

Single-function time relay CRM-81J, CRM-83J

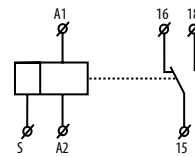


- single-function and single-time relay with possibility of fine time setting by a potentiometer (within the frames of a particular time range)
- it is suitable for applications where function and time requirements are known beforehand
- time switch, possible to be used for pump decay time after switching heating off, switching of fans.
- Choice of 3 functions:
 - 1) ZR - delay ON
 - 2) ZN - delay OFF
 - 3) BL - cycler 1:1
- every function can be controlled by supply voltage or control input
- choice of 6 time ranges: (0.1 s - 1 s / 1 s - 10 s / 6 s - 60 s / 1 min - 10 min / 6 min - 60 min / 1 h - 10 hrs)
- universal supply voltage AC/DC 12 - 240 V or AC 230 V
- output contact: CRM-81J: 1x changeover 16 A
CRM-83J: 3x changeover 8 A
- output indication: red LED
- 1-MODULE, DIN rail mounting

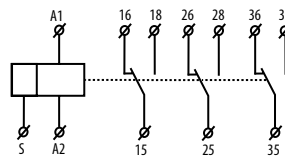
Technical parameters	CRM-81J	CRM-83J
Functions:	ZR - delay ON / ZN - delay OFF / BL - cycler 1:1	
Supply terminals:	A1 - A2	
Supply voltage:	UNI	AC/DC 12 - 240 V (AC 50 - 60 Hz)
Consumption:	AC 0.7 - 3 VA / DC 0.5 - 1.7 W	
Supply voltage:	230	AC 230 V / 50 - 60 Hz
Consumption (apparent/loss):	AC max. 12 VA / 1.3 W	AC max. 12 VA / 1.9 W
Supply voltage tolerance:	-15 %; +10 %	
Supply indication:	green LED	
Time ranges:	0.1 s - 10 h (in 6 alternate)	
Time setting:	potentiometer	
Time deviation:	5 % - mechanical setting	
Repeat accuracy:	0.2 % - set value stability	
Temperature coefficient:	0.01% / °C, at =20 °C	
Output		
Number of contacts:	1x changeover (AgNi)	3x changeover (AgNi)
Rated current:	16 A / AC1	8 A / AC1
Breaking capacity:	4000 VA / AC1, 384 W / DC	2000 VA / AC1, 192 W / DC
Inrush current:	30 A / <3 s	10 A / <3 s
Switching voltage:	250 V AC1 / 24 V DC	
Min. breaking capacity DC:	500 mW	
Output indication:	red LED	
Mechanical life:	3x10 ⁷	
Electrical life (AC1):	0.7x10 ⁵	
Control		
Consumption of input:	AC 0.025 - 0.2 VA / DC 0.1 - 0.7 W (UNI), AC 0.53 VA (AC 230 V)	
Load between S-A2:	Yes (UNI), Yes (AC 230 V)	
Glow-tubes:	No (UNI), Yes (AC 230 V), 20 pcs (1 pc - 1 mA)	
Control terminals:	A1-S	
Impulse length:	min. 25 ms / max. unlimited	
Reset time:	max. 150 ms	
Other information		
Power of control input:	-20 .. +55 °C	
Storage temperature:	-30 .. +70 °C	
Electrical strength:	4 kV	
Mounting/DIN rail:	DIN rail EN 60715	
Protection degree:	IP 40 from front panel	
Operating position:	any	
Overvoltage category:	III.	
Pollution degree:	2	
Max. cable size(mm ²):	solid wire max. 1x2.5 or 2x1.5 / with sleeve max. 1x2.5	
Dimensions:	90 x 17.6 x 64 mm, see page 90-92	
Weight:	(UNI) - 62 g, (230) - 60 g	(UNI) - 86 g, (230) - 82 g
Standards:	EN 61812-1, EN 61010-1	

Symbol

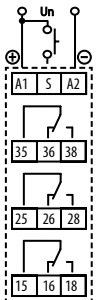
CRM-81J



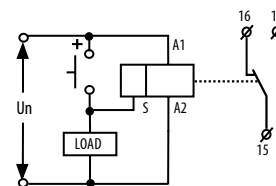
CRM-83J



Connection



It is possible to connect load between S-A2 (e.g. contactor, control of light or any other device), without disturbing a correct function of relay (load is energized while the switch is ON.)



Example of an order

CRM-81J/230, ZR10s

1x changeover contact, voltage AC 230 V, function: delay ON, time 1 - 10 s

CRM-83J/UNI, BL1h

3x changeover contact, voltage AC/DC 12 - 240 V, function: cycler begin. with impulse, time 6 - 60 min

Single-function time relay CRM-81J, CRM-83J

Functions

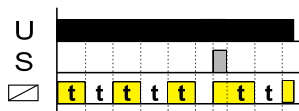
ZR - Delay ON



ZN - Delay OFF



BL - Cycler 1:1

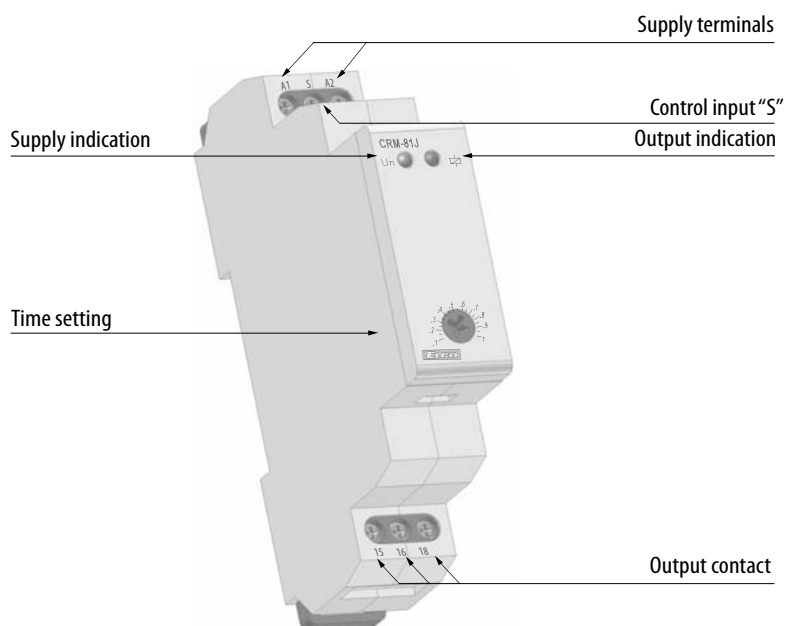


Note: the function ZR and ZN is controlled by supply voltage and control input t.m. when it comes to failure and refreshing the supply voltage, the relay automatically makes one cycle

Time range

	1 s	10 s	1 min	10 min	1 h	10 h
min	0.1 s	1 s	6 s	1 min	6 min	1 h
max	1 s	10 s	60 s	10 min	60 min	10 h

Description



Delay OFF without supply voltage CRM-82T0

1M



- „true OFF“ relay – relay timing without supply voltage and switches off after set time.
- sample of using: back up source delay OFF in case of voltage failure (emergency light, emergency respirator, protection of el. controlled doors - in case of blaze)
- 2 time functions adjustable by rotary switch:
 - a - delay OFF after the supply is switched off - after supply failure relay times for time t and switches off
 - e - delay ON
- time range (adjustable by rotary switch and fine setting by potentiometer): 0.1 s - 10 min
- universal supply voltage AC/DC 12 - 240 V
- output contact: 2x changeover 8 A
- output status indicated by LED (only in case of supply voltage connection)
- clamp terminals
- 1-MODULE, DIN rail mounting

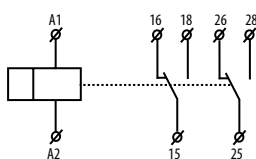
TIME RELAYS

Technical parameters

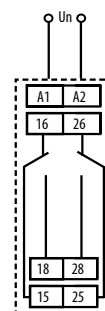
CRM-82T0

Number of functions:	a - Delay OFF no power supply/e - Delay ON
Supply terminals:	A1 - A2
Supply voltage:	AC/DC 12 - 240 V (AC50 - 60 Hz)
Consumption:	AC 0.7 - 3 VA / DC 0.5 - 1.7 W
Supply voltage tolerance:	-15 %; +10 %
Supply indication:	green LED
Time ranges:	0.1 s - 10 min
Time setting:	potentiometer
Time deviation:	5 % - mechanical setting
Repeat accuracy:	0.2 % - set value stability
Temperature coefficient:	0.1 % / °C, at = 20 °C
Output	
Number of contacts:	2x changeover (AgNi)
Rated current:	8 A / AC1
Breaking capacity:	2000 VA / AC1, 192 W / DC
Inrush current:	10 A / <3 s
Switching voltage:	250 V AC1 / 24 V DC
Min. breaking capacity DC:	500 mW
Output indication:	red LED
Mechanical life:	3x10 ⁷
Electrical life (AC1):	0.7x10 ⁵
Other information	
Operating temperature:	-20.. +50 °C
Storage temperature:	-30.. +70 °C
Electrical strength:	4 kV (supply-output)
Mounting/DIN rail:	DIN rail EN 60715
Protection degree:	IP 40 from front panel
Operating position:	any
Overvoltage category:	III.
Pollution degree:	2
Max. cable size(mm ²):	solid wire max. 2x2.5 or 1x4 with sleeve max. 2x1.5 or 1x2.5
Dimensions:	90 x 17.6 x 64 mm, see page 90-92
Weight:	93 g
Standarts:	EN 61812-1, EN 61010-1

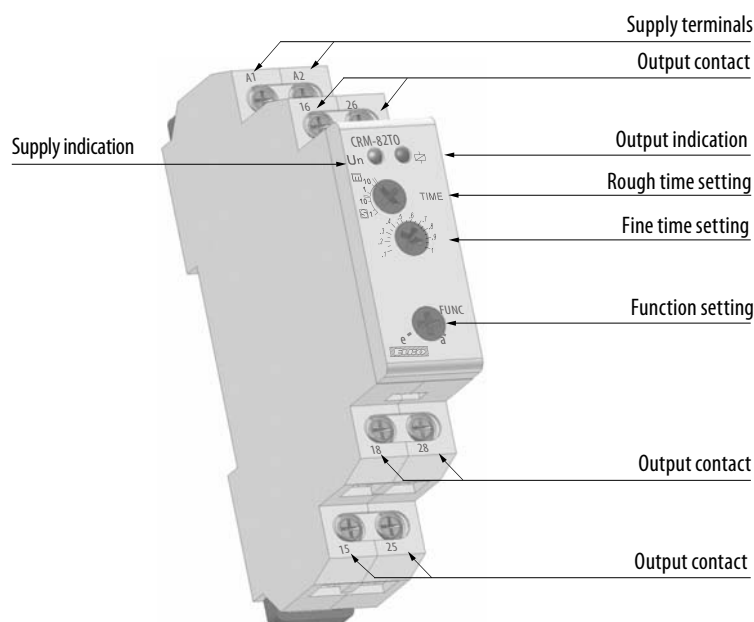
Symbol



Connection

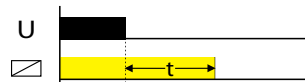


Description



Function

a - Delay OFF the power supply is switched off (min. time is 0.5 s)



e - Delay ON



Doublestage delay unit SJR-2

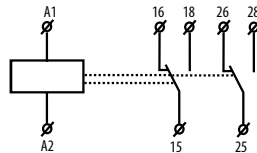


- for gradual switching of heavy wads (for example electrical heating), prevents current strokes in the main
- function: 2x Delay ON (2 time relays in one)
- time scale 0.1s - 10 days divided into 10 time ranges:
0.1 s - 1 s / 1 s - 10 s / 0.1 min - 1 min / 1 min - 10 min / 0.1 h - 1 h / 1 h - 10 hrs / 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: 2 x changeover 16 A
- output indication: multifunction red LED, flashing at certain states
- 1-MODULE, DIN rail mounting

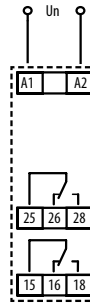
TIME RELAYS

Technical parameters	SJR-2
Number of functions:	2x delay ON
Supply terminals:	A1 - A2
Supply voltage:	AC/DC 12 - 240 V (AC 50 - 60 Hz)
Consumption:	AC 0.7 - 3 VA / DC 0.5 - 1.7 W
Supply voltage:	AC 230 V / 50 - 60 Hz
Power input (apparent/loss):	AC max. 12 VA / 1.3 W
Supplyvoltage tolerance:	-15%; +10 %
Supply indication:	green LED
Time ranges:	0.1 s - 10 days
Time setting:	rotary switch and potentiometer
Time deviation:	5 % - mechanical setting
Repeat accuracy:	0.2 % - set value stability
Temperature coefficient:	0.01 % / °C, at = 20 °C
Output	
Number of contacts:	2x changeover (AgNi)
Rated current:	16 A / AC1
Breaking capacity:	4000 VA / AC1, 384 W / DC
Inrush current:	30 A / <3 s
Switching voltage:	250 V AC1 / 24 V DC
Min. breaking capacity DC:	500 mW
Output indication:	multifunction red LED
Mechanical life:	3x10 ⁷
Electrical life (AC1):	0.7x10 ⁵
Reset time:	max. 150 ms
Other information	
Operating temperature:	-20.. +55 °C
Storage temperature:	-30.. +70 °C
Electrical strength:	4 kV (supply-output)
Operating position:	any
Mounting/DIN rail:	DIN rail EN 60715
Protection degree:	IP 40 from front panel
Overvoltage cathegory:	III.
Pollution degree:	2
Max. cable size (mm ²):	solid wire max. 1x 2.5 or 2x 1.5 / with sleeve max. 1x 2.5
Dimensions:	90x17.6x64 mm, see page 90-92
Weight:	UNI - 88 g, 230 - 83 g
Standards:	EN 61812-1, EN 61010-1

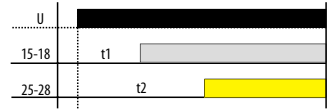
Symbol



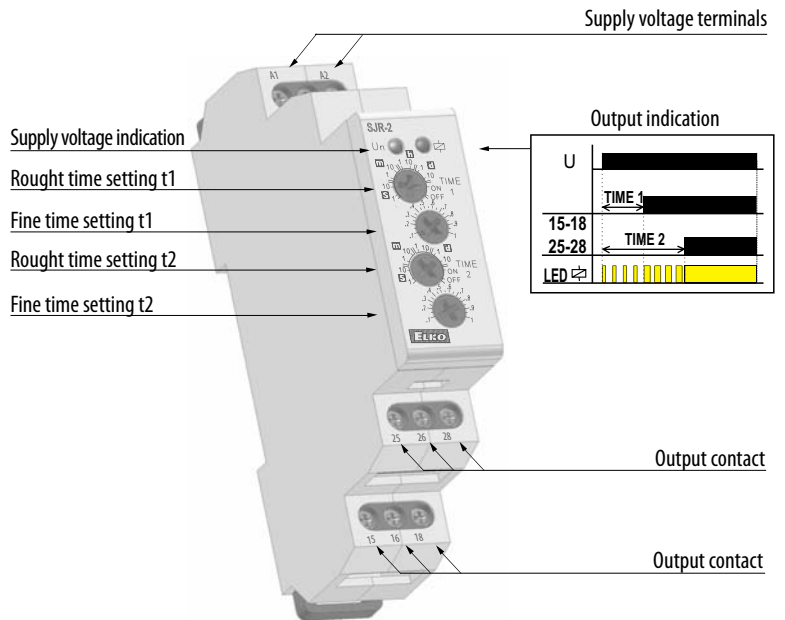
Connection



Function



Description



Time ranges

