ISCOM008-0802

Vemer S.p.A.
I - 32032 Feltre (BL) • Via Camp Lonc, 16
Tel +39 0439 80638 • Fax +39 0439 80619
e-mail: info@vemer.it - web site: www.vemer.it

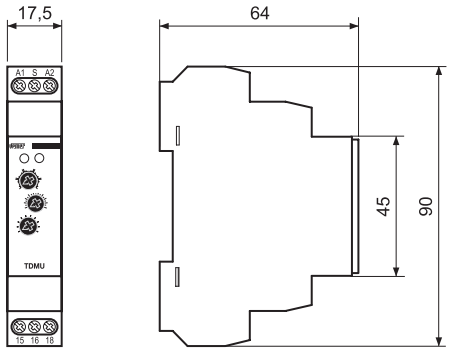
Mod. **TDMU**

User Manual

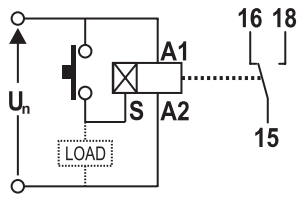
TDMU MULTIFUNCTION TIME RELAY

Read all instructions carefully

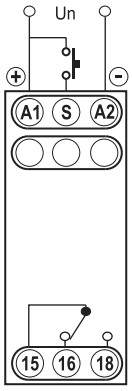
Dimensions



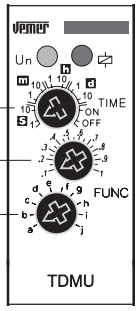
Wiring diagram



U_n = 12 ÷ 240V



Operating diagrams

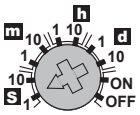


Rough time setting

Fine time setting (% rough time)

Function setting

Time ranges
0,1-1 s
1-10 s
0,1-1 min
1-10 min
0,1-1 h
1-10 h
0,1-1 day
1-10 days
only ON
only OFF

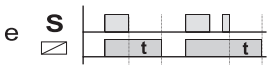


Delay ON after energization

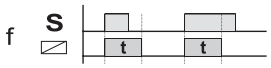
Delay OFF after energization

Cycler beginning with pause after energisation

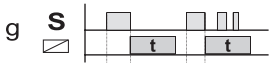
Cycler beginning with impulse after energisation



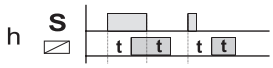
Delay OFF after de-energisation, instant make of output



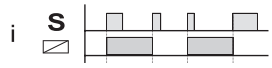
Delay OFF responding to make of control contact regardless its length



Delay OFF after break of control contact with instant output



Delay OFF after make and break of control contact



Memory (impulse) relay

Pulse generator

■ The multifunction time relay **TDMU** is a device standardised in 1-module DIN container, designed to operate in environments with normal pollution level.
The various alternatives of intervals and functions available made the device easy to adapt in any type of automatism such as control of light, motors, heating, fun, pumps.

SAFETY WARNINGS

During the installation and operation of the instrument, proceed in accordance with the instructions below:

1) ***The instrument should be installed by a competent operator following the installation diagrams carefully***
2) ***The instrument should be installed in a panel from which no access can be gained to the terminals after installation***
3) ***Do not power or connect the instrument if any part of it is damaged***
4) ***The electrical system of the building in which the instruments is to be installed should have a switch and a protective device against over-currents***
5) ***The instrument is designed for installations with over-voltage category III and pollution level 2, in accordance with the EN 61010-1 standard.***

TECHNICAL SPECIFICATIONS

- Power supply: AC/DC 12 ÷ 240V (AC 50/60Hz) -15% ÷ +10%
- Consumption: AC 0,7÷3VA / DC 0,5÷1,7W
- Supply indication: green LED
- Time range with potentiometer: 0,1s ÷ 10 days
- Output
  - Number of contacts: 1 changeover
  - Output indication: red LED multifunction
  - Contact capacity: 16A 250V AC1 / 24V DC
  - Inrush current: 30A / < 3 second
  - Minimum breaking capacity DC: 500mW
  - Breaking capacity: 4000VA / AC1 , 384W / DC
  - Mechanical life: $3x10^7$
  - Electrical life: $0,7x10^5$
- Operating temperature: -20°C ÷ +55°C
- Storage temperature: -30°C ÷ +70°C
- Protection degree: IP40 from front panel

OPERATION

- **Operation conditions**
  While installing this device it is necessary to consider temperature rate of ambient devices so the operation temperature stated in technical parameters is kept. It is necessary to ensure air circulation so the operation temperature is not exceeded in any case.
  It is necessary to avoid placing devices close to sources of electromagnetic disturbances to ensure their correct function.
  It is necessary to pay attention while connecting products to the circuit with appliances that create electromagnetic disturbances (conductors, motors), or power cables close to them. It is recommended to have the connection cables of a product (supply and operating inputs) as short as possible and have them led separately into power conductors.

- **Handling and use**
  Use a screwdriver with an approximate width 2 mm for installation and setting
  Do not use brute force to screw input terminals (maximally 0,5 N/m).
  Do not put exceeded pressure on to the holding parts of terminals so the inner construction of the device is not damaged.
  Protect the device against falls and excessive vibrations
  Do not overload relay output contacts, mainly while using loads of another category then AC1
  If contacts of relay melted while switching big loads, it is necessary to use an inserted contactor or power relay rated for required load in the current installation.

  For a correct setting of the relay, observe the following operations:

  - setting the **Rought time** with its potentiometer (see time ranges in the box "OPERATING DIAGRAMS")
  - setting the Fine time with its potentiometer (between 10% and 100% of the Rought time setting)
  - setting the Function modes (ten mode available).

REFERENCE STANDARDS

Conformity to the EU directives:
2006/95/EC (Low Voltage)
89/336/EEC modified by 92/31/EEC and 93/68/EEC (EMC)
is declared with reference to the following harmonised standards:
Safety: EN 61010-1
Electromagnetic compatibility: EN 61000-6-2, EN 61000-6-4