

TFIS 12-240VUC 2NO SD**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com**Product image**

Compact timing relays for building and factory automation

Our TFIS-Relays consists of five different devices covering the most important applications in building and factory automation. Four of these carry out individual functions: clock generator (pause and pulse start), star-delta switch, switch-on delay and off-delay with control input. There is also a multifunctional version with seven different timing functions. The timing functions and time ranges can be easily configured using a rotary switch fitted on the front. All of the devices meet the international standards according to EN 61812 and have UL approval for the North American market.

- Available in installation design and compact industrial design
- Simple configuration via setting potentiometers and status LED
- Compliance with international standards according to EN 61812
- UL approved for the North American market

General ordering data

| | |
|------------|--|
| Version | TFI-SERIES, Star-Delta Timer, Number of contacts: 2, NO contact, AgNi, Rated control voltage: 12...240 V UC -10 % / +10 %, Continuous current: 3 A, Screw connection |
| Order No. | 2697270000 |
| Type | TFIS 12-240VUC 2NO SD |
| GTIN (EAN) | 4050118705270 |
| Qty. | 1 pc(s). |

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Technical data

Dimensions and weights

| | | | |
|------------|--------|-----------------|------------|
| Depth | 75 mm | Depth (inches) | 2.953 inch |
| Height | 67 mm | Height (inches) | 2.638 inch |
| Width | 225 mm | Width (inches) | 8.858 inch |
| Net weight | 81 g | | |

Temperatures

| | | | |
|---------------------|---|-----------------------|----------------|
| Storage temperature | -40 °C...70 °C | Operating temperature | -25 °C...60 °C |
| Humidity | 5...95 % rel. humidity, no condensation | | |

Control side

| | | | |
|-----------------------|---|--|---|
| Rated control voltage | 12...240 V UC -10 % / +10 % | Power rating | 500 mVA, 180 mW |
| Status indicator | LED green (U/t) flashes: star-relay closed, time runs, LED green (U/t) lights permanently: delta-relay closed, time runs, LED yellow (R): star-relay closed | Time ranges | 0.5 s - 10 s, 1.5 s - 30 s, 3 s - 60 s, 9 s - 180 s |
| Setting tolerance | 5 % | Max. reset time after voltage interruption | 200 ms |
| Basic accuracy | ± 1 % (of scale-end value) | Min. pulse duration | 100 ms |
| Repeat accuracy | <0.5 % or ±5 ms | | |

Load side

| | | | |
|---|---------------------------------------|---|---|
| Rated switching voltage | 250 V AC | Continuous current | 3 A |
| Max. switching voltage, AC | 250 V | Max. switching voltage, DC | 30 V |
| AC switching capacity (resistive), max. | 750 VA | DC switching capacity (resistive), max. | 90 W |
| Contact type | 2 NO contact (AgNi) | Electrical service life, DC coil | 100x10 ³ switching cycles (3 A at 250 VAC) |
| Mechanical service life | 20 x 10 ⁶ switching cycles | Min. switching power | 10 mA @ 12 V, 100 mA @ 5 V |

General data

| | | | |
|--------------------------------------|---|---------|--|
| Suitable for front mounting | No | | |
| Rail | TS 35 | | |
| Test button available | No | | |
| Mechanical switch position indicator | No | | |
| Colour | black | | |
| UL 94 flammability rating | V-0 | | |
| UL94 flammability rating component | Component | Housing | |
| | UL94 flammability rating | V-0 | |
| Resistance to vibration EN 61812-1 | 10 Hz...60 Hz: 0.15 mm, 60 Hz...150 Hz: 2 g | | |

Insulation coordination

| | | | |
|--|--------|---|--------|
| Rated voltage | 300 V | Pollution severity | 2 |
| Surge voltage category | III | Clearance and creepage distances for control side - load side | ≥ 3 mm |
| Dielectric strength for control side - load side | 1.6 kV | Impulse withstand voltage | 4 kV |
| Protection degree | IP20 | | |

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Catalogue status 17.08.2024 / We reserve the right to make technical changes.

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Technical data

Further details of approvals / standards

Certificate no. (cULus) E360862

Connection data

| | | | |
|---|---------------------|---|---------------------|
| Wire connection method | Screw connection | Stripping length, rated connection | 8 mm |
| Tightening torque, max. | 1 Nm | Clamping range, rated connection | 2.5 mm ² |
| Clamping range, min. | 0.5 mm ² | Clamping range, max. | 4 mm ² |
| Wire connection cross section AWG, min. | AWG 20 | Wire connection cross section AWG, max. | AWG 12 |
| Wire cross-section, solid, min. | 0.5 mm ² | Wire cross-section, solid, max. | 4 mm ² |
| Wire connection cross section, finely stranded, min. | 0.5 mm ² | Wire connection cross section, finely stranded, max. | 4 mm ² |
| Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, min. | 0.5 mm ² | Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, max. | 2.5 mm ² |
| Conductor cross-section, flexible, AEH (DIN 46228-1), min. | 0.5 mm ² | Conductor cross-section, flexible, AEH (DIN 46228-1), max. | 2.5 mm ² |
| Wire connection cross section, finely stranded, two clampable wires, min. | 0.5 mm ² | Wire cross-section, finely stranded, two clampable wires, max. | 2.5 mm ² |
| Blade size | size PH1 | | |

Classifications

| | | | |
|-------------|-------------|-------------|-------------|
| ETIM 6.0 | EC001439 | ETIM 7.0 | EC001439 |
| ETIM 8.0 | EC001439 | ETIM 9.0 | EC001439 |
| ECLASS 9.0 | 27-37-16-05 | ECLASS 9.1 | 27-37-16-05 |
| ECLASS 10.0 | 27-37-16-05 | ECLASS 11.0 | 27-37-16-05 |
| ECLASS 12.0 | 27-37-16-05 | ECLASS 13.0 | 27-37-16-05 |
| ECLASS 14.0 | 27-37-16-05 | | |

Environmental Product Compliance

REACH SVHC /

RoHS Compliance Status Compliant without exemption

Approvals

Approvals



ROHS Conform

UL File Number Search UL Website

Certificate no. (cULus) E360862

Downloads

Approval/Certificate/Document of Conformity [EU Konformitätserklärung / EU Declaration of Conformity](#)

Engineering Data [CAD data – STEP](#)

User Documentation [Beschreibung der Zeitfunktionen - Deutsch](#)
[Declaration of timing functions - English](#)
[Beipackzettel / Package Insert – multilingual](#)

Catalogues [Catalogues in PDF-format](#)

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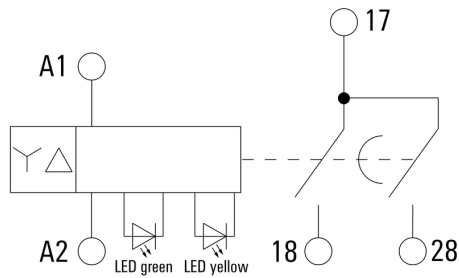
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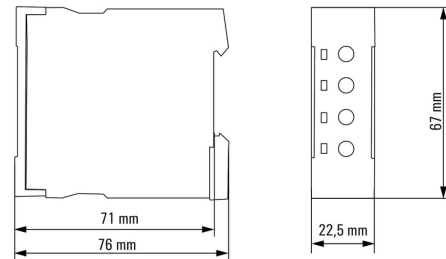
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Drawings

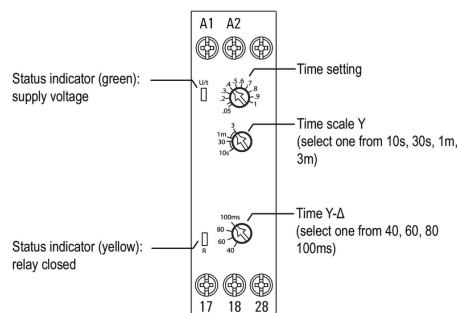
Wiring diagram



Dimensional drawing



Miscellaneous



Detailed drawing

TFIS 12-240VUC 2NO SD**Weidmüller Interface GmbH & Co. KG**

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www.weidmueller.com**Accessories****Blank**

ESG is the tried-and-tested marker in MultiCard format for use on many well-known electrical devices. The result is high-quality device marking with a high-contrast appearance.

Various types are available for devices from manufacturers like Siemens, ABB, Beckhoff etc.

Advantages at a glance:

- Tags for universal usage, self-adhesive or clip-on tags, depending on type
- For aligned equipment, e.g. circuit breakers, we supply ESG markers for clipping onto tag rails
- Individual laser-quality printing according to specifications

For custom printing: Please send us a file of our labeling software M-Print PRO or M-Print PRO Online (without installation) for your labeling specifications.

General ordering data

| | | |
|------------|----------------------------|---|
| Type | ESG 6/17 K MC NE WS | Version |
| Order No. | 1880120000 | ESG, Device markers x 17 mm, PA 66, Colour: white, Self-adhesive |
| GTIN (EAN) | 4032248478804 | |
| Qty. | 200 pc(s). | |
| Type | ESG 6/17 K MC NE GE | Version |
| Order No. | 1880110000 | ESG, Device markers x 17 mm, PA 66, Colour: yellow, Self-adhesive |
| GTIN (EAN) | 4032248478798 | |
| Qty. | 200 pc(s). | |

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General ordering data

| | | |
|------------|----------------------------|---|
| Type | ESG 6/15 K MC NE GE | Version |
| Order No. | 1880130000 | ESG, Device markers x 15 mm, PA 66, Colour: yellow, Self-adhesive |
| GTIN (EAN) | 4032248478910 | |
| Qty. | 200 pc(s). | |
| Type | ESG 6/15 K MC NE WS | Version |
| Order No. | 1880100000 | ESG, Device markers x 15 mm, PA 66, Colour: white, Self-adhesive |
| GTIN (EAN) | 4032248478781 | |
| Qty. | 200 pc(s). | |

ESG 6/15



Guaranteed long service life: ESG

The multi-colour and multi-format labels have a strong adhesive layer to ensure the best possible adhesion to the underlying surface. Double laminated polyester makes the basic material very thin and yet extremely tear-resistant.

Your benefits with MultiMark

- "Different materials for various requirements"
- Can be used with equipment from many manufacturers
- Device markers with a familiar design

General ordering data

| | | |
|------------|----------------------------|---------------------------------------|
| Type | ESG 6/15 MM WS | Version |
| Order No. | 2619940000 | ESG, Device markers, 6 x 15 mm, white |
| GTIN (EAN) | 4050118626148 | |
| Qty. | 3,000 pc(s). | |

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www.weidmueller.com**Accessories****Crosshead screwdriver, Phillips**

VDE insulated screwdriver sets, for working on live parts up to 1000 V AC and 1500 V DC, DIN EN 60900. IEC 900. Each piece is "GS" safety tested. Blade made from fully hardened, high-alloy chromium-vanadium-molybdenum steel, gun-metal finish.

General ordering data

| | | |
|------------|----------------------------|---|
| Type | SDIK SLIM PH1 X 80 | Version |
| Order No. | 2749650000 | Screwdriver, Blade width (B): 1 mm, 80 mm, Blade thickness (A): 1 |
| GTIN (EAN) | 4050118896398 | |
| Qty. | 1 pc(s). | |

Crosshead screwdriver Phillips

VDE insulated crosshead screwdriver, for Phillips screws, SDIK PH DIN 7438, ISO 8764/2-PH, output to ISO 8764-PH, SoftFinish grip

General ordering data

| | | |
|------------|----------------------------|---|
| Type | SDIK PH1 X 80 | Version |
| Order No. | 2749890000 | Screwdriver, Blade width (B): 1 mm, 80 mm, Blade thickness (A): 1 |
| GTIN (EAN) | 4050118897098 | |
| Qty. | 1 pc(s). | |

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www.weidmueller.com**Accessories****Crosshead screwdriver Phillips**

Crosshead screwdriver, Phillips, SDK PH DIN 5262, ISO 8764/2-PH, output to ISO 8764-PH, ChromTop tip, SoftFinish grip

General ordering data

| | | |
|------------|----------------------------|---|
| Type | SDK PH1 X 80 | Version |
| Order No. | 2749410000 | Screwdriver, Blade width (B): 1 mm, 80 mm, Blade thickness (A): |
| GTIN (EAN) | 4050118895636 | |
| Qty. | 1 pc(s). | |

ESG 6/17**Guaranteed long service life: ESG**

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- Can be used with equipment from many manufacturers
- Device markers with a familiar design

General ordering data

| | | |
|------------|----------------------------|---------------------------------------|
| Type | ESG 6/17 MM WS | Version |
| Order No. | 2005100000 | ESG, Device markers, 6 x 17 mm, white |
| GTIN (EAN) | 4050118390728 | |
| Qty. | 3,000 pc(s). | |

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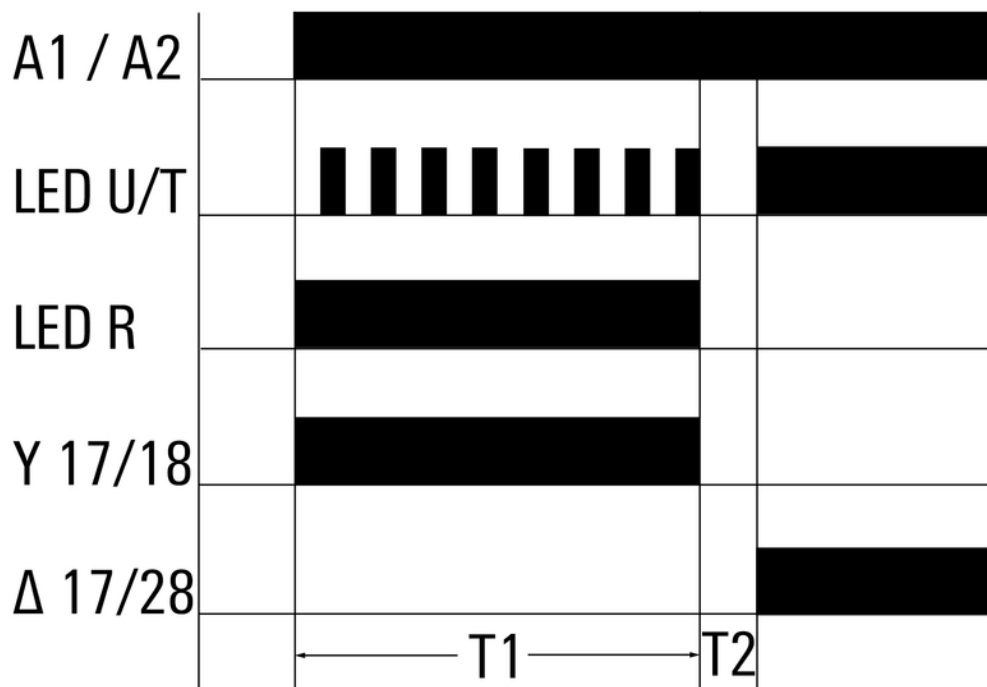
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www.weidmueller.com**Drawings****Graph****S**

star-delta



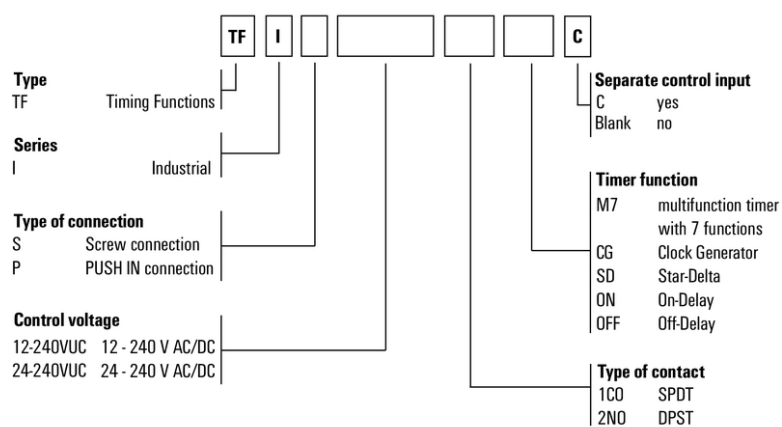
Time functions

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www.weidmueller.com**Drawings****Type codes****Miscellaneous**

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