

Multi-function and mono-function timer range

- 80.01 - Multi-function & multi-voltage**
- 80.11 - On-delay, multi-voltage**

- 17.5 mm wide
- Six time scales from 0.1 s to 24 h
- High input/output isolation
- 35 mm rail (EN 60715) mount
- "Blade + cross" - both flat blade and cross head screw drivers can be used to adjust the range and function selectors, the timing trimmer, and to disengage the rail mounting clip
- New multi-voltage versions with "PWM clever" technology

80.01 / 80.11
Screw terminal



FOR UL RATINGS SEE:

"General technical information" page V

For outline drawing see page 6

Contact specification

Contact configuration		1 CO (SPDT)	1 CO (SPDT)
Rated current/Maximum peak current	A	16/30	16/30
Rated voltage/ Maximum switching voltage	V AC	250/400	250/400
Rated load AC1	VA	4000	4000
Rated load AC15 (230 V AC)	VA	750	750
Single phase motor rating (230 V AC)	kW	0.55	0.55
Breaking capacity DC1: 30/110/220 V	A	16/0.3/0.12	16/0.3/0.12
Minimum switching load	mW (V/mA)	500 (10/5)	500 (10/5)
Standard contact material		AgNi	AgNi

Supply specification

Nominal voltage (U _N)	V AC (50/60 Hz)	12...240	24...240
	V DC	12...240	24...240
Rated power AC/DC	VA (50 Hz)/W	< 1.8/< 1	< 1.8/< 1
Operating range	V AC	10.8...265	16.8...265
	V DC	10.8...265	16.8...265

Technical data

Specified time range		(0.1...2)s, (1...20)s, (0.1...2)min, (1...20)min, (0.1...2)h, (1...24)h	
Repeatability	%	± 1	± 1
Recovery time	ms	100	100
Minimum control impulse	ms	50	—
Setting accuracy-full range	%	± 5	± 5
Electrical life at rated load in AC1	cycles	50 · 10 ³	50 · 10 ³
Ambient temperature range	°C	-10...+50	-10...+50
Protection category		IP 20	IP 20

Approvals (according to type)

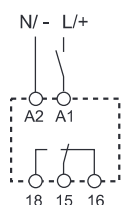


80.01

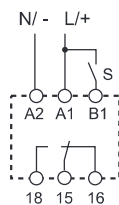


- Multi-voltage
- Multi-function

- AI:** On-delay
- DI:** Interval
- SW:** Symmetrical flasher (starting pulse on)
- BE:** Off-delay with control signal
- CE:** On- and off-delay with control signal
- DE:** Interval with control signal on



Wiring diagram
(without control signal)



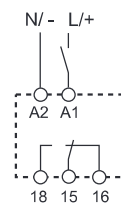
Wiring diagram
(with control signal)

80.11



- Multi-voltage
- Mono-function

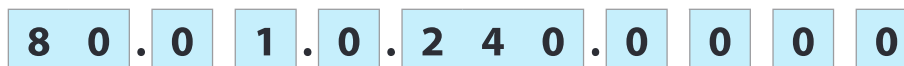
- AI:** On-delay



Wiring diagram
(without control signal)

Ordering information

Example: 80 series, modular timers, 1 CO (SPDT) - 16 A, supply rated at (12...240)V AC/DC.



Series

Type

- 0 = Multi-function (AI, DI, SW, BE, CE, DE)
- 1 = On-delay (AI)
- 2 = Interval (DI)
- 4 = Off-delay with control signal (BE)
- 6 = Power off-delay (True off-delay) (BI)
- 7 = Multi-function with solid state output (AI, DI, SW, BE, CE, DE)
- 8 = Star-delta (SD)
- 9 = Asymmetrical flasher (LI, LE)

Versions

0 = Standard

Supply voltage

- 240 = (12...240)V AC/DC (80.01, 80.91)
- 240 = (24...240)V AC/DC (80.11, 80.21, 80.41, 80.71, 80.82)
- 240 = (24...240)V AC, (24...220)V DC (80.61)

Supply version

0 = AC (50/60 Hz)/DC

No. of poles

- 1 = 1 CO (SPDT)
- 1 = 1 NO (SPST-NO), type 80.71 only
- 2 = 2 NO (DPST-NO), type 80.82 only

Technical data

Insulation						
Dielectric strength	between input and output circuit	V AC	80.01/11/21/41/82/91	80.61	80.71	
	between open contacts	V AC	4000	2500	2500	
Insulation (1.2/50 μs) between input and output		kV	1000	1000	—	
			6	4	4	
EMC specifications						
Type of test	Reference standard	80.01/11/21/41/61/71/91		80.82		
Electrostatic discharge	contact discharge	EN 61000-4-2	4 kV	4 kV		
	air discharge	EN 61000-4-2	8 kV	8 kV		
Radio-frequency electromagnetic field (80 ÷ 1000 MHz)		EN 61000-4-3	10 V/m	10 V/m		
Fast transients (burst) (5-50 ns, 5 kHz) on Supply terminals		EN 61000-4-4	4 kV	4 kV		
Surges (1.2/50 μs) on Supply terminals	common mode	EN 61000-4-5	4 kV	4 kV		
		EN 61000-4-5	4 kV	4 kV		
	on start terminal (B1)	common mode	EN 61000-4-5	4 kV	4 kV	
		differential mode	EN 61000-4-5	4 kV	4 kV	
Radio-frequency common mode (0.15 ÷ 80 MHz) on Supply terminals		EN 61000-4-6	10 V	10 V		
Radiated and conducted emission		EN 55022	class B	class A		
Other data						
Current absorption on signal control (B1)		< 1 mA				
Power lost to the environment	without contact current	W	1.4			
	with rated current	W	3.2			
Screw torque			Nm 0.8			
Max. wire size			solid cable	stranded cable		
			mm ²	1 x 4 / 2 x 2.5		
			AWG	1 x 12 / 2 x 14		

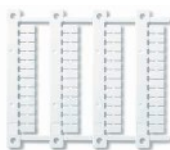
Accessories



020.24

Sheet of marker tags, for types 80.82, plastic, 24 tags, 9 x 17 mm

020.24



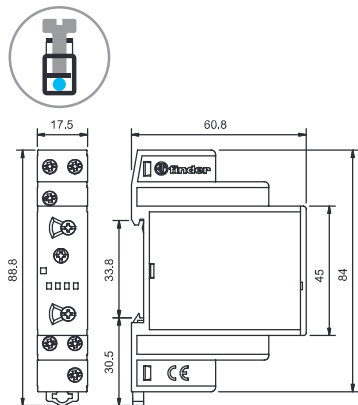
060.48

Sheet of marker tags (CEMBRE'S Thermal transfer printers) for relays types 80.01/11/21/41/61/71 (48 tags), 6 x 12 mm

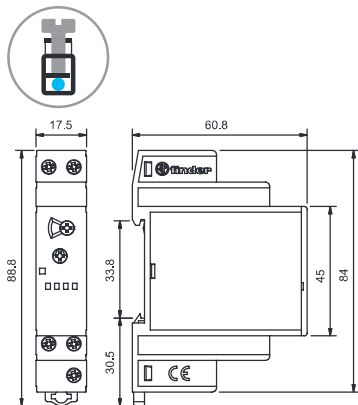
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Outline drawings

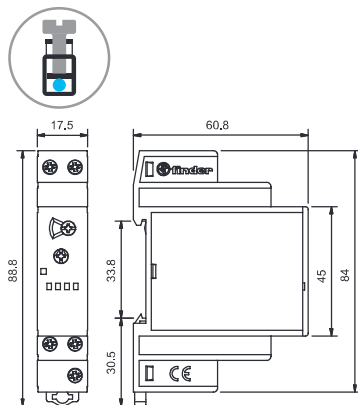
80.01
Screw terminal



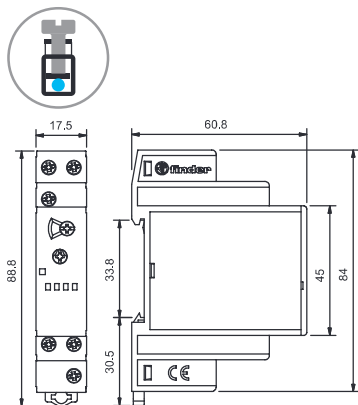
80.11
Screw terminal



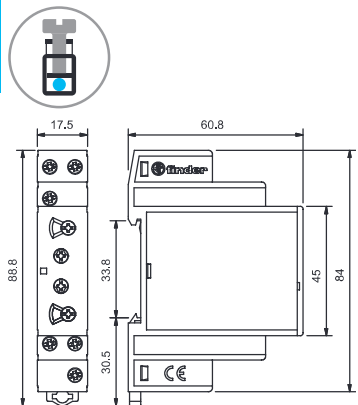
80.21
Screw terminal



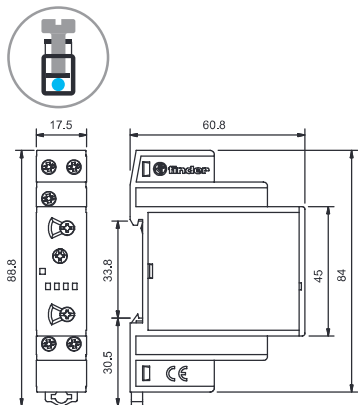
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Screw terminal



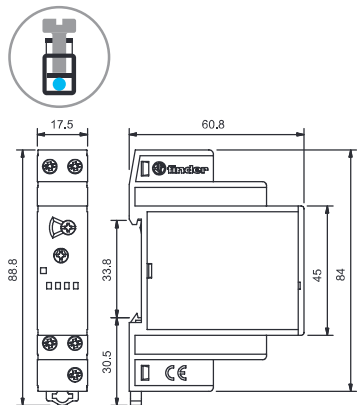
80.91
Screw terminal



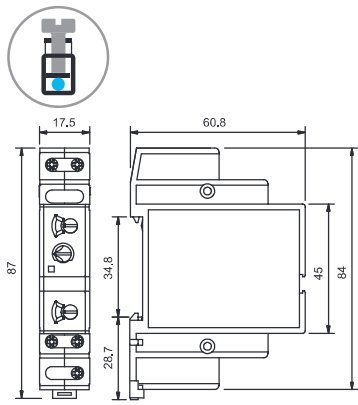
80.71
Screw terminal



80.61
Screw terminal



80.82
Screw terminal



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