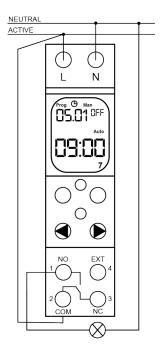
[TECHNICAL PARAMETERS]

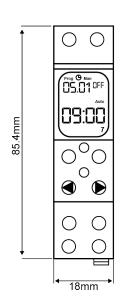
- Operation Voltage: 240V AC
- Accuracy: ≤+/- 2 sec/day (20°C)
- · Pulse Output: 1 sec 99 secs
- · Countdown: 1 sec 99 mins 59 secs
- Power Consumption: 3VA
- · Weight: 90g
- · Mechanical Life: 100, 000 Cycles
- Contact Type: Normally Open + 1 Changeover Contact

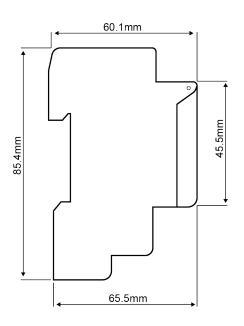




[WIRING DIAGRAM]







Rated Voltage 240V AC Frequency 50Hz **Drive Method** Electronic **Accuracy** ≤± 2 Sec / Day at 20°C Cycle 7 Days Power Consumption 3 VA Battery Reserve 1.5 - 2 Years ON/OFF Operation 16 ON/OFF 32 Pulse Time Settings: 1 - 99 secs 10 Holiday Time Settings Countdown Timer: 1 sec - 99min 59 secs Auto ON/Auto OFF Resistive Load 16A Incandescent Lamp 1000W Load Capacity Inductive (COS Φ = 0.4) Energy Saving Lamps 150W **Ambient Temperature** -10°C ~ + 50°C Ambient Humidity Max 85% Mounting 35mm DIN Rail Mount



[TIMER FUNCTION MODES]

The TME116 has 1 of 3 modes available:

- 1. Day of the Week Programs up to 16 ON and 16 OFF times can be programmed for each day of the week.
- 2. Countdown Timer The TME116 can function as a countdown timer which is activated directly on the device or by wiring a momentary press mechanism into the EXT terminal to control from a separate switch location. This feature cannot be programmed to trigger at a set time.
- 3. Pulse Timer Function Up to 32 different ON times can be programmed for each day of the week with a time out countdown function up to 99 seconds.

Note: If a different mode selection is made after initially being set, the device needs to be reset to select another mode.

EXT Port

For the Countdown and Pulse Timer function, the TME116 has the flexibility of being activated at a separate switched location by wiring a mechanism into the EXT Port of the device. Please note, the additional switching circuit should not exceed 100m and the switch itself should be a momentary switch contact (M16BP).

ON AUTO/OFF AUTO/ON/OFF

The relay function can be changed from its default OFF AUTO to ON AUTO, depending on the required action when the programmed time is reached, or set to permanently ON or permanently OFF.

1. Setting a Manual Program

- 1.1. Press the 'Menu' button until the 'Man' icon flashes. Press 'OK'.
- 1.2. Use the < or > arrow buttons to cycle to the default OFF AUTO icon. Press 'OK'.
- 1.3. Use the < or > arrow buttons until the desired operation is displaying. Press 'OK'.
- **1.4.** Press the 'Menu' button to exit the program mode.

Note: The ON/OFF status is the relay status prior to the programmed time being reached.

Holiday Mode Function

The TME116 can be programmed to activate up to 10 ON and 10 OFF Holiday programs by setting an ON and OFF date. When the Holiday Mode timers are set, the TME116 device will not operate during a programmed Holiday Time.



[PROGRAMMING INSTRUCTIONS]

Initial Programming

Note: On the initial connection of power, the LCD screen display may not be active. In this case, press the reset button once and the LED screen will power up.

2. Setting the Date and Time

- 2.1. Press the 'Menu' button and the 'Prog' icon will flash. Select 'OK'.
- **2.2.** Press the 'Menu' button, then use the < or > arrow to toggle left or right until the 'clock' icon is flashing and press 'OK'. The year will start flashing.
- 2.3. Use the < or > arrow to select a year and press 'OK'.
- **2.4.** Use the < or > arrow to select month and press 'OK'.
- **2.5.** Use the < or > arrow to select day and press 'OK'. You will notice the day of the week also changes as the date changes, the first day of the week being Monday.
- 2.6. Use the < or > arrow to select hour of day in 24 hour format and press 'OK'.
- 2.7. Use the < or > arrow to select minutes and press 'OK'.
- 2.8. Press the 'Menu' button to exit the programming mode.

3. Setting a Day of the Week Program

- **3.1.** Set the device date and time using the 'Setting the Date and Time' Procedure 1'.
- **3.2.** Press the 'Menu' button and the 'Prog' icon will flash. Press 'OK' and the program number will flash.
- **3.3.** Use the < or > arrow buttons to cycle through each program number 'ON' and 'OFF', and press 'OK' for the program number you wish to set. The hours and minutes will start flashing.
- **3.4.** Press the 'Menu' button to set the hours using the < or > arrows and press 'OK' when set. Repeat for setting minutes.
 - *To cancel a program time. use the above sequence to select the hours. Press the 'Menu' button and the time setting is erased and then press 'OK'.
- **3.5.** After setting the minutes, the days of the week will flash. Use the > arrow button to cycle through the days of the week to adjust which days should be active.
- **3.6.** To delete a day of the week, press the > arrow button until the appropriate day is flashing.
- **3.7.** Pressing the < arrow once brings up the option to delete the day of the week then press the > arrow button to accept the change. The day is now deleted.
- **3.8.** To copy or add a day of the week, use the > arrow button to highlight an active day and press the < arrow button twice until you see 'Cop' on the display. Press the > arrow button to confirm, then the > arrow button to cycle to the day you wish to add. Press the < arrow twice until 'Cop' appears and select the > arrow to confirm. The day has been added.
- **3.9.** When completed, press the 'OK' button to accept the set program time.
- **3.10.** To set another program, repeat steps 2.2 to 2.7 or;
- **3.11.** Press 'Menu' to exit the Program setting mode.



[PROGRAMMING INSTRUCTIONS CONT.]

4. Setting a Holiday Program

- 4.1. Press the 'Menu' button until the 'Man' icon flashes. Press 'OK'.
- **4.2.** Use the < or > arrow buttons to cycle to the 'Holiday' icon. Press 'OK'.
- 4.3. Use the same sequence to set the Year/Month/Date for each ON/OFF time.
- **4.4.** Press 'Menu' to exit the programming mode.

5. Setting a Countdown Function

- 5.1. Press the 'Reset' button and the 'Prog' icon will flash.
- **5.2.** Use the > arrow to cycle through and select the Countdown function icon, then select 'OK'. The following icons should appear: 'Clock/Man/Countdown Timer.
- **5.3.** Set the device date and time using the 'Setting the Date and Time' procedure above.
- 5.4. Press the 'Menu' button twice to cycle to 'Man' and the icon will flash. Press 'OK'.
- **5.5.** Select either ON AUTO/OFF AUTO by pressing 'OK' button, depending on the desired load state when the countdown begins. Select 'Menu' to accept.

If using an additional switch location, follow steps 5.6 & 5.7 below.

- 5.6. Press the 'Menu' button twice to cycle to 'Man' and the icon will flash. Press 'OK'.
- **5.7.** Use the < or > arrow buttons to cycle to the 'EXIT' setting and select 'OK'. Use the 'OK' button to toggle through OFF or ON if you are using an additional switch to operate the device. Select 'Menu' to accept the change.
- **5.8.** Press the 'Menu' button 4 times to cycle to 'Countdown' and the icon will flash. Press 'OK'.
- **5.9.** The Countdown hours setting will flash.
- **5.10.** Use the < or > arrow buttons to adjust the required minutes, and press 'OK'.
- **5.11.** Use the < or > arrow buttons to adjust the required seconds, and press 'OK'.
- **5.12.** Press the 'Menu' button to exit the programming mode.
- **5.13.** To activate the timer countdown sequence, either:
 - a. Press the 'OK', '+' and '>' button together or;
 - **b.** Press the additional switch if EXT option was selected

6. Setting a Pulse Function

- **6.1.** Press the 'Reset' button and the 'Prog' icon will flash.
- **6.2.** Press the 'Menu' button once and the 'Pulse' icon flashes. Select 'OK'. The following icons should appear: Clock/Man/Pulse.
- **6.3.** Set the device date and time using the 'Setting the Date and Time' procedure above (2.1 2.8).



[PROGRAMMING INSTRUCTIONS CONT.]

- 6.4. Press the 'Menu' button and the 'Pulse' icon will flash. Press 'OK'.
- 6.5. To set up to 32 times, select the required program and press 'OK'.
- 6.6. The hours and minutes will flash. Press 'Menu'.
- **6.7.** Use the < or > arrows to adjust the hours. Press 'OK'.
- **6.8.** Use the < or > arrows to adjust the minutes. Press 'OK'.
- **6.9.** After setting the minutes, the days of the week will flash. Use the > arrow button to cycle through the days of the week to adjust which days should be active.
- **6.10.** To delete a day of the week, press the > arrow button until the appropriate day is flashing.
- **6.11.** Pressing the < arrow once brings up the option to delete the day of the week, then press the > arrow button to accept the change. The day is now deleted.
- **6.12.** To copy or add a day of the week, use the > arrow button to highlight an active day. Next, press the < arrow button twice until you see 'Cop' flashing on the display. Press the > arrow button to confirm, then use the > arrow to cycle to the day you wish to add. Press the < arrow twice until 'Cop' appears and select the > arrow to confirm. The day is now added.
- 6.13. Select 'OK'.
- **6.14.** Use the < or > arrow buttons to adjust the pulse time out setting up to 99 seconds and press 'OK'.
- **6.15.** Press 'Menu' to exit the programming mode.



[DESCRIPTION]

TME116-66

The TME116-66 weatherproof electronic timer is ideal for residential, commercial and industrial applications. Say goodbye to expensive electricity bills by programming the timer to turn your electricity on when it's required, and turn it off when it's not. The LCD display means clear and easy programming.

[FEATURES]

- · LCD Display
- IP66 Protection Rating
- 28 ON/OFF Programs
- Minimum Time Setting: 1 Minute
- Manual Override Feature
- Weekly Auto Time Correction
- Lithium Backup Battery
- Battery Life: 1.5 2 Years

[COMPLIANCE]

IEC 60730

[IMAGES]



TME116-66

[TECHNICAL PARAMETERS]

- Operation Voltage: 240V AC
- Maximum Switchable Current: 16(8)A
- Power Consumption: 0.1VA
- · Minimum Interval: 1 Minute
- · Changeover Switching Contacts
- Maximum Time Setting: 168 Hours
- · Lithium Backup Battery
- Backup Battery Life: 1.5 2 Years
- · Ambient Temp: -10~+40°C
- Ambient Humidity: 35~85%RH
- · Service Life:

Mechanical 10⁷

Electronic 10⁵

- Size: 101 x 101 x 101mm
- · Conduit Entries:

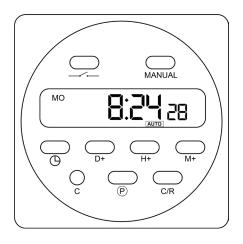
2 x 25mm, 1 x 32mm, 25/32mm Threaded Adaptors

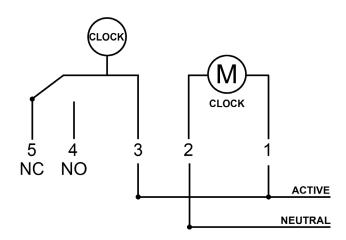
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[WIRING DIAGRAM]





[PROGRAMMING INSTRUCTIONS]

1. Setting Clock Time

1.1. Press and hold the clock button and use the 'D+/H+/M+' buttons to change the day and time accordingly.

2. Setting a Program

- **2.1.** Press the 'P' button to enter the 'Program' mode. Each time the 'P' button is pressed, the display will cycle through individual ON/OFF programs.
- **2.2.** Use the 'D+/H+/M+' button to set each required programs day, ON time and OFF time.
- 2.3. Press the 'Clock' button at any time to exit the program setting mode.

NOTE: Time Setting Errors

E1 - A program has not had a start time set

E2 - A program has not had an end time set

3. Display Lock

- **3.1.** Press the 'Clock' button 4 times to lock the display. Press 4 times again to unlock the display.
- **3.2.** Long press 'C/R' button at any time to exit the program setting mode.

4. Manual Override

- **4.1.** To enter the manual override mode press and hold the 'Manual' button for 5 seconds. The screen will turn off indicating the electronic controller is shut down.
- **4.2.** Press the 'Manual' button for 5 seconds to exit the manual override mode. The display will return to previous settings.



[TROUBLESHOOTING]

ERROR CODE	REASON
El	Incorrect programming, there is an empty "ON" time program
E2	Incorrect programming, there is an empty "OFF" time program

Press the "C" button to reset the timer and reprogram

[WARRANTY]

Connected Switchgear FUSION series of product come with a trusted 5 Year In House Warranty. That means that you have peace of mind knowing that if a fault develops within a five year period, Connected Group Australia will cover the cost of replacing the product and it's installation.*

* See our website for full terms and conditions www.connectedswitchgear.com.au

