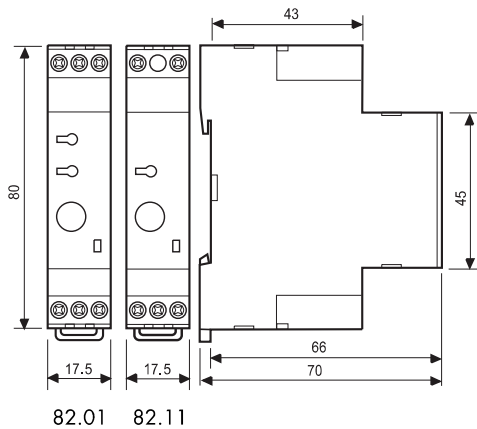


- Mono or multi-function timers
- One module (17.5 mm) wide
- Five functions
- Six time scales, from 0.05s to 10h
- 35 mm rail (EN 50022) mount



82.01

82.11



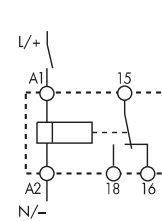
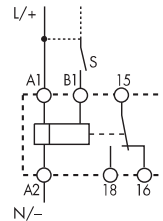
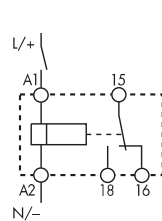
- Multi-function
- Multi-voltage
- 35 mm rail mounting

- Mono-function
- Multi-voltage
- 35 mm rail mounting

A1: ON delay  
 DI: ON pulse  
 SW: Symmetrical recycler:  
 ON start

BE: Signal OFF delay

A1: ON delay



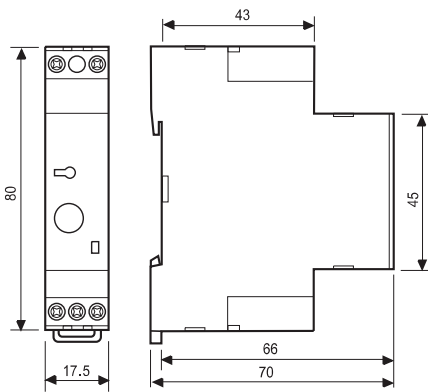
wiring diagram  
(without signal START)

wiring diagram  
(with signal START)

wiring diagram  
(without signal START)

Contact specifications			
Contact configuration		1 CO	1 CO
Rated current/Maximum peak current	A	5/20	5/20
Rated voltage/Maximum switching voltage	V AC	250/400	250/400
Rated load in AC1	VA	1,250	1,250
Rated load in AC15 (230 VAC)	VA	250	250
Single phase motor rating (230 VAC)	kW	0.125	0.125
Breaking capacity in DC1: 30/110/220V A		5/0.3/0.12	5/0.3/0.12
Minimum switching load	mW(V/mA)	300 (10/5)	300 (10/5)
Standard contact material		AgCdO	AgCdO
Supply specifications			
Nominal voltage	V AC(50/60Hz)	24...240	24...240
	V DC	24...48	24...48
Rated power AC/DC	VA (50Hz)/W	5/0.5	5/0.5
Operating range	AC	(0.85...1.1)U <sub>N</sub>	(0.85...1.1)U <sub>N</sub>
	DC	(0.85...1.2)U <sub>N</sub>	(0.85...1.2)U <sub>N</sub>
Technical data			
Specified time range		(0.05...1) s, (0.5...10) s, (0.05...1) min,	(0.5...10) min, (0.05...1) h, (0.5...10) h
Repeatability	%	± 1	± 1
Recovery time	ms	≤ 100	≤ 100
Minimum control impulse	ms	250	250
Setting accuracy-full range	%	± 5	± 5
Electrical life at rated load in AC1	cycles	100 10 <sup>3</sup>	100 10 <sup>3</sup>
Ambient temperature range	C	-20...+50	-20...+50
Protection category		IP 20	IP 20
Approvals: (according to type)			

- Mono or multi-function timers
- One module (17.5 mm) wide
- Five functions
- Six time scales, from 0.05s to 10h
- 35 mm rail (EN 50022) mount

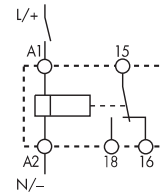
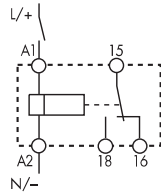

**82.21**
**82.31**


- Mono-function
- Multi-voltage
- 35 mm rail mounting

- Mono-function
- Multi-voltage
- 35 mm rail mounting

DI: ON pulse

SW: Symmetrical recycler: ON start


 wiring diagram  
(without signal START)

 wiring diagram  
(without signal START)

**Contact specifications**

Contact configuration		1 CO	1 CO
Rated current/Maximum peak current	A	5/20	5/20
Rated voltage/Maximum switching voltage	V AC	250/400	250/400
Rated load in AC1	VA	1,250	1,250
Rated load in AC15 (230 VAC)	VA	250	250
Single phase motor rating (230 VAC)	kW	0.125	0.125
Breaking capacity in DC1:	30/110/220V A	5/0.3/0.12	5/0.3/0.12
Minimum switching load	mW[V/mA]	300 (10/5)	300 (10/5)
Standard contact material		AgCdO	AgCdO

**Supply specifications**

Nominal voltage	V AC(50/60Hz)	24...240	24...240
	V DC	24...48	24...48
Rated power AC/DC	VA (50Hz)/W	5/0.5	5/0.5
Operating range	AC	(0.85...1.1)U <sub>N</sub>	(0.85...1.1)U <sub>N</sub>
	DC	(0.85...1.2)U <sub>N</sub>	(0.85...1.2)U <sub>N</sub>

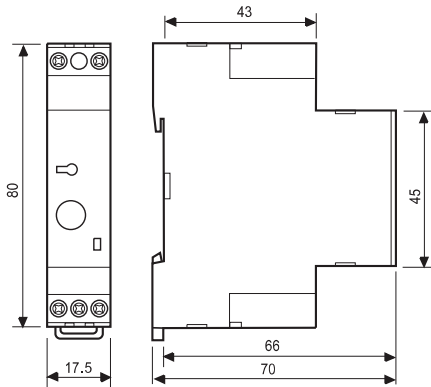
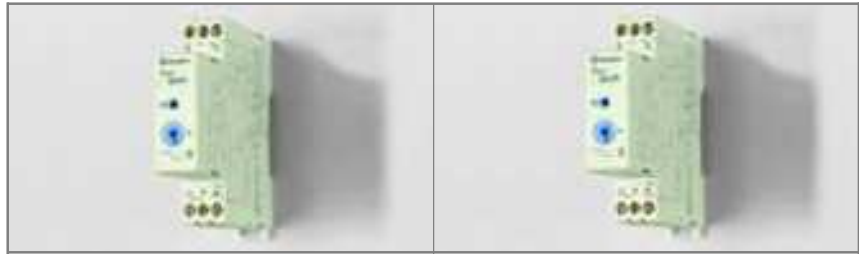
**Technical data**

Specified time range		(0.05...1) s, (0.5...10) s, (0.05...1) min, (0.5...10) min, (0.05...1) h, (0.5...10) h
Repeatability	%	± 1
Recovery time	ms	≤ 100
Minimum control impulse	ms	250
Setting accuracy-full range	%	± 5
Electrical life at rated load in AC1	cycles	100 10 <sup>3</sup>
Ambient temperature range	C	-20...+50
Protection category		IP 20

Approvals: (according to type)

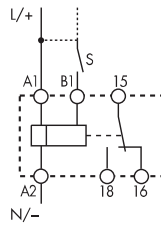


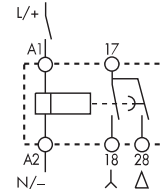
- Mono or multi-function timers
- One module (17.5 mm) wide
- Five functions
- Six time scales, from 0.05s to 10h
- 35 mm rail (EN 50022) mount


**82.41**
**82.82**


- Mono-function
- Multi-voltage
- 35 mm rail mounting

- Mono-function
- Multi-voltage
- 35 mm rail mounting

**BE: Signal OFF delay**

 wiring diagram  
(with signal START)

**SD: Star-Delta**

 wiring diagram  
(without signal START)

Contact specifications			
Contact configuration		1 CO	2 NO
Rated current/Maximum peak current	A	5/20	5/20
Rated voltage/Maximum switching voltage	V AC	250/400	250/400
Rated load in AC1	VA	1,250	1,250
Rated load in AC15 (230 VAC)	VA	250	250
Single phase motor rating (230 VAC)	kW	0.125	0.125
Breaking capacity in DC1: 30/110/220V A		5/0.3/0.12	5/0.3/0.12
Minimum switching load	mW(V/mA)	300 (10/5)	300 (10/5)
Standard contact material		AgCdO	AgCdO
Supply specifications			
Nominal voltage	V AC(50/60Hz)	24...240	24...240
	V DC	24...48	24...48
Rated power AC/DC	VA (50Hz)/W	5/0.5	5/0.5
Operating range	AC	(0.85...1.1)U <sub>N</sub>	(0.85...1.1)U <sub>N</sub>
	DC	(0.85...1.2)U <sub>N</sub>	(0.85...1.2)U <sub>N</sub>
Technical data			
Specified time range		(0.05...1)s, (0.5...10)s, (0.05...1)min, (0.5...10)min, (0.05...1)h, (0.5...10)h	(0.15...3)s, (0.5...10)s, (0.05...1)min, (0.5...10)min
Repeatability	%	± 1	± 1
Recovery time	ms	≤ 100	≤ 100
Minimum control impulse	ms	250	250
Setting accuracy-full range	%	± 5	± 5
Electrical life at rated load in AC1	cycles	100 10 <sup>3</sup>	100 10 <sup>3</sup>
Ambient temperature range	C	-20...+50	-20...+50
Protection category		IP 20	IP 20
Approvals: (according to type)			

## ORDERING INFORMATION

Example: a 82 series, multi-function modular timer, 24 to 48 V DC and 24 to 240 V AC (50/60) Hz supply voltage.

8	2	.	0	1	.	0	.	2	4	0	.	0	0	0	0
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Series —————

Type —————

0 = Multi-function (AI, DI, BE, SW)  
 1 = ON delay (AI)  
 2 = ON pulse (DI)  
 3 = Symmetrical recycler: ON start (SW)  
 4 = Signal OFF delay (BE)  
 8 = Star - delta (SD)

Supply voltage  
 240 = { 24...48 V DC  
 { 24...240 V AC

Supply version  
 0 = AC (50/60 Hz)/DC

No. of poles  
 1 = 1 pole for types 0, 1, 2, 3, 4  
 2 = 2 pole for star - delta

## TECHNICAL DATA

### EMC SPECIFICATIONS

TYPE OF TEST	REFERENCE STANDARD	
ELECTROSTATIC DISCHARGE	- contact discharge	EN 61000-4-2
	- air discharge	EN 61000-4-2
RADIO-FREQUENCY ELECTROMAGNETIC FIELD (80 - 1000 MHz)		EN 61000-4-3
FAST TRANSIENTS (burst) (5-50 ns, 5 kHz) on Supply terminals		EN 61000-4-4
SURGES (1.2/50 µs) on Supply terminals	- common mode	EN 61000-4-5
	- differential mode	EN 61000-4-5
RADIO-FREQUENCY COMMON MODE (0.15 - 80 MHz) on Supply terminals		EN 61000-4-6
RADIATED AND CONDUCTED EMISSION	EN 55022	class B

### OTHER DATA

CURRENT ABSORPTION on signal control (B1)	1 mA		
POWER LOST TO THE ENVIRONMENT			
- without contact current	W	5	
- with rated current	W	6	
MAX WIRE SIZE	solid cable	stranded cable	
	mm <sup>2</sup>	1x4 / 2x2.5	1x4 / 2x1.5
	AWG	1x12 / 2x14	1x12 / 2x16
⊕ SCREW TORQUE	Nm	1	

## TIME SCALES

Type	Function Code	Function	s	s	s	min	min	h	h
			0.05	0.15	0.5	0.05	0.5	0.05	0.5
			1	3	10	1	10	1	10
82.01	AI	ON delay	•	•	•	•	•	•	•
	BE	Signal OFF delay	•	•	•	•	•	•	•
	DI	ON pulse	•	•	•	•	•	•	•
	SW	Symmetrical recycler: ON start	•	•	•	•	•	•	•
82.11	AI	ON delay	•	•	•	•	•	•	
82.21	DI	ON pulse	•	•	•	•	•	•	
82.31	SW	Symmetrical recycler: ON start	•	•	•	•	•	•	
82.41	BE	Signal OFF delay	•	•	•	•	•	•	
82.82	SD	Star - delta		•	•	•	•		

NOTE: time scales and functions must be set before energising the timer.

## FUNCTIONS

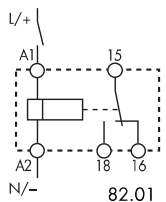
	LED	Relay type	Supply voltage	NO output contact	Contacts	
					Open	Closed
U = Supply Voltage		82.01 82.11 82.21	ON	Open	15 - 18	15 - 16
S = Signal switch		82.31 82.41	ON	Closed	15 - 16	15 - 18
C = Output contact		82.82	ON	Closed ( $\wedge$ )	17 - 28	17 - 18
			ON	Closed ( $\Delta$ )	17 - 18	17 - 28

Without signal Start= Start via contact in supply line (A1).

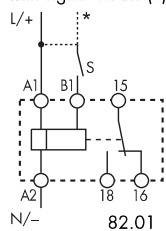
With signal Start = Start via contact into control terminal (B1).

### Wiring diagram

Multi-function without signal START

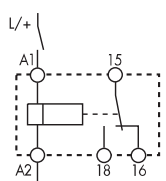


with signal START (S)

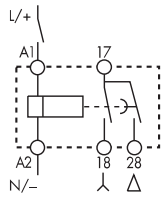


82.01

Mono-function without signal START

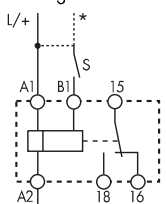


82.11  
82.21  
82.31

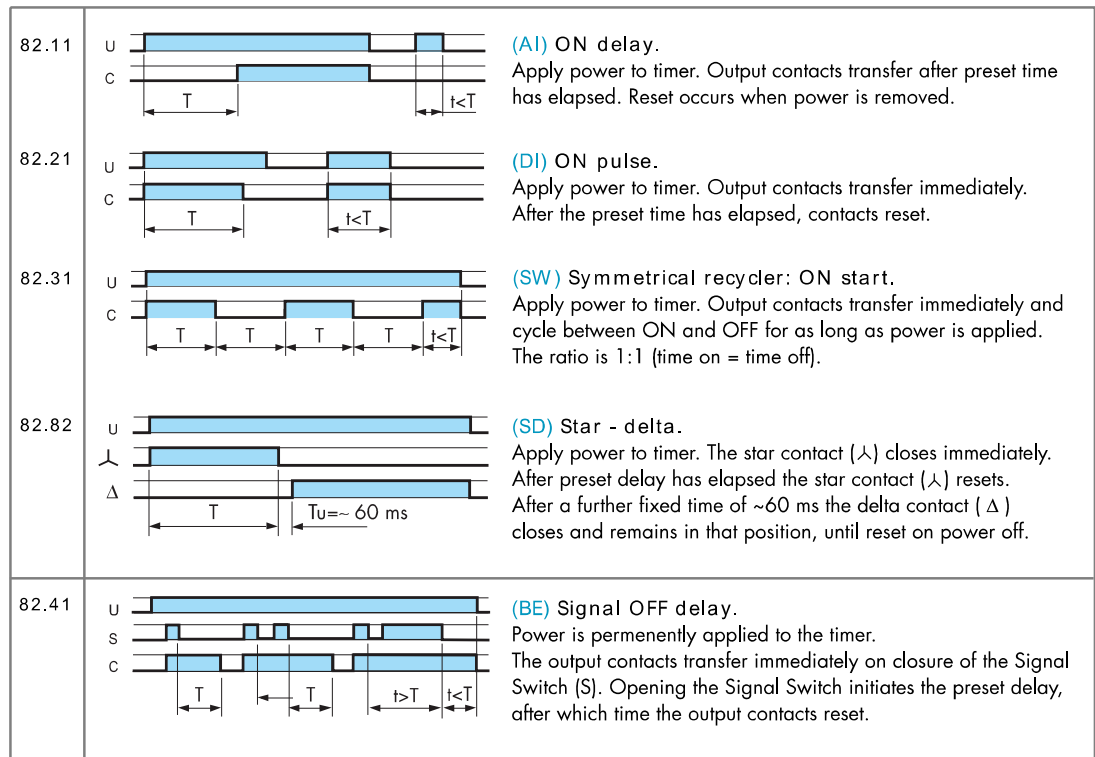
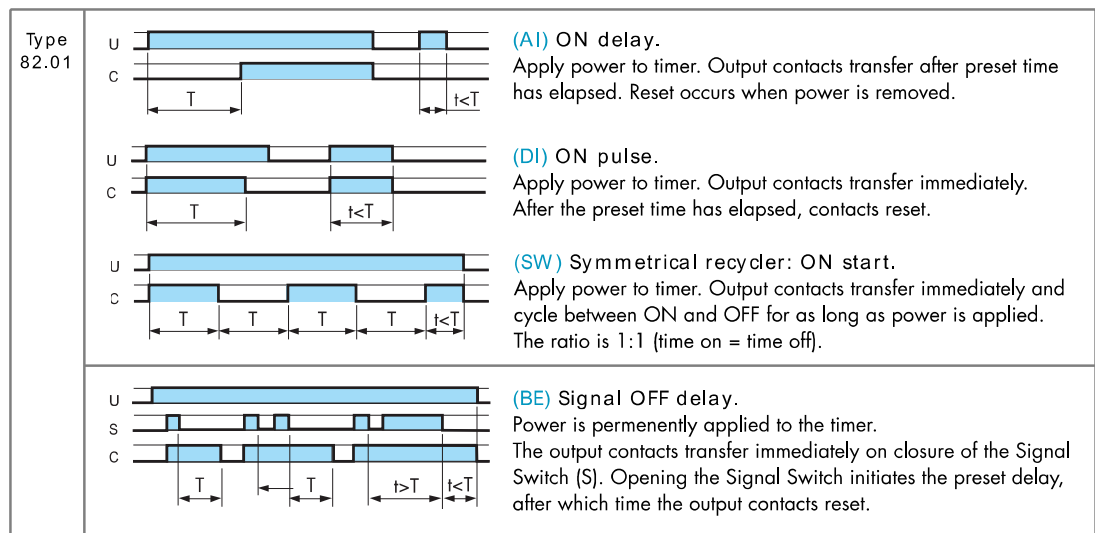


82.82

with signal START



82.41



\* A voltage other than the supply voltage can be applied to the command START (B1).

Example: A1 - A2 = 230 V AC/B1 - A2 = 24 V AC