



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

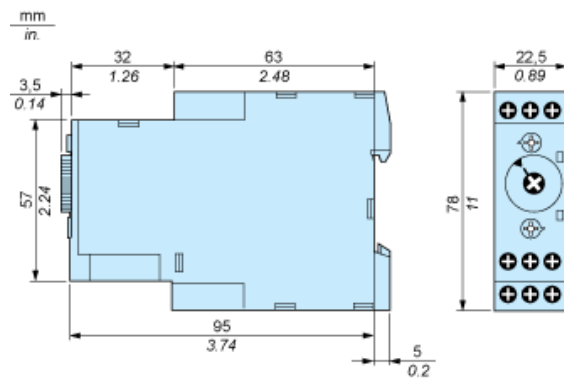
Discrete output type	Relay
Width pitch dimension	22.5 mm
Non-overlap time	100 ms 120 ms 140 ms 20 ms 40 ms 60 ms 80 ms
[Us] rated supply voltage	24...240 V AC at 50/60 Hz 24 V DC
Voltage range	0.85...1.1 Us
Connections - terminals	Screw terminals, clamping capacity: 2 x 2.5 mm ² without cable end Screw 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 %
Maximum power consumption	32 VA 240 V
Maximum power consumption	1.5 W 240 V 0.6 W 24 V
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

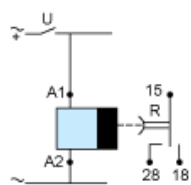
Environment

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

T Timing period

Ta Adjustable On-delay

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Tr Adjustable Off-delay

-

U Supply