

# CIM1R

Multifunction | 24 ... 240 V UC | 1 CO



### Time data

Timing functions	fig. 1 1: E 2: A, K, N, B1, S, LS 3: B, W
Timing range	50 ms ... 0.6 s / 0.5 s ... 6 s / 5 s ... 60 s / 0.5 min ... 6 min / 5 min ... 60 min / 0.5 h ... 6 h / 5 h ... 60 h
Timing scale	0.6 s / 6 s / 60 s / 6 min / 60 min / 6 h / 60 h

### Main circuit

Number of contacts	1 CO
Contact material	AgNi
Rated voltage	250 V AC
Switching at zero crossing	yes ( $t_0 > 0.6$ s)
Rated current	16 A
Minimum load	10 mA, 10 V
Inrush current	30 A, 10 ms
Rated load DC	fig. 2
Rated load AC-1	4000 VA
Mechanical endurance (cycles)	30 000 000
Electrical endurance at rated load AC-1 (cycles)	fig. 3

### Control circuit

Nominal voltage	24 ... 240 V UC
Operating voltage range	16.8 ... 250 V UC
Power consumption AC / DC	1.2 VA / 430 mW
Current consumption on supply A1-A2 AC / DC	< 23 mA / < 23 mA
Current consumption on input control B1 AC / DC	< 22 mA / < 22 mA
Threshold voltage on input control B1 AC / DC	13 V / 15 V
Rated frequency	0; 16 ... 63 Hz

### Insulation

Rated test voltage control / main circuit	2.5 kV rms / 1 min
Rated test voltage open contact	1 kV rms / 1 min
Pollution degree	2
Overvoltage category	III

### General data

Ambient temperature storage (no ice)	-40 ... 85 °C
Ambient temperature operation	-40 ... 70 °C
Conductor cross section	2.5 mm <sup>2</sup> , 2 x 1.5 mm <sup>2</sup>
Nominal screw torque	0.4 Nm
Dimensions	fig. 4
Weight	70 g
Protection degree	IP 20
Housing material	PC

### Product reference

Description	Type	24-240
UC supply, Railway version	CIM1R/UC...V	✓

Other voltages on request. Please contact [support@comatreleco.com](mailto:support@comatreleco.com).  
«...» list control circuit voltage to complete product references.

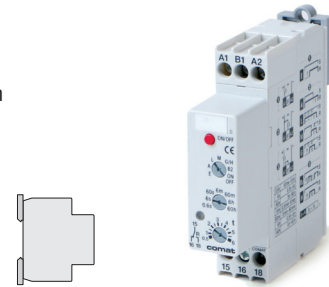


fig. 1. Wiring diagram

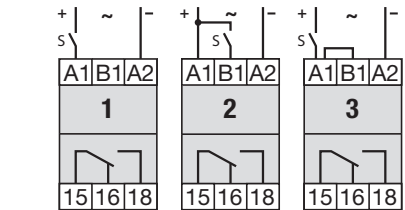


fig. 2. DC load limit curve

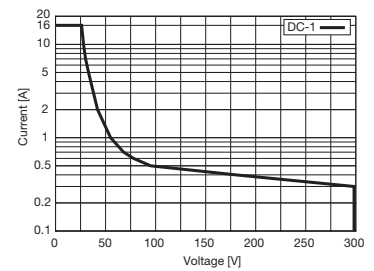


fig. 3. AC voltage endurance

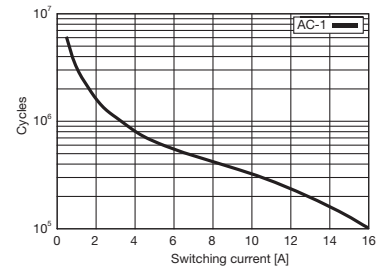
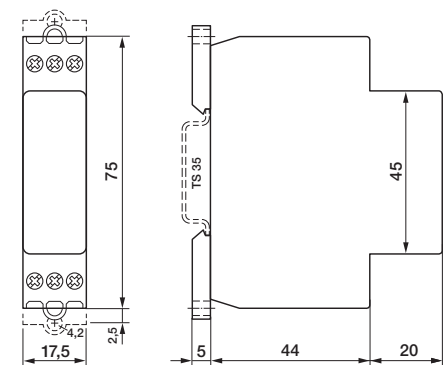


fig. 4. Dimensions (mm)



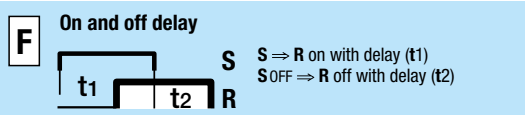
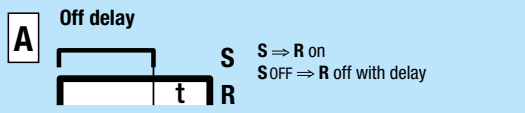
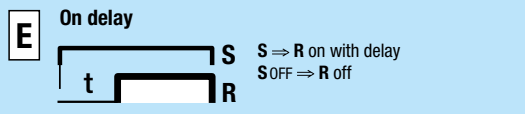
### Standards and approvals

Standards IEC/EN 60947;  
Railway standards EN 50155; EN 45545-2

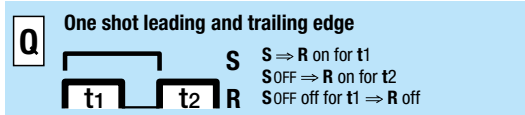
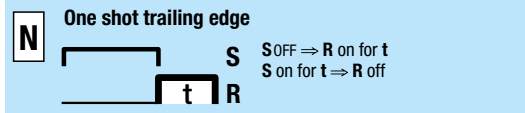
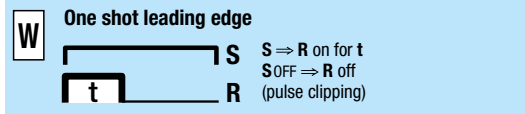


Approvals

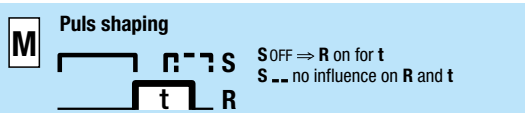
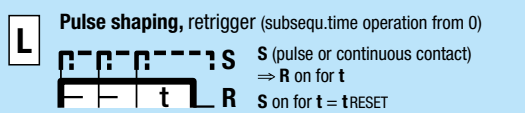
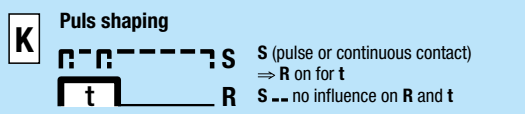
## Delay functions



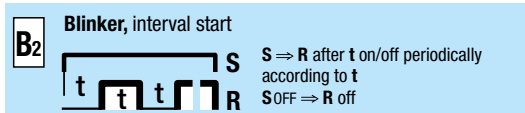
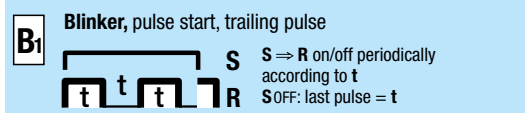
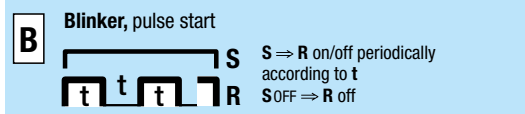
## Shot timing modes



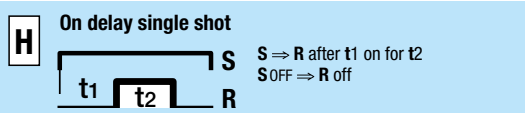
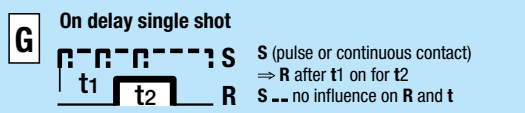
## Puls shaping



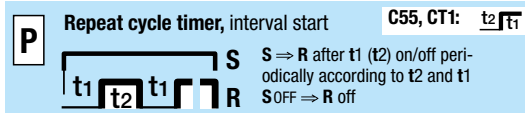
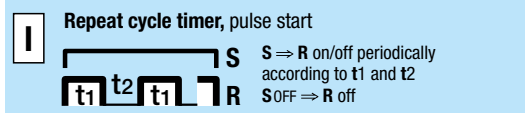
## Blinker functions



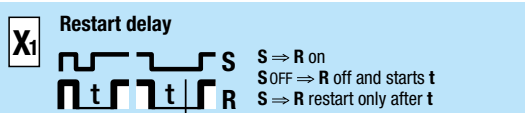
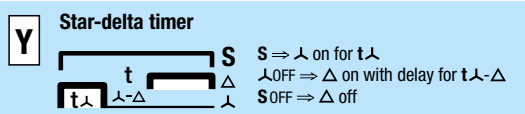
## Delayed pulse



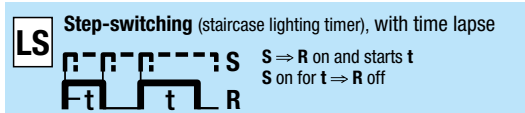
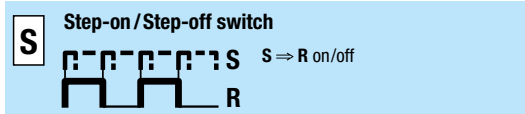
## Repeat cycle timer



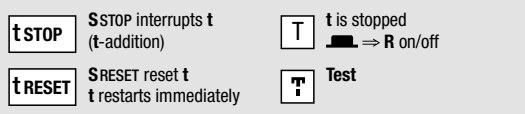
## Special functions



## Special functions



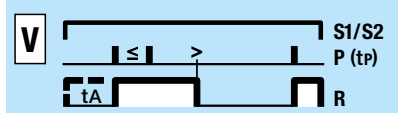
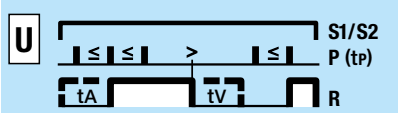
## Stop / Reset



S = Triggering  
R = Output circuit  
⇒ = switches...



## Pulse sequence monitoring



S1/S2 = Monitoring start  
P = Pulse sequence  
tp = Pulse separation

≤: Pulse separation is **smaller** than the time tp  
>: Pulse separation is **larger** than the time tp

Start with S1 = **without** start-up short-out tA  
Start with S2 = start-up short-out tA

tV = settable alarm delay  
delay (tA = tV)

