CY1

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, tmax (DIP switch)  0.5 ... 6 s / 5 ... 60 s
Fine adjustment range (rotary knob)  tmin ... tmax, 0.5 ... 6
Time range tolerance  tmin: -20 % ... +0 % / tmax: -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
Nominal voltage  UC 24-60 V  UC 110-240 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 10⁶ operations
Conductor cross section  Stranded wire 2.5 mm², 2 x 1.5 mm²
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

Connection diagram

Fig.1 AC electrical endurance

Fig. 2 DC load limit curve

Dimensions [mm]

Technical approvals, conformities

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