



Main

Range of product	Zelio Time
Product or component type	Industrial timing relay
Contacts type and composition	1 C/O timed contact, AgNi (cadmium free)
Component name	RE88865
Time delay type	Q
Time delay range	1 h 1 min 1 s 10 h 10 min 10 s 100 h

Complementary

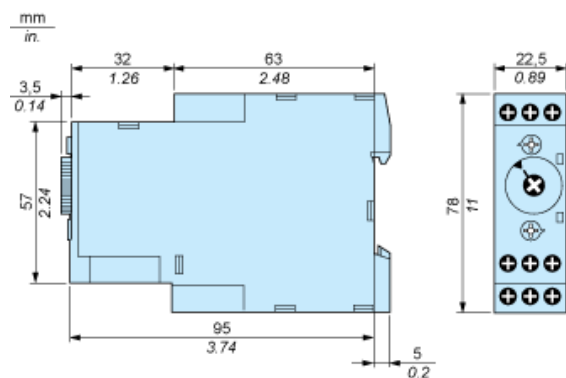
Discrete output type	Relay
Width pitch dimension	22.5 mm
Non-overlap time	100 ms 120 ms 140 ms 20 ms 40 ms 60 ms 80 ms
[Us] rated supply voltage	230...380 V AC at 50/60 Hz
Voltage range	0.85...1.1 Us
Connections - terminals	Screw terminals, clamping capacity: 2 x 2.5 mm ² without cable end Screw terminals, clamping capacity: 2 x 1.5 mm ² with cable end
Housing material	Self-extinguishing
Repeat accuracy	+/- 0.5 % conforming to IEC 61812-1
Temperature drift	+/- 0.05 %/°C
Voltage drift	+/- 0.2 %/V
Setting accuracy of time delay	+/- 10 % of full scale at 25 °C conforming to IEC 61812-1
Minimum pulse duration	30 ms 100 ms under load
Maximum reset time	100 ms on de-energisation
On-load factor	100 %
Breaking capacity	2000 VA
Breaking capacity	80 W
Minimum switching current	10 mA
Maximum switching current	8 A
Maximum switching voltage	250 V
Electrical durability	100000 cycles 8 A at 250 V resistive
Mechanical durability	5000000 cycles
[Uimp] rated impulse withstand voltage	5 kV for 1.2...50 µs conforming to IEC 61812-1 5 kV for 1.2...50 µs conforming to IEC 60664-1
Marking	CE
Creepage distance	4 kV/3 conforming to IEC 60664-1
Surge withstand	2 kV (common mode) conforming to IEC 61000-4-5 level 3 1 kV (differential mode) conforming to IEC 61000-4-5 level 3
Mounting support	35 mm symmetrical mounting rail conforming to EN 50022

Local signalling	LED indicator green pulsing: relay energised, no timing in progress LED indicator green on steady: relay energised, no timing in progress LED indicator green flashing: timing in progress
Product weight	0.09 kg

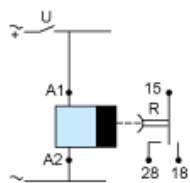
Environment

Immunity to microbreaks	> 10 ms
Dielectric strength	2.5 kV 1 mA/1 minute 50 Hz conforming to IEC 61812-1
Standards	73/23/EEC 89/336/EEC 93/68/EEC EN 50081-1/2 EN 50082-1/2 IEC 60669-2-3 IEC 61812-1
Product certifications	CSA CULus GL
Ambient air temperature for operation	-20...60 °C
Ambient air temperature for storage	-30...60 °C
IP degree of protection	IP50 (front face) conforming to IEC 60529 IP40 (housing) conforming to IEC 60529 IP20 (terminal block) conforming to IEC 60529
Vibration resistance	0.35 mm (f = 10...55 Hz) conforming to IEC 60068-2-6
Relative humidity	93 % without condensation conforming to IEC 60068-2-3
Resistance to electrostatic discharge	8 kV (in air) conforming to EN/IEC 61000-4-2 level 3 6 kV (in contact) conforming to EN/IEC 61000-4-2 level 3
Resistance to electromagnetic fields	10 V/m, 80 MHz to 1 GHz conforming to IEC 61000-4-3 level 3 10 V/m, 80 MHz to 1 GHz conforming to ENV 50140/204 level 3
Resistance to fast transients	2 kV, direct conforming to IEC 61000-4-4 level 3 1 kV, capacitive connecting clip conforming to IEC 61000-4-4 level 3
Immunity to radioelectric fields	10 V (0.15...80 MHz) conforming to ENV 50141 (IEC 61000-4-6)
Immunity to voltage dips	95 % / 5 s conforming to IEC 61000-4-11 60 % / 100 ms conforming to IEC 61000-4-11 30 % / 10 ms conforming to IEC 61000-4-11
Disturbance radiated/conducted	Class B conforming to EN 55022 (EN 55011 group 1)

Width 22.5 mm



Wiring Diagram



Function Q: Star-Delta Starting

Description

On energisation, the star contact closes instantaneously during the timing period T . At the end of the timing period, the star contact opens. At the end of the timing period T_i (interswitching time), while the contact is open, the delta contact closes and remains in this position.



Legend

 Relay de-energised

 Relay energised

 Output open

 Output closed

C Control contact

G Gate

R Relay or solid state output

R1/ 2 timed outputs

R2

R2 inst. The second output is instantaneous if the right position is selected

T Timing period

Ta Adjustable On-delay

-

Tr Adjustable Off-delay

-

U Supply