CROUZET

Essential Analog Timers

DIN-Rail Mount 17.5 mm

EMER8, EMAR7, EMAR9 Series



IP40

Screw terminals

Electrical Control & Protection > Timer Relays > DIN-Rail > Analog **> Relay Output**

Highlights

- Multifunction or mono-function
- Multi-range (7 ranges)
- Multi-voltage or single voltage
- Screw terminals
- LED status indicator (1 voltage present LED, 1 timer ON LED)
- Option of supplying a load in parallel (EMER)
- Nominal rating 5 A NO

Standards

CE, UKCA, cULus LISTED, RoHS REACH COMPLIANT

Part Numbers

88829198	88829117	88829119
		
Functions: A - At - B - C - D - Di - H - Ht - Pe - W Series: EMER8	Functions A Series: EMAR7	Functions A Series: EMAR9

More info.

HERE

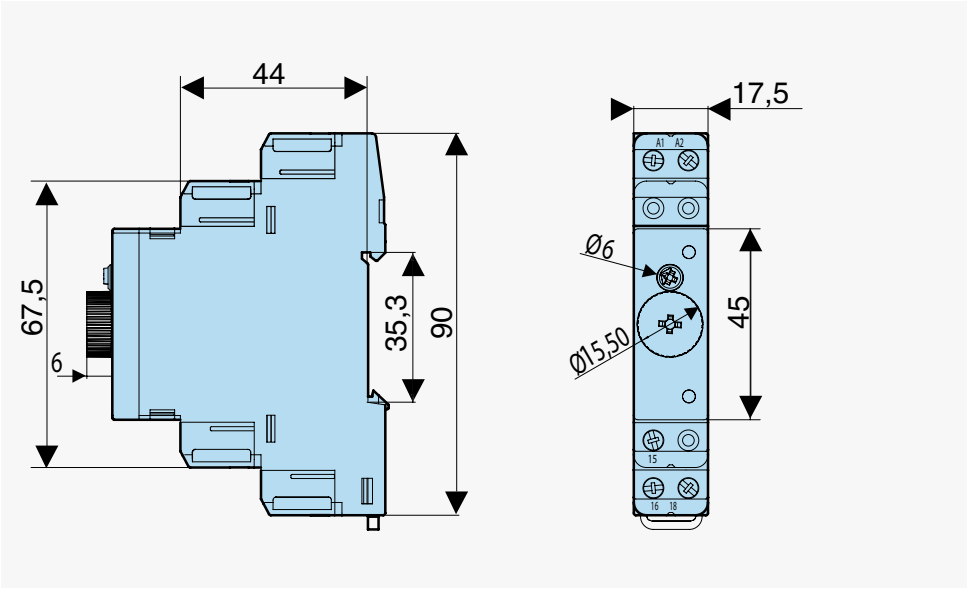
Specifications

	88829198	88829117	88829119
Inputs			
Supply voltage	12-240 VDC / 24-240 VAC	240 VAC	24 VAC/DC
Voltage supply tolerance	-15%, +10%		24 VAC: -15%, +10% 24 VDC: -15%, +20%
AC supply voltage frequency	50/60 Hz ± 5%		
Max power consumption at Un	Approx. 3.2 VA (1.5 W) / 230 VAC (DC) Approx. 1.2 VA (0.6 W) / 24 VAC (DC)	Approx. 3.2 VA (1.5 W) / 230 VAC (DC)	Approx. 1.2 VA (0.6 W) / 24 VAC (DC
Immunity to power micro cuts	> 10 ms		
Timing			
Timing 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 h , 2 h - 20 h		
Minimum control pulse duration	30 ms		
Recovery time (after by de-energization)	100 ms		
Setting accuracy (full range)	± 0.5%		
Drift temperature	± 0.05% /°C		
Drift voltage	± 0.2% / V		
Outputs			
Outputs configuration	1 changeover relay 1 NO: 1250 VA / 150 W 1 NC: 750 VA / 90 W		
Maximum switching voltage	277 VAC / 30 VDC		
Switching current rate (resistive)	NO: 5 A 250 VAC / 5 A 30 VDC resistive NC: 3 A 250 VAC / 3 A 30 VDC resistive		
Electrical life (operations)	10^5 NO cycles $7x10^4$ cycles		
Minimum breaking current	10 mA / 12 VDC		
Mechanical life (operations)	$5x10^6$ cycles		
Insulation			
Rated insulation voltage	250 V		
Insulation coordination	IEC/EN 60664-1: category III, pollution degree 3 ; up to 2000 m		
Rated impulse voltage	2.5 kV (1.2 / 50 µs)		
Dielectric strength	IEC/EN 61812-1: 2 kV / 1 min / 1 mA / 50 Hz		
Insulation resistance	> 500 MΩ / 250 VDC / 1 min		

Specifications

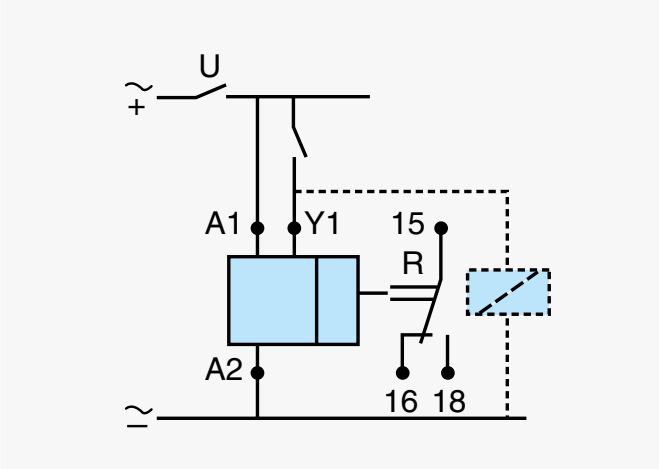
	88829198	88829117	88829119
General characteristics			
Display	No, but LED status indicator (Green: voltage present / yellow: timer R ON)		
Display accuracy	IEC/EN 61812-1: ± 10% / 25°C		
Casing	17.5 mm		
Mounting	35 mm symmetrical DIN-Rail		
Mounting position	Vertical		
Degree of protection	IEC/EN 60529: Casing: IP40 / Connection terminals: IP20		
Terminal capacity	Multi-wire with ferrule: 1x0.5 - 4 mm² (AWG 20 - AWG11) 2x0.5 - 2.5 mm² (AWG 20 - AWG14) Single-wire without ferrule: 1x0.5 - 2.5 mm² (AWG 20 - AWG14) 2x0.5 - 1.5 mm² (AWG 20 - AWG16)		
Stripping length	5 mm		
Maximum tightening torques	IEC/EN 60947-1: 0.6 - 0.8 Nm		
Operating temperature	-20°C to +60°C		
Storage temperature	-40°C to +70°C		
Humidity	IEC/EN 60068-2-30: 93% without condensation		
Vibration resistance	IEC/EN 60068-2-6: 10 - 55 Hz, A = 0.35 mm peak to peak 10 x cycles, 1 octave/min		
Weight	60 g		
Standards			
EU Directives	2014/30/EU: EMC 2014/35/EU: Low voltage		
Approvals / marking	CE, cULus Listed Industrial Control Equipment		
Conformity with environmental directives	2002/95/CE: RoHS 1907/2006: Reach		
Immunity to electrostatic discharges	IEC/EN 61000-4-2: Level III (Air ± 8 kV / Contact ± 4 kV)		
Immunity to radiated, radio-frequency, electromagnetic field	IEC/EN 61000-4-3: Level III 10 V/m (80 MHz - 1 GHz) 80% AM (1 kHz) 3 V/m (1.4 GHz - 2 GHz) 80% AM (1 KHz) 1 V/m (2 GHz - 2.7 GHz) 80% AM (1 KHz)		
Immunity to rapid transient bursts	IEC/EN 61000-4-4: Level III Direct ± 2 kV (power supply) Coupling ± 1 kV (I/O)		
Immunity to shock waves on power supply	IEC/EN 61000-4-5: Level III Power supply/earth ± 2 kV Power supply input ± 1 kV		
Immunity to radiofrequency in common mode	IEC/EN 61000-4-6: Level III 10 Vrms (0.15 - 80 MHz) 80% AM (1 kHz)		
Immunity to magnetical field	IEC/EN 61000-4-8: 50/60 Hz 30 A/m, 1 min		
Immunity to voltage dips and breaks	IEC/EN 61000-4-11: 0% residual voltage / 1 cycle 40% residual voltage / 10 cycles (50 Hz) / 12 cycles (60 Hz) 70% residual voltage / 25 cycles (50 Hz) / 30 cycles (60 Hz)		

Dimensions (mm)

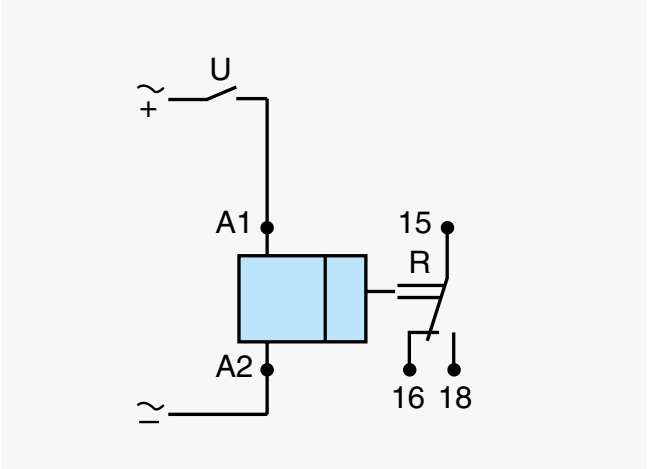


Wiring diagrams

EMER8

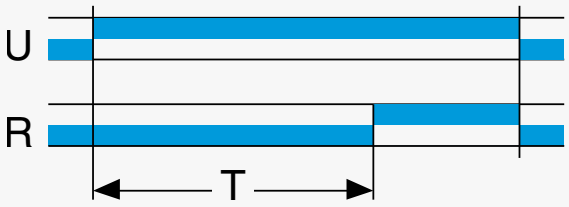


EMAR7 - EMAR9

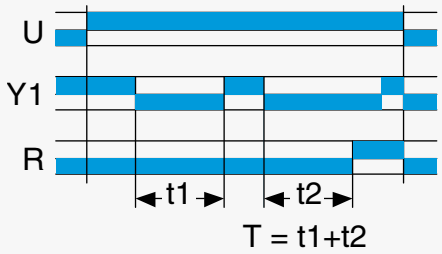


Function diagrams

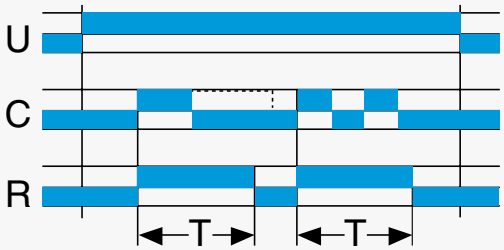
Function A: On-Delay (Delay on make)



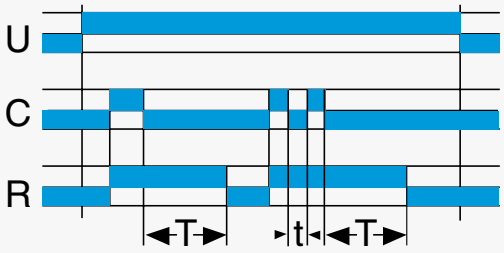
Function At: Summation time relay



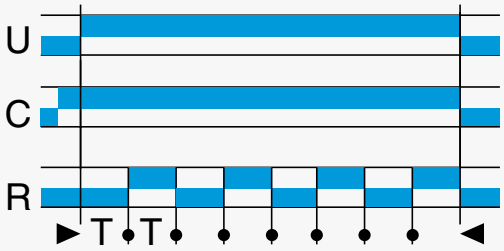
Function B: Single Shot (One Shot)



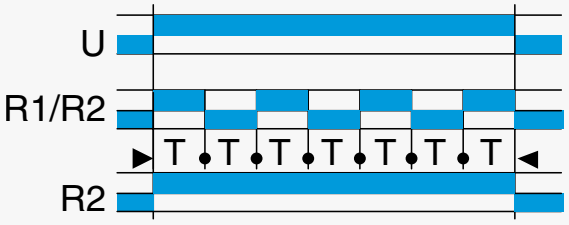
Function C: Off-Delay (Delay on break)



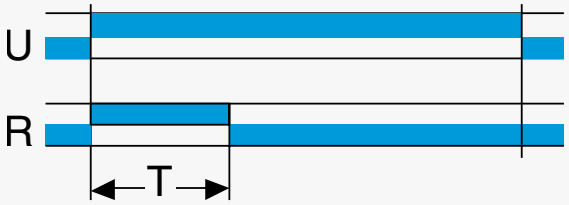
Function D: Flasher (Symmetrical) – OFF Start



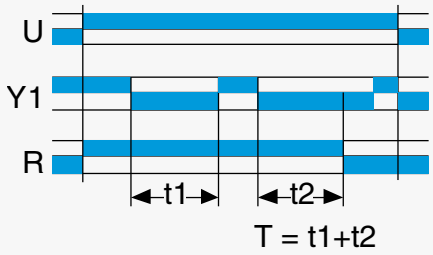
Function Di: Flasher (Symmetrical) – ON Start



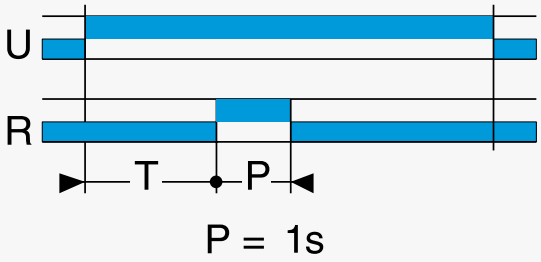
Function H: Interval



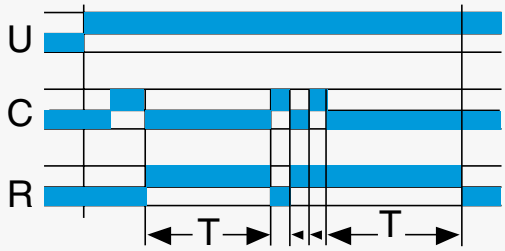
Function Ht: Interval with Memory



Function Pe: Impulse counter (delay on) 1 relay



Function W: Timing after pulse of control contact



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