E1ZM20 24-240V AC/DC

Manufacturer data sheet: V.070

Timer - Multifunction

Status: Available Data sheet created: 01.07.2025

Item Number: 110210 - **Serie:** Enya - **EAN:** 9008662006560



- Timer relay series ENYA
- Multifunction
- 7 functions
- 7 time ranges
- Supply voltage 24-240V AC/DC
- 1 changeover contact and 1 make contact
- width 17.5 mm
- Installation type

Description

Precise and reliable switching and control in industrial and commercial applications.

General information

Short description	Multifunction (7 fct.), 1 changeover and 1 make contact 24-240V AC/DC
Item Number	110210
EAN	9008662006560
Main category	Timing Relays
Series	Enya
Type	E1ZM20 24-240V AC/DC
Design	Installation design
Supply	24-240V AC/DC
Dimensions	17.5 x 87 x 65 mm

Functions and measurands

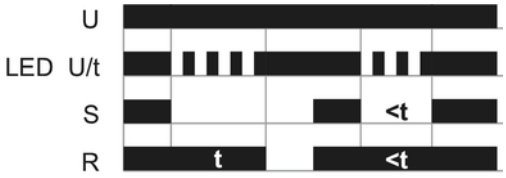
The selection of the time function must be made in the de-energized state.

Amount of functions 7



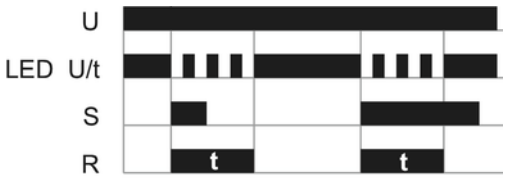
ON delay (E)

When the supply voltage U is applied, the set time t starts to run (green LED U/t flashes). After the time t has elapsed (green LED U/t illuminated), the output relay R switches into on-position (yellow LED illuminated). This state remains until the supply voltage is interrupted. If the supply voltage is interrupted before the time t has elapsed, the time that has already elapsed is deleted and restarted when the supply voltage is next applied.



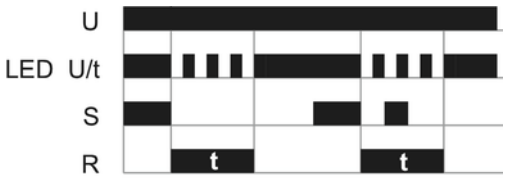
OFF delay with control input (R)

The supply voltage U must be constantly applied to the device (green LED U/t illuminated). When the control contact S is closed, the output relay R switches into on-position (yellow LED illuminated). If the control contact is opened, the set interval t begins (green LED flashes). After the interval t has expired (green LED U/t illuminated) the output relay switches into off-position (yellow LED not illuminated). If the control contact is closed again before the interval t has expired, the interval already expired is erased and is restarted.



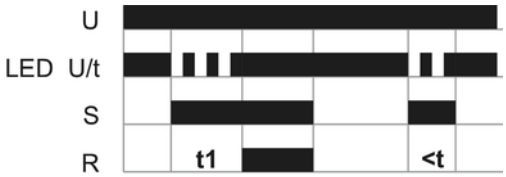
Single shot leading edge with control input (Ws)

The supply voltage U must be constantly applied to the device (green LED U/t illuminated). When the control contact S is closed, the output relay R switches into on-position (green LED U/t illuminated) and the set interval t begins (green LED U/t flashes). After the interval t has expired (green LED U/t illuminated) the output relay switches into off-position (yellow LED not illuminated). During the interval, the control contact can be operated any number of times. A further cycle can only be started when the cycle run has been completed.



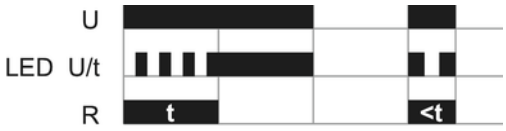
Single shot trailing edge with control input (Wa)

The supply voltage U must be constantly applied to the device (green LED U/t illuminated). Closing the control contact S has no influence on the condition of the output R. When the control contact is opened, the output relay switches into on-position (yellow LED illuminated) and the set interval t begins (green LED U/t flashes). After the interval t has expired (green LED U/t illuminated), the ouput relay switches into off-position (yellow LED not illuminated). During the interval, the control contact can be operated any number of times. A further cycle can only be started when the cycle run has been completed.



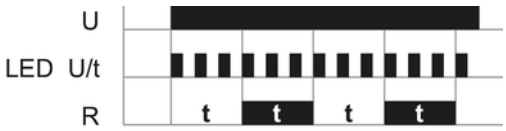
ON delay with control input (Es)

The supply voltage U must be constantly applied to the device (green LED U/t illuminated). When the control contact S is closed, the set interval t begins (green LED U/t flashes). After the interval t has expired (green LED U/t illuminated) the output relay R switches into on-position (yellow LED illuminated). This status remains until the control contact is opened again. If the control contact is opened before the interval t has expired , the interval already expired is erased and is restarted with the next cycle.



Single shot leading edge voltage controlled (Wu)

When the supply voltage U is applied, the output relay R switches into on-position (yellow LED illuminated) and the set interval t begins (green LED U/t flashes). After the interval t has expired (green LED U/t illuminated) the output relay switches into off-position (yellow LED not illuminated). This status remains until the supply voltage is interrupted. If the supply voltage is interrupted before the interval t has expired, the output relay switches into off-position. The interval already is erased and is restarted when the supply voltage is next applied.



Flasher pause first (Bp)
When the supply voltage U is applied, the set interval t begins (green LED U/t flashes). After the interval t has expired, the output relay R switches into on-position (yellow LED illuminated) and the set interval t begins again. After the interval t has expired, the output relay switches into off-position (yellow LED not illuminated). The output relay is triggered at a ratio of 1:1 until the supply voltage is interrupted.

Time ranges

Number Of Areas	7		
Time ranges	**Time range**	**Adjustment range**	
	1s	50ms	1s
	10s	500s	10s
	1min	3s	1min
	10min	30s	10min
	1h	3min	1h
	10h	30min	10h
	100h	5h	100h

Indicators

Supply/time lapse 1	Green LED U/t ON: Supply voltage applied
Supply/time lapse 2	Green LED U/t flashes: Display of the time lapse t
Relay state	Yellow LED ON/OFF: output relay position

Mechanical design

Housing material	made of self-extinguishing plastic
Housing - protection degree	IP40
Mounting	top hat rail TH 35 7,5-15 according to IEC 60715:2017 / EN 60715:2017
Terminals/connections	Touch-proof clamping yoke terminals according to DGUV 3 (Screwdriver PZ1 required)
Terminals - protection degree	IP20
Mounting position	any
Max. Tightening Torque	1 Nm
Terminal capacity	• 1 x 0.5 to 2.5mm² with/without ferrule • 1 x 4mm² without wire end ferrule • 2 x 0.5 to 1.5mm² with/without end sleeves • 2 x 2.5mm² flexible without ferrules

Supply circuit

Terminals/connections	A1(+)-A2
Supply voltage d.c.	24 ... 240 V
Supply voltage tolerance d.c.	-15% ... +10%
Supply voltage a.c.	24 ... 240 V
Supply voltage tolerance a.c.	-15% ... +10%
Rated frequency [Hz]	a.c. 48 ... 63 Hz
Rated consumption a.c.	1,5 W / 6 VA
Residual ripple	d.c. 10%
Drop-out voltage	>30% of the min. supply voltage
Overvoltage category	III (IEC 60664-1)
Rated surge voltage	4 kV

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Output curcuit

Type	Relay
Contact 1	1 changeover contacts
Terminals 1	25-26-28
Contacts 2	1 NO contact
Terminals/connections 2	17-18
Rated voltage	250 V a.c.
Fuse Protection	8 A quick
Mechanical life	20 x 10^6 Switching cycles
Electrical life	2 x 10^5 Switching cycles (1000 VA resistive load)
Switching frequency	max. 6/min at 1000 VA resistive load (according to IEC 60947-5-1)
Rated surge voltage	4 kV
Overvoltage category	III (nach IEC 60664-1)

Control input

Control input	with potential
Terminals/connections	A1-B1
Loadable	Yes
Maximum line length	10 m
Trigger level (sensitivity)	Automatically adjusted to supply
Minimum control pulse length a.c.	100 ms
Minimum control pulse length d.c.	50 ms

Accuracy

Base accuracy	±1 % from full scale
Adjustment accuracy	<5 % from full scale
Repetition accuracy	<0.5 % or ±5 ms
Temperature influence	<=0.01 % / °C

Ambient conditions and general specifications

Storage temperature	-25 ... +70 °C
Transport temperature	-25 ... +70 °C
Pollution degree	2, pollution level can be increased by installation in suitable enclosures (according to IEC 60664-1)

Logistics

Minimum Quantity	1
Tariff Number	85364900
EAN	9008662006560
Country of Origin	AT
Product Weight (g)	85

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Available declarations / conformities

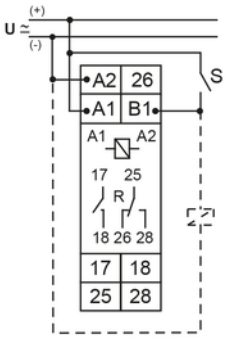
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CE	Open document
REACH	Open document
WEEE	Open document
TSCA	Open document
RoHs	Open document
CMRT	Open document

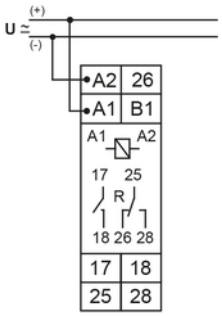
CAD Files

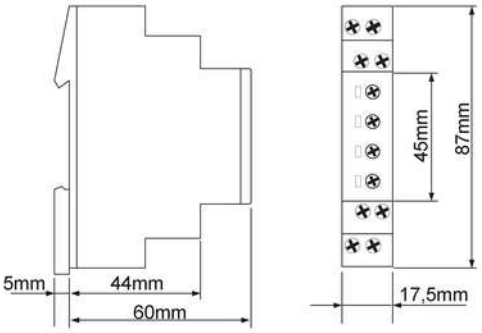
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Media & drawings









Dimensions

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Changes and errors excepted