



17.5 mm DIN rail mounting MLR1 Part number 88826155



- 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

	Type	Functions	Timing	Output	Nominal rating	Connections	Supply voltage
88826105	MUR1	A - At - B - C - H - Ht - Di - D - Ac - Bw	0,1s→100h	1 changeover relay	8A	Screw terminals	24 V DC / 24 →240V AC
88826115	MAR1	A - At	0,1s→100h	1 changeover relay	8A	Screw terminals	24 V DC / 24 →240V AC
88826125	MBR1	B	0,1s→100h	1 changeover relay	8A	Screw terminals	24 V DC / 24 →240V AC
88826135	MCR1	C	0,1s→100h	1 changeover relay	8A	Screw terminals	24 V DC / 24 →240V AC
88826145	MHR1	H - Ht	0,1s→100h	1 changeover relay	8A	Screw terminals	24 V DC / 24 →240V AC
88826155	MLR1	Li-L	0,1s→100h	1 changeover relay	8A	Screw terminals	24 V DC / 24 →240V AC
88826100	MUR4	A - At - B - C - H - Ht - Di - D - Ac - Bw	0,1s→100h	1 changeover relay	8A	Screw terminals	12 V AC / DC
88826103	MUR3	A - At - B - C - H - Ht-Di - D - Ac - Bw	0,1s→100h	1 changeover relay	8A	Screw terminals	12→240V AC/DC
88826503	MUR3	A - At - B - C - H - Ht - Di - D - Ac - Bw	0,1s→100h	1 changeover relay	8A	Spring terminals	12 →240V AC/DC
88826185	MXR1	Ad - Ah - N - O - P - Pt - TI - Tt - W	0,1s→100h	1 changeover relay	8A	Screw terminals	24 V DC / 24 →240V AC
88826004	MUS2	A - At - B - C - H - Ht - Di - D - Ac - Bw	0,1s→100h	Solid state	0,7 A	Screw terminals	24 →240V AC
88826014	MAS5	A	0,1s→100h	Solid state	0,7 A	Screw terminals	24 →240V AC/DC
88826044	MHS2	H	0,1s→100h	Solid state	0,7 A	Screw terminals	24 →240V AC
88826054	MLS2	Li - L	0,1s→100h	Solid state	0,7 A	Screw terminals	24 →240V AC

Timing

Timing ranges (7 ranges)	1 s - 10 s - 1 min - 10 min - 1 h - 10 h - 100 h TK2R1: 0.6s - 2.5s - 20s - 160 s
Repetition accuracy with constant parameters	± 0.5% (IEC 1812-1)
Drift Temperature	± 0,05% / °C
Drift Voltage	± 0.2% / V
Display accuracy according to IEC 1812-1	± 10% / 25°C
Minimum pulse duration typically (relay version)	30 ms 50 ms
Minimum pulse duration typically (solid state version)	100 ms
Minimum pulse duration typically (relay version under load)	100 ms
Maximum reset time by de-energisation typically (relay version)	350 ms
Maximum reset time by de-energisation typically (solid state version)	> 10 ms
Immunity from micro power cuts: typical	

Supply

Multi-voltage power supply	Depending on version 50 / 60
Frequency (Hz)	85 to 110% Un
Operating range	(85 to 120% Un for 12V AC/DC) 100%
Operator factor	0,6 W 24 V AC/DC
Max. absorbed power	1,5 W 230 V AC 32 VA 230 V AC

Output specification

1 or 2 changeover relays, AgNi (cadmium-free)	2000 VA/80 W 2000 VA/80 W 8 A AC 8A DC 10 mA / 5 V DC
Rated power	250 V AC/ DC
Maximum breaking current	10 ⁵ operations 8 A 250 V resistive
Minimum breaking current	5x10 ⁶
Voltage breaking capacity	2.5 kV/1 min / 1 mA / 50 Hz
Electrical life (operations)	5 kV, wave 1.2 / 50 μs
Mechanical life (operations)	
Breakdown voltage acc. to IEC 1812-1	0,7 A AC/DC
Impulse voltage acc. to IEC 664-1, IEC 1812-1	20 °C (0,5 A UL)

Solid state output

Rated power	5 mA / °C 20 A ≤ 10ms 10 mA
Derting	
Maximum admissible current	
Minimum breaking current	

Leakage current	< 5 mA
Voltage breaking capacity	250 V AC/ DC
Maximum voltage drop at terminals	3 wire 4V - 2 wire 8V
Electrical life (operations)	10 ⁸ 10 ⁸
Mechanical life (operations)	2.5 kV to 1 mA / 1 min
Breakdown voltage acc. to IEC 664, IEC 255-5	Volt-free contact
Input type	3-wire PNP output control option residual voltage: 0.4V whatever the timer power supply

General characteristics

Conforming to standards IEC 1812-1, EN 50081-1/2, EN 50082-1/2, LV directives (73/23/EEC + 93/68/EEC (CE marking) + EMC (89/336/EEC + IEC 669-2-3 (17,5 mm))	<ul style="list-style-type: none"> UL - CSA - cUL
Approvals	-20 →+60-30 →+60
Temperature limits use (°C)	Voltage surge category
Temperature limits stored (°C)	4 kV / 3
Installation category (acc. to IEC 664-1)	IP20IP40
Creepage distance and clearance acc. to IEC 664-1	IP50
Protection (IEC 529)	f = 10 55 Hz A = 0,35 mm 93% sans condensation
Degree of protection acc. to IEC 529 Front face (except Tk2R1)	
Vibration resistance acc. to IEC 68-2-6	Level III (Air 8 KV / Contact 6 KV)
Relative humidity no condensation acc. to IEC 60068-2-3	Level III 10V/m (80 MHz to 1 GHz)
Electromagnetic compatibility - Immunity to electrostatic discharges acc to IEC 1000-42	Level III (direct 2kV / Capacitive coupling clamp 1 KV)
Immunity to electrostatic fields acc. ENV 50140/204 (IEC 61000-4-3)	Level III (2 KV / common mode 2 KV/residual current mode 1KV)
Immunity to rapid transient bursts acc. to IEC 61000-4-4	Level III (10V rms: 0.15 MHz to 80 MHz)
Immunity to shock waves on power supply acc. to IEC 61000-4-5	30%/10 ms 60%/100 ms > 95%/5 s
Immunity to radio frequency in common mode acc. to ENV (IEC 61000-4-6)	
Immunity to voltage dips and breaks acc. to IEC 1000-4-11	Class B 35mm
Mains-borne and radiated emissions acc. to EN 55022 (EN 55011 Group 1)	2 x 2,5 mm ² 2 x 1,5 mm ²
Fixing: Symmetrical DIN rail (EN 50022)	
Connection capacity - without ferrule	1,5 mm ²
Connection capacity - with ferrule	2,5 mm ²
Spring terminals, 2 terminals per connection point - flexible wire	Self-extinguishing
Spring terminals, 2 terminals per connection point - rigid wire	60g 90g 80g
Housing material	
Weight: casing 17,5 mm	
Weight: casing 22,5 mm	
Weight: plug-in casing	

Display

Visualisation des états par 1 LED

- Verte clignotante sous tension

Indication du fonctionnement LED verte

Flashes brefs :

- minuterie sous tension, pas de temporisation en cours (sauf Di-D et Li-L) *

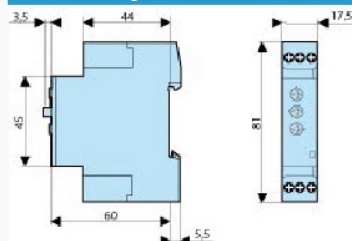
Clignotement :

- temporisation en cours

Allumage permanent :

- relais enclenché, pas de temporisation en cours

Dimension Diagram :



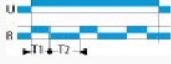
Curves : Function L



Function L

Double temporisation

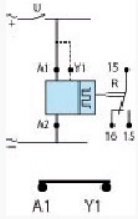
Curves : Function Li



Function Li

Asymmetrical recycler
Pulse start

: 1 changeover relay output



Functions

Li-L