

Your Advantage

- Flush mounting- or DIN rail mounting

Features

- According to IEC/EN 61812-1
- 10 time ranges from 0.05 s ... 30 h
- Programmable on front side for
 - On delay (E)
 - Release delay (A)
 - Fleeting on make (WE)
 - Fleeting on break (WA)
- 2 changeover contacts
- Voltage range AC/DC 24 ... 240 V

Approvals and Markings



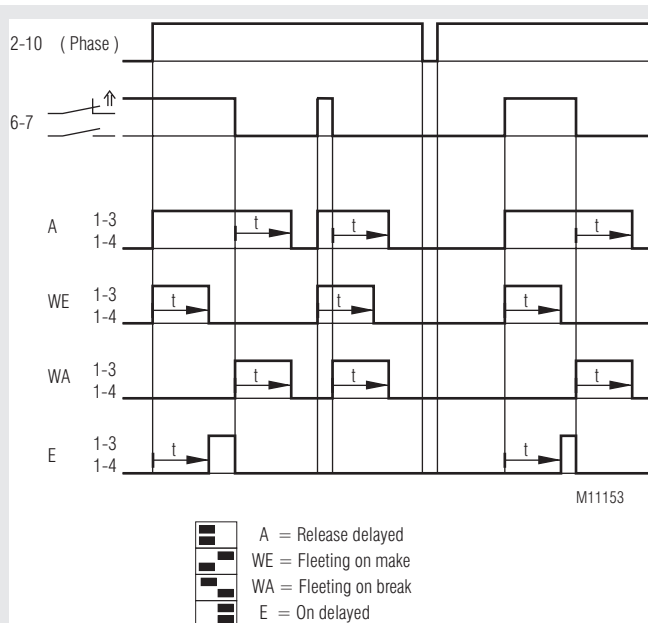
Function

The MULTITIMER EO 9920 is a multifunction relay with 10 selectable time ranges and 4 selectable functions. The device is a plug-in version for surface or DIN rail mounting with a plug-in socket. Flush mounting is also possible with an additional mounting frame for front panel installation. 2 LEDs show operational voltage and status of the output contacts. Function and time range can be selected via dip switches on the front. To control the device in function "A" off- delay and "WA" fleeting on break other functions 6-7 must be bridged.



EO 9920/200 without and with front frame

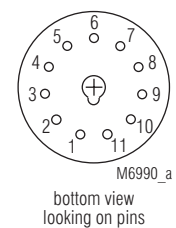
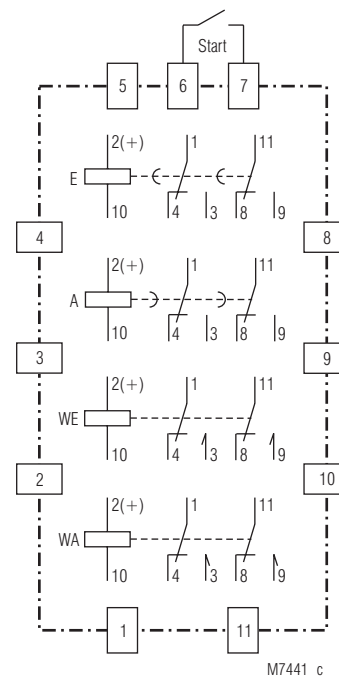
Function Diagram



Indicators

- Red LED: On, when supply connected flashes during time delay
- Green LED: On, when corresponding output relay is active

Circuit Diagrams



Assignment of connection pins	
No. of connection pin	Signal Description
2	L / +
10	N / -
6, 7	Control input (voltage free contact) to control the functions "A" and "WA", for other functions terminals 6-7 have to be bridged.
1, 3, 4	1. changeover contact
8, 9, 11	2. changeover contact

Notes

Info The auxiliary supply is not buffered. On loss of voltage or voltage interruption the output relay de-energises immediately.

Technical Data

Time Circuit

Time ranges:	0.05 ... 1 s
	0.15 ... 3 s
	0.5 ... 10 s
	1.5 ... 30 s
	5 ... 100 s
	15 ... 300 s
	1.5 ... 30 min
	5 ... 100 min
	0.5 ... 10 h
	1.5 ... 30 h
Time setting:	Infinite, 1:20 on relative scale
Recovery time:	Approx. 50 ms
Repeat accuracy:	± 0.5 %
Voltage influence:	< 1 % via voltage range
Temperature influence:	< 0.1 % / K

Input

Nominal voltage U_N:	AC/DC 24 ... 240 V
Voltage range:	AC 18 ... 264 V DC 18 ... 300 V
Minimum switch-on time of the control input 6 / 7:	15 ms
Release voltage (A1/A2)	
AC 50 Hz:	6 V e.g. 0.5 mA
DC:	4.5 V
Nominal consumption:	AC 24 V 0.6 VA AC 240 V 3.6 VA DC 24 V 0.7 W DC 240 V 1.2 W
Nominal frequency:	50 ... 400 Hz

Output

Contacts	
EO 9920.82/200:	2 changeover contacts
Contact material:	AgNi
Voltage rated operating:	AC 250 V
Thermal current I_{th}:	2 x 5 A
Switching capacity	
To AC 15	
NO contacts:	2 A / AC 230 V IEC/EN 60947-5-1
NC contacts:	1 A / AC 230 V IEC/EN 60947-5-1
To DC 13	
NO contacts:	1 A / DC 24 V IEC/EN 60947-5-1
NC contacts:	1 A / DC 24 V IEC/EN 60947-5-1
Electrical life	
To AC 15 at 1 A, AC 230 V:	2,5 x 10 ⁵ switch.cycl. IEC/EN 60947-5-1
Permissible switching frequency:	72000 switching cycles / h
Short circuit strength	
Max. fuse rating:	4 A gG / gL IEC/EN 60947-5-1
Mechanical life:	50 x 10 ⁶ switching cycles

Technical Data

General Data

Nominal operating mode:	Continuous operation	
Temperature range:		
Operation:	- 20 ... + 60 °C	
Storage:	- 40 ... + 70 °C	
Relative air humidity:	93 % at 40 °C	
Altitude:	< 2000 m	
Clearance and creepage distance		
Rated impulse voltage / pollution degree:	4 kV / 2 (basis insulation)	IEC 60664-1 III
Overvoltage category:	III	
Insulation test voltage, type test:	2.5 kV; 1 min	
EMC		
Electrostatic discharge (ESD):	8 kV (air)	IEC/EN 61000-4-2
HF irradiation:		
80 MHz ... 2.7 GHz:	10 V/m	IEC/EN 61000-4-3
Fast transients:	4 kV	IEC/EN 61000-4-4
Surge voltage		
Between		
wires for power supply:	1 kV	IEC/EN 61000-4-5
Between wire and ground:	2 kV	IEC/EN 61000-4-5
HF-wire guided:	20 V	IEC/EN 61000-4-6
Interference suppression:	Limit value class B	EN 55011
Degree of protection		
Housing:	IP 40	IEC/EN 60529
Terminals:	IP 20	IEC/EN 60529
Housing:	Thermoplastic with VO behaviour acc. to UL subject 94	
Vibration resistance:	Amplitude 0.35 mm, frequency 10 ... 55 Hz, IEC/EN 60068-2-6 20 / 060 / 04 IEC/EN 60068-1	
Climate resistance:		
Load of control contact:	DC 6 V, > 1 mA	
Wire connection:	Via plugin adapter suitable for 11-pin socket see accessories	
Weight:	85 g	

Dimensions

Width x height x depth: 35 x 48 x 119 mm

Standard Type

EO 9920.82/200	AC/DC 24 ... 240 V	0.05 s ... 30 h
Article number:	0041478	
• Output:	2 Wechsler	
• Nominal voltage U_N :	AC/DC 24 ... 240 V	

Accessories

For DIN rail mounting

ET 4048-21: Plug-in socket without fixing clamp
Article number: 0028049

ET 4048-22: Plug-in socket with fixing clamp
Article number: 0028050

For flush mounting

ET 4048-13: Plug in adaptor
Article number: 0010784

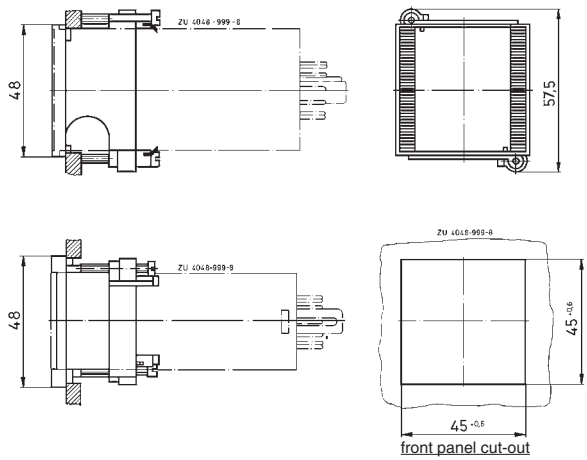
ET 4048-3: Front frame
Article number: 0004979

Accessories - Front frame ET 4048-3 -

48 x 48 mm with clamp screws.

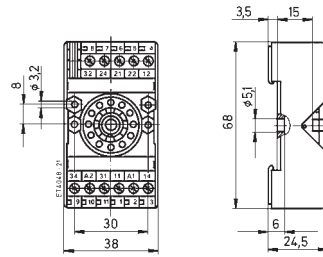
Installation note: Insert the front frame without relay (acc. to DIN 43700) into the prepared 45 x 45^{+0,6} mm panel cut-out from the front. Insert the time relay also from up to the detend. Then tighten the clamping screws from behind.

To disassemble, first loosen the clamping screws, then unscrew the latching fields with a screwdriver and simultaneously push the relay forward.



Accessories - Plug-in-sockets -

ET 4048-21: Without safety stirrup
 ET 4048-22: With safety stirrup

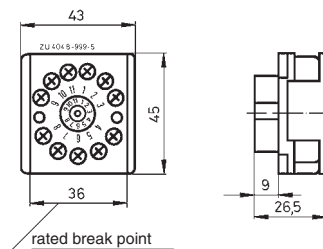


For surface mounting 11-pole acc. to IEC 67-1-18a with box terminals and captive screws suitable for connecting 2 conductors 2.5 mm² solid or 1.5 mm² stranded wire with sleeve. Large-area contact with the part is prevented in accordance with the requirements of the health and safety authorities VBG 4.

Accessories - Plug in adaptor ET 4048-13 -

11-pole, from PC

For installation into control panel. The plug-in adaptor is pushed onto the relay from the plug side and then enables wiring from the rear of the device.



Version with flat plugs on request.

