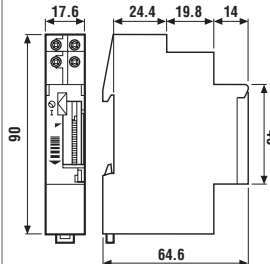
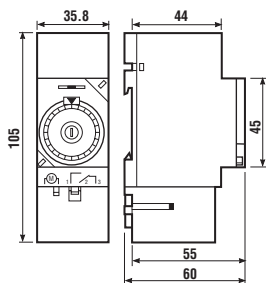


Features
**Mechanical time switches
- daily time setting**

- Type 12.01 - 1 Pole 16 A CO (SPDT)
35.8 mm width
- Type 12.11 - 1 Pole 16 A NO (SPST-NO)
17.6 mm width
- Minimum time interval setting:
30 min (12.01)
15 min (12.11)
- 35 mm rail (EN 50022) mount

12.01
12.11


- Mechanical daily time switch
 - 1 CO (SPDT)
 - 35 mm rail (EN 50022) mount
- Mechanical daily time switch
 - 1 NO (SPST-NO)
 - 35 mm rail (EN 50022) mount



Contact specification			
Contact configuration		1 CO (SPDT)	1 NO (SPST-NO)
Rated current/Maximum peak current	A	16/—	16/30
Rated voltage/Maximum switching voltage V AC		250/—	250/—
Rated load AC1	VA	4,000	4,000
Rated load AC15 (230 V AC)	VA	750	420
Nominal lamp rating:incandescent (230 V)	W	2,000 (NO contact)	2,000
compensated fluorescent (230 V)	W	750 (NO contact)	750
uncompensated fluorescent (230 V)	W	1,000 (NO contact)	1,000
halogen (230 V)	W	2,000 (NO contact)	2,000
Minimum switching load	mW (V/mA)	1,000 (10/10)	1,000 (10/10)
Standard contact material		AgCdO	AgCdO
Supply specification			
Nominal voltage (U _N)	V AC (50/60 Hz)	230	230
	V DC	—	—
Rated power AC/DC	VA (50 Hz)/W	2/—	2/—
Operating range	AC (50 Hz)	(0.85...1.1)U _N	(0.85...1.1)U _N
	DC	—	—
Technical data			
Electrical life at rated load in AC1	cycles	50 · 10 ³	50 · 10 ³
Type of time switch		daily	daily
Programs		48 switching point	96 switching point
Minimum interval setting	min	30	15
Accuracy	s/day	1.5	1.5
Ambient temperature range	°C	-5...+55	-5...+55
Protection category		IP 20	IP 20
Approvals (according to type)			

Features

Electronic digital time switches

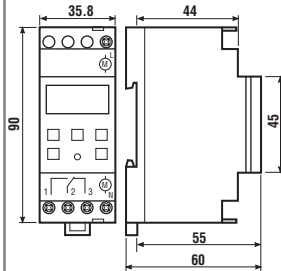
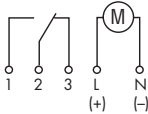
- weekly time setting

- Type 12.21 - 1 Pole 16 A CO (SPDT)
35.8 mm width
- Type 12.22 - 2 Pole 16 A CO (DPDT)
35.8 mm width
- Type 12.71 - 1 Pole 16 A CO (SPDT)
17.6 mm width
- Available for 230 V AC or 24 V AC/DC supply
- Minimum time interval setting - 1 minute
- Internal battery for set-up without supply
- Impulse output function (1...59)s
- Automatic adjustment for daylight saving
- 35 mm rail (EN 50022) mount

12.21



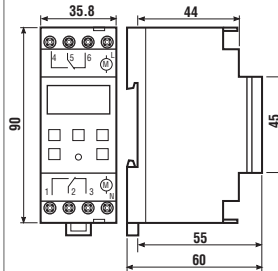
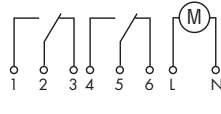
- Digital weekly time switch
- 1 CO (SPDT)
- 35 mm rail (EN 50022) mount



12.22



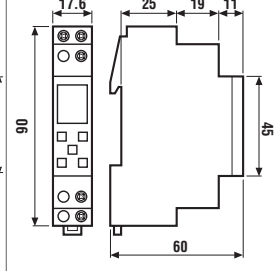
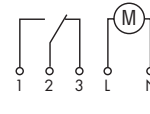
- Digital weekly time switch
- 2 CO (DPDT)
- 35 mm rail (EN 50022) mount



12.71



- Digital weekly time switch
- 1 CO (SPDT)
- 35 mm rail (EN 50022) mount



Contact specification

Contact configuration	1 CO (SPDT)	2 CO (DPDT)	1 CO (SPDT)
Rated current/Maximum peak current A	16/30	16/30	16/30
Rated voltage/Maximum switching voltage V AC	250/—	250/—	250/—
Rated load AC1 VA	4,000	4,000	4,000
Rated load AC15 (230 V AC) VA	750	750	420
Nominal lamp rating:incandescent (230 V) W	2,000 (NO contact)	2,000 (NO contact)	2,000 (NO contact)
compensated fluorescent (230 V) W	420 (NO contact)	420 (NO contact)	750 (NO contact)
uncompensated fluorescent (230 V) W	1,000 (NO contact)	1,000 (NO contact)	1,000 (NO contact)
halogen (230 V) W	2,000 (NO contact)	2,000 (NO contact)	2,000 (NO contact)
Minimum switching load mW (V/mA)	1,000 (10/10)	1,000 (10/10)	1,000 (10/10)
Standard contact material	AgCdO	AgCdO	AgCdO

Supply specification

Nominal voltage (U _N)	V AC (50/60 Hz)	—	230	—	230	—	230
	V AC/DC	24	—	24	—	24	—
Rated power AC/DC VA (50 Hz)/W		1.4/1.4	2/—	1.4/1.4	2/—	1.4/1.4	2/—
Operating range	AC (50 Hz)	(0.9...1.1)U _N	(0.85...1.1)U _N	(0.9...1.1)U _N	(0.85...1.1)U _N	(0.9...1.1)U _N	(0.85...1.1)U _N
	DC	(0.9...1.1)U _N	—	(0.9...1.1)U _N	—	(0.9...1.1)U _N	—

Technical data

Electrical life at rated load in AC1 cycles		50 · 10 ³	50 · 10 ³	50 · 10 ³
Type of time switch		weekly	weekly	weekly
Programs		30	30	30
Minimum interval setting min		1	1	1
Accuracy s/day		1.5	1.5	1.5
Ambient temperature range °C		-5...+55	-10...+55	-5...+55
Protection category		IP 20	IP 20	IP 20

Approvals (according to type)



Ordering information

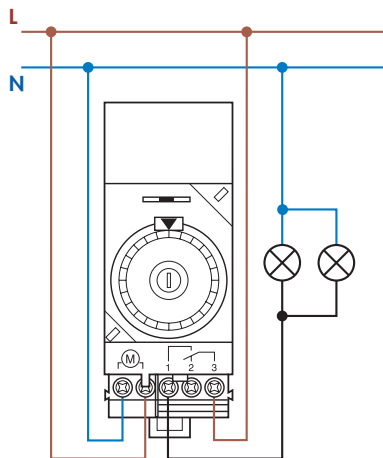
Example: 12 series, mechanical daily time switch, 1 CO (SPDT) 16 A, supply voltage 230 V AC.

1	2	0	1	8	2	3	0	0	0	0
Series			Type			No. of poles			Option	
0 = Daily, 35.8 mm wide 1 = Daily, 17.5 mm wide 2 = Weekly, 35.8 mm wide 7 = Weekly, 17.5 mm wide			1 = 1 CO (SPDT), 16 A 2 = 2 CO (DPDT), 16 A (type 12.22)			0 = With power back-up 1 = Without power back-up (type 12.11)		Supply voltage 024 = 24 V AC/DC 230 = 230 V		Supply version 0 = AC (50/60 Hz)/DC (types 12.21.0.024, 12.22.0.024, 12.71.0.024) 8 = AC (50/60 Hz)

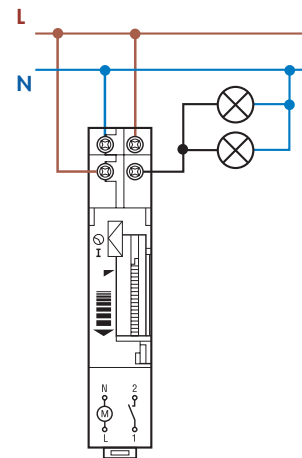
Technical data

Insulation	12.01, 12.11		12.21, 12.22, 12.71		
Dielectric strength between open contacts V AC	1,000		1,000		
Other data	12.01, 12.11		12.21, 12.22, 12.71		
Power back-up	70 h (following 80 h continuous energisation)		6 years after the first operation		
Power lost to the environment					
without contact current W	1.5		2		
with rated current W	2.5		3 (for 1 pole)	4 (for 2 pole)	
⊕ Screw torque Nm	1.2		1.2		
Max. wire size		solid cable	stranded cable	solid cable	stranded cable
	mm ²	1x6 / 2x4	1x6 / 2x2.5	1x6 / 2x4	1x6 / 2x2.5
	AWG	1x10 / 2x12	1x10 / 2x14	1x10 / 2x12	1x10 / 2x14

Wiring diagrams

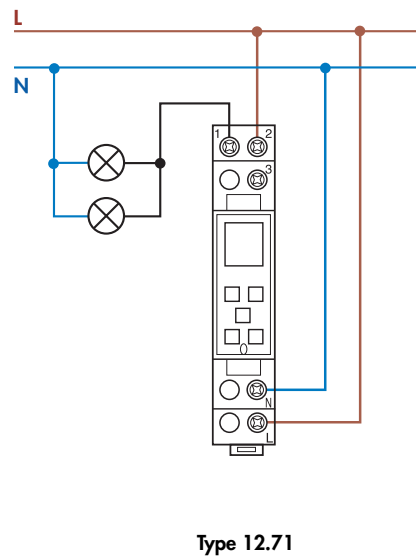
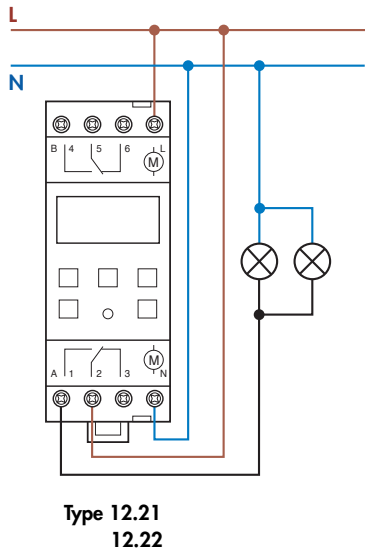


Type 12.01
Selector switch:
⊖ = Permanently OFF
AUTO = Automatic
I = Permanently ON



Type 12.11
Selector switch:
⊖ = Automatic
I = Permanently ON

Wiring diagrams



Accessories

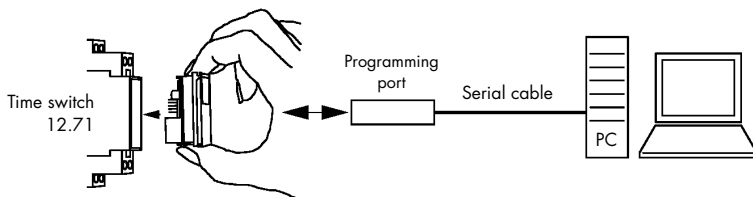
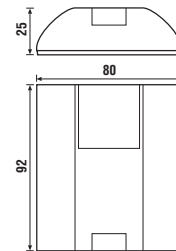


012.00

PC programming kit for type 12.71 contents:
programming port, serial cable and software

012.00

- Power supply: via PC-RS232 serial interface
- Power consumption: < 10 mA
- Ambient temperature: (-5...+35)°C
- Protection category: IP 00



INSTALLATION OF PC-SOFTWARE

- Place the CD in the CD-drive
- Installation should START
- Follow the on-screen instructions
- Choose your language and COM1...COM4 in "setting menu"