

# Multifunction impulse switch with integrated relay function

## ESR12M-8..230V UC



Impulse switch, which may optionally be used as switching relay (ER).

1 + 1 NO contacts potential free 16A/250V AC, incandescent lamps 2000 W.  
Standby loss 0.5 watt only.

Universal control voltage 8..230V UC.

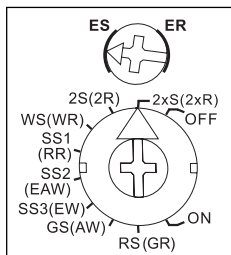
Supply voltage like control voltage.

Contact position indication with two LEDs.

**Bistable relay as relay contact. The switched consumer may not be connected to the mains before the automatic synchronisation after installation has terminated.**

In case of a power failure the system is disconnected in a defined mode. From 110V control voltage and in switching positions 2S, WS, SS and GS glow lamp current up to 50 mA.

### Function rotary switches



With the small rotary switch ES/ER the functions of the big rotary switch will be pre-selected. The setting ER selects the function in brackets.

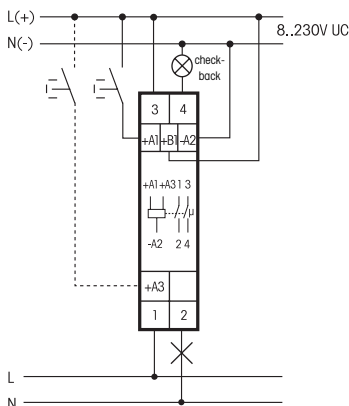
With the big rotary switch 18 different functions may be selected:

- OFF** = Permanent OFF
- 2xS** = 2fold impulse switch with 1 NO contact each, control inputs A1 and A3
- (2xR)** = 2fold switching relay with 1 NO contact each, control inputs A1 and A3
- 2S** = Impulse switch with 2 NO contacts
- (2R)** = Switching relay with 2 NO contacts
- WS** = Impulse switch with 1 NO contact and 1 NC contact
- (WR)** = Switching relay with 1 NO contact and 1 NC contact
- SS1** = Impulse multi circuit switch 1 + 1 NO contacts for switching sequence 0-1-2-1+2
- (RR)** = Switching relay (closed-circuit current relay) with 2 NC contacts
- SS2** = Impulse multi circuit switch 1 + 1 NO contacts for switching sequence 0-1-1+2-2
- (EAW)** = Impulse relay for passing make contact and passing break contact with 1 + 1 NO contacts, wiping time 1 second each
- SS3** = Impulse multi circuit switch 1 + 1 NO contacts for switching sequence 0-1-1+2
- (EW)** = Impulse relay for passing make contact with 1 NO contact and 1 NC contact, wiping time 1 second

- GS** = Impulse group switch 1 + 1 NO contacts for switching sequence 0-1-0-2
- (AW)** = Impulse relay for passing break contact with 1 NO contact and 1 NC contact, wiping time 1 second
- RS** = Switch with A1 = set control input and A3 = reset control input
- (GR)** = Group relay 1 + 1 NO contacts  
Relay with change-over contact
- ON** = Permanent ON

The control inputs A1 and A3 have the same functions except for 2xS, 2xR and RS.

### Typical connection



### Technical Data

Control voltage	8 to 230V UC
Rated switching capacity	16A/250 V AC
Incandescent lamp load and halogen lamp load 230V <sup>1)</sup>	2000 W
Fluorescent lamp load with KVG in lead-lag circuit or non compensated	1000 VA
Fluorescent lamps with KVG shunt-compensated or with EVG	500 VA
Compact fluorescent lamp with EVG and energy saving lamps	I on ≤ 70A/ 10 ms <sup>2)</sup>
Standby loss (activ power)	0,5 W

<sup>1)</sup> For lamps with 200 W max

<sup>2)</sup> For electronic ballast gears a 40fold inrush current has to be calculated.



The strain relief clamps of the terminals must be closed, that means the screws must be tightened for testing the function of the device. The terminals are open ex works.

### Important reminder!

**Only a trained electrician may install this equipment, otherwise there is a risk of fire or electric shock.**