

Display characteristics			
Number of digits			4
Digit height	mm		8
Timing characteristics			
Repeat accuracy (including temperature drift)			$\pm 0.005\% \pm 20\text{ ms}$ ($\pm 0.005\% \pm 50\text{ ms}$, if timing starts with ON)
Full scale setting accuracy			$\pm 0.05\% \pm 20\text{ ms}$
Reset time	By de-energisation	s	≤ 0.05
	By control contact	s	≤ 0.05
	By manual reset	s	≤ 0.05
Input characteristics			
Control and reset input by contact	Solid state PNP Level 0	V	0...1
	Level 1	V	4...30
Impedance		K Ω	10, $\pm 10\%$
Minimum duration of control impulse		ms	50
Output characteristics			
Rated current		A	$\sim 5, \dots 1$
Rated insulation voltage		V	$\sim/\dots 250$
Maximum breaking capacity (on a resistive load)			$\sim 1350\text{ VA} / \dots 30\text{ W}$
Electrical life at I max $\sim 250\text{ V}$ resistive			100 000 operating cycles
Mechanical life			20 million operating cycles

General characteristics			
Functions and EEPROM configuration memory		years	10
Permissible voltage variation			+ 10 ...- 15 %
Immunity to microbreaks		ms	≤ 3
Maximum power consumption	≡ 12 V	W	0.5
	≡ 24 V	W	1
	~ 24 V	VA	1.3
	~ 48 V	VA	4
	~ 115 V	VA	8
	~ 230 V	VA	17
Temperature limits	Operation	°C	- 10...+ 50
	Storage	°C	- 25...+ 70
Front panel protection class			Conforming to NFC 20010 - IEC 529 - DIN 40050
Insulation voltage	Conforming to standard VDE 0110 and IEC 225 Group C	V	~ / ≡ 250
Dielectric strength	Conforming to IEC 255-5	kV	3
Test on power supply	Conforming to IEC 801-4 level 3	kV	2
Test on input signal	Conforming to IEC 801-4 level 3	kV	1
Damped oscillatory wave	Conforming to IEC 255-4	kV	3
Impulse voltage	Conforming to IEC 255-5	kV	5
Electrostatic discharge on front panel		kV	15
Front panel degree of protection			IP 65
Fixing	Panel-mounted		By clip
	Base-mounted		On socket
Approvals			c UR us, CSA

References

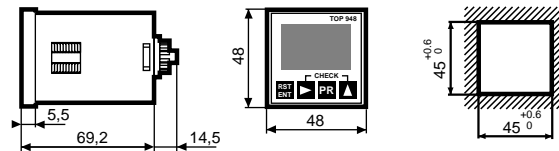


Functions		Multifunction A, Ab, B, C, D, Di, H, T
Timing ranges	7 programmable ranges	99.99 s, 999.99 s, 99 min 59 s, 99.99 min, 999.9 min, 99 h 59 min, 999.9 h
Relay output		1 timed C/O contact
Rated current		5 A
Voltages	--- 12 or 24 V	RE 88 857 502
	\sim 24 or 42...48 V, 50/60 Hz (1)	RE 88 857 504
	\sim 110...127 or 220...240 V, 50/60 Hz	RE 88 857 508
Weight (kg)		0.100
Socket (2)	11-pin	RUZ 1A
	Weight (kg)	0.067

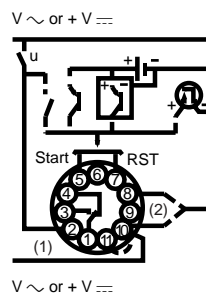
(1) For --- 48V or --- 24 V supply, additional 560 Ω 2 W resistor.
(2) These products are sold in packs of 10.

Dimensions and connection scheme

Dimensions



Connection scheme

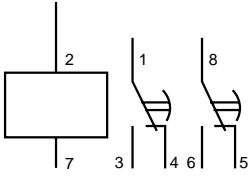


(1) Link between pins 10 and 11 for --- 12 V, \sim 24 V and \sim 110...127 V only.
(2) Link to pin 10 for --- 24 V only.

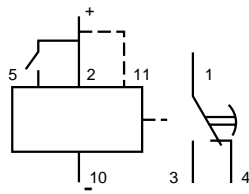
Display characteristics				
Number of digits			4	
Digit height		mm	8	
Timing characteristics				
Repeat accuracy (with constant parameters)			± 0.03 % ± 20 ms	
Full scale setting accuracy			± 0.03 % ± 20 ms	
Minimum duration of control impulse		ms	50	
Maximum reset time by de-energisation	During time delay period	ms	50	
	After time delay period	ms	50	
Output characteristics				
Relay type			RE 88 857 40●	RE 88 857 10● RE 88 857 00●
Rated current		A	~ 5, --- 5	~ 8, --- 8
Maximum switching voltage		V	~ 250, --- 30	~ 250, --- 30
Maximum breaking capacity on resistive load	~	VA	1250	2000
	---	W	120	190
Maximum permissible current		A	15 < 0.01 s	
Minimum current		mA	100	
Electrical life at I max, ~ 250 V resistive			10 ⁵ cycles	
Mechanical life			5 million operating cycles	
General characteristics				
Permissible voltage variation			- 15...+ 10 %	- 15...+ 10 %
Immunity to microbreaks		s	< 0.03	< 0.03
Maximum power consumption	--- 12 V	W	–	0.5
	--- 24 V	W	0.5	0.5
	--- 48 V	W	–	1
	~ 24 V	VA	1	1
	~ 48 V	VA	–	2
	~ 110 V	VA	3.5	3.5
	~ 220 V	VA	11	11
Temperature limits	Operation	°C	- 10...+ 60	
	Storage	°C	- 30...+ 70	
Front panel degree of protection			IP 65	
Insulation			Conforming to standard VDE 0110 and IEC 225 Group C	
Protection class			Conforming to UTE C 20010, IEC 529, DIN 40050	
Conforming to standards			IEC 255, VDE 0435-2021	
Approvals			c UR us, CSA	
Fixing	Panel-mounted		By clip	
	Base-mounted		On socket	
Material			Self-extinguishing UL 94 grade Vo	

Internal schemes

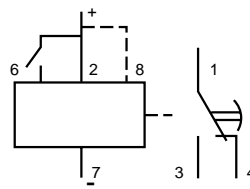
Relay RE 88 857 40●



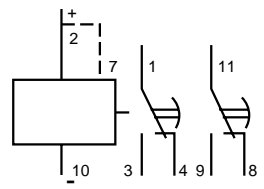
Relay RE 88 857 10●



Relay RE 88 857 00●

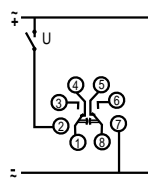


Relay RE 88 857 30●

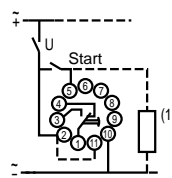


Terminal referencing

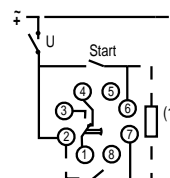
Relay
RE 88 57 40●



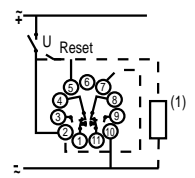
RE 88 857 10●



RE 88 857 00●



RE 88 557 30●



Supply 2-10	-	●	-	●
Supply 2-7	●	-	●	-
Link 2-11 : \sim 12 V or \sim 24 V	-	●	-	-
Link 2-7 : \sim 12 V or \sim 24 V	-	-	-	●
Link 2-8 : \sim 12 V or \sim 24 V	-	-	●	-
2-5 or 2-6 control or reset contact	-	●	●	●
1-3-4 timed output contact	●	●	●	●
8-5-6 timed output contact	●	-	-	-
8-9-11 timed or instantaneous output contact	-	-	-	●

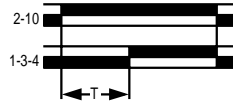
Relay output

- LCD display
- Multifunction or single function
- Multirange
- Multivoltage
- 1 or 2 relay outputs
- Reset function on front panel (RE 88 857 30●)
- Memory in the event of mains power failure (RE 88 857 30●)
- Locking of access to programming (RE 88 857 10● and RE 88 857 00●)
- Upcount or downcount mode
- Internal supply by lithium battery (10 years at 20 °C)

Function diagrams

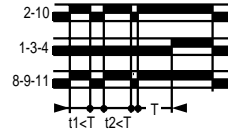
Function A

Delay on energisation
1 timed contact



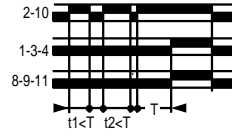
Function A1

Delay on energisation
1 timed contact
1 instantaneous contact



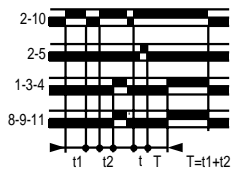
Function A2

Delay on energisation
2 timed contacts



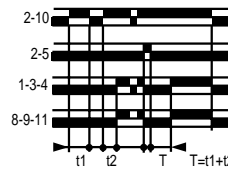
Function AM

Delay on energisation
Memory during the time delay period. Reset



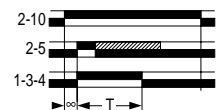
Function AMt

Delay on energisation
Memory during and after the time delay period. Reset



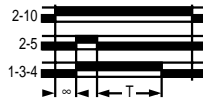
Function B

Timing on impulse, one shot



Function C

Off-delay



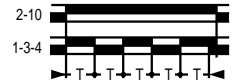
Function D

Flashing relay



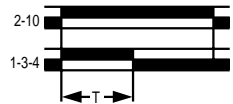
Function Di

Flashing relay



Function H

Timing on energisation



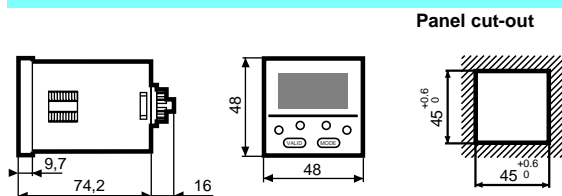
References



Plug-in	8-pin	11-pin	8-pin	11-pin
Functions	Single function A	Multifunction A, B, C, D, Di, H	Multifunction A, B, C, D, Di, H	Multifunction A1, A2, AM, AMt
Timing ranges	99.99 s, 999.9 s, 9999 s, 99 min 59 s, 99.99 min, 999.9 min, 9999 min, 99 h 59 min, 99.99 h, 999.9 h, 9999 h			
Relay output	2 timed C/O contacts	1 timed C/O contact	1 timed C/O contact	1 timed C/O contact 1 timed or instantaneous C/O contact
Rated current	2 x 5 A	8 A	8 A	2 x 8 A
Voltages	$\text{---} 12 \text{ V and } \sim \text{ or } \text{---} 24 \dots 48 \text{ V -}$ $\text{---} 12 \text{ V and } \sim \text{ or } \text{---} 42 \dots 48 \text{ V -}$ $\sim \text{ or } \text{---} 24 \text{ V}$ $\sim \text{ or } \text{---} 24 \text{ V and } \sim 110 \text{ V}$ $\sim \text{ or c } 24 \text{ V and } \sim 110 \dots 240 \text{ V -}$ $\sim \text{ or c } 24 \text{ V and } \sim 220 \dots 240 \text{ V -}$ $\sim 110 \text{ V}$ $\sim 220 \dots 240 \text{ V}$	RE 88 857 103 - - - RE 88 57 05 - - -	RE 88 857 003 - - RE 88 857 005 - - -	- RE 88 857 302 - RE 88 857 307 - RE 88 857 301 - - -
Weight (kg)	0.140	0.100	0.100	0.140
Socket (1)	8-pin	-	8-pin	-
	11-pin	-	11-pin	-
Weight (kg)	0.067	0.067	0.067	0.067

(1) These products are sold in packs of 10.

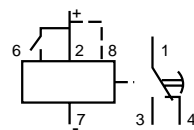
Dimensions



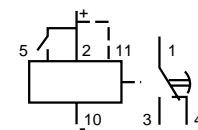
Display characteristics			
Number of digits			4
Digit height	mm		7
Timing characteristics			
Repeat accuracy (with constant parameters)			$\pm 0.03 \% \pm 20 \text{ ms}$
Full scale setting accuracy			$\pm 0.03 \% \pm 20 \text{ ms}$
Minimum duration of control impulse	ms		50
Maximum reset time by de-energisation	During time delay period	ms	50
	After time delay period	ms	50
Output characteristics			
Rated current	A	$\sim 8, \text{---} 8$	
Maximum switching voltage	V	$\sim 250, \text{---} 30$	
Maximum breaking capacity on a resistive load	\sim VA	2000	
	--- W	190	
Maximum permissible current	A	$15 < 0.01 \text{ s}$	
Minimum current	mA	100	
Electrical life at I max $\sim 250 \text{ V}$ resistive			100 000 operating cycles
Mechanical life			5 million operating cycles
General characteristics			
Permissible voltage variation			- 15 ... + 10 %
Immunity to microbreaks	s		< 0.03
Maximum power consumption	$\text{---} 24 \text{ V}$	W	0.5
	$\text{---} 48 \text{ V}$	W	1.5
	$\sim 24 \text{ V}$	VA	1
	$\sim 48 \text{ V}$	VA	1.5
	$\sim 110 \text{ V}$	VA	4
	$\sim 230 \text{ V}$	VA	12
Temperature limits	Operation	$^{\circ}\text{C}$	- 10...+ 60
	Storage	$^{\circ}\text{C}$	- 30...+ 70
Front panel degree of protection			IP 65
Insulation			Conforming to standards VDE 0110 and IEC 225 Group C
Protection class			Conforming to standards UTE C 20010, IEC 529, DIN 40050
Conforming to standards			IEC 255, VDE 0435-2021
Approvals			u UR cs, CSA
Fixing	Panel-mounting		By clip
	Base-mounted		On socket
Material			Self-extinguishing UL 94 grade Vo

Internal schemes

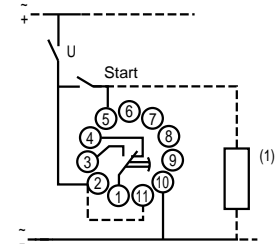
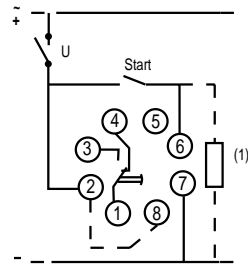
Terminal referencing



8-pin relay



11-pin relay



(1) Another load may be connected.

2-10 or 2-7 supply	•	•
Link (2-11) or (2-8) $\sim / \text{---} 24 \text{ V}$ supply	•	•
2-5 or 2-6 control or reset contact	•	•
1-3-4 timed output contact	•	•

Zelio Time - timing relays

Panel-mounted, plug-in, universal relays

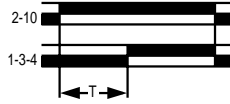
Relay output

- Red illuminated display
- Multifunction
- Multirange
- Multivoltage
- 1 relay output
- Locking of access to programming
- Upcount or downcount mode
- Internal supply by lithium battery (10 years at 20 °C)

Function diagrams

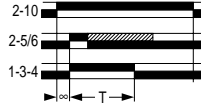
Function A

Delay on energisation
1 timed contact



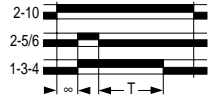
Function B

Timing on impulse, one shot



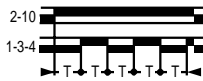
Function C

Off-delay



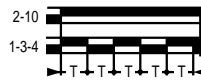
Function D

Flashing relay



Function Di

Flashing relay



Function H

Timing on energisation



References



Plug-in	8-pin	11-pin
Functions	Multifunction A, B, C, D, Di, H	Multifunction A, B, C, D, Di, H
Timing ranges	99.99 s, 999.99 s, 9999 s, 99 min 59 s, 99.99 min, 999.9 min, 9999 min, 99 h 59 min, 99.99 h, 999.9 h, 9999 h	
Relay output	1 timed C/O contact	1 timed C/O contact
Rated current	8 A	8 A
Voltages	\sim or \equiv 24 V and \sim or \equiv 48 V RE 88 857 604 \sim or \equiv 24 V and \sim 110 V, 50/60 Hz RE 88 857 607 \sim or \equiv 24 V and \sim 24...240 V, 50/60 Hz RE 88 857 601	RE 88 857 704 RE 88 857 707 RE 88 857 701
Weight (kg)	0.100	0.100
Socket (1)	8-pin RUZ 1D 11-pin -	- RUZ 1A
	Weight (kg) 0.067	0.067

(1) These products are sold in packs of 10.

Dimensions

