



17.5 mm DIN rail mounting MUS2 Part number 88827004



- Relay or solid state output
- Multi-function or mono-function
- Multi-range
- Multi-voltage
- Screw or spring terminals
- LED status indicator (relay version)
- Option of connecting an external power supply to the control input
- 3-wire sensor control option

Part numbers

	Type	Functions	Timing	Output	Nominal rating	Connections	Supply voltage
88 827 004	MUS2	A - Ac - At - B - Bw - C - D - Di - H - Ht	0,1s→100h	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
Minimum pulse duration typically (relay version)	30 ms
Minimum pulse duration typically (solid state version)	50 ms
Minimum pulse duration typically (relay version under load)	100 ms
Maximum reset time by de-energisation typically (relay version)	120 ms
Maximum reset time by de-energisation typically (solid state version)	350 ms
Immunity from micro power cuts : typical	< 10 ms

Supply

Multi-voltage power supply	Depending on version
Frequency (Hz)	50 / 60
Operating range	85 →110 % Un 85 →120 % Un for 12 V AC / DC
Operator factor	100 %
Max. absorbed power	32 VA (240 VAC) 1,5 W (240 VDC) 0,6 W (24 VDC) 0,7 VA (12 VAC) 0,7 W (12 VDC)

Output specification

1 or 2 changeover relays, AgNi (cadmium-free)	1 C/O
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 ⁵ 8 A 250 VAC resistive
Mechanical life (operations)	10 x 10 ⁶
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

Solid state output

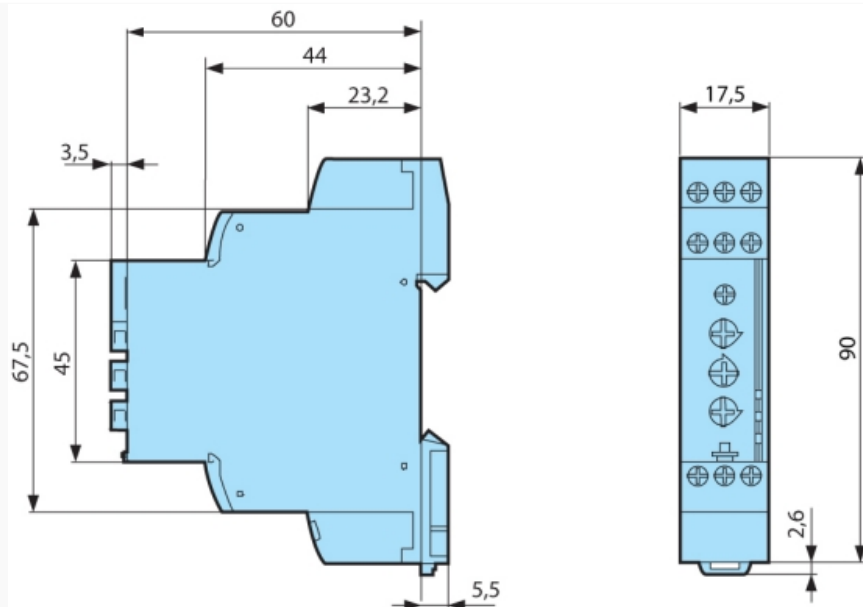
Rated power	0,7 A AC / DC 20 °C (0,5 A UL)
Derating	5 mA/ °C
Maximum admissible current	20 A ≤ 10 ms
Minimum breaking current	10 mA
Leakage current	< 5 mA
Voltage breaking capacity	250 VAC / DC

Maximum voltage drop at terminals	3 wire 4V 2 wire 8V
Electrical life (operations)	10 ⁸
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

General characteristics

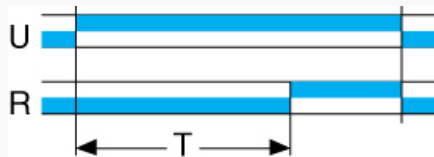
Conformity to standards	IEC/EN 61812-1 IEC/EN 61000-6-1 IEC/EN 61000-6-2 IEC/EN 61000-6-3 IEC/EN 61000-6-4
Certifications	CE, UL, cUL, CSA, GL
Temperature limits use (°C)	-20 → +60
Temperature limits stored (°C)	-30 → +60
Installation category (acc. to IEC/EN 60664-1)	Voltage surge category III
Creepage 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 ² 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 ² (AWG 20 → AWG 12) 2 x 0,5 → 2,5 mm ² (AWG 20 → AWG 14)
Terminal capacity Multi-wire with ferrule	1 x 0,5 → 2,5 mm ² (AWG 20 → AWG 14) 2 x 0,5 → 1,5 mm ² (AWG 20 → AWG 16)
Spring terminals, 2 terminals per connection point - flexible wire	2 x 0,5 → 1,5 mm ² (AWG 20 → AWG 16)
Spring terminals, 2 terminals per connection point - rigid wire	2 x 0,5 → 1,5 mm ² (AWG 20 → AWG 16)
Housing material	Self-extinguishing
Weight : casing 17,5 mm	88827105 (MUR1) : 63 g 88827115 (MAR1) : 63 g 88827125 (MBR1) : 63 g 88827135 (MCR1) : 62 g 88827145 (MHR1) : 63 g 88827150 (MLR4) : 63 g 88827155 (MLR1) : 64 g 88827100 (MUR4) : 62 g 88827103 (MUR3) : 66 g 88827503 (MURc3) : 59 g 88827150 (MLR4) : 63 g 88827185 (MXR1) : 63 g 88827004 (MUS2) : 55 g 88827014 (MAS5) : 53 g 88827044 (MHS2) : 53 g 88827054 (MLS2) : 56 g
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
Insulation resistance according to IEC/EN 60664-1	100 MΩ (500 VDC)

Dimensions (mm)



Curves

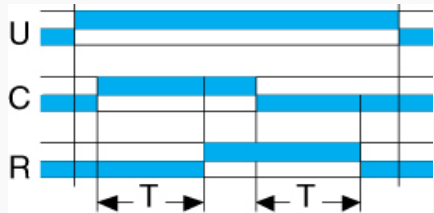
Function A



Function A
Delay on energisation 1 relay

Curves

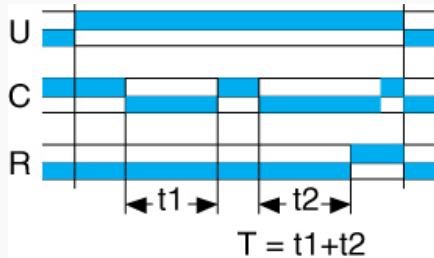
Function Ac



Function Ac
Timing after closing and opening of control contact 1 relay

Curves

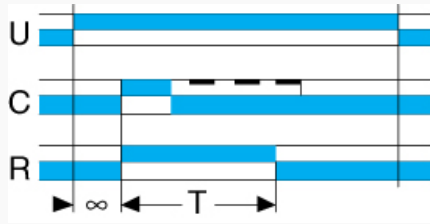
Function At



Function At
Timing on energisation with memory 1 relay

Curves

Function B

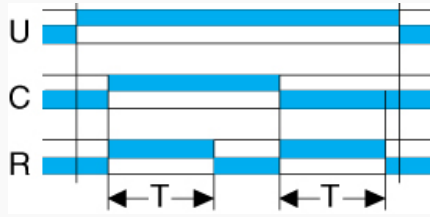


Function B

Timing on impulse one shot 1 relay

Curves

Function Bw

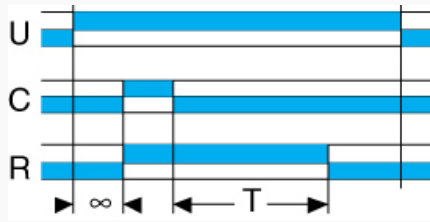


Function Bw

Pulse output (adjustable) 1 relay

Curves

Function C

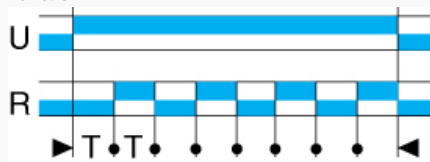


Function C

Timing after impulse 1 relay

Curves

Function D

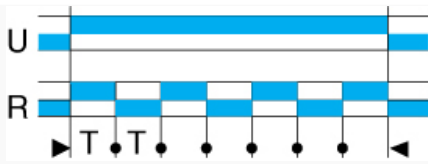


Function D

Flip-flop Pause start 1 relay

Curves

Function Di



Function Di
 Flip-flop Pulse start 1 relay

Curves

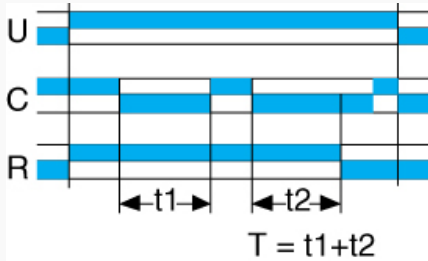
Function H



Function H
 Timing on energisation 1 relay

Curves

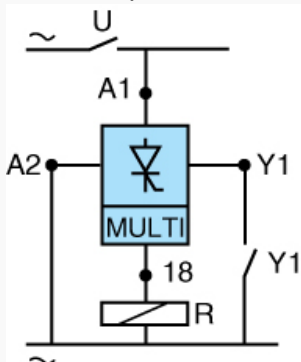
Function Ht



Function Ht
 Delay on energisation with memory 1 relay

Connections

Solid state output





Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

Телефон: 8 (812) 309 58 32 (многоканальный)

Факс: 8 (812) 320-02-42

Электронная почта: org@eplast1.ru

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.