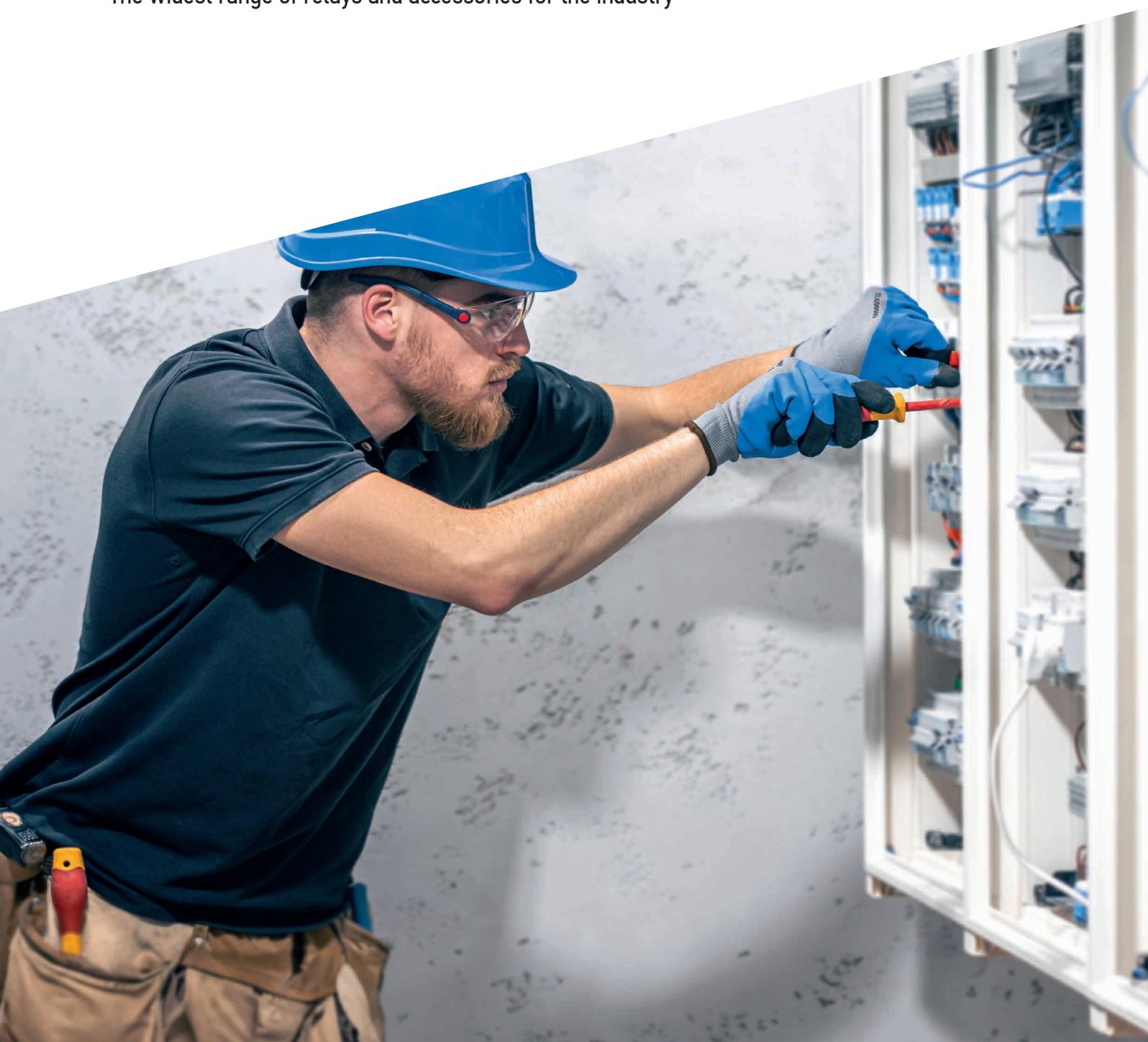


# SOLUTIONS FOR ELECTRICAL PANELS AND INDUSTRIAL AUTOMATION

The widest range of relays and accessories for the industry





# ABOUT US



Finder was founded in Italy in 1954. Since then it has been designing and manufacturing a wide range of electromechanical and electronic components for both the residential and industrial sectors. Today, thanks to its global vision, Finder now distributes its products around the world through a network of 29 company-owned subsidiaries and more than 80 trade partnerships. Finder is an international family made up of more than 2000 individuals, all united by the same values and passion for our products.



**14,000+** different products to satisfy a myriad of applications. From products at the heart of automation to the control of machines, power, time, temperature, liquid level and light

## OUR PRODUCTS CARRY MORE CERTIFICATIONS THAN ANY OTHER RELAY MANUFACTURER



## FINDER IS AN ITALIAN BRAND WITH A WORLDWIDE PRESENCE

- 4** PRODUCTION PLANTS IN EUROPE
- 29** SUBSIDIARIES
- 80+** OFFICIAL DISTRIBUTORS



### ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG)

Finder considers social and environmental sustainability as fundamental principles of doing business, just as it believes that business growth must develop in synergy with a conscious vision of the future.

That is why Finder is committed to reducing and eliminating CO2 emissions, focusing on circularity, caring for its employees to foster a safe, fair and inclusive work environment, spreading a culture of integrity and transparency, and collaborating with stakeholders who share its values.



**ISO 9001:2015**  
Quality management system



**IECEx**  
Equipment for Use in Explosive Atmospheres



**ISO 14001:2015**  
Environmental management system



**ISO 27001-27701**  
Information Security and Privacy Management System



**ISO 45001:2018**  
Health and safety management system



**ISO 50001:2018**  
Energy management system

### AUTONOMY AND INDEPENDENCE

Finder's managerial, financial and technological autonomy allows optimal control over all its business processes, the results of which include simplified customs procedures and a high reliability of commercial relations.



**ISO 14064-1:2019**  
Carbon Footprint verification



**AEOF**  
Simplified customs and enhanced supply chain security



**FSC**  
Forest Stewardship Council



**Cribis Prime Company**  
Recognition of highest reliability of commercial relations



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# OPTA

## PROGRAMMABLE LOGIC RELAYS

### 8A Series

Easily create industrial, OEM and building automation programs with OPTA PLRs using traditional IEC 61131-3 languages (LADDER, FBD, etc.) with either CODESYS or ARDUINO PLC IDE.

#### OPTA LITE

RJ45 + USB C



Type 8A.04.9.024.8300

#### OPTA PLUS

+ RS485



Type 8A.04.9.024.8310

#### OPTA ADVANCED

+ Wi-Fi and BLE



Type 8A.04.9.024.8320

- Supply: 12...24 V DC
- 8 Digital/Analog (0-10 V) inputs
- 4 NO relay output contacts, rated 10 A
- USB (type C) High Speed port for:
  - Programming
  - Powering during configuration
  - Data logging (via memory stick)

CE UK CA EAC 15 UL LISTED (according to type)



CODESYS



Type 8A.04.9.024.832C



[opta.findernet.com](http://opta.findernet.com)

Low profile  
switch mode  
power supplies  
with DC output



78 Series  
See the technical  
data sheet



Type 78.12.1.230.2482

Up to 1 OPTA and  
5 expansion modules

- Output:  
24 V DC - 0.5 A, 12 W
- Peak current: 2 A



Type 78.25.1.230.2482

Up to 2 groups of 1 OPTA  
and 5 expansion modules

- Output:  
24 V DC - 1 A, 25 W
- Peak current: 3 A

# OPTA

# EXPANSION MODULES

OPTA expansion modules expand the possibilities of the PROGRAMMABLE LOGIC RELAY for unprecedented versatility. Designed to add further inputs / outputs to any OPTA version up to a maximum of five modules. Connection is via AUX port of each device.

## + INPUTS

A maximum of 80 with the digital version and 30 for the analogue version

## + OUTPUTS

Up to 40 for the digital version and 30 for the analogue version

### EMR

- 16 digital/analog (0...10 V) inputs
- 8 EMR 6 A outputs
- Nominal voltage 12...24 V DC



CODESYS



Type 8A.58.9.024.160C

### SSR

- 16 digital/analog (0...10 V) inputs
- 8 SSR 3 A outputs
- Nominal voltage 12...24 V DC



CODESYS



Type 8A.88.9.024.160C

### ANALOG

- 6 analog (0...10 V, 4...20 mA, PT 100) inputs - programmable up to 8
- 2 analog (0...10 V, 4...20 mA) outputs - programmable up to 8
- 4 PWM outputs
- Nominal voltage 12...24 V DC



CODESYS



Type 8A.26.9.024.060C



ARDUINO

PRO



Type 8A.58.9.024.160C



ARDUINO

PRO



Type 8A.88.9.024.160C



ARDUINO

PRO



Type 8A.26.9.024.060C

## 30 SERIES Subminiature DIL relays 2 A



→ **Very low coil consumption - 200 mW**

- Very Small
- 2 contacts 2 A
- For the control of low level loads
- Au clad contacts
- Printed circuit mount



30 Series  
See the technical data sheet

## 32 SERIES Subminiature PCB relays 6 A



→ **Very low coil consumption - 200 mW**

- Very Small
- 1 Pole changeover contact or 1 Pole normally open contact 6 A
- Subminiature, low profile package



32 Series  
See the technical data sheet

Approvals (according to type)



Used mainly for electronic circuit boards in signal transmission devices, telecoms, and small household appliances.

## 34 SERIES

# Ultra-slim PCB Relays (EMR or SSR) 0.1 - 0.2 - 2 - 6 A



→ **Ultra slim (5 mm) package**

- 1 Pole changeover contact or 1 Pole normally open contact
- Very low coil consumption - 170 mW
- UL Listing (certain relay/socket combinations)
- PCB or 93 Series socket mount  
(according to type - page 18)



34 Series  
See the technical data sheet

## 36 SERIES

# Miniature PCB relays 10 A



→ **Miniature - "Sugar cube" package**

- 1 Pole changeover contact 10 A
- Very low coil consumption - 360 mW



36 Series  
See the technical data sheet

Approvals (according to type)



34 Series: used mainly for circuit boards within equipment such as vending machines, programmable controllers.  
36 Series: widely used in household appliances.

# 40 SERIES Miniature PCB Relays or socket mount 8 - 10 - 12 - 16 A



## → AC coils and DC coils (low coil consumption)

- 1 or 2 contacts
- Pin length 3.5 mm for PCB mount
- Pin length 5.3 mm for 95 Series sockets Plug-in mount
- Meets EN 60335-1 glow wire requirements
- Bistable versions available
- PCB or 95 Series socket mount  
(according to type - page 18)



40 Series  
See the technical data sheet

# 41 SERIES Low profile PCB relays (EMR or SSR) 3 - 5 - 8 - 12 - 16 A



## → Low profile (15.7 mm high)

- 1 or 2 contacts
- AC coils and DC coils
- Low coil consumption
- SSR versions available - Silent, high speed switching with long electrical life
- PCB or 93 Series socket mount  
(according to type - page 18)



## → Special versions for hazardous locations (ATEX, HazLoc, IECEx)

**IECEx - ATEX certification: II 3 G Ex nC IIC Gc**

**HazLoc certification: Class I, Zone 2, AEx nC IIC Gc**

**Class I Div. 2, Gruppi A, B, C, D - T4**



41 Series  
See the technical data sheet

Approvals (according to type)



Multi-function, suitable for a wide range of applications.

Due to their versatility they are widely used in electronic circuit boards for household appliances (refrigerators, washing machines), electric gates, boiler control boards and similar.

## 43 SERIES Low profile PCB relays 10 - 16 A



### → Low coil consumption

- Low profile (15.4 mm high)
- 1 Pole changeover contact or 1 Pole normally open contact
- DC coil
- PCB or 95 Series sockets mount (according to type - page 18)



43 Series  
See the technical data sheet

## 45 SERIES Miniature PCB Relays + Faston 250, 10 - 16 A



### → Relay for +105 °C or 125°C ambient use

- 1 normally open contact
- Large contact gap
- DC coil
- Conform to Annex CC EN 61439-7:2018 for EV charging station



45 Series  
See the technical data sheet

Approvals (according to type)



Household appliances, food industry, drying kilns.  
45 Series: for photovoltaic inverters and charging station.

# 46 SERIES Miniature industrial relays 8 - 16 A



→ **Available with: lockable test button, mechanical indicator & LED indicator**

- Power relays, 1 - 2 contacts
- AC coils and DC coils
- Optional alternative mounting adaptors
- PCB mount sockets or 35 mm rail (EN 60715) mount sockets, (according to type - page 18)



46 Series  
See the technical data sheet



European Patent  
(according to type)

# 55 SERIES General purpose relays 7 - 10 A



→ **2 - 3 - 4 changeover contacts**

- Compact dimensions
- AC coils and DC coils
- Optional alternative mounting adaptors
- PCB or 94 Series socket mount (according to type - page 18)



55 Series  
See the technical data sheet



European Patent  
(according to type)

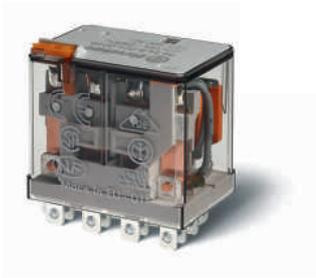
Approvals (according to type)



General switchboard installations, industrial automation panels, auxiliary relays, interfacing.

Special versions for railway applications.

## 56 SERIES Miniature power relays 12 A



### → 2 - 4 Pole changeover contacts 12 A

- AC coils and DC coils
- Lockable test button and mechanical indicator
- Optional alternative mounting adaptors
- PCB or 96 Series socket mount (according to type - page 19)



56 Series  
See the technical data sheet



European Patent  
(according to type)

## 60 SERIES Industrial relays 6 - 10 A



### → 8 pin plug-in and 11 pin plug-in versions

- 2 - 3 Pole changeover contacts
- Bifurcated contacts for low level switching
- AC coils and DC coils
- Lockable test button with mechanical flag indicator (preferred version)
- PCB or 90 Series socket mount (according to type - page 19)



60 Series  
See the technical data sheet



European Patent  
(according to type)

Approvals (according to type)



General switchboard installations, industrial automation panels, auxiliary relays, interfacing.

Special versions for railway applications.

# 62 SERIES Power relays 16 A



- **2 & 3 Pole changeover contacts or normally open contacts ( $\geq 3$  mm contact gap)**
- **Magnetic blow-out power relay**
  - AC coils and DC coils
  - SELV coil-contact separator option
  - LED, test button and mechanical indicator standard (according to type)
  - PCB or 92 Series socket mount (according to type - page 19)



62 Series  
See the technical data sheet



European Patent  
(according to type)

# 65 SERIES Power relays 20 - 30 A



- **PCB mount or Faston 250 (6.3 x 0.8 mm) connection**
  - 1 NO + 1 NC (SPST-NO + SPST-NC) or 1 NO (SPST-NO)
  - AC coils and DC coils
  - Bifurcated terminals
  - Optional alternative mounting adaptors



65 Series  
See the technical data sheet

Approvals (according to type)



General switchboard installations, industrial automation panels, auxiliary relays, interfacing, versions for applications with special loads (e.g. magnetic blow out for control of power distribution switches and circuit breakers).

# 66 SERIES Power relays 30 A



- **Certification by ATEX accredited body to (EX ec nC) EN IEC 60079-15: 2019**
- **Complies with HazLoc Class I Div. 2, Groups A, B, C, D - T4 - T5 - T6**
  - 2 Pole changeover contacts or 2 normally open contacts 30 A
  - AC coils and DC coils
  - PCB mount - bifurcated terminals, flange mount, Faston 250 connections



66 Series  
See the technical data sheet

# 67 SERIES High Power relays 50 A



- **2 - 3 normally open contacts 50 A**
  - DC coils, with only 170 mW holding power
  - Suitable for use at ambient temperatures up to 85 °C (with energy-saving coil energization) or 70 °C (with standard coil energization)
  - Meets the EN 60335-1 requirements of resistance to heat and fire (GWIT 775 °C and GWFI 850 °C)
  - Printed circuit mount



67 Series  
See the technical data sheet

Approvals (according to type)



Installations where the disconnection of electrical power is critically important (electronic power boards, inverters, photovoltaic (PV) systems) or ATEX applications, where the environment is at risk of explosion (LPG storage, underground garage, fuel stations).

# 68 SERIES High Power relays 32 - 40 - 100 A



68 Series  
See the technical  
data sheet

- 2 NO (DPST-NO) 100 A  
or 2 NO (DPST-NO) 100 A + 1 NC (SPST-NC) 3 A (feedback contact)
- 4 NO (4PST-NO) 40 A  
or 4 NO (4PST-NO) + 1 NC (SPST-NC) 3 A (feedback contact)
- 4 NO (4PST-NO) 32 A  
or 4 NO (4PST-NO) + 1 NC (SPST-NC) 3 A (feedback contact)\*
  - Meets EN 60335-1 requirements for resistance to heat and fire (GWIT 775°C and GWFI 850°C)
  - DC coils, with only 700 mW holding power
  - Suitable for use at ambient temperatures up to 85 °C
  - Mirror contact (type 68.23) according to EN 60947-4-1 Annex F
  - Printed circuit mount



Approvals (according to type)



\* Complies with IEC 62955 for electric vehicle charging stations.

Inverters, photovoltaic inverters, battery chargers and high power switching applications.

## RB SERIES Bistable relays 8 A



→ **SET and RESET signal inputs**

- 2 or 4 pole changeover contacts 8 A
- DC coils
- LED command status indication
- 35 mm rail (EN 60715) mount or 90 Series socket mount



RB Series  
See the technical data sheet

## RR SERIES Fast relay module 8 A



→ **Operate time  $\leq 3$  ms**

- 4 pole changeover or 3 normally open + 1 changeover contacts 8 A
- DC coils
- LED command status indication
- 35 mm rail (EN 60715) mount or 90 Series socket mount



RR Series  
See the technical data sheet

Approvals (according to type)



Used within safety and protection systems in areas such as energy distribution, or in applications where the intervention time is crucially important.

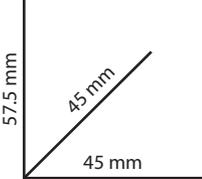
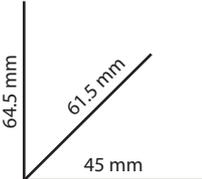
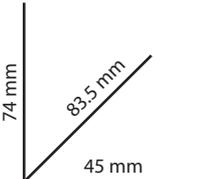
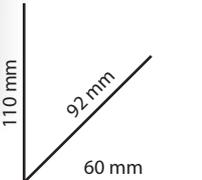
# 6K SERIES Industrial contactors

Space Saving Size with Maximum Performance.



6K Series  
See the technical data sheet

- From 4 to 37 kW
- From 9 to 74 A, AC3 – 400 V AC
- Complies with EN 60947 / IEC 947
- AgSnO<sub>2</sub> contact material
  - Various contact configurations available
  - Working temperature: -40°C...+ 90°C (with coil voltage derating @90°C)
  - Auxiliary block contacts available, 2 A (AC15 – 400 V)
  - 35 mm Din rail mounting

 	<p><b>Type 6K.04.x.xxx.4x09</b></p> <ul style="list-style-type: none"> <li>- 3 normally open contacts, 9 A (AC3)</li> <li>+ 1 auxiliary contact 2 A (AC15)</li> <li>- 4 normally open contacts, 9 A (AC3)</li> <li>- Nominal voltage: 24 - 48 - 110 - 230 V AC 12 - 24 - 48 - 60 - 72 - 110 V DC</li> </ul>	<p><b>Type 6K.04.x.xxx.4x12</b></p> <ul style="list-style-type: none"> <li>- 3 normally open contacts, 12 A (AC3)</li> <li>+ 1 auxiliary contact 2 A (AC15)</li> <li>- 4 normally open contacts, 12 A (AC3)</li> <li>- Nominal voltage: 24 - 48 - 110 - 230 V AC 12 - 24 - 48 - 60 - 72 - 110 V DC</li> </ul>
 	<p><b>Type 6K.14.x.xxx.4x10</b></p> <ul style="list-style-type: none"> <li>- 3 normally open contacts, 10 A (AC3)</li> <li>+ 1 auxiliary contact 2 A (AC15)</li> <li>- 4 normally open contacts, 10 A (AC3)</li> <li>- Nominal voltage: 24 - 110 - 230 V AC 12 - 24 - 48 - 60 - 72 - 110 V DC</li> </ul>	<p><b>Type 6K.14.x.xxx.4x18</b></p> <ul style="list-style-type: none"> <li>- 3 normally open contacts, 18 A (AC3)</li> <li>+ 1 auxiliary contact 2 A (AC15)</li> <li>- 4 normally open contacts, 18 A (AC3)</li> <li>- Nominal voltage: 24 - 110 - 230 V AC 12 - 24 - 48 - 60 - 72 - 110 V DC</li> </ul>
 	<p><b>Type 6K.13.x.xxx.4324</b></p> <ul style="list-style-type: none"> <li>- 3 normally open contacts, 24 A (AC3)</li> <li>- Nominal voltage: 24 - 110 - 230 V AC 12 - 24 - 48 - 60 - 72 - 110 V DC</li> </ul>	<p><b>Type 6K.13.x.xxx.4332</b></p> <ul style="list-style-type: none"> <li>- 3 normally open contacts, 32 A (AC3)</li> <li>- Nominal voltage: 24 - 110 - 230 V AC 12 - 24 - 48 - 60 - 72 - 110 V DC</li> </ul>
 	<p><b>Type 6K.13.8.xxx.4350</b></p> <ul style="list-style-type: none"> <li>- 3 normally open contacts, 50 A (AC3)</li> <li>- Nominal voltage: 24 - 110 - 230 V AC</li> </ul>	<p><b>Type 6K.13.8.xxx.4374</b></p> <ul style="list-style-type: none"> <li>- 3 normally open contacts, 74 A (AC3)</li> <li>- Nominal voltage: 24 - 110 - 230 V AC</li> </ul>

## Auxiliary modules

Mechanically linked contacts according to EN 60947-5-1, IEC 947-5-1

for Type 6K.04



**Type 06K.03**  
1 normally open contact  
+ 1 normally closed contact 2 A

**Type 06K.06**  
2 normally open contacts  
+ 2 normally closed contacts 2 A

(AC15 – 400 V)

for Type 6K.14 and 6K.13



**Type 06K.11**  
1 normally open contact 2 A  
(AC15 – 400 V)



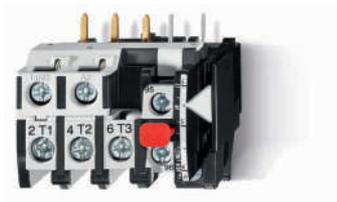
**Type 06K.12**  
1 normally closed contact 2 A  
(AC15 – 400 V)

# 6K SERIES Thermal overload protection



6K Series  
See the technical data sheet

- Thermal overload protection for contactors Type 6K.04, 6K.14 and 6K.13
- Thermal overload protection from 1.8 A up to 24 A
- Automatic or manual intervention reset button
  - Trip class according to IEC 947-4-1: 10 A
  - Adjustable threshold
  - Stop button
  - Terminal for auxiliary contact
  - AgNi contact material



Type 6K.T0.0.000.xxxx  
for contactor 6K.04

- 3 normally open contacts
- 1 auxiliary normally open contact
- 1 auxiliary normally closed contact



Type 6K.T1.0.000.xxxx  
for contactor 6K.14 and 6K.13

- 3 normally open contacts + AUX contact
- 1 auxiliary normally open contact
- 1 auxiliary normally closed contact
- Automatic or manual intervention reset button
- Pin gap adjustable for using 6K.13 or 6K.14

## RC units

for Type 6K.04



Type 06K.R0.0.xxx  
Nominal voltage:  
12...48 V AC/DC  
48...127 V AC/DC  
110...230 V AC/DC

for Type 6K.14 and 6K.13



Type 06K.R1.0.xxx  
Nominal voltage:  
12...48 V AC/DC  
48...127 V AC/DC  
110...230 V AC/DC

Approvals (according to type)



**Space Saving Size with Maximum Performance.**

Possible connection of front auxiliary modules from 1 to 4 poles in various configurations.

# Socket-Relay compatibility

For all these sockets there are a number of accessories available, such as jumper links for faster connection clips and marker tag holders.



34 Series



93 Series



Box clamp



Push-in terminals



40 Series



95 Series



Box clamp



Push-in terminals



46 Series



97 Series



Box clamp



Push-in terminals



55 Series



94 Series



Box clamp



Push-in terminals

# Socket-Relay compatibility

For all these sockets there are a number of accessories available, such as jumper links for faster connection clips and marker tag holders.



56 Series



96 Series



Box clamp



60 Series



90 Series



Box clamp



62 Series



92 Series



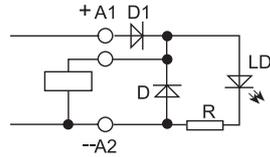
Box clamp

# 99 SERIES

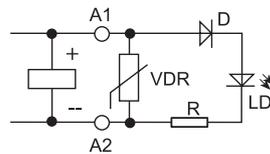
## Coil indication and EMC suppression modules for sockets



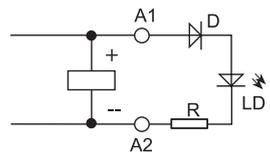
These modules when be plugged into the appropriate socket can suppress coil generated back-emf (diode or varistor), provide visual signaling (coil energized LED) or can filter out possible mains disturbances (RC filters).



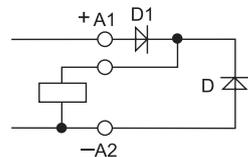
Green LED indicator + diode (standard polarity)



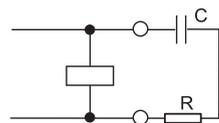
Green LED indicator + Varistor



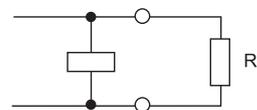
Green LED indicator



Diode (standard polarity)



RC Circuit



Residual current by pass

## 38 SERIES

# Relay interface modules (EMR or SSR) 0.1 - 2 - 3 - 5 - 6 - 8 - 16 A



→ **"Ultra-slim" interface modules, just 6.2 mm wide only**

- 1 or 2 changeover contacts or 1 normally open contact
- Sensitive DC coils or AC/DC coils versions
- Quick and easy ejection of relay using plastic retaining clip
- Timed multifunction version with electromechanical or solid state relay output
- UL Listing (certain relay/socket combinations)
- Box clamp and screwless terminal sockets



38 Series  
See the technical data sheet

## 39 SERIES

# MasterINTERFACE Relay interface modules (EMR or SSR) 0.1 - 2 - 6 A



→ **"Ultra-slim" interface modules, just 6.2 mm wide only**

→ **Atex and HazLoc compliant versions available**

→ **The most complete range of accessories**

- 1 or 2 changeover contacts or 1 normally open contact
- AC coils and DC coils
- Quick and easy ejection of relay using plastic retaining clip
- Versions taking fuse holder module for protection of the output circuit
- Timed multifunction version with electromechanical or solid state relay output
- Common connection possible with optional 16-way jumper links (terminals A1, A2 and 11)
- UL Listing (certain relay/socket combinations)
- Box clamp and push-in terminal sockets



39 Series  
See the technical data sheet



Approvals (according to type)



Interfacing in general, widely used in automation with PLC and in applications where space saving is important.

ATEX and HAZLOC applications: LPG storage areas, underground garages, gas stations.

# 48 SERIES Relay interface modules

## 8 - 10 - 16 A



→ **Safety applications: relay with forcibly guided contacts according to EN 61810-3 Type B (previously EN 50205)**

- 1 or 2 pole changeover contacts
- AC coils or DC coils
- 15.8 mm wide
- Supply status indication and EMC coil suppression module as standard
- Quick and easy ejection of relay using plastic retaining clip
- UL Listing (certain relay/socket combinations)
- Box clamp and push-in terminal sockets



48 Series  
See the technical data sheet

# 4C SERIES Relay interface modules

## 8 - 10 - 16 A



→ **Relay with: lockable test button, mechanical indicator & LED indicator**

- 1 or 2 pole changeover contacts
- AC coils or DC coils
- 15.8 mm wide
- Supply status indication and EMC coil suppression module as standard
- Quick and easy ejection of relay using plastic retaining clip
- UL Listing (certain relay/socket combinations)
- Box clamp and push-in terminal sockets



4C Series  
See the technical data sheet

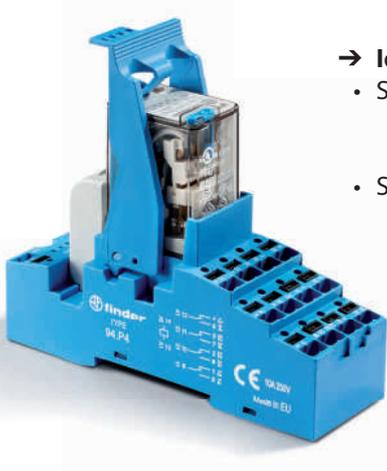
Approvals (according to type)



Interfacing in general, widely used in panel building in general applications where 1 or 2 high rated contacts are required.  
Industrial automation control panels, power plants, home automation, etc...

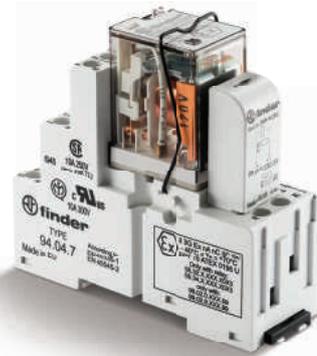
# 58 SERIES Relay interface modules

## 6 - 7 - 10 A



→ **Ideal interface for PLC and electronic systems**

- Socket with box clamp: 58.32 - 2 CO 10 A  
53.33 - 3 CO 10 A  
58.34 - 4 CO 7 A
- Socket with Push-in terminals: 53.P3 - 3 CO 10 A  
58.P4 - 4 CO 7 A



→ **Special versions for hazardous locations (ATEX, HazLoc, IECEx)**

**IECEx - ATEX certification: II 3G Ex ec nC IIC Gc**

**HazLoc certification: Class I Div. 2 Groups A, B, C, D - T5**

→ **Complies with: EN 60079-0:2012+A11:2013; EN 60079-15:2010; EN 60079-7:2015 e 2014/34/UE**

- Socket with box clamp: 58.32-x0xx - 2 CO 10 A  
58.34-x0xx - 4 CO 6 A
- Socket with Push-in terminals: 53.P3 - 3 CO 8.5 A  
58.P4 - 4 CO 6 A



- AC coil or DC coil
- 27 mm wide
- Supply status indication and EMC coil suppression module as standard
- UL Listing (certain relay/socket combinations)



58 Series  
See the technical data sheet

Approvals (according to type)



Interfacing in general, widely used in panel building, and in applications where 3 or 4 contacts are required.  
Industrial automation control panels, power plants, home automation, etc...  
ATEX and HAZLOC applications: LPG deposits, underground garages, gas stations.

# 50 SERIES

# PCB Relay with forcibly guided contacts 8 A



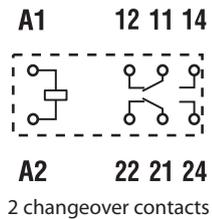
50 Series  
See the technical data sheet

→ Relay with forcibly guided contacts according to EN 61810-3 (previously EN 50205) for safety applications

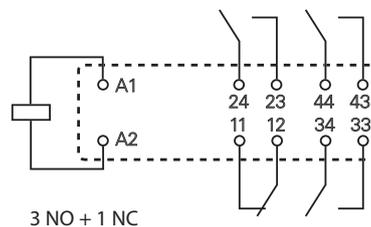
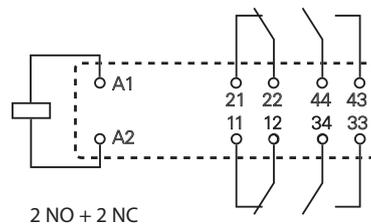
→ Bobina in DC a basso assorbimento

- Contact configuration (according to type):  
2 changeover contacts 8 A  
4 pole: 2 NO + 2 NC, 3 NO + 1 NC  
6 pole: 4 NO + 2 NC, 5 NO + 1 NC, 3 NO + 3 NC
- High physical separation between adjacent contacts
- PCB mount

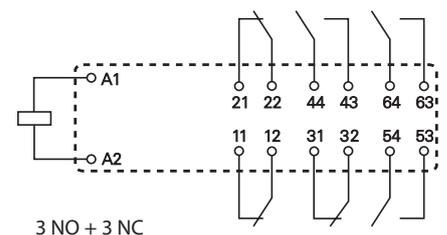
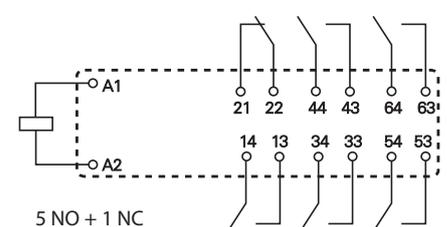
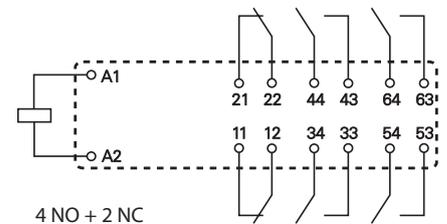
50.12



50.14



50.16



Approvals (according to type)



Machine tools, elevators, safety barriers.

# 7S SERIES Modular relays with forcibly guided contacts 6 - 10 A



7S Series  
See the technical data sheet

## → Relay with forcibly guided contacts according to EN 61810-3 (previously EN 50205) for safety applications

- Modular electromechanical relays with 2 - 3 - 4 or 6 forcibly guided contacts
- AC coils or DC coils
- Coil status visual indication with LED
- 17.5 mm or 22.5 mm wide
- Box clamp or screwless terminals
- 35 mm rail (EN 60715) mount

### SIL2

Assessed to EN 61508 for functional safety in applications up to SIL2 according to EN 62061, and for functional safety in applications up to PL d according to EN 13849-1.

### SIL3

Assessed to EN 61508 for functional safety in applications up to SIL3 according to EN 62061, and for applications up to PL e according to EN 13849-1. System with dual channel architecture (1oo2) with two NO contacts, 1 feedback contact and 1 auxiliary contact.



7S.12/7S.32	7S.14/34...4220	7S.14...4310	7S.16/36...5420	7S.16/36...5510	7S.23	7S.43/63																																																																																																																									
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Approvals (according to type)



For safety applications up to SIL 2 or SIL 3 according to IEC 61508 (according to type).  
Machine tools, elevators, safety barriers and expansion modules.

Special versions for railway applications.

# 70 SERIES Monitoring relays

- Multifunction models able to monitor and control the characteristic variables of single-phase and three-phase electrical systems
- Positive safety logic
  - 1 or 2 changeover contacts
  - Colored LEDs for clear & immediate visual indication
  - NFC version
  - Modular, 17.5, 22.5 or 35 mm wide
  - 35 mm rail (EN 60715) mount



70 Series  
See the technical data sheet



70.51



70.42

Approvals (according to type)



This product range is ideal for voltage control in equipment and machinery such as motors, lifts, elevators, hydraulic pumps, air-conditioning systems and air treatment machines.

# 72 SERIES

## Level control relays for conductive liquids



72 Series  
See the technical data sheet

- **Multifunction versions**
- **Type 72.01 and 72.11: electrode type liquid level controllers**
- **Type 72.42: priority change relay for alternating loads**
  - LED indicator
  - Control about a single level or between Min./Max. limits (72.01/72.11)
  - Emptying or filling functions
  - Complex load control to account for issues such as redundancy, maintenance, intervention of external override signals
  - Reinforced insulation (6 kV - 1.2/50 μs) between: supply and contacts, electrodes and supply, contacts and electrodes
  - Modular, 35 mm wide



72.01



72.42



72.51

- **Type 72.51, modular, 17.5 mm wide**
- **Wide range of accessories available**
  - Emptying or filling functions (6 functions: FL, FS, ES, EL, WL, WS):
    - Control about a single level, between Min./Max. limits or Window mode
  - Adjustable sensitivity (5...150) kΩ
  - Delay time (0.5 s or 7 s) selectable
  - Double LED indicator: power supply ON and indication of output status
  - Reinforced insulation (6 kV - 1.2/50 μs) between:
    - supply and contacts
    - electrodes and supply
    - contacts and electrodes
  - Contact configuration: 1 CO (SPDT), 6A

Approvals (according to type)



Type 72.01, 72.11 and 72.51: level control of conductive liquids using electrodes.  
Type 72.42 is ideal for alternating load sharing in applications with pumps, compressors, air conditioning and refrigeration units.

# 72 SERIES Accessories for 72.01, 72.11 and 72.51 (according to type)

A wide range of sensors make the Level Control Relays ideal for different applications.

Normally, 2 sensors are used to control to a single level, or 3 sensors are used to control between "Minimum" and "Maximum" levels.

If the tank is made of conductive material, it can be used directly as the "common" connection to B3.

If you have to control to two different levels in the same tank, simply use 2 relays.



**Type 072.01**  
for liquid foodstuff  
**Type 072.02**  
for liquids with high chlorine content (swimming pools)

Pre-wired cable-sensor with cable length 6 or 15 m (1.5 mm<sup>2</sup>), suitable for level monitoring in food applications or where there are high levels of chlorine, in wells and reservoirs not under pressure.



**Type 072.51**  
Bipolar electrode holder, suitable for metal tanks with G3/8" coupling. The tank can be used as ground via the coupling by connecting it directly to the screw terminal (B3) of the relays 72.01/11.  
The total length of the probe is obtained by interconnecting multiple 072.500 electrodes.  
Maximum liquid temperature 100°C.  
High-quality electrode material: stainless steel (AISI 304) for high corrosion resistance.



**Type 072.41**  
One-pole sensor for wells and tanks. Maximum liquid temperature 80°C.  
High-quality electrode material: stainless steel (AISI 316L) with high corrosion resistance.  
Made of polypropylene for resistance to aqueous solutions of inorganic salts, acids, alkaline solutions, alcohol, some oils and washing solutions.  
Physiologically harmless, it is therefore especially suitable for use in the food and pharmaceutical industries.



**Type 072.53**  
Three-pole electrode holder for wells and tanks.  
The total length of the sensor is obtained by interconnecting multiple electrodes 072.500.  
Maximum liquid temperature 70°C.  
High quality electrode material: stainless steel (AISI 303) for high corrosion resistance.



**Type 072.11**  
Flood sensor, ideal for detecting floor surface water and condensation (for example in refrigerator aisles).



**Type 072.503**  
Electrode separator - for use with the 072.53 holder and 072.500 electrodes.  
Maintains the safe separation of the electrodes - preventing them inadvertently touching each other.

# 72 SERIES

## Float switch suitable for fluid level regulation

- Suitable for emptying and filling
- Cable and plastic EPDM and H05 RN F certified version
  - 1 changeover contact 10 A (resistive load) / 8 A (inductive load)
  - Space saving version
  - Cable length 5 m, 10 m, 15 m or 20 m
  - Type 72.C1: Manual switch for automatic (ON/OFF) or manual (always ON) operation, cable length 2 m



72 Series  
See the technical data sheet



72.A1.1000.xx02  
Cable material EPDM



72.A1.1000.xx01  
H05 RN F cable approved TÜV



72.B1.1000.xx01  
H05 RN F cable approved TÜV



72.C1.0000.0201  
H05 RN F cable approved TÜV

Approvals (according to type)



Type 72.A1.1000.xx01: for grey water, professional plumbing systems and waste water.  
 Type 72.A1.1000.xx02: for swimming pools with high levels of chlorine, or in salt-water pools with high levels of salinity. Cable and plastics ACS certified for alimentary uses.  
 Type 72.B1.1000.xx01: for black water systems, drainage plants and pumping stations.  
 Type 72.C1.0000.0201: space saving, clean or waste water wells, industrial and chemical waters.

# 7M SERIES SMART Energy meters with NFC technology

Control, measurement and data transmission via pulse communication interface, Mbus or Modbus (according to type).



7M Series  
See the technical data sheet

- **Thanks to NFC technology it is possible:**
  - to monitor the trend of energy consumption
  - to program and customize the counters 7M
  - store and share programs
  - to read the energy meter without the presence of the supply network
- **MID certified, according to type, up to 70°C**
  - Bidirectional energy meters for measuring kWh, kvarh, kVAh, voltage and current, phase, line-to-line voltage, frequency, cosfi and THD  
Equipped with double tariff and re-settable partial counters
  - Modbus RS485, M-bus or Ethernet communication port incorporated into the meter
  - Modular, 17.5 or 52.5 mm wide
  - 35 mm rail (EN 60715) mount



**7M.24**  
NFC - Modbus RS485

- Single phase systems
- Rated current 40 A – 70°C
- Counters for active imported and exported energy
- 8 resettable counters, customized via the App

**7M.38**  
NFC - Modbus RS485

- Three phase systems with or without neutral or for single phase systems
- Rated current 80 A – 70°C
- Counters for active imported and exported energy
- 16 resettable counters, customized via the App

Approvals (according to type)



Energy meters ideal for remote monitoring and measurement of energy consumed in apartments, communal areas in apartment blocks, boilers, photovoltaic systems, machine tools, production lines and presses, etc...

# 7M SERIES SMART Energy meters with NFC technology

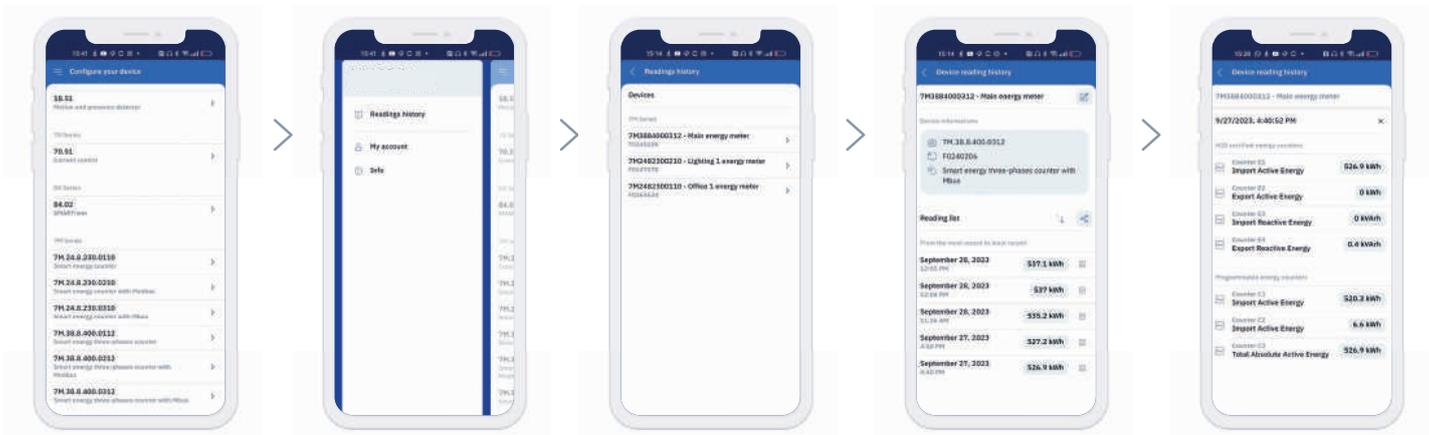
## 7M Series – Toolbox App



7M Series  
See the technical data sheet

With the last update of Toolbox App and thanks to the NFC technology is possible to:

- store on Finder cloud the energy measurements done with 7M energy meter
- easily check the consumption trend on your smartphone
- send to your mail address a CSV file to create graph and analyse the power consumption with your PC
- name the meter to easy recognize it and the energy measured (eg. meter for Mr Finder's car box)
- no annual fee to store your data



Approvals (according to type)



Energy meters ideal for remote monitoring and measurement of energy consumed in apartments, communal areas in apartment blocks, boilers, photovoltaic systems, machine tools, production lines and presses, etc...

# 6M SERIES Power analyzer products

Type 6M.Tx - Single phase Modbus quality power Monitors.



6M Series  
See the technical  
data sheet

- **"All-in-one": CT, Power/Energy meter and Supply quality monitor + Modbus communications**
- **True-RMS AC and DC measurements**
  - Accuracy class: 0.5% F.S.
  - Up to 300 A - 800 V AC  
up to 400 A - 1000 V DC measurement
  - Bi-directional active energy measurement kWh
  - Working frequency: DC or 1...400 Hz
  - Fully configurable via Modbus RS485 interface (free software)
  - DIN rail mounting (with DIN rail adaptor included)



**6M.TA.9.024.1200**  
50 A - 800 V AC/1000 V DC

**6M.TB.9.024.1200**  
100 A - 800 V AC/1000 V DC



**6M.TF.9.024.1200**  
300 A - 800 V AC,  
400 A - 1000 V DC



Type 6M.BU.0.024.2200 - Modbus RS485 RTU  
Modbus TCP/IP Gateway with on board web server interface

- **Ethernet com port: 10/100 Mb/s (Max 10 Clients)**
- **Modbus RTU com port: RS485 up to 115.200 bit/s (Max 200 slaves)**
  - User interface: 6 LED
  - Insulation between power supply, RS485, Ethernet: 1500 V
  - DIN rail mounting

Approvals (according to type)



Charging Stations, energy management, inverters, Industrial automation, panels for electrical distribution, PV applications.

# 7P SERIES Surge protection devices (SPD)

SPD, for single/three phase applications, for protection of data lines.



7P Series  
See the technical data sheet

- **Class I + II SPD with varistor and GDT guarantees high isolation and zero leakage current (7P.04)**
  - Class I + II SPD, compact and efficient - effective protection starting from the point of delivery of energy
  - Class I and Class II SPDs with replaceable module
  - Class III SPDs for a wide range of applications such as LED lamps, sensitive electronics, data lines
  - For panel or 35 mm rail (EN 60715) mount
  - Equipped with replaceable modules with or without remote signalling contact
  - Modular, from 18 to 144 mm wide



7P.04



7P.12



7P.23



7P.25



7P.36



7P.68



7P.62-RS485

Approvals (according to type)



The ideal overvoltage protection system consists of the connection of Class I, II and III SPDs. Providing protection from atmospheric (lightning) and switching overvoltage. Residential and service installations such as: apartments, saunas, TVs, dishwashers, computers, modems, etc... Industrial installations: elevators, motors, sensitive measurement and data transmission electronics. Photovoltaic systems: inverters, panels and control and measurement devices.

# 7P SERIES Surge protection devices (SPD)

SPD Type 1+2 designed for charging stations.  
For industrial, and residential and commercial applications, with or without a lightning rod.



7P Series  
See the technical data sheet

- Compact size with no leakage current
- High discharge current up to 50 kA<sub>imp</sub>
- For single and three phase systems (230/400 V)

Each module has a combined high energy varistor block and a high-performance spark gap (GDT) that ensure:

- High discharge current
- High insulation resistance that eliminates leakage current
- No following current



**7P02.8.275.1012**  
SPD Type 1+2  
for single phase TT (TN-S) systems



**7P04.8.275.1012**  
SPD Type 1+2  
for three phase TT (TN-S) systems



**7P05.8.275.1012**  
SPD Type 1+2  
for three phase TN systems

Approvals (according to type)



The ideal overvoltage protection system consists of the connection of Class I, II and III SPDs. Providing protection from atmospheric (lightning) and switching overvoltage.  
Residential and service installations such as: apartments, saunas, TVs, dishwashers, computers, modems, etc...  
Industrial installations: elevators, motors, sensitive measurement and data transmission electronics.  
Photovoltaic systems: inverters, panels and control and measurement devices.

# 7P SERIES Surge protection devices (SPD)

SPDs for Photovoltaic Applications.



7P Series  
See the technical  
data sheet

- Compact size with high total discharge current up to 12.5 kA.
- Upside down mounting solution
- Suitable up to 1500 V DC of  $U_{CPV}$

## SPD Type 1+2

parameters for each pole: - Y connection

- $I_{imp}$  = 6.25 kA (single pole)
- $I_n$  = 20 kA
- $I_{max}$  = 40 kA



7P.13.9.000.1006  
 $U_{CPV}$  = 1050 V DC



7P.13.9.500.1006  
 $U_{CPV}$  = 1500 V DC

## SPD Type 2

- $I_n$  = 20 kA
- $I_{max}$  = 40 kA

x = optional  
remote  
connector



7P.23.9.750.x020  
 $U_{CPV}$  = 750 V DC



7P.23.9.000.x015  
 $U_{CPV}$  = 1020 V DC



7P.23.9.500.x015  
 $U_{CPV}$  = 1500 V DC

Approvals (according to type)



SPD Type 1+2 and Type 2 for Photovoltaic Applications in compliance with the regulations in force.

# 77 SERIES Solid State Relays (SSR)



Modular version, 5 - 15 - 25 - 30 A

→ **DC output with short circuit protection**

- 1 normally open contact AC output
- 17.5 mm or 22.5 mm wide, heat-sink + plastic cover
- Zero-crossing and random switch-on versions available
- Silent switching, arc and bounce-free switching
- Low control power



77 Series  
See the technical data sheet

77.01

Solid State Relay "Hockey puck" case from 25 to 125 A for single phase application, dual phase with 2 independent channel and for three phase system.



77.x1

- Single phase SSR with SCR power output device
- Nominal switching (load) current: 25, 40, 60, 80, 100, 125 A
- Rated voltage (load): 230 or 600 V AC
- Zero Crossing switching mode
- Nominal coil voltage: 24 V DC or 230 V AC
- Dielectric strength: 4000 V AC



77.x2

- Dual phase SSR with 2 independent channels
- Dual SCR power output
- Nominal switching (load) current: 25, 50, 75 A
- Rated voltage (load): 600 V AC
- Random switching mode
- Nominal coil voltage: 24 V DC
- Dielectric strength: 4000 V AC



77.x3

- Three phase SSR with SCR output power device
- Nominal switching (load) current: 25, 40, 60, 80 A
- Rated voltage (load): 600 V AC
- Random switching mode
- Nominal coil voltage: 24 V DC or 230 V AC
- Dielectric strength: 4000 V AC

Approvals (according to type)



Particularly suitable for resistive loads and for industrial applications with high switching rate and loads with high inrush currents.

"Zero crossing": for switching low-energy lamps (in particular for compact low-energy lamps - CFL), resistive loads, solenoids, contactor coils.

"Random switch-on version": for fast switching applications (in particular motor loads), circuits where the input phase is different from the output phase, and for three-phase loads.

# 78 SERIES Switch mode power supplies

High-performance switch mode power supplies with adjustable output voltage and overvoltage and short circuit protection.

- **High efficiency and reliability**
- **Low stand-by power consumption**
  - Compact size
  - Front panel access for easy replacement of input fuse (according to type)
  - Separate alert for thermal protection
  - Compliant with EN 60950-1 and EN 61204-3



78 Series  
See the technical data sheet



78.12



78.60



78.2E

Approvals (according to type)



Industrial applications: industrial automation, control and measurement systems.  
Building applications: video door entry systems, pumps, DC motors, LED lighting, panels for interfacing BUS systems.

# 7T SERIES Panel Thermo-Hygrostat and Thermostats

## Type 7T.51 - THERMO-HYGROSTAT

→ **Compact size, 17.5 mm**

→ **Electronic temperature control +10...+60°C and humidity control 50...90%**

- 1 normally open contact (10 A)
- Multi-function

## Type 7T.81 - THERMOSTATS

→ **Compact size, 17.5 mm**

→ **Temperature setting 0...+60 °C, -20...+40 °C, -20...+60°C**

- 1 normally open contact (10 A) version for ventilation control
- 1 normally closed contact (10 A) version for heating control



7T Series  
See the technical data sheet



7T.51



7T.81.0.000.230x



7T.81.0.000.240x

Approvals (according to type)



Ensuring the performance and longevity of components and instrumentation within control panels and enclosures. Control of ventilation fans or anti-condensation heaters, according to the temperature being above or below the set level.

In the case of the thermo-hygrostat, control is also dependent on the humidity within the panel.

# 7H SERIES

## Panel heaters

25 - 50 - 100 - 150 - 250 - 400 W

→ **SAFE TOUCH plastic protection against accidental contact**

- Heaters: heating power 25 - 50 - 100 and 150 W
- Nominal voltage 110...230 V AC/DC
- Fan assisted heaters: heating power 250 and 400 W
- Nominal voltage 120 or 230 V AC



7H Series  
See the technical data sheet



7H.51.0.230.0025



7H.51.0.230.0100



7H.51.8.230.0250

Approvals (according to type)



Used in control panels and enclosures to prevent the formation of condensation by keeping the interior above the dew point.

# 7F SERIES Filter Fan (24...700)m<sup>3</sup>/h and Exhaust Filter

- **Air flow from 24 to 700 m<sup>3</sup>/h**
- **Protection category IP 54 and NEMA Type 12 and Type 3R (7F.30)**
  - Nominal voltage 120 V AC, 230 V AC or 24 V DC (according to type)
  - Available for indoor (7F.20) or outdoor (7F.30) applications
  - Filter Fan supplied in Reverse flow mode (7F.21 and 7F.31)
  - Very low acoustic noise
  - Easily replaceable filter mat
  - Dimensions from 120 mm up to 320 mm
  - Push-in terminals
  - Colours available: Types 7F.20 - Grey RAL 7035 and Black RAL 9004  
Types 7F.30 - Grey RAL 700



7F Series  
See the technical data sheet



Approvals (according to type)



Filter fans with exhaust filters to help maintain constant temperature in control panels and enclosures and ensure long term performance of components.

# 7L SERIES LED panel lights



7L Series  
See the technical  
data sheet

- Versions with: direct switching, switching via ON/OFF switch and switching via movement detector
- Brightness levels: 600 or 1200 lumens
- Nominal power consumption: 6 W (600 lm), 9 W (1200 lm)
- Direct magnetic mounting or through a screw-fixed metallic support
  - Power supply: 12...48 V AC/DC and 110...240 V AC/DC
  - Radiation angle: 120°
  - Colour temperature: 5,000 K
  - Protection category: IP 20
  - Push-in terminals for the connection to a single unit
  - Plug-in terminals for the connection to a single or multiple units (up to max. 7 lamps)
  - Connector Type 07L.11 included in the packaging



DIRECT SWITCHING



SWITCHING VIA ON/OFF  
SOFT LATCH SWITCH



SWITCHING VIA  
MOTION DETECTOR

Approvals (according to type)



Used in electrical cabinets or technical compartments for powerful and versatile lighting.

# 7U SERIES Power outlets for electrical enclosures

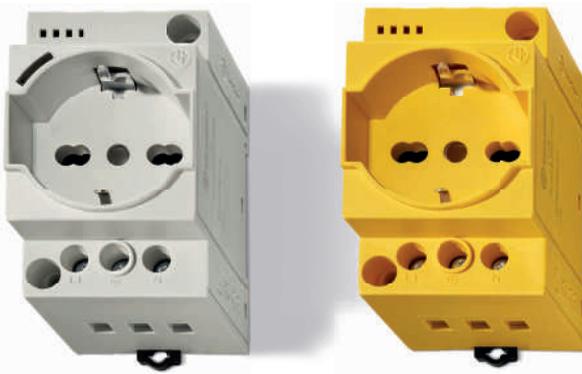


7U Series  
See the technical  
data sheet

→ **Voltage indication LED version available**

- 45 mm wide
- Available in grey (RAL 7035) and yellow (RAL 1021) color (according to type)
- 35 mm rail (EN 60715) mount

**Italian Bipasso - Type F and Type L 10/16 A**  
Nominal voltage: 250 V AC



7U.00.8.230.00x0

7U.00.8.230.00x2

**French system - Type E 16 A**  
Nominal voltage: 250 V AC



7U.01.8.230.00x0

7U.01.8.230.00x2

**North America - Type B 15 A**  
Nominal voltage: 125 V AC



7U.02.8.120.00x0

Approvals (according to type)



For a secure and approved power outlet for use within electrical enclosures.

# 9D SERIES High Current Terminal Blocks

- **Nominal current: 80, 125, 175, 250 or 400 A**
- **Daisy chain blocks for further expansion of output terminals**
  - Available with 7, 8 or 12 connections (according to type)
  - Cable connection capacity up to 185 mm<sup>2</sup> cross section
  - Screw terminals
  - 35 mm rail (EN 60715) mount



9D Series  
See the technical data sheet



9D.01.5.080.0304

9D.01.5.125.0206



9D.01.5.175.0210

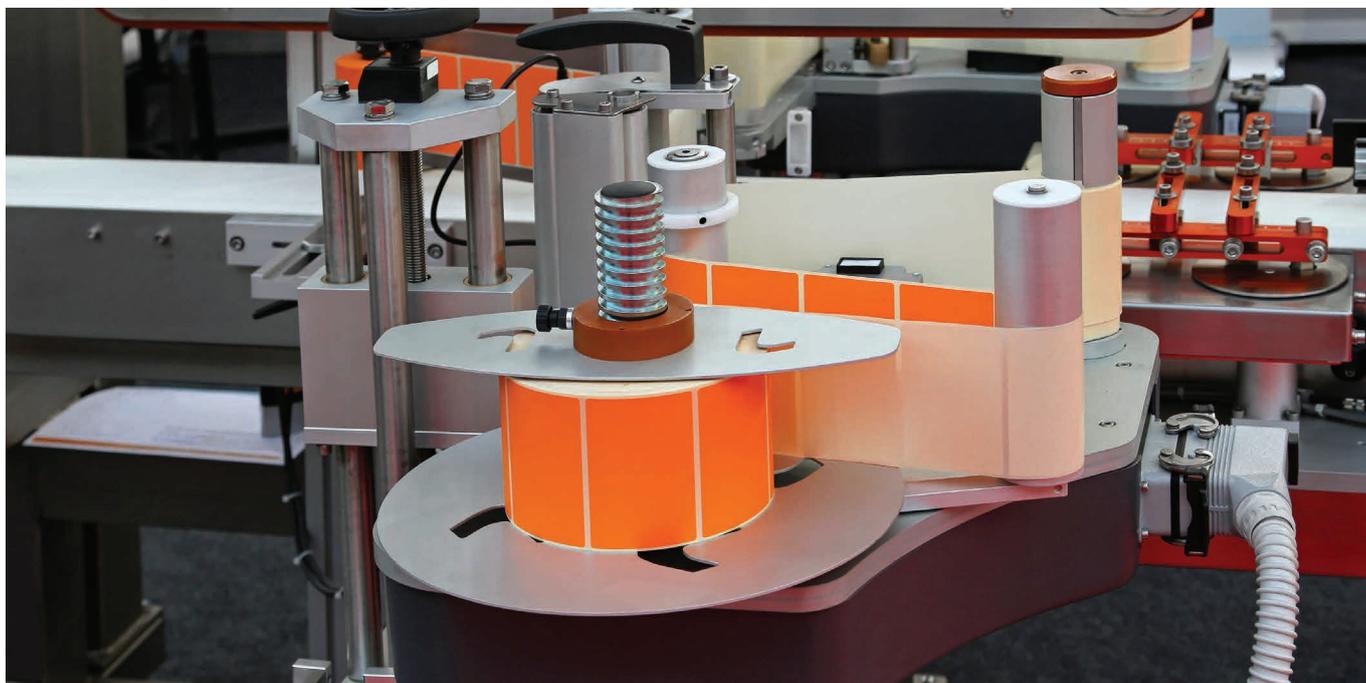
9D.01.5.250.0111

9D.01.5.400.0111

Approvals (according to type)



For the combining and distribution of high current power cables within electrical panels and cabinets.



## 81 SERIES Modular timer 16 A



Multi-voltage Modular Timer 17.5 mm, with Start and Reset function.

### → Reset function

- Multi-function (7 functions, 4 with power-on start and 3 with Start and Reset control signal inputs)
- Wide nominal voltage range of 12 to 230 V AC or DC (non-polarised)
- DIP switch for time and function controls
- Six time scales from 0.1s to 10h



81 Series  
See the technical data sheet

Approvals (according to type)



Automatic door and gate openers, shipyards, drills, cleaners, sanders, control panels, distribution, timers and lighting controls, milk-processing machines, control panels, industrial sweepers.

# 80 SERIES Modular timer 1 - 6 - 8 - 16 A



80.01

Modular timers 17.5 mm. Multi-voltage, Multi-function and Mono-function.

- **Wide nominal voltage range of 12 to 240 V AC or DC (non-polarised)**
  - "PWM clever" technology for automatic recognition of the supply voltage
  - Rated current up to 16 A; a version with 1 A SSR output is also available
  - Six time scales from 0.1s to 24h
  - High input/output isolation
  - "Blade + cross" - both flat blade and cross head screwdrivers can be used to adjust the range and function selectors, the timing trimmer, and to disengage the rail mounting clip



80 Series  
See the technical  
data sheet

Type 80.01.0.240.N000 - Modular Timer, with NFC

- **Multi-voltage**
- **Multi-functions**
- **Programmable via NFC**
  - 1 CO contact 16A
  - Nominal voltage 12...240V AC/DC
  - 7 functions available
  - 17,5 mm wide



Approvals (according to type)



Automatic door and gate openers, building automation, cranes, pump control panels and pumping units, automated awnings, blinds, shutters, elevators, control systems, timers and lighting controls.

# 83 SERIES Modular timers 8 - 12 - 16 A

Modular timers 22.5 mm. Multi-function and Mono-function.



83.91

- **Wide nominal voltage range of 24 to 240 V AC or DC (non-polarised). Rated current up to 16 A; special versions also available with 2 timed contacts or 1 timed + 1 instantaneous contact plus option to set delay time via an external potentiometer**
  - Multi-function and Mono-function types available
  - "PWM clever" technology for automatic recognition of the supply voltage
  - Eight time scales from 0.05 s to 10 days
  - High input/output isolation



Type 83.02.0.240.0003 - IECEx modular timer

- **Multi-function & multi-voltage IECEx, ATEX (Zone 2, Category 3), HazLoc (CI I, Div.2) timer**
  - 2 Pole (timed + instantaneous options)
  - External time setting potentiometer option
  - $U_n = 24 \dots 240 \text{ V AC/DC}$
  - 2 changeover contacts, 277 V AC, 10 A
  - ATEX: II 3 G Ex ec nC IIC T4 Gc
  - IECEx: Ex ec nC IIC T4 Gc
  - HazLoc: CI I, Div2, Gr A, B, C, D, T4, CI I, Zn 2, AEx ec nC IIC T4, Ex ec nC IIC T4 Gc X



83 Series  
See the technical  
data sheet

Approvals (according to type)



Packaging machines, pump control panels and pumping units, industrial refrigeration, discotheques, swimming pools, and fountains, industrial furnaces and ovens, confectionery machines, control panels and distribution, automatic car-washes.

# 84 SERIES SMARTimer, digital timer 16 A



84 Series  
See the technical  
data sheet

- **Multi-function; (the two channels, and their respective selected function, can be combined to create a new and more complex function)**
- **Multi-voltage**
  - Two programming modes: "Smart" mode via smartphone with NFC communication or "Classic" mode via the joystick
  - Wide backlit display
  - High precision and flexibility, adjustable in tenths of a second, seconds, minutes, hours
- 2 changeover contacts 16 A output



# 85 SERIES Miniature plug-in timers 7 - 10 A



- **Seven time scales, from 0.05 s to 100 h**
- **Multi-function**
  - AC/DC supply non polarized
  - 2, 3 or 4 changeover contacts
  - Wide ambient temperature range: -20...+60°C
  - 94 Series sockets mount



85 Series  
See the technical data sheet

Approvals (according to type)



84 Series: Industrial washing machines, timers and lighting controls, discotheques, swimming pools, and fountains, industrial furnaces and ovens, confectionery machines, punches, cleaners, planers and sanders, control panels, automatic car-washes.

85 Series: Medical and dentistry, drying kilns, timers and lighting controls, elevators for workshops, galvanic treatment machines, panels for electrical distribution, control panels, industrial fans.

# 86 SERIES Timer modules



86.00

- Option of functions with external start (Type 86.00)
- Special versions for hazardous locations (ATEX, HazLoc)
  - Multi-function & multi-voltage
  - Wide supply voltage AC/DC range (non polarized)
  - Seven time scale: from 0.05 s to 100 h
  - LED indicator
  - Timer modules for use in conjunction with relay & socket



86 Series  
See the technical data sheet



86.30



# 88 SERIES Plug-in timers 8 A



88 Series  
See the technical data sheet

- 8 and 11 pin plug-in versions available for 90 Series socket mount
- Versions available: 2 timed contacts or 1 timed contact + 1 instantaneous contact
  - Multi-voltage and multi-function
  - Time scales from 0.05 s to 100 h
  - Wide supply voltage AC/DC range



88.02



88.92

Approvals (according to type)



86 Series: Machines for paper processing, printing machines, machines for ceramics, packaging machines, wood processing machines, milk-processing machines, textile machines, control panels.  
88 Series: Medical and dentistry, drying kilns, industrial furnaces and ovens, ultrasonic cleaning machines, industrial washing machines, confectionery machines, wood-processing machines, galvanic treatment plants.

# Socket-Timer compatibility



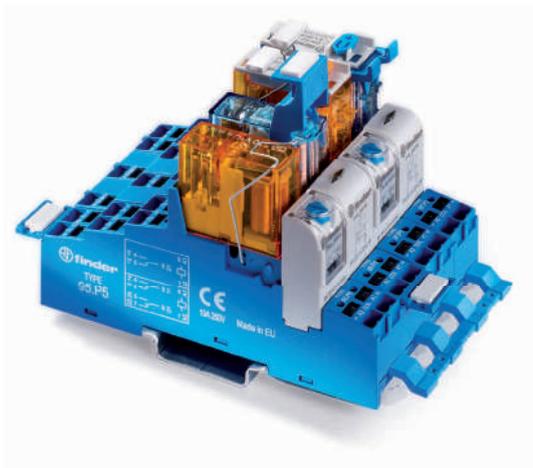
**85 SERIES - Miniature plug-in timers**

Compatible with 94 Series sockets



**88 SERIES - Plug-in timers**

Compatible with 90 Series sockets



**86 SERIES - Timer modules**

Type 86.00

compatible with the following socket type:

- 90.02, 90.03
- 92.03
- 96.04

Type 86.30

compatible with the following socket type:

- 90.02, 90.03
- 92.03
- 96.02, 96.04
- 94.02, 94.03, 94.04, 94.54, 94.P3, 94.P4
- 97.01, 97.02, 97.51, 97.52, 97.P1, 97.P2
- 95.03, 95.05, 95.55, 95.P3, 95.P5



**39 SERIES**

**Slim timed interface module**

- 39.81 - **EMR**  
Timed socket with box clamp
- 39.80 - **SSR**  
Timed socket with box clamp
- 39.91 - **EMR**  
Timed socket with push-in terminals
- 39.90 - **SSR**  
Timed socket with push-in terminals



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