



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



## 17.5 mm - 1 Solid State Relay 0.7A MUS2 Part number 88827004



- Multi-function or mono-function
- Multi-range
- Multi-voltage
- Screw or spring terminals
- LED status indicator (relay version)
- Possibility of external load connection in parallel to the control input
- 3-wire PNP sensor compatible

### Part numbers

	Type	Functions	Timing	Output	Nominal rating	Connections	Supply voltage
88827004	MUS2	A - Ac - At - B - Bw - C - D - Di - H - Ht	0,1 s → 100 h	Solid state	0,7 A	Screw terminals	24 → 240 V AC

### Specifications

#### Timing

Timing ranges (7 ranges)	1 s - 10 s - 1 min - 10 min - 1 h - 10 h - 100 h
Repetition accuracy with constant parameters	± 0.5 % (IEC/EN 61812-1)
Drift Temperature	± 0,05 % / °C
Drift Voltage	± 0,2 % / V
Display accuracy according to IEC/EN 61812-1	± 10 % / 25 °C
Immunity from micro power cuts : typical	< 10 ms

#### Supply

Multi-voltage power supply	Depending on version
Frequency (Hz)	50 / 60
Operating factor	100 %

#### Output specification

Rated power	2000 VA/80 W
Maximum breaking current	8 AAC 250 VAC resistive 8 ADC 30 VDC resistive
Minimum breaking current	10 mA / 5 VDC
Voltage breaking capacity	250 VAC / 8 AAC resistive 250 VDC / 0,3 A resistive
Electrical life (operations)	10 <sup>5</sup> 8 A 250 VAC resistive
Mechanical life (operations)	10 x 10 <sup>6</sup>
Breakdown voltage acc. to IEC/EN 61812-1	2,5 kV / 1 min / 1 mA / 50 Hz
Impulse voltage acc. to IEC/EN 60664-1, IEC/EN 61812-1	5 kV wave 1.2 / 50 µs

#### General characteristics

Conformity to standards	IEC/EN 61812-1 IEC/EN 61000-6-1 IEC/EN 61000-6-2 IEC/EN 61000-6-3 IEC/EN 61000-6-4
Certifications	CE, UL, cUL, CSA, GL
Temperature limits use (°C)	-20 → +60
Temperature limits stored (°C)	-30 → +60
Installation category (acc. to IEC/EN 60664-1)	Voltage surge category III
Creepage distance and clearance acc. to IEC/EN 60664-1	4 kV / 3 mm
Protection (IEC/EN 60529)	IP20 IP40
Degree of protection acc. to IEC/EN 60529 Front face	IP50
Vibration resistance acc. to IEC/EN 60068-2-6	20 m/s <sup>2</sup> 10 Hz → 150 Hz
Relative humidity no condensation acc. to IEC/EN 60068-2-30	93 % non-condensing
Electromagnetic compatibility - Immunity to electrostatic discharges acc to IEC/EN 61000-4-2	Level III (Air 8 kV / Contact 6 kV)
Immunity to radiated, radio-frequency, electromagnetic field acc. IEC/EN 61000-4-3	Level I (1 V/m : 2,0 G Hz → 2,7 G Hz) Level II (3 V/m : 1,4 G Hz → 2,0 G Hz)

	Level III (10 V/m : 80 M Hz →1 G Hz)
Immunity to rapid transient bursts acc. to IEC/EN 61000-4-4	Level III (direct 2 kV / Capacitive coupling clamp 1 kV)
Immunity to shock waves on power supply acc. to IEC/EN 61000-4-5	Level III (2 kV / common mode 2 kV/residual current mode 1 kV)
Immunity to radio frequency in common mode acc. to IEC/EN 61000-4-6	Level III (10V rms : 0.15 M Hz to 80 M Hz)
Immunity to voltage dips and breaks acc. to IEC/EN 61000-4-11	0 % residual voltage, 1 cycle 70 % residual voltage, 25/30 cycles
Mains-borne and radiated emissions acc. to EN 55022 (CISPR22), EN55011 (CISPR11)	Class B
Fixing : Symmetrical DIN rail	35 mm
Terminal capacity Single-wire without ferrule	1 x 0,5 →3,3 mm <sup>2</sup> (AWG 20 →AWG 12) 2 x 0,5 →2,5 mm <sup>2</sup> (AWG 20 →AWG 14)
Terminal capacity Multi-wire with ferrule	1 x 0,5 →2,5 mm <sup>2</sup> (AWG 20 →AWG 14) 2 x 0,5 →1,5 mm <sup>2</sup> (AWG 20 →AWG 16)
Housing material	Self-extinguishing
Shock test IEC/EN 60068-2-27	15 g - 11 ms
Short interruption on power line acc to IEC/EN 61000-4-11	0 % residual voltage, 250/300 cycles

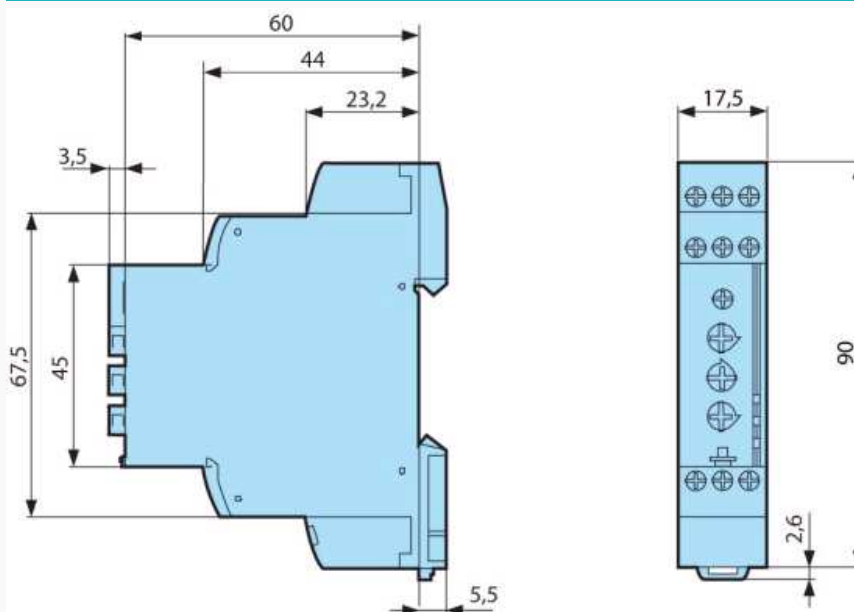
### Timing

Minimum pulse duration typically (relay version)	
Minimum pulse duration typically (solid state version)	
Minimum pulse duration typically (relay version under load)	
Maximum reset time by de-energisation typically (relay version)	
Maximum reset time by de-energisation typically (solid state version)	

### Solid state output

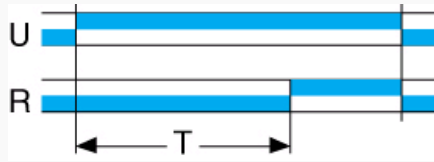
Breaking capacity	0,7 A AC / DC 20 °C (0,5 A UL)
Traduction à placer ici	5 mA/ °C
Maximum admissible current	20 A ≤ 10 ms
Minimum breaking current	10 mA
Leakage current	< 5 mA
Voltage breaking capacity	250 VAC / DC
Maximum voltage drop at terminals	3 wire 4V 2 wire 8V
Electrical life (operations)	10 <sup>8</sup>
Breakdown voltage acc. to IEC/EN 60664-1, IEC/EN 60255-5	2.5 kV to 1 mA / 1 min
Input type	Volt-free contact 3-wire PNP output control option residual voltage : 0.4V whatever the timer power supply

### Dimensions (mm)



**Curves**

**Function A**



**Function A**

Delay on energisation 1 relay

**Curves**

**Function Ac**

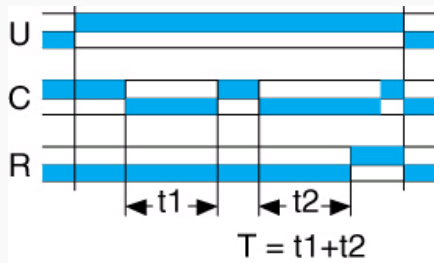


**Function Ac**

Timing after closing and opening of control contact 1 relay

**Curves**

**Function At**

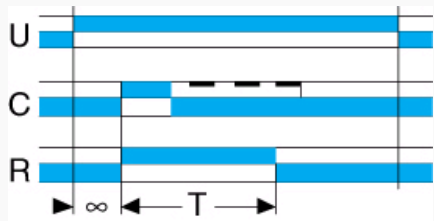


**Function At**

Timing on energisation with memory 1 relay

**Curves**

**Function B**

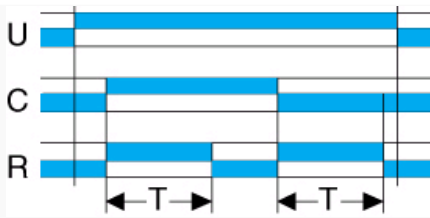


**Function B**

Timing on impulse one shot 1 relay

**Curves**

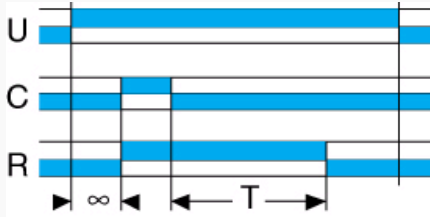
**Function Bw**



**Function Bw**  
Pulse output (adjustable) 1 relay

**Curves**

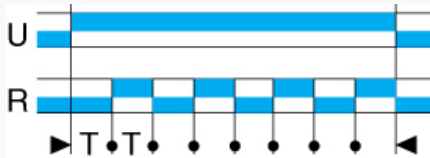
**Function C**



**Function C**  
Timing after impulse 1 relay

**Curves**

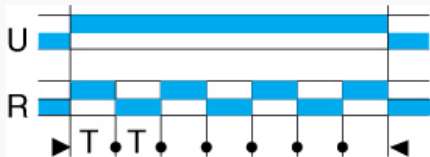
**Function D**



**Function D**  
Flip-flop Pause start 1 relay

**Curves**

**Function Di**



**Function Di**  
Flip-flop Pulse start 1 relay

**Curves**

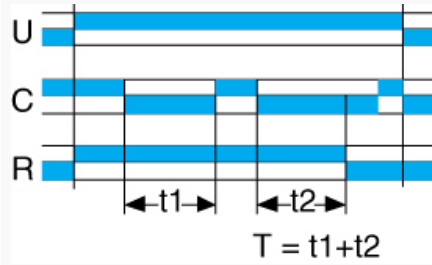
**Function H**



**Function H**  
Timing on energisation 1 relay

## Curves

## Function Ht

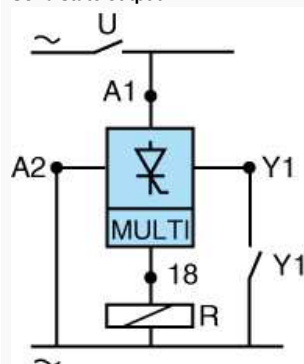


## Function Ht

Delay on energisation with memory 1 relay

## Connections

## Solid state output



## Connections

## CA MUS2

CA MUS2