

- Single-function and single-time relay with fine time setting by a potentiometer (within the frames of a particular time range)
- Suitable for applications where function and time requirements are known
- Time switch, possible to be used for pump delay after switching heating off, switching of fans
- Choice of 3 functions:
  - 1) ZR Delay ON
  - 2) ZN -Delay OFF
  - 3) BL Repeat Cycle
- Functions can be controlled by supply voltage or time scale control input:

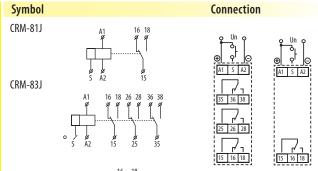
(0.1 s - 1 s / 1 s - 10 s / 6 s - 60 s / 1 min - 10 min / 6 min - 60 min / 1 h - 10 hrs)

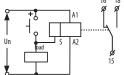
- Universal voltage range AC/DC 12 240 V
- Output contact: CRM-81J: 1x changeover/ SPDT 16 A

CRM-83J: 3x changeover/ 3PDT 8 A

- Red LED output indicator
- 1-MODULE, DIN rail mounting

CRM-83J according to type		■ 1-WODOLL, DIN Tall Houldin					
Technical parameters		CRM-81J	CRM-83J				
Functions:		ZR - delay ON / ZN - delay OFF / BL- cycler 1:1					
Supply terminals:		A1 - A2					
Voltage range:	N	AC/DC 12 - 240 V (AC 50 - 60 Hz)					
Burden:	0	AC 0.7 - 3 VA / DC 0.5 - 1.7 W					
Voltage range:	230	AC 230 V / 50 - 60 Hz					
Consumption (apparent/loss):	73	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 ranges)					
Time setting:		potentiometer					
Time deviation:		5 % - mechanical setting					
Repeat accuracy:		0.2 % - set value stability					
Temperature coefficient:		0.01% / °C, at =20 °C					
<u>Output</u>							
Number of contacts:		1x changeover/ SPDT (AgNi / Silver Alloy)	3x changeover/ SPDT (AgNi / Silver Alloy)				
Current rating:		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 <sup>7</sup>					
Electrical life (AC1):		0.7x10 <sup>s</sup>					
<u>Control</u>							
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					
Control terminals:		A1-S					
Glow tubes connetions:		230 V - Yes / UNI - No					
Max. amount of glow lamps		UNI - glow lamps cannot connected					
connected to controlling input:		230 V - max.10 pcs (Measured with glow lamp 0.68mA/230 AC)					
Impulse length:		min. 25 ms / max. unlimited					
Reset time:		max. 150 ms					
Other information							
Power of control input:		-20 °C 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:		DIN rail EN 60715					
Protection degree:		IP 40 from front panel / IP 20 terminals					
Overvoltage category:		III.					
Pollution degree:		2					
Max. cable size(mm²):		solid wire max.1x2.5 or 2x1.5 / with sleeve max.1x2.5 (AWG 12)					
Dimensions:		90 x 17.6 x 64 mm (3.5" x 0.7" x 2.5")					
Weight:		(UNI) - 62 g, (230) - 60 g (UNI) - 86 g, (230) - 82 g					
		EN 61812-1, EN 61010-1					





It is possible to connect the load between terminals S-A2 (e.g. contactor, pilot lamp or another device), without compromising the correct operation of the relay (the load is energized as long as the switch button is closed).

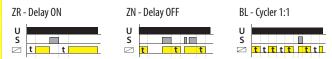
## Example of an order

#### CRM-81J/230, ZR10s

1x changeover contact, voltage AC 230 V, function: delay 0N, time 1 - 10 s  $\underline{\text{CRM-83J/UNI, BL1h}}$ 

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

## **Functions**



Note: the function ZR and ZN is controlled by supply voltage and control input ie. Once phase failure is detected and supply voltage is re applied, The relay automatically makes one cycle.

## Time range

		1 s	10 s	1 min	10 min	1 hr	10 hrs
m	in	0.1 s	1 s	6 s	1 min	6 min	1 hr
ma	ax	1 s	10 s	60 s	10 min	60 min	10 hrs

# Description

