E1ZMLA10 24-240VAC/DC

Monitoring relay - pump alternator + time relay (5 fct.)

Status: Available Data sheet created: 01.07.2025

Item Number: 110218 - **Serie:** Enya - **EAN:** 9008662015951



- Load changer (pump alternator) plus time relay series ENYA
- 5 functions selectable: E, R, LA, L1 (manual), L2 (manual)
- 7 time ranges selectable: 50msek to 100h
- Auxiliary supply: 24-240V AC/DC
- control input: 1 input, potential bound
- Output: 1 changeover contact, 8A/250V C
- Power consumption: 1.5 Watt
- Construction width 17.5mm
- Top hat rail 35mm
- Approvals: CE,UL, cUL, EAC

Description

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

General information

Short description	pump alternator + time relay (5 fct.), 1 changeover contact, 24-240V AC/DC
Item Number	110218
EAN	9008662015951
Main category	Timing Relays
Series	Enya
Type	E1ZMLA10 24-240VAC/DC
Design	Installation design
Supply	24-240V AC/DC
Dimensions	17.5 x 87 x 65 mm

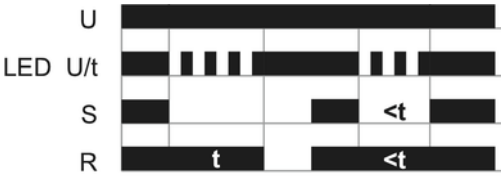
Functions and measurands

Amount of functions 5



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)

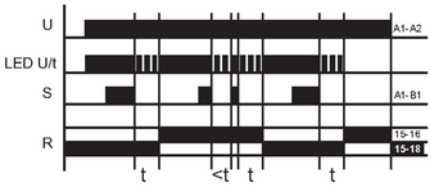
The supply voltage U must be constantly applied to the device (green LED U/t illuminated). When the control contact S is closed, the output relay R switches into on-position (yellow LED illuminated). If the control contact is opened, the set interval t begins (green LED flashes). After the interval t 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.

Manual OFF (L1)

If the function selector indicates function L1, the output relay R remains in the off-position. If you switch from LA to L1 the relay switches into off-position independent of the status of the control input.

Manual ON (L2)

If the function selector indicates function L2, the output relay R remains in on-position as long as the supply voltage is available. If you switch from LA to L2 the relay switches into on-position independent of the status of the control input.



Load Alternator - Pump Changer (LA)

In this mode, every falling edge toggles the output relay R (flip-flop) from L1 to L2 or L2 to L1 whatever position is defined by the previous status. On Power-Up the relay R stays in off condition until the first falling edge is detected on S Terminal B1. To ensure a safe and optimal function, please turn both timing controllers on the front to the most left position (CCW), which equals 50 msec. In this operation mode, a minimum delay/de-bump time of 50 msec is applied from the falling edge of the control input until relay R is changing its state. Is a longer delay time as 50 msec is set, a short pulse on the „S“ input resets the times. The timer is restarted with the next falling edge signal on „S“ input again. If you wish to apply longer delay times, set the according time selectors to the required values or contact your application engineer.

Time ranges

Number Of Areas 7

	Time end range	Setting range	
Time ranges	1s	50ms	1s
	10s	500ms	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 time lapse
Relay state	Yellow LED ON/OFF: position of the output relay

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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 sleeves2 x 2.5mm² flexible without ferrules

Supply circuit

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 / 4VA
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

Output curcuit

Type	Relay
Terminals 1	15-16-18
Rated voltage	250 V a.c.
Contacts material	AgNi
Mechanical life	20 x 10^6 Switching cycles
Electrical life	1 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

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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	9008662015951
Country of Origin	AT
Product Weight (g)	74

Available declarations / conformities

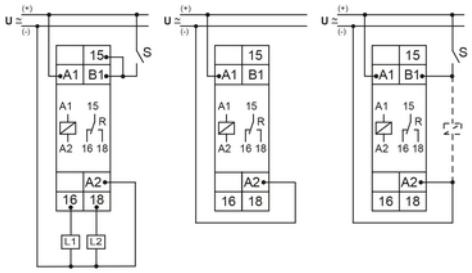
EAC	✓
CE	✓
REACH	Open document
WEEE	Open document
TSCA	Open document
RoHs	Open document
CMRT	Open document

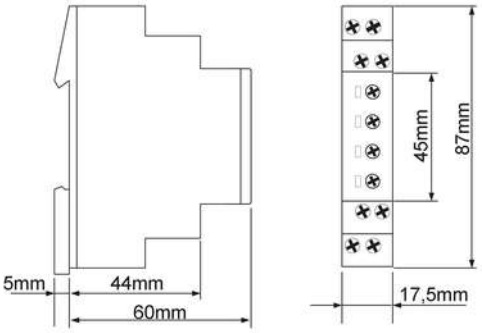
CAD Files

STEP_E1_en.STEP	Download file

Media & drawings







Dimensions

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Changes and errors excepted