

## **INDUSTRIAL - NEW PRODUCTS 2023**

Components for electrical enclosures, energy management, industrial automation and IECEx - Atex



## **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 1300 individuals, all united by the same values and passion for our products.

14,500 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









### 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.

### 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.

This focus is demonstrated by the company's commitment to the following internationally recognized projects and certifications:



ISO 9001:2015

Quality

management



ISO 14001:2015 Environmental management



ISO 45001:2018 Health and safety management



ISO 14064-1 2018 Footprint



FSC Forest Stewardship



Simplified customs

and enhanced supply



Cribis Prime Company Recognition of highest reliability of commercial

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### PROGRAMMABLE LOGIC RELAYS

**8A Series** 

## **OPTA RANGE**



# THE UNIQUE NEW PROGRAMMABLE LOGIC RELAY

Free programmable with ARDUINO IDE or ARDUINO PLC-IDE for IEC 61131-3 languages

Easily create applications for industrial automation, OEM and building automation







**SECURE** 



CONNECTED









**EASY** 



**VERSATILE** 









### Type 8A.04.9.024.8300

- Supply 12...24 V DC
- 8 Digital/Analog (0-10 V) input
- 4 NO relay output contacts, rated 10 A
- USB (type C) High Speed port for:
  - Programming
  - Data logging (via memory stick)
- RJ45 for Ethernet connections or MODBUS TCP/IP



### Type 8A.04.9.024.8310 - Supply 12...24 V DC

- 8 Digital/Analog (0-10V) input
- 4 NO relay output contacts, rated 10 A
- USB (type C) High Speed port for:
  - Programming
- Data logging (via memory stick)
- RJ45 for Ethernet connections or MODBUS TCP/IP
- RS485 Port for MODUS RTU connection





### Type 8A.04.9.024.8320

- Supply 12...24 V DC
- 8 Digital/Analog (0-10V) input
- 4 NO relay output contacts, rated 10 A
- USB (type C) High Speed port for:
  - Programming
  - Data logging (via memory stick)
- RJ45 for Ethernet connections or MODBUS TCP/IP
- RS485 Port for MODUS RTU connection
- WIFI/BLE integrated module



### Type 78.12.1.230.2482

- 24 V DC power supplies
- Peak current: 2A
- 15 W, only one module wide (17,5mm)
- Short circuit protection
- Thermal protection
- Overvoltage protection
- SELV









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OUIPUT EMR ZA 250V AC OUTPUT EMR 6A 250V AC

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OPTA

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**finder** 

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**OPTA** 

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EASILY EXPAND THE PLR'S POTENTIAL

FOR GREATER FLEXIBILITY

## **EXPANSION RANGE**



### Type 8A.58.9.024.1600

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



### Type 8A.88.9.024.1600

- 16 digital/analog (0...10 V) inputs
- 8 SSR 2A outputs
- Nominal voltage 12...24 V DC



### Type 8A.26.9.024.0600

- 6 analog 0...10 V, 4...20 mA, PT 100/1000 inputs
- 2 analog 0...10 V, 4...20 mA outputs
- 4 PWM outputs
- Nominal voltage 24 V DC







**INDUSTRY** 4.0



SSR 2A & & & &

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finder

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OPTA

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opta.findernet.com











## **ALL THE PROGRAMMING** LANGUAGES YOU NEED

### FREE – WITHOUT LICENCES

Using ARDUINO IDE, the Open-Source Arduino Software



#### LICENSED - TRADITIONAL

Using ARDUINO PLC-IDE for traditional language IEC 61131-3



designed for cyber security

## A SUPER POWERFUL **PROCESSOR**

### PROCESSOR ST dual-core Cortex® M7+M4

Super fast real-time processing to manage calculations for predictive maintenance and OTA (Over-The-Air) updates

#### CRYPTO CHIP

Enhanced IoT security thanks to the onboard secure element chip















## 78 Series – OPTA Power Supply

Compact DC power supply, designed for use with OPTA

- 24 V DC, 15 W output
- 17.5 mm wide
- High peak output current
- Suitable for SELV applications
- Thermal, overload and short-circuit protection
- 12 W at 50 °C
- UL certified



Type 78.12.1.230.2482



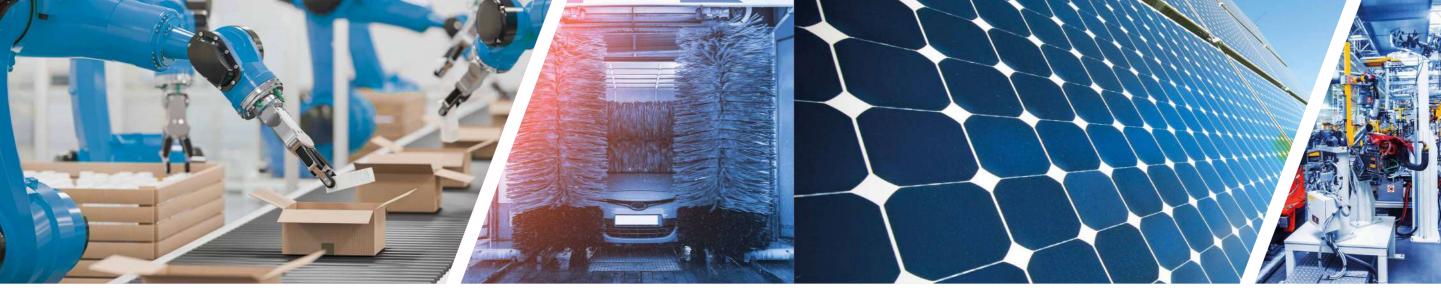




































83 Series - IECEx Modular Timer



- Multifunction, multi-voltage IECEx, Ex (Zone 2, Category 3), HazLoc (Cl I, Div.2) timer
- 2 possible working way: 2 timed contacts or 1 timed + 1 istantaneous
- Timing can be regulated also using an external potentiometer



- Un = 24...240 V AC/DC
- 2 Change over contact, 277 V AC, 10 A
- ATEX: II 3 G Ex ec nC IIC T4 Gc
- IECEx: Ex ec nC IIC T4 Gc
- HazLoc: Cl I, Div2, Gr A, B, C, D, T4, CI I, Zn 2, AEx ec nC IICT4, Ex ec nC IIC T4 Gc X

Type 83.02.0.240.0003













### Single phase Modbus quality power Monitors

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.
- Measurement: up to 300 A 800 V AC up to 400 A 1000 V DC
- Bi-directional active energy measurement kWh
- Working frequency: DC or 1...400 Hz
- Fully configurable via Modbus RS485 interface (free software)



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



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



Type 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 Client)
- Modbus RTU com port: RS485 up to115.200 bit/s (Max 200 slave)
- User interface: 6 LED
- Insulation between power supply, RS485, Ethernet: 1500 V



6M Series

(according to type)





MODULAR TIMERS











Industrial





PV applications





## 7M Series – Smart Energy meters

Energy meters with NFC technology, MID certified at 70°C and RS485 Modbus integrated interface.

Ideally suited for electric vehicle charging systems as well as other single and three phase systems, 3 or 4 wire, with rated currents up to 80 A.

NFC technology allows reading the measured energy even in the absence of mains voltage, and to program and customize the counters via smartphone.



### Type 7M.24.8.230.0210

#### NFC - Modbus RS485

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



### Type 7M.38.8.400.0212

### 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
- MID certified
- 16 resettable counters, customized via the App

## 7M Series – Toolbox App

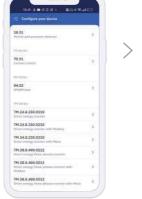
With the last update of Toolbox App and thanks to the NFC technology is possible to:

- 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



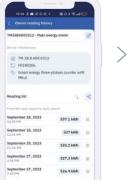
















7M Series See technical data sheet

Approvals (according to type)





















### **6K Series - Industrial Contactors**

New three or four-pole industrial contactors 6K Series for powers from 4 up to 37 kW in AC3 according to IEC/EN 60947. Possible connection of front auxiliary modules from 1 to 4 poles in various configurations.

- 3 Contacts NO from 4 kW to 37 kW AC3, from 9 A to 74 A
- According to EN 60947 / IEC 947
- Nominal voltage 120 V AC, 230 V AC, 24 V AC
- 1 Auxiliary contact NO or NC (according to type) 3 A
- Auxiliary block contact 3 A in various configurations available
- AgSnO2 material contact
- 35 mm Din rail mounting



Type 06K.11 3 A - 400 V AC3

1 NO



Type 06K.12



3 A - 400 V AC3 1 NC



**Type 06K.03** 3 A - 400 V AC3 1 NO + 1 NC









Type 6K.04.8.230.4809

9 A - 400 V AC3 4 kW



Type 6K.13.8.230.4324

24 A - 400 V AC3 11 kW



Type 6K.14.8.230.4810

10 A - 400 V AC3 4 kW



Type 6K.13.8.230.4350

74 A - 400 V AC3 37 kW





















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Bottling plant

## 77 Series - Solid State Relays (SSR)

New Solid State Relay "Hockey puck" case for single phase application up to 125 A, dual phase with 2 independent channel up to 75A and for three phase system up to 80A.





### **Type 77.x1**

- Single phase SSR with SCR power output device
- Nominal switching (load) current: 25, 40, 60, 80, 100 or 125 A versions
- 2 different versions for different nominal output voltage: 230 V AC and 600 V AC: "8250" version: 24...280 V AC load voltage, Zero Crossing switching
  "8650" version: 24...660 V AC load voltage, Zero Crossing switching
- Nominal coil voltage: 24 V DC or 230 V AC
- Dielectric strenght: 4000 V AC

### **Type 77.x2**

- Dual phase SSR with 2 indipendent channel
- Dual indipendent SCR power output
- Nominal switching (load) current: 25, 50, 75 A versions
- 600 V AC output voltage in Random switching mode
- Nominal coil voltage: 24 V DC
- Dielectric strenght: 4000 V AC



### Type 77.x3

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

Approvals (according to type)





















7U Series — Power outlets for electrical enclosures

For a secure and approved power outlet for use within electrical enclosures. Voltage indication LED version available.

- Nominal voltage: 230 V AC or 125 V AC (USA version)
- Nominal current: up to 16 A; 15 A (USA version)
- Voltage indication LED version available
- 45 mm wide
- 35 mm rail (EN 60715) mount

Compatible with Schuko + Italian Bipasso



Type 7U.00.8.230.0010 (Grey RAL 7035) Type 7U.00.8.230.0002 (Yellow RAL 1021)

Compatible with French systems



Type 7U.01.8.230.0000 (Grey RAL 7035) Type 7U.01.8.230.0012 (Yellow RAL 1021)

Compatible with **US** systems



Type 7U.02.8.125.0010 (Grey RAL 7035)

## 7F Series - Filter fans and exhaust filters for outdoor applications

To ensure the performance of the components and instrumentation inside control panels and enclosures also in outdoor applications

- Nominal voltages 120 V AC, 230 V AC or 24 V DC (depending on types)
- Internal filter easily replaceable
- Minimum external dimensions
- Air flow (24...700)m3/h
- Reduced installation and maintenance times thanks to the quick coupling system
- Extremely low noise
- IP54/Type 3R protection rating
- Grey color RAL 7000



for outdoor use



(according to type)







(according to type)



















PV applications









and lifts

## 7P Series – NEW Type 1+2 SPD for Photovoltaic Application

SPD Type 1+2 for PV system – Compact size with high total discharge current up to 12.5 kA Upside down mounting solution – Suitable up to 1500 VDC of U



#### Type 7P.13.9.000.1006

(parameters for each pole)

- PV SPD Type 1+2 Y connection
- $-U_{CPV} = 1050 \text{ V DC}$
- $-I_{imp} = 6.25 \text{ kA (single pole)}$
- $-1_{1}^{2} = 20 \text{ kA}$
- $-I_{max} = 40 \text{ kA}$



### Type 7P.13.9.500.1006

(parameters for each pole)

- PV SPD Type 1+2 Y connection
- $-U_{CPV} = 1500 \text{ V DC}$
- = 6.25 kA (single pole)
- = 20 kA
- =40 kA

## 7P Series – Surge Protection Device (SPD)

SPD Type 1+2 designed for charging stations Suitable also for standard AC application Compact size with no leakage current High discharge current up to 50 kA I 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

### 7P Series – NEW Type 2 SPD for Photovoltaic Application

SPD Type 2 for PV system from 750 up to 1500 VDC of U<sub>CPV</sub>

x = optional remote

connector







#### Type 7P.23.9.500.x015

- PV SPD Type 2  $-U_{CPV} = 750 \text{ V DC}$
- $-I_{n} = 20 \text{ kA}$
- $-I_{max} = 40 \text{ kA}$



### Type 7P.23.9.000.x015

- PV SPD Type 2
- $-U_{CPV} = 1020 \text{ V DC}$
- $-I_{1} = 15 \text{ kA}$
- $-I_{max} = 40 \text{ kA}$

- PV SPD Type 2
- U<sub>CPV</sub> = 1500 V DC
- -1 = 15 kA





### Type 7P.02.8.275.1012

- SPD Type 1+2 for single phase TT (TN-S) systems



### Type 7P.04.8.275.1012

- SPD Type 1+2 for three phase TT (TN-S) systems



#### Type 7P.05.8.275.1012

- SPD Type 1+2 for three phase TN systems



Type 7P.23.9.750.x020

(according to type)







(according to type)





















78 Series - Switch mode power supplies

15 W Low profile power supply switching designed for general use but also as DIN rail, realible, LED driver TUV certified (EN 61347-2-13)

- 24 V DC, 15 W output
- 17.5 mm wide
- Suitable for SELV applications
- Modular LED driver
- Suitable for general use (15 W 40 °C, 12 W 50 °C)
- TUV approved, 12 W, 24 V DC
- UL approved up to 12 W, 24 V at 50°C for industrial and 6M application



Type 78.12.1.230.2402



(according to type)







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