

GENERAL:

The following time functions can be implemented with the UZR 3 multifunction timing relay:

- On-delay
- Off-delay
- Passing make contact
- Passing break contact
- Pulse delay
- Pulse shaper
- Lighting time-delay switch
- Lighting time-delay switch with long-time selector
- Clock generator with interpulse start
- Clock generator with pulse start

The UZR 3 is available both in two fixed voltage variants (24V and 230V) and in a highly flexible universal voltage variant (10 to 250V).

APPLICATION:

Building automation, industrial control systems, solar systems, automotive systems etc.

OPERATION:

In the operating modes with on-delay and when used as a clock generator, the UZR 3 multifunction timing relay is mains-controlled (i.e. the timing function is started by applying the supply voltage to A1 and A2). In the other operating modes, the UZR 3 is triggered by the control input B1. In this case, A1 and A2 provide the voltage supply for the UZR 3. The timer settings for all functions are programmed by the controls "Time range" (10 discrete increments from 0.1s to 10h) and "Time factor" (infinitely variable from 1 to 10). In "Pulse delay" mode, the pulse duration (length) can also be set with the "ti" control. For details of the individual modes, see the function diagrams overleaf.

Multifunction timing relay UZR 3

SPECIAL FEATURES:

- 10 adjustable timing functions
- Time adjustable from 0.1s to 100h
- Precise timing adjustment with 10 time ranges and infinitely variable controls
- Output contacts potential-free
- High contact load capacity (up to 16A)
- Wide input voltage range 10-250V (with universal voltage variant)

TECHNICAL DATA:

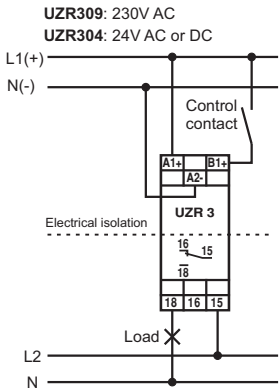
Part No.	Operating voltage
uzr304	24V UC +-10%
uzr309	230V AC +-10%
uzr30u	10 to 250V UC
Power consumption	approx. 0.6W (uzr30u 1W)
Max. load at B1	10mA / 220nF for uzr309 2mA / 30nF for uzr30u
Adjustable time range	0.1s to 100h
Relay output	1 changeover contact, potential-free
Switching voltage	max. 250V AC
Continuous current	max. 16A
Switching capacity	see data sheet "Power rating of relay contacts"
Ambient temperature	-10°C to +45°C
Interference immunity	compliant IEC 801-4 level 4
Equipment protection	compliant IEC 801-5 level 3
Creepage / clearance	compliant VDE 0110 gr. C/250V
Insulated housing	flameproof to VDE 0304 part 3, level FV 0
Connections	socket terminals with captive screws M3.5
Installation position	freely selectable
Fixing	clip fastening on 35 mm standard rail DIN EN 50022
External dimensions	18x88(45)x58mm
Installation depth	55mm
Weight	approx 80g
Colour (RAL)	grey 7035 / green 6029

ORDERING INFORMATION:

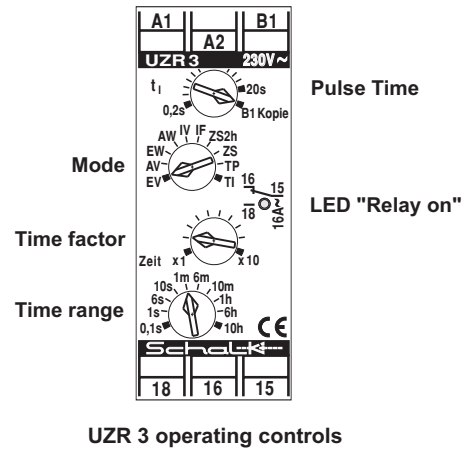
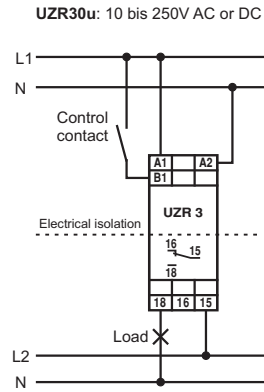
Part No.	Type	Description
uzr304	UZR 3	Multifunction timing relay 24V UC
uzr309	UZR 3	Multifunction timing relay 230V AC
uzr30u	UZR 3	Multifunction timing relay 10-250V UC

TYPICAL APPLICATIONS

Device variants for fixed voltage 24 or 230V

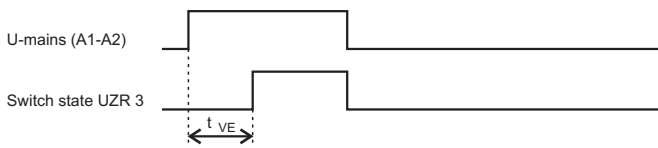


Device variant for universal voltage 10 to 250V

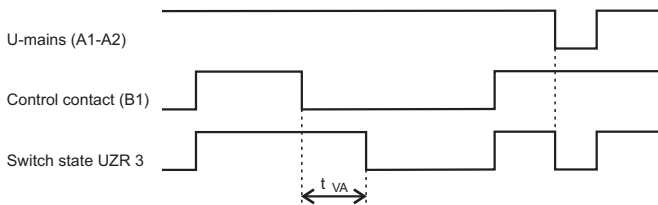


FUNCTION DIAGRAMS:

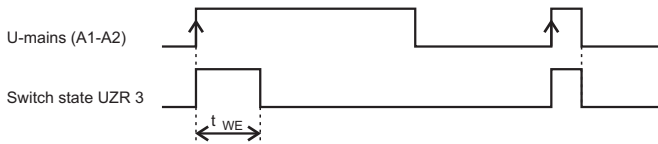
EV: On-delay



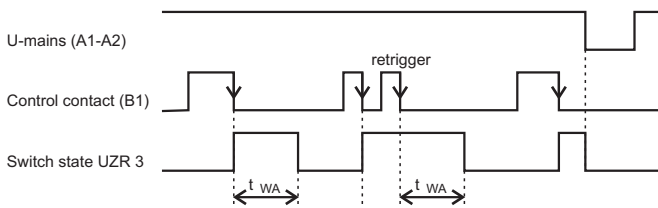
AV: Off-delay



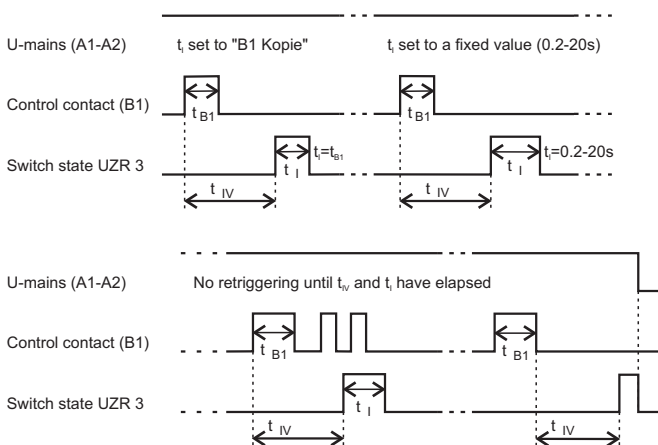
EW: Passing make



AW: Passing break

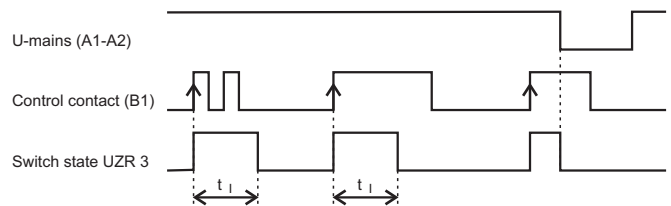


IV: Pulse delay

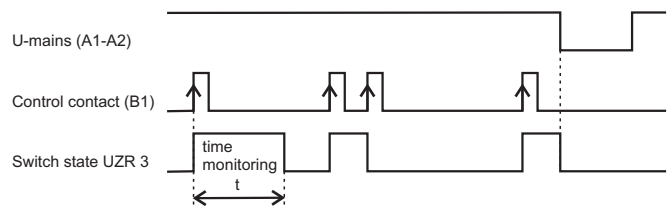


Delay time t_{IV} : time range setting multiplied by time factor setting
Pulse length t_I : pulse time setting (0.2-20s) or when set to position "B1 copy" the output pulse length is always equal to the input pulse length

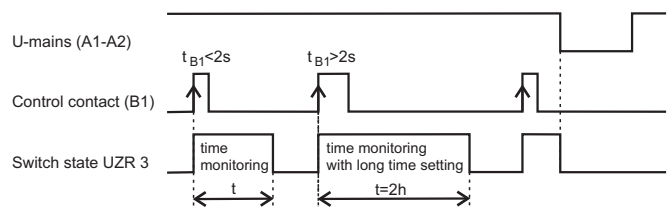
IF: Pulse Shaper



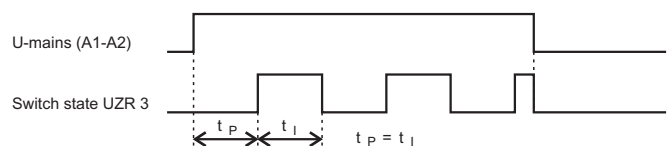
ZS: Light time switch



ZS2h: Light time switch with long-time selector



TP: Clock generator with interpulse start



TI: Clock generator with pulse start

