

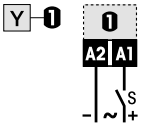
Star - Delta starting time relay, 0.5 ... 60 s
DIN Rail mounting according to DIN 43 880

Type: CY1/... V R

star-Delta starting time relay , adjustable star starting time until 60 s, 2 switch over delay times, 50 ms, 100 ms, LED state indicators for control input and delta-run, also suitable for panel mounting 2 x M4

Maximum contact load	6 A / 250 V AC-1 180 W DC-1
Recommended minimum contact load	10 mA / 10 V

Time functions and related connection diagrams (Function diagrams: refer to page 130)



Time data

2 partial time ranges, t_{max} (DIP switch)	0.5 ... 6 s / 5 ... 60 s
Fine adjustment range (rotary knob)	$t_{min} ... t_{max}$, 0.5 ... 6
Time range tolerance	t_{min} : -20 % ... +0 % / t_{max} : -0 % ... +20 %
Repetition accuracy	± 0.1 %
Switch over delay time (DIP switch)	50 ms / 100 ms (-0 / + 40 %)
Voltage failure buffering	≥ 25 ms

Contacts

Type	2 CO, micro disconnection
Material	AgNi
Rated operational current	6 A
Max. inrush current (10 ms)	30 A
Max. switching voltage AC-1	250 V
Max. AC load AC-1 (Fig.1)	1500 VA
Max. DC load DC-1, 30 V / 250 V (Fig.2)	180 W / 75 W

Control input

	UC 24-60 V	UC 110-240 V
Nominal voltage	20 ... 75 V	90 ... 265 V
Operating voltage range	20 ... 75 V	90 ... 265 V
Power consumption	≤ 1 W	≤ 1 W
Frequency range	50 Hz / 60 Hz	50 Hz / 60 Hz
Threshold voltage AC / DC	≤ 17 V / ≤ 19	≤ 60 V / ≤ 85 V
Max. Inrush current	1.5 A / 100 μs	0.6 A / 100 μs

Insulation

Test voltage open contact	1 kVrms 1 minute
Test voltage between contacts and control input	2 kVrms 1 minute

General Specifications

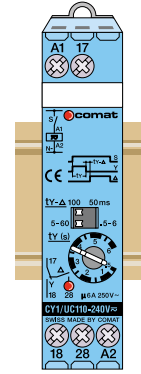
Ambient temperature storage /operation	-40 ... 80 °C / -25 ...60 °C
Mechanical life of contacts	30 x 10 ⁶ operations
Conductor cross section	Stranded wire 2.5 mm ² , 2 x 1.5 mm ²
Ingress protection degree	IP 20
Max. Screw torque	0.4 Nm
Housing material / Weight	Lexan / 76 g

Standard types

UC 50 Hz /60 HZ	CY1/UC24-60V R
	CY1/UC110-240V R

Accessories

Label plate: (replacement)	BZS-DIN 17.5
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Connection diagram

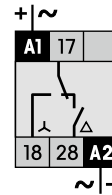


Fig.1 AC electrical endurance

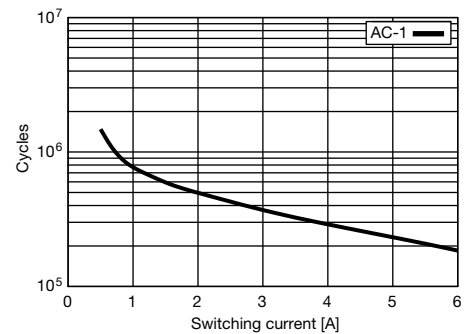
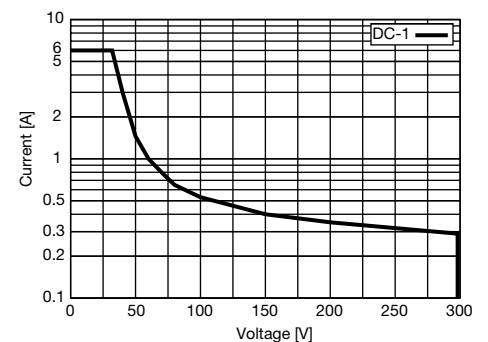
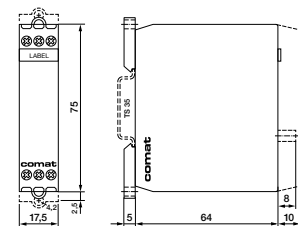


Fig. 2 DC load limit curve



Dimensions [mm]



Technical approvals, conformities

