K3ZM20P 12-240V AC/DC

Timing relay - multifunction

Status: Available Data sheet created: 01.07.2025

Item Number: 135200 - **Serie:** Kappa - **EAN:** 9008662006492



- Time relay series KAPPA
- Multifunction
- 7 functions
- 7 time ranges
- power supply 12-240V AC/DC
- 2 changeover contacts
- Pluggable on 11-pin socket
- width 38mm
- cap dimension 45mm

Description

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

General information

Short description	Multifunction (7 fct.), 2 change-over contacts, 12-240V AC/DC, control cont. potential-free
Item Number	135200
EAN	9008662006492
Main category	Timing Relays
Series	Kappa
Type	K3ZM20P 12-240V AC/DC
Design	Industrial design (plug-in)
Supply	12-240V AC/DC
Dimensions	38 x 51 x 80 mm

Functions and measurands

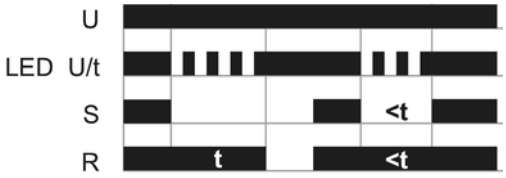
The selection of the time function must be made in the de-energized state.

Amount of functions 7



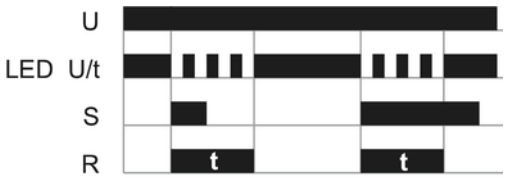
ON delay (E)

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.



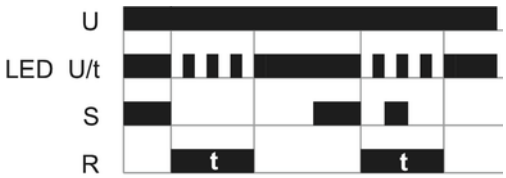
OFF delay with control input (R)

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.



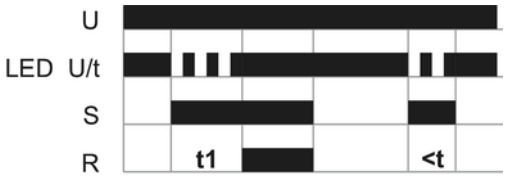
Single shot leading edge with control input (Ws)

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.



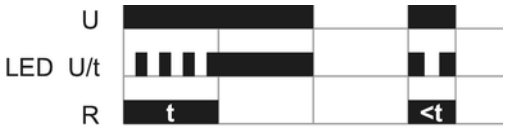
Single shot trailing edge with control input (Wa)

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)

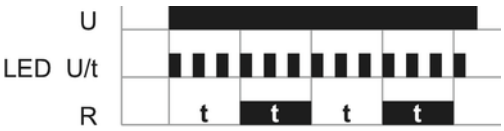
The supply voltage U must be constantly applied to the device (green LED U/t illuminated). When the control contact S is closed, the set interval t begins (green LED U/t flashes). After the interval t has expired (green LED U/t illuminated) the output relay R switches into on-position (yellow LED illuminated).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

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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 3	Green LED U/t flashes: Display of time elapsed t
Relay state	Yellow LED ON/OFF: output relay position

Mechanical design

Housing material	made of self-extinguishing plastic
Housing - protection degree	IP40
Mounting	11-pole plug-in socket according to IEC60067-1-18a (type R11X or ES12)
Mounting position	any

Supply circuit

Terminals/connections	S2(+)-S10 / A1(+)-A2
Supply voltage d.c.	12 ... 240 V
Supply voltage tolerance d.c.	-10% ... +10%
Supply voltage a.c.	12 ... 240 V
Supply voltage tolerance a.c.	-10% ... +10%
Rated frequency [Hz]	a.c. 48 ... 63 Hz
Rated consumption a.c.	2 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	S1 - S3 - S4
Contacts 2	1 changeover contact
Terminals/connections 2	S8-S9-S11
Rated voltage	250 V a.c.
Contacts material	AgNi
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	Pins S2-S5
Loadable	no, the pins S2-S6 are internally connected, i.e. pin S5 can also be used as a loadable control input.
Maximum line length	10 m
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	9008662006492
Country of Origin	AT
Product Weight (g)	90

K3ZM20P 12-240V AC/DC

Manufacturer data sheet: V.073

Available declarations / conformities

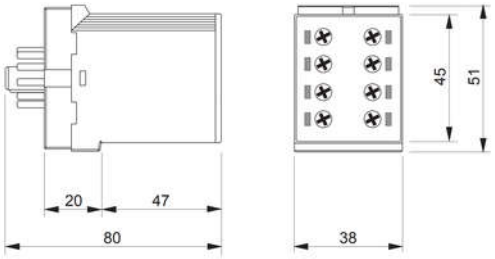
EAC	✓
CE	Open document
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