

Multifunction Analog Timers

DIN-Rail Mount 17.5 mm

Chronos2 MUR1, MUR3, MXR1 Series

The Chronos 2 range of industrial timers: ideal for timing, monitoring and counting functions. Available in single or multi-function versions, to meet the specific needs of each application.



24 VDC /
24-240 VAC



12-240
VAC/DC



IP40



Screw
terminals

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

Highlights

- Multifunction
- Multi-range
- Multi-voltage
- Screw terminals
- LED status indicator
- Possibility of external load connection in parallel to the control input
- 3-wire PNP sensor compatible
- Nominal rating 8 A

Standards



Part Numbers

88827105



Functions: Multifunction U (A - Ac - At - B - Bw - C - D - Di - H - Ht)

Series: MUR1

88827103



Functions: Multifunction U (A - Ac - At - B - Bw - C - D - Di - H - Ht)

Series: MUR3

88827185



Functions: Multifunction X (Ad - Ah - N - O - P - Pt - TL - Tt) + W

Series: MXR1

Part numbering system

Product line:
88: Control

Output Type:
0: Static
1: Relay

Power Supply:
3: 12-240 VAC/DC
4: 24-240 VAC or 24-240 VAC/DC
5: 24 VDC / 24-240 VAC or 24-240 VAC/DC
6: 230-240 / 380-440 VAC

88

827

1

0

3

Casing:
827: 17.5 mm
865/866: 22.5 mm

Function:

0: Multifunction U
1: Function A
2: Function B
3: Function C
4: Function H/Ht

5: Function L/Li
6: Function K
7: Function Q
8: Multifunction X

More info.



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Specifications

88827105
88827103
88827185

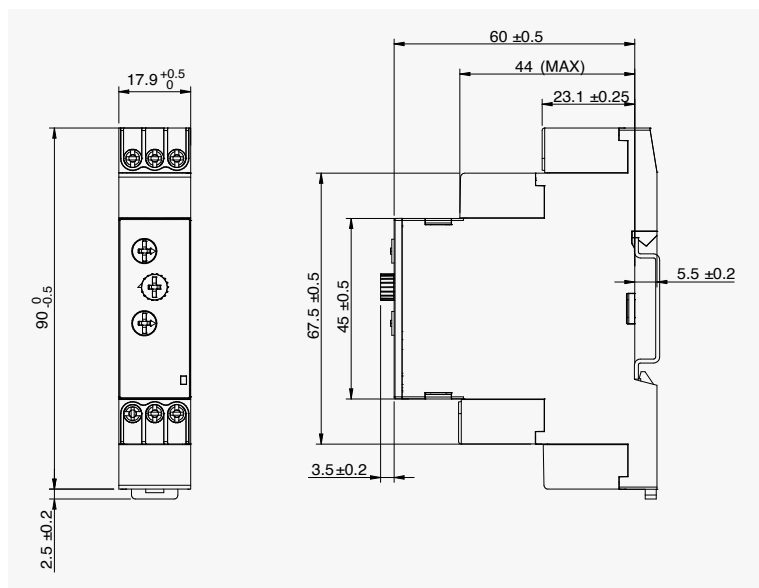
Inputs			
Supply voltage	24 VDC / 24-240 VAC	12-240 VAC/DC	24 VDC / 24-240 VAC
Voltage supply tolerance	-15%, +10%		
Operating factor	100%		
Max power consumption at Un	0.6 W (24 VDC)	0.4 W (12 VDC)	0.6 W (24 VDC)
	1.1 VA (24 VAC)	2 W (240 VDC)	1.1 VA (24 VAC)
	10 VA (120 VAC)	1 VA (12 VAC)	10 VA (120 VAC)
	28 VA (240 VAC)	4 VA (240 VAC)	28 VA (240 VAC)
Immunity to power micro cuts	< 10 ms		
Timing			
Timing ranges	1 s - 10 s - 1 min - 10 min - 1 h - 10 h - 100 h		
Minimum control pulse duration	30 ms DC / 50 ms AC		
Recovery time (after by de-energization)	120 ms		
Setting accuracy (full range)	IEC/EN 61812-1: ± 0.5% with constant parameters		
Drift temperature	± 0.05% /°C		
Drift voltage	± 0.2% / V		
Outputs			
Outputs configuration	1 changeover relay		
Maximum switching voltage	8 A 250 VAC resistive		
	8 A 30 VDC resistive		
Maximum switching power (resistive)	250 VAC / 8 A resistive		
	125 VDC / 0.3 A resistive		
Electrical life (operations)	10 ⁵		
	8 A 250 VAC resistive		
Minimum breaking current	10 mA / 5 VDC		
Mechanical life (operations)	10x10 ⁶ cycles		
Rated power	2000 VA / 40 W		
Dielectric strength	IEC/EN 60664-1: 2.5 kV / 1 min / 1 mA / 50 Hz		
Insulation			
Insulation coordination	IEC/EN 60664-1: Voltage surge category III		
Rated impulse voltage	IEC/EN 60664-1, IEC/EN 61812-1, IEC 62314:2022: 5 kV (1.2/50 μs)		
Clearance / creepage distances	IEC/EN 60664-1: 4 kV / 3 mm		
	Pollution degree 2		
Insulation resistance	IEC/EN 60664-1: 100 MΩ (500 VDC)		

Specifications

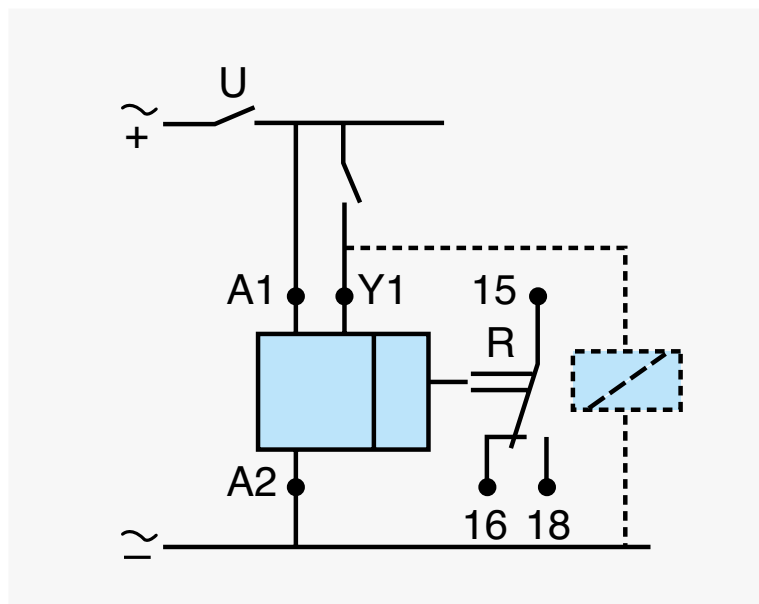
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88827185

General characteristics	
Display	No, but status indicator. Un: green LED blinks when counting, flashes when not counting (except for D & Di functions), lights up continuously when relay is closed and not counting.
Display accuracy	IEC/EN 61812-1: ± 10% / 25°C
Casing	17.5 mm
Mounting	IEC/EN 60715: 35 mm symmetrical DIN-Rail
Mounting position	Vertical
Housing material	Self-extinguishing Incandescent wire test
Degree of protection	According to IEC/EN 60529 : Terminal block : IP20 Housing : IP40 Front face : IP50
Terminal capacity	Single-wire without ferrule: 1x0,5 - 3,3 mm² (AWG 20 - AWG 12) 2x0,5 - 2,5 mm² (AWG 20 - AWG 14) Multi-wire with ferrule: 1x0.5 - 2.5mm² (AWG20 - AWG14) 2x0.5 - 1.5mm² (AWG20 - AWG16)
Maximum tightening torques	IEC 60947-1 : 0.5 - 0.6 N.m
Operating temperature	-20°C to +60°C
Storage temperature	-30°C to +60°C
Humidity	IEC/EN 60068-2-30: 93% non-condensing
Vibration resistance	IEC/EN 60068-2-6: 20 m/s² / 10 Hz - 150 Hz
Shock resistance	IEC/EN 60068-2-27: 15 g - 11 ms
Short interruption on power line	IEC/EN 61000-4-11: 0% residual voltage, 250/300 cycles
Weight	63 g66 g63 g
Packaging	Paper Compact carton Corrugated carton PE bags (not glued) Molded cellulose pulp (e.g.-box) PET pieces (recyclable)
Standards	
Approvals / marking	CE, cULus Listed Industrial Control Equipment, CCC*
Conformity with environmental directives	2015/863/UE: RoHS 1907/2006: Reach
Immunity to electrostatic discharges	IEC/EN 61000-4-2: Level III (Air 8 kV / Contact 6 kV) IEC/EN 61000-4-3: Level I (1 V/m: 2.0 GHz - 2.7 GHz) Level II (3 V/m: 1.4 GHz - 2.0 GHz) Level III (10 V/m: 80 MHz - 1 GHz)
Immunity to radiated, radio-frequency, electromagnetic field	
Immunity to rapid transient bursts	IEC/EN 61000-4-4: Level III (direct 2 kV / Capacitive coupling clamp 1 kV)
Immunity to shock waves on power supply	IEC/EN 61000-4-5: Level III (2 kV / common mode 2 kV / residual current mode 1 kV)
Immunity to radiofrequency in common mode	IEC/EN 61000-4-6: Level III (10 Vrms: 0.15 MHz - 80 MHz)
Immunity to voltage dips and breaks	IEC/EN 61000-4-11: 0% residual voltage, 1 cycle 70% residual voltage, 25/30 cycles

Dimensions (mm)



Wiring diagrams



Function diagrams

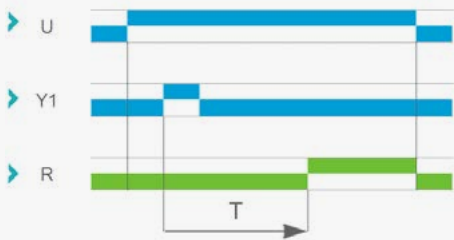
Function A: On-Delay (Delay on make)



Function Ac: On/Off Delay (Delay on make/break)



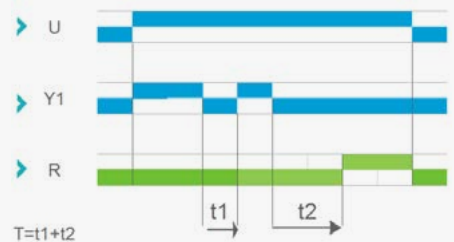
Function Ad: Delay on Start



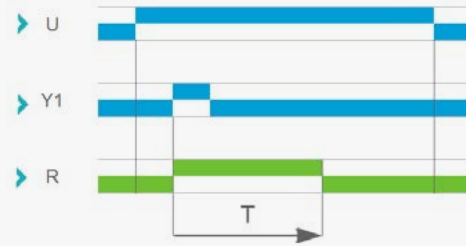
Function Ah: Triggered Flashing Cycle (Single shot flip-flop)



Function At: Summation Time Relay



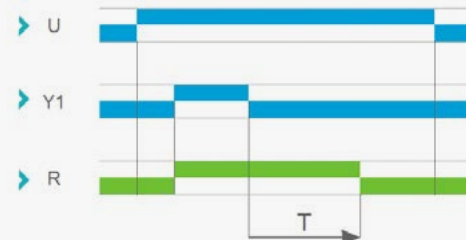
Function B: One-Shot



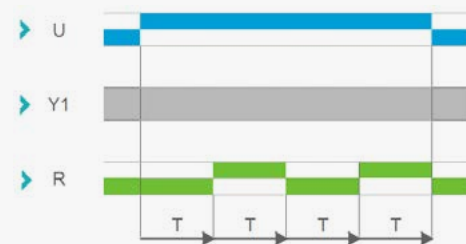
Function Bw: Pulse output



Function C: Off-Delay (Delay on brake)



Function D: Flasher (Symmetrical) - OFF Start



Function Di: Flasher (Symmetrical) - ON Start

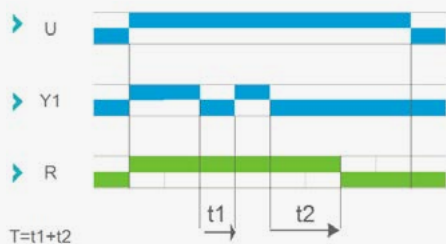


Function diagrams

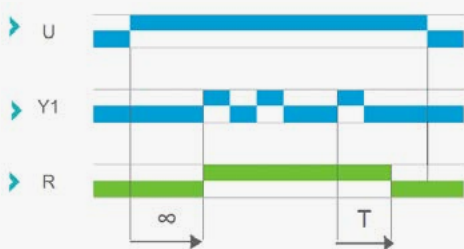
Function H: Interval



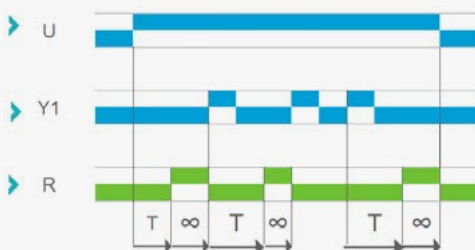
Function Ht: Interval with Memory



Function N: Watchdog



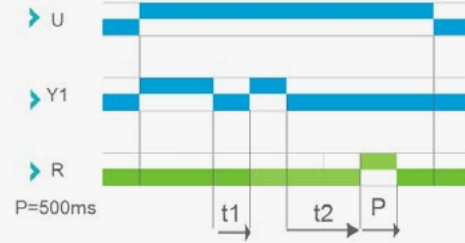
Function O: Delayed watchdog



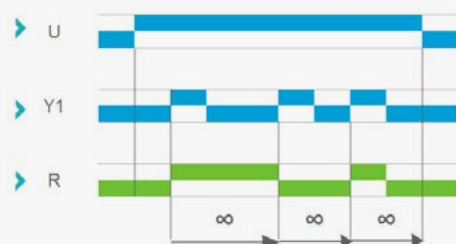
Function P: Pulse delayed relay



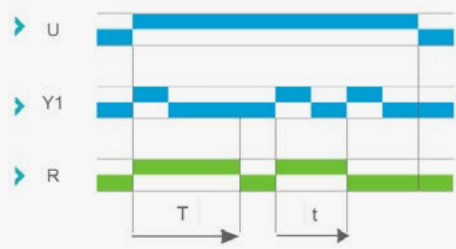
Function Pt: Impulse counter (delay on)



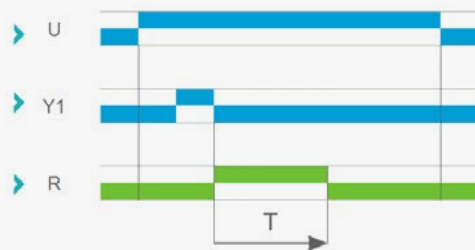
Function TL: Latching (Alternating) - Leading Edge



Function Tt: Delayed Latching (Alternating) - Leading Edge



Function W: Timing after Pulse of Control Contact



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