

## Timing characteristics

<b>Repeat accuracy</b> (with constant parameters)	Conforming to IEC 1812-1		± 0.5 %
<b>Drift</b>	Temperature		± 0.05 % / °C
	Voltage		± 0.2 % / V
<b>Setting accuracy at full scale</b>	Conforming to IEC 1812-1		± 10 % at 25 °C
<b>Minimum duration of control impulse</b>	Typical	<b>ms</b>	50
<b>Maximum reset time by de-energisation</b>	Typical	<b>ms</b>	350
<b>Immunity time to microbreaks</b>	Typical	<b>ms</b>	> 10




## Supply characteristics

<b>Multivoltage supply</b>			Depending on version, see pages 24501/4 and 24501/5	
<b>Frequency</b>		<b>Hz</b>	50/60	
<b>Operating range</b>			85...110 % Un	
<b>On-load factor</b>			100 %	
<b>Maximum power consumption</b>	Depending on model	--- 24 V	<b>W</b>	0.6
		--- 240 V	<b>W</b>	1.5
		~ 240 V	<b>VA</b>	32

## Output characteristics

<b>Output type</b>			Solid state
<b>Breaking capacity</b>		<b>A</b>	~--- 0.7 at 20° C (0.5 A UL)
<b>Derating</b>		<b>mA</b>	5 / °C
<b>Maximum permissible current</b>		<b>A</b>	20 ≤ 10 ms
<b>Minimum breaking current</b>		<b>mA</b>	10
<b>Leakage current</b>		<b>mA</b>	< 5
<b>Maximum switching voltage</b>		<b>V</b>	~--- 250
<b>Typical voltage drop at terminals</b>			3-wire 4V - 2-wire 8V
<b>Electrical life</b>			10 <sup>8</sup> operations
<b>Mechanical life</b>			10 <sup>8</sup> operations
<b>Dielectric strength conforming to IEC 664, IEC 255-5</b>		<b>kV</b>	2.5 at 1 mA / 1 min

## Display characteristics

<b>State indication by 1 LED</b>	Green		Operating status indication:  Pulsing : relay energised, no timing in progress (except Di-D and Li-L)  Flashing : timing in progress  On steady : relay energised, no timing in progress
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## Input characteristics

<b>Input type</b>		<b>V</b>	Volt-free contact (no potential) Control possible by 3-wire sensor with PNP output, maximum residual voltage : 0.4 V whatever the supply voltage of the timer
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# Zelio Time - timing relays

Modular relays, solid state output  
width 17.5 mm

General characteristics			
<b>Conforming to standards</b>			IEC 1812-1, EN 50081-1/2, EN 50082-1/2, LV directives (73/23/EEC + 93/68/EEC (CE marking) + EMC (89/336/EEC + IEC 669-2-3)
<b>Approvals</b>			c UL us, CSA
<b>Temperature limits</b>	Operation	°C	- 20...+ 60
	Storage	°C	- 30...+ 60
<b>Creepage distance and clearance</b>	Conforming to IEC 60664-1	kV	4 kV/3
<b>Degree of protection conforming to IEC 529</b>	Terminal block		IP 20
	Enclosure		IP 40
	Panel-mounted		IP 50
<b>Vibration resistance</b>	Conforming to IEC 68-2-6		f = 10...55 Hz A = 0.35 mm
<b>Relative humidity without condensation</b>	Conforming to IEC 68-2-3		93 %
<b>Electromagnetic compatibility</b>	Immunity to electrostatic discharge, conforming to IEC 1000-4-2		Level III (Air 8 kV/Contact 6 kV)
	Immunity to electromagnetic fields, conforming to ENV 50140/204 (IEC 1000-4-3)		Level III 10 V/m : (80 MHz...1 GHz)
	Immunity to fast transients in bursts, conforming to IEC 1000-4-4		Level III (direct 2 kV / capacitive connecting clip 1 kV)
	Immunity to surges on the power supply conforming to IEC 1000-4-5		Level III (common mode 2 kV / differential mode 1 kV)
	Immunity to radio frequency interference in common mode conforming to ENV 50141 (IEC 1000-4-6)		Level III (10 V rms : 0.15...80 MHz)
	Immunity to voltage dips and breaks conforming to IEC 1000-4-11		30 % / 10 ms
			60 % / 100 ms >
	Radiated and mains conducted disturbance conforming to EN 55022 (EN 55011 Group 1)		Class B
<b>Mounting method</b>	Symmetrical mounting rail (EN 50022)	mm	35
<b>Clamping capacity</b>	Without cable end	mm <sup>2</sup>	2 x 2.5
	With cable end	mm <sup>2</sup>	2 x 1.5
<b>Spring terminals, 2 terminals per connection point</b>	Flexible cable	mm <sup>2</sup>	1.5
	Solid cable	mm <sup>2</sup>	2.5
<b>Enclosure material</b>			Self-extinguishing

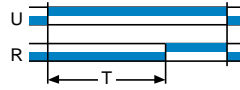
**Solid state output**

- Multifunction or single function
- Multi-range (7 switchable ranges)
- Multivoltage
- Solid state output: 0.7 A - 250 V (0.5 A UL)
- Screw terminals
- State indication by 1 LED

**Function diagrams**

**Function A**

Delay on energisation



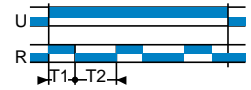
**Function H**

Timing on energisation  
Pulse-on energisation



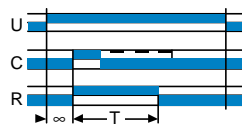
**Function Li**

Asymmetrical recycler  
Pulse start



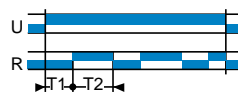
**Function B**

Timing on impulse, one shot



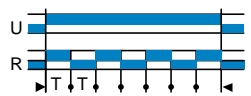
**Function L**

Asymmetrical recycler  
Start after pause



**Function Di**

Symmetrical flasher, start  
with output in operating  
position



**References**

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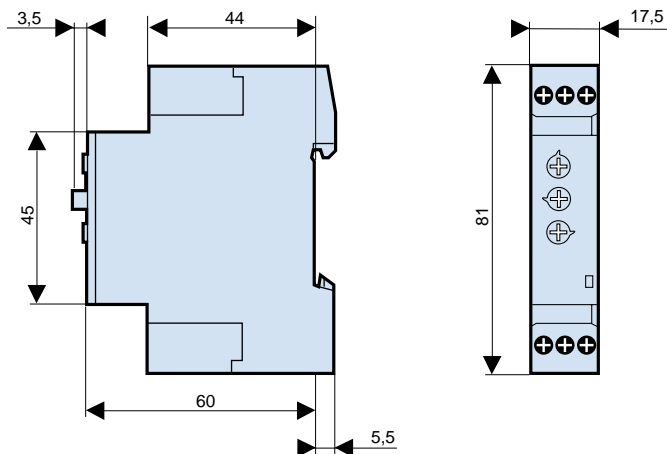
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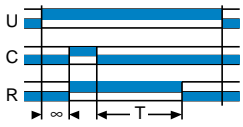
<b>Connection</b>	Screw terminals	●	●
<b>Functions</b>		<b>Multifunction</b> A - At - B - C - H - Ht - Di - D - Ac - Bw	<b>Single function</b> A
<b>Timing ranges</b>	7 ranges	1 s - 10 s - 1 min - 10 min - 1 h - 10 h - 100 h	
<b>Rated current</b>		0.7 A	0.7 A
<b>Voltages</b>	24...240 V ~ 50/60 Hz	<b>RE 88 826 004</b>	-
	24...240 V ~/DC 50/60 Hz	-	<b>RE 88 826 014</b>
<b>Weight (kg)</b>		0.060	0.060

**Dimensions and connection schemes**

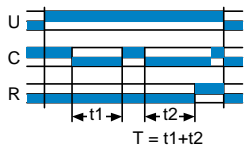
**Dimensions**



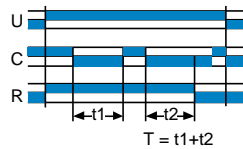
**Function C**  
Off-delay, with control contact



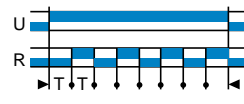
**Function At**  
Timing on energisation with memory



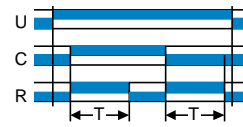
**Function Ht**  
Delay on energisation with memory



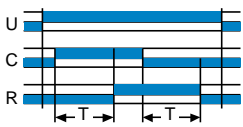
**Function D**  
Symmetrical flasher, start with output in rest position



**Function Bw**  
Pulse output (adjustable)



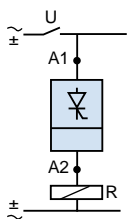
**Function Ac**  
Timing after closing/opening of control contact



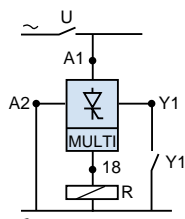
Single function	Dual function
H	Li - L
1 s - 10 s - 1 min - 10 min - 1 h - 10 h - 100 h	
0.7 A	0.7 A
RE 88 826 044	RE 88 826 054
-	-
0.060	0.060

**Connection schemes**

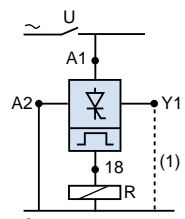
Functions A, H



Function U



Functions L, Li



(1) Link A2-Y1 for function L only.