



## SJR-2

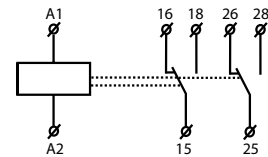
### Doublestage delay unit



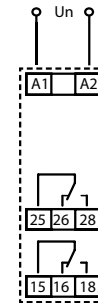
### Characteristics

- for gradual switching of heavy wads (for example electrical heating), prevents current strokes in the main
- function: 2x Delay ON (2 time relays in one)
- time scale 0.1s - 10 days divided into 10 time ranges:  
 0.1s - 1s / 1s - 10s / 0.1min - 1min / 1min - 10min / 0.1h - 1h / 1h - 10hrs / 0.1 day - 1 day / 1 day - 10 days / ON / OFF
- times t1 and t2 are independantly adjustable
- t1 and t2 are switched on after supply voltage connection
- rough time setting via rotary switch
- supply voltage: AC 230 V or AC/DC 12 - 240 V
- output contact: 2x changeover / DPDT 16 A
- output indication: multifunction red LED, flashing at certain states
- 1-MODULE, DIN rail mounting

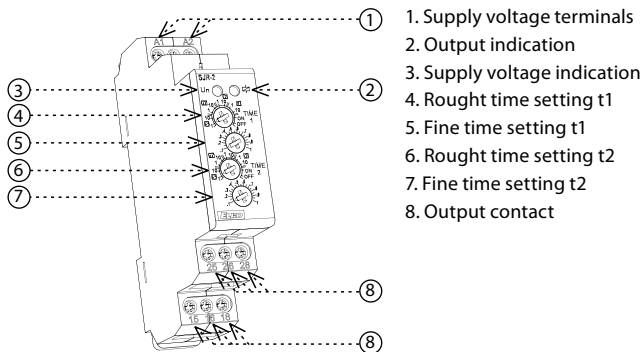
### Symbol



### Connection



### Description



Type of load	$\cos \varphi \geq 0.95$ AC1	AC2	AC3	AC5a uncompensated	AC5a compensated	HAL.230V AC5b	AC6a	AC7b	AC12
Mat. contacts AgNi, contact 16 A	250V / 16A	250V / 5A	250V / 3A	230V / 3A (690VA)	x	800W	x	250V / 3A	250V / 10A
Type of load	AC13	AC14	AC15	DC1	DC3	DC5	DC12	DC13	DC14
Mat. contacts AgNi, contact 16 A	250V / 6A	250V / 6A	250V / 6A	24V / 16A	24V / 6A	24V / 4A	24V / 16A	24V / 2A	24V / 2A

## Technical parameters

### SJR-2

Number of functions:	2x delay ON	
Supply terminals:	A1-A2	
Voltage range:	AC/DC 12 - 240 V (AC 50 - 60 Hz)	AC 230 V / 50 - 60 Hz
Power input max. (apparent / loss):	AC 0.7 - 3 VA DC 0.5 - 1.7 W	AC 12 VA / 1.3 W
Max. dissipated power (Un + terminals):	4.5 W	
Supply voltage tolerance:	-15%; +10%	
Supply indication:	green LED	
Time ranges:	0.1 s - 10 days	
Time setting:	rotaty switch and potentiometer	
Time deviation:	5 % - mechanical setting	
Repeat accuracy:	0.2 % - set value stability	
Temperature coefficient:	0.01 % / °C, at = 20 °C ( 0.01 % / °F, at = 68 °F)	

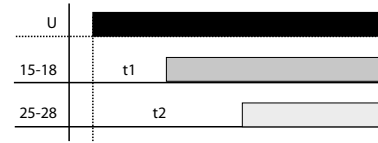
#### Output

Number of contacts:	2x changeover / DPDT (AgNi / Silver Alloy)
Current rating:	16 A / AC 1
Breaking capacity:	4000 VA / AC1, 384 W / DC
Switching voltage:	250 V AC1 / 24 V DC
Inrush current:	30 A < 3 s
Output indication:	multifunction red LED
Mechanical life:	3x10 <sup>7</sup>
Electrical life (AC1):	0.7x10 <sup>5</sup>
Reset time:	max. 150 ms

#### Other information

Operating temperature:	-20 to +55 °C (-4 °F to 131 °F)	
Storage temperature:	-30 °C to 70 °C (-22 °F to 158 °F)	
Electrical strength:	4 kV (supply-output)	
Operating position:	any	
Mounting:	DIN rail EN 60715	
Protection degree:	IP40 from front panel / IP20 terminals	
Overvoltage category:	III.	
Pollution degree:	2	
Max. cable size (mm <sup>2</sup> ):	solid wire max. 1x 2.5 or 2 x1.5 / with sleeve max. 1x 2.5 (AWG 12)	
Dimensions:	90 x 17.6 x 64 mm (3.5" x 0.7" x 2.5")	
Weight:	85 g (3 oz.)	83 g (2.9 oz.)
Standards:	EN 61812-1, EN 61010-1	

## Function



After power voltage connection start to work both timer together (function ZR- Delay ON). By changing the switch to position ON/OFF is possible to switch off the timer manually. Timing is indicated by blinking red LED.

### More accurate setting of timing for long periods of time

Example of time setting to 8 hours period:

For rough setting use time scale 1 - 10 s on the potentiometer.

For fine time setting aim for 8s on potentiometer, then recheck accuracy (using stopwatch etc).

On rough time setting, set potentiometer to originally desired scale 1 - 10 hours, leave a fine setting as it is.

### Warning

Device is constructed for connection in 1-phase main AC/DC 12 - 240 V or 230 V and must be installed according to norms valid in the state of application. Connection according to the details in this direction. Installation, connection, setting and servicing should be installed by qualified electrician staff only, who has learnt these instruction and functions of the device. This device contains protection against overvoltage peaks and disturbances in supply. For correct function of the protection of this device there must be suitable protections of higher degree (A, B, C) installed in front of them. According to standards elimination of disturbances must be ensured. Before installation the main switch must be in position "OFF" and the device should be de-energized. Don't install the device to sources of excessive electro-magnetic interference. By correct installation ensure ideal air circulation so in case of permanent operation and higher ambient temperature the maximal operating temperature of the device is not exceeded. For installation and setting use screw-driver cca 2 mm. The device is fully-electronic - installation should be carried out according to this fact. Non-problematic function depends also on the way of transportation, storing and handling. In case of any signs of destruction, deformation, non-function or missing part, don't install and claim at your seller it is possible to dismount the device after its lifetime, recycle, or store in protective dump.