

Delay-on energisation AFZ A



Timer relay in a housing for front-panel mounting-delay-on energisation

Features

- Voltage surge protected

Technical details	AFZ A
Electrical data	
Supply voltage	DC: 24 V
Tolerance	85 ... 110 %
Power consumption	DC: 0.3 W
Output	1 semiconductor
Output current	30 mA short circuit-proof
Times	
Reaction time	0.05 ... 1 s; 0.15 ... 3 s; 0.5 ... 10 s; 1.5 ... 30 s; 5 ... 100 s; 15 ... 300 s; 10 ... 1000 s; 3 ... 60 min; 9 ... 180 min
Recovery time	25 ms
Repetition accuracy	±1 %
Voltage variation	±0.03 %/% ΔU
Temperature variation	±0.15 %/°C
Mechanical data	
Max. cross-section of the ext. conductor	1 x 1.5 mm ² Single-core or multi-core with crimp connectors
Torque setting for connection terminals	0.6 Nm screws
Dimensions (∅ x D)	29 x 34 mm
Weight	20 g

Description

The timer relay is enclosed in a 22.5 mm housing for front-panel mounting. There are 6 versions and one supply voltage available.

Features:

- PNP transistor output
- Absolute scale, with control knob
- Digital time circuit
- LED for supply voltage
Can be connected using three-wire system: +24 V, 0 V, output Y

In conjunction with the APN, the device may be used as a 22.5 mm ∅ timer relay. The AFZ is supplied with power from the APN and switches

the APN's output relay. The AFZ can also be connected directly to a PLC to adjust timer settings.

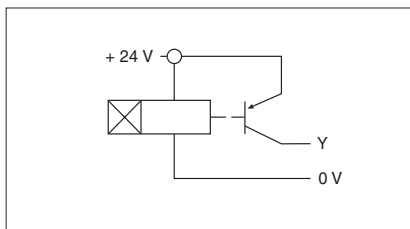
Once the supply voltage has been applied to terminal +24 V, the "Power" LED is on. Once time has elapsed, then +24 V is supplied at terminal Y. If the supply voltage is interrupted, the LED is then off and terminal Y goes to 0 V.

Accessories

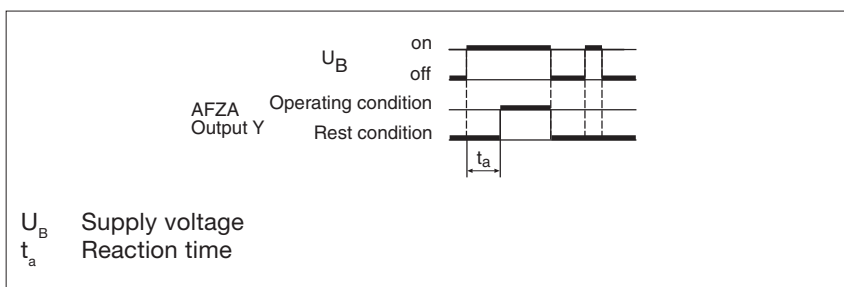
- Reducer ring for ∅ 30 mm hole; for a 30 mm hole, 2 reducer rings are required.
- APN

Delay-on energisation AFZ A

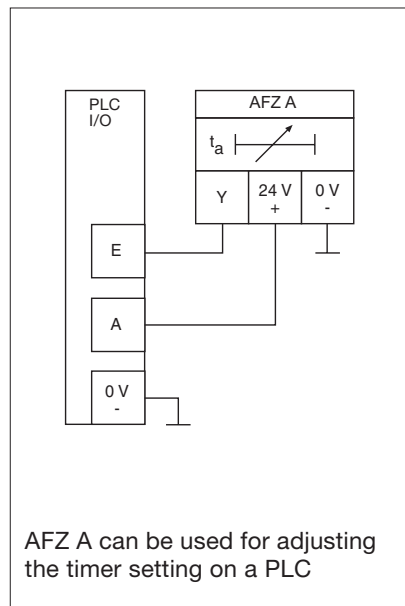
Internal wiring diagram



Pulse diagram



Connection example



Delay-on energisation AFZ A

General details

Unless stated otherwise in the technical details for the specific unit.

Electrical data

Frequency range AC	50 ... 60 Hz
Residual ripple DC	160 %
Contact material	AgCdO
Continuous duty	100 %

Environmental data

EMC	EN 50081-1, 01/92; EN 50082-2, 03/95
Vibrations in accordance with EN 60068-2-6, 04/95	Frequency: 10 ... 55 Hz, Amplitude: 0.35 mm
Climatic suitability	IEC 60068-2-3, 1969
Airgap creepage	DIN VDE 0110-1, 04/97
Ambient temperature	-10 ... +55 °C
Storage temperature	-40 ... +85 °C

Mechanical data

Torque setting for connection terminals	0.6 Nm (screws)
Mounting position	Any
Housing material	Thermoplastic Noryl SE 100
Protection types	Mounting: IP 54 Housing: IP 40 Terminals: IP 20

The units were tested in accordance with the standards applicable at the time of development.

Order reference key

U_B Supply voltage
t_a Reaction time

Order reference

Type	t _a	U _B	Order no.
AFZ A	1 s	24 VDC	350 001
AFZ A	3 s	24 VDC	350 006
AFZ A	10 s	24 VDC	350 011
AFZ A	30 s	24 VDC	350 016
AFZ A	100 s	24 VDC	350 021
AFZ A	300 s	24 VDC	350 026
AFZ A	1000 s	24 VDC	350 031
AFZ A	60 min	24 VDC	350 036
AFZ A	180 min	24 VDC	350 039

Order reference, accessories

Type	Order No.
Reducer ring for Ø 30 mm hole	374 007