

Timer Relays Series AMPARO



ZRAE,R,AMF



ZRAE0011



ZRAR0011



ZRAMF011

Schrack-Info

ZRAE0011

- Tripping delayed timer relay
- Mode: "E"
- 1 CO, 5 A
- 24-48 V DC / 24-240 V AC
- Time range 0.05 seconds - 10 hours
- Component width 17.5 mm

ZRAR0011

- Release delayed timer relay
- Mode: "R"
- 1 CO, 5 A
- 24-48 V DC / 24-240 V AC
- Time range 0.05 seconds - 10 hours
- Component width 17.5 mm

ZRAMF011

- Multi-function timer relay
- Modes: "E", "R", "Ws", "Wu", "Wa", "Bp" & "F"
- 1 CO, 5 A
- 24-48 V DC / 24-240 V AC
- Time range 0.05 seconds - 10 hours
- Component width 17.5 mm

Overview AMPARO Timer Relays

Article	Number of contacts and type	Voltage range	Number of time ranges	Number of functions	E	R	Ws	Wu	Wa	Bp	F
ZRAE0011	1 CO	24 - 240 V AC / DC	6	1	X						
ZRAR0011	1 CO	24 - 240 V AC / DC	6	1		X					
ZRAMF011	1 CO	24 - 240 V AC / DC	6	7	X	X	X	X	X	X	X

Timer Relays Series AMPARO

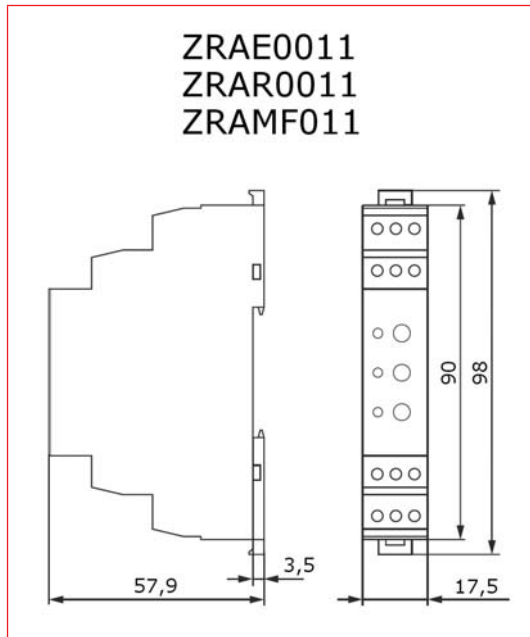
Overview Modes

Article	
ZRAE0011	Time relay ON delay
ZRAR0011	Time relay OFF delay
ZRAMF011	Multifunction time relays

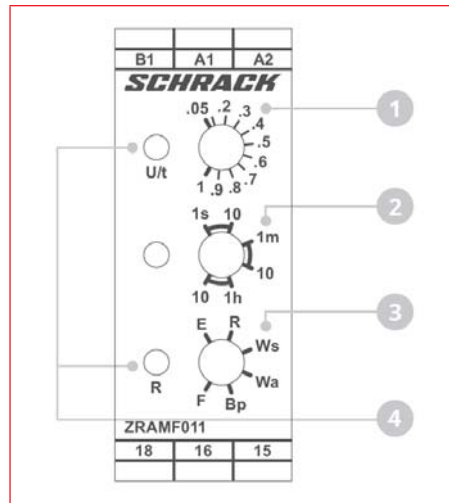
Functions

Code	Function
E	ON delay
R	OFF delay (with control contact)
Ws	Single shot leading edge (with control contact)
Wu	Single shot leading edge voltage controlled
Wa	Single shot trailing edge (with control contact)
Bp	Flasher pause first
F	T-FlipFlop (Toggle)

Dimensions (mm)



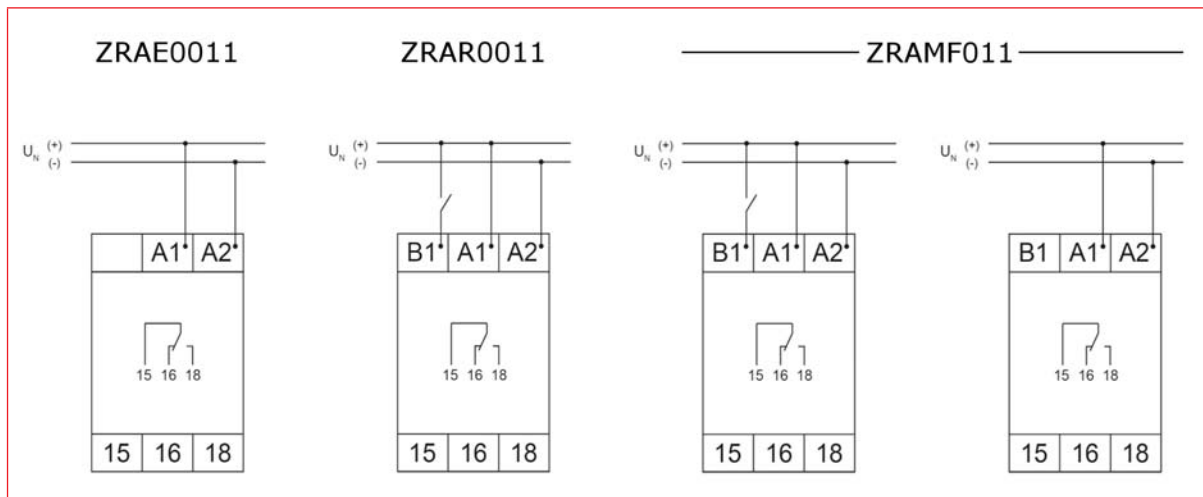
Configuration & Settings



Configuration & Functionalities

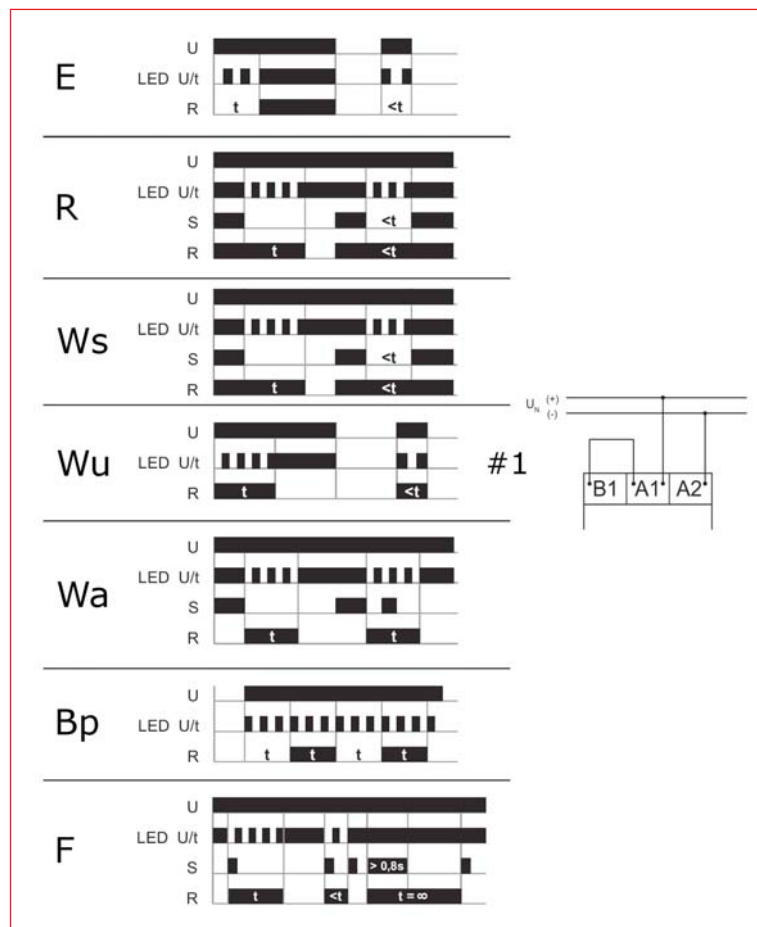
1	Fine adjustment
2	Setting of time range
3	Selection of the desired function
4	Status indication
	U/t: LED green...Supply voltage applied
	R: LED yellow...Relay is active

Overview Circuit Diagrams



Timer Relays Series AMPARO

Modes



Overview Modes

Article	E	R	Ws	Wu	Wa	Bp	F
ZRAE0011	X						
ZRAR0011		X					
ZRAMF011	X	X	X	X	X	X	X




Description of Modes

E	ON delay
R	OFF delay with control contact
Ws	Single shot leading edge with control contact
Wu	Single shot leading edge voltage controlled (function selector must be set on Ws and fixed jumper A1 - B1)
#1	Function Ws with fixed jumper A1 - B1
Wa	Single shot trailing edge with control contact
Bp	Flasher pause first
F	T-FlipFlop (Toggle)

Timer Relays Series AMPARO

Technical Data

		ZRAE0011	ZRAR0011	ZRAMF011	
INDICATORS	Green LED U/t ON	Indication of supply voltage			
	Green LED U/t flashes	Indication of time period			
	Yellow LED R ON/OFF	Relay is energized			
INPUT CIRCUIT	Terminals	A1 - A2			
	Supply voltage	24 - 48 V DC / 24 - 240 V~			
	Duty cycle	100 %			
	Bridging time	< 30 ms			
	Reset time	100 ms			
	Drop-out voltage	> 30 %			
	Power loss	1 W			
	OUTPUT CIRCUIT	Number of contacts and type	1 CO		
Terminals		15 - 16 - 18			
Type		Relay			
Contact material		AgNi			
Rated voltage		250 V			
Max. switching voltage		250 V			
Max. switching current		5 A			
Rated current		5 A / 250 V			
Service life		Mechanical	1 x 10 ⁵ operations		
		Electrical	1 x 10 ⁵ operations		
Switching frequency		With load	6 / min		
	Without load	1200 / min			
Fusing	5 A fast acting				
DATAS OF INSULATION	Pollution degree (IEC 61812-1)	2			
	Overvoltage category (IEC 61812-1)	II			
	Rated insulation voltage (IEC 61812-1)	Input circuit/ output circuit	300 V		
	Rated surge voltage (IEC 61812-1)	Input circuit/ output circuit	2500 V		
	Insulation-test-voltage (IEC 61812-1)	Input circuit/ output circuit	1600 V		
ELECTRICAL CONNECTION	Insulation	Input circuit/ output circuit	Basic insulation		
	Terminal	Screw-terminal			
	Terminal capacity	Rated terminal capacity	2.5 mm ²		
	Max. terminal capacity	Flexible with /without ferrule	1 x 0.25...2.5 mm ² (23 AWG...14AWG)		
		Flexible without sleeve	2 x 0.25...1.5 mm ² (23 AWG...14AWG)		
		Flexible with twin-sleeve	2 x 0.25...1.5 mm ² (23 AWG...14AWG)		
		Stranded without sleeve	1 x 0.25...2.5 mm ² (23 AWG...14AWG)		
Length without insulation	7 mm				
Tightening torque	Max. 0.5 Nm				
GENERAL DATA	Ambient temperature	Operation	-25...+50 °C		
	Dimensions (DIN 43880)	LxHxD	17.5 x 97 x 57.9 mm		
	Mounting	(EN 60715)	DIN-rail		
	Mounting position	Any			
	IP rating	Housing	IP40		
Terminals		IP20			

DESCRIPTION	AVAILABLE	ORDER NO.
Tripping and Release Delay		
Timer single function ON-delay AMPARO, 24V AC/DC or 230V AC, 1 CO, 5A/230V		ZRAE0011
Timer single function OFF-delay AMPARO, 24V AC/DC or 230V AC, 1 CO, 5A/230V		ZRAR0011
Multi-function Relays		
Timer multifunction AMPARO, 24V AC/DC or 230V AC, 1 CO, 5A/230V		ZRAMF011

