

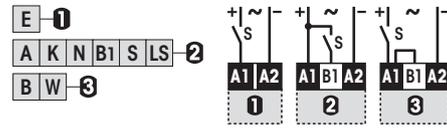
# CIM1, CIM1R

Multifunction | 24-240 V AC / DC



<b>Maximum contact load</b>	<b>16 A / 250 V AC-1 16 A / 24 V DC-1</b>
<b>Recommended minimum contact load</b>	<b>10 mA / 10 V</b>

**Time functions and related connection diagrams** (Function diagrams: refer to page 148)  
The functions are selectable by rotary switch



**LED function table:**

LED	Relay	Time run
OFF	OFF	NO
Continuous ON	ON	NO
Short blinking	OFF	YES
Long blinking	ON	YES

### Time data

7 partial time ranges, $t_{max}$ (rotary switch)	0.6, 6, 60 s / 6, 60 min / 6, 60 h
Fine adjustment range (rotary knob)	$t_{min} \dots t_{max}$ , 0.5 ... 6
Time range tolerance	$t_{min}$ : -5 % ... +0 % / $t_{max}$ : -0 % ... +5 %
Repetition accuracy	± 0.1 % or DC: 2 ms / AC: 10 ms
Response time, power on, on A1	≤ 45 ms
Min. trigger pulse on B1	20 ms (AC / DC)
Reset time B1 (AC/DC)	≤ 30 ms
Voltage failure buffering (50 / 60 Hz)	≥ 20 ms

### Contacts

Material CIM1 / CIM1R / Type	AgNi / 1 CO, micro disconnection, zero crossing
Rated operational current at 40 °C / 60 °C	16 A / 13 A
Max. inrush current	30 A
Max. switching voltage AC-1	250 V
Max. AC load AC-1 (Fig.1)	4 kVA
Max. DC load DC-1 30 V / 250 V (Fig.2)	240 W / 85 W

### Power supply- and control input

Nominal voltage (A1, B1)	<b>UC 24-240 V (UC = AC / DC)</b>
Operating voltage range	UC 19 ... 250 V
Power consumption	approx. 1 W
Frequency range	15 ... 60 Hz
Allowed DC residual current into B1	≤ 0.5 mA
AC Neon lamp residual current into B1	≤ 10 mA
Trigger threshold voltage on B1, AC / DC	15 / 17 V

### Insulation

Test voltage open contact	1 kV rms / 1 min
Test voltage between contacts and control input	2.5 kV rms / 1 min

### Specifications

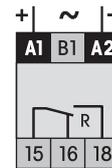
Ambient temperature storage /operation	-40 ... 85 °C / -40 ...60 °C (Railway: -46 °C) (no ice)
Mechanical life of contact	30 x 1'000'000 operations
Conductor cross section	Stranded wire 2.5 mm <sup>2</sup> , 2 x 1.5 mm <sup>2</sup>
Protection degree	IP 20
Nominal screw torque	0.4 Nm
Housing material / weight	Lexan / 70 g
Mounting	TS-35 or Back Panel Mounting

### Product References

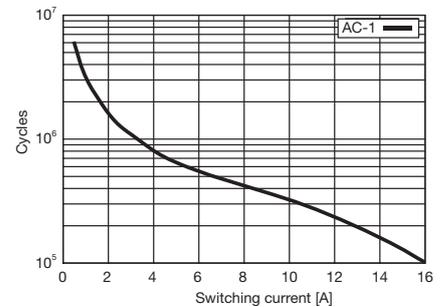
<b>Standard</b>	<b>CIM1/UC24-240V</b>
<b>Railway</b>	<b>CIM1R/UC24-240V</b>



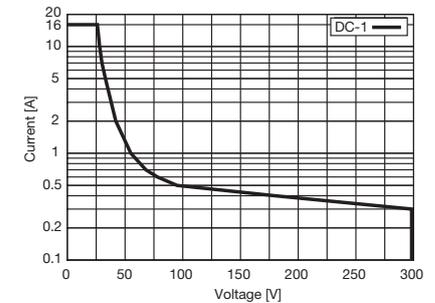
**Connection diagram**



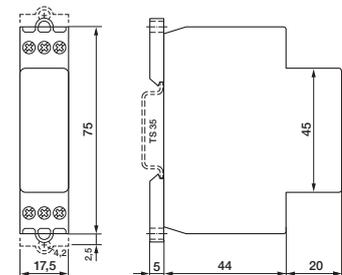
**Fig.1 AC voltage endurance**



**Fig. 2 DC load limit curve**



### Dimensions



### Technical approvals, conformities



IEC/EN 50155, IEC/EN 60730