

# Solutions for e-mobility

DEVICES FOR BUILDING RELIABLE, SAFE, EFFICIENT  
AND SUSTAINABLE CHARGING SYSTEMS





# 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 28 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, light and much more.

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

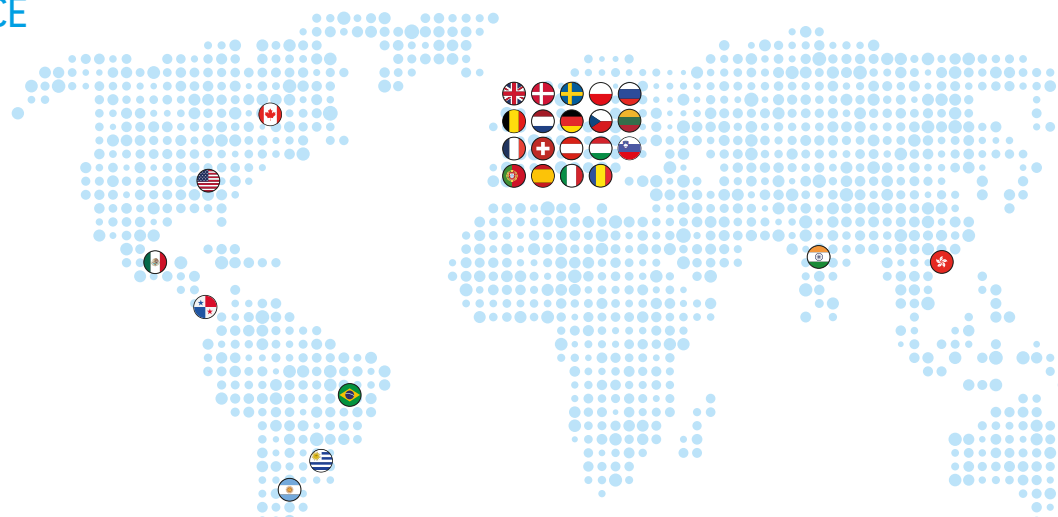


## FINDER IS AN ITALIAN BRAND WITH A WORLDWIDE PRESENCE

4 PRODUCTION PLANTS IN EUROPE

28 SUBSIDIARIES

80+ OFFICIAL DISTRIBUTORS





# WE ARE BUILDING A SUSTAINABLE FUTURE

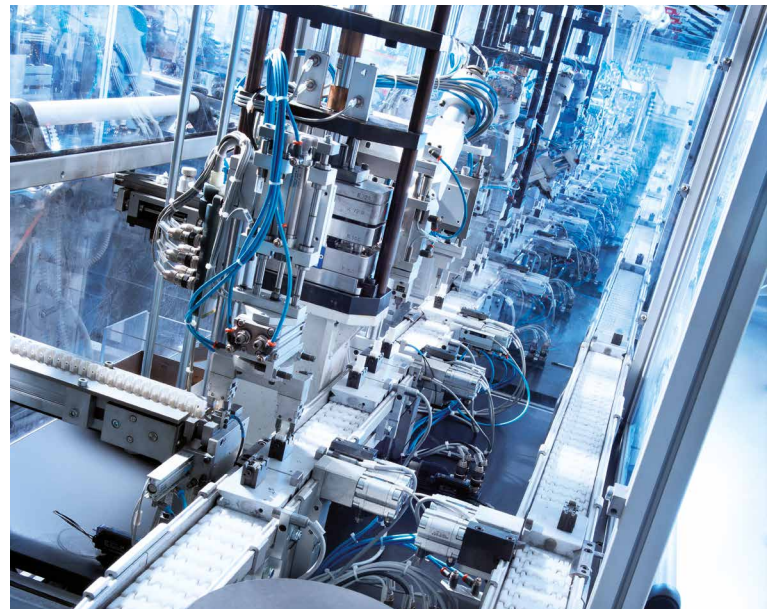
**Finder believes in sustainability and is investing** to make its operations worldwide more and more sustainable.

At present, over 80% of our company energy needs are fulfilled using renewable energy systems.

E-mobility is a key driver in the transition towards the use of sustainable energy.

For e-mobility to spread, an increasingly extended and efficient network of charging points for electrical vehicles is a prerequisite.

Finder's worldwide structure, MADE IN EUROPE products, and know-how of the industry make it the ideal partner for manufacturers of e-mobility charging systems.



# FINDER SOLUTIONS FOR EV CHARGING SYSTEMS

Finder is supporting the transition to environmental-friendly mobility by way of creating efficient, reliable and very high quality solutions for manufacturers of charging systems for e-mobility.

Our devices are developed based on the know-how our company has acquired through partnerships with some of the leading manufacturers of EV charging systems worldwide.



## WHY CHOOSE FINDER?



A **comprehensive range of products** for the charging process, from load switching to energy metering. Applicable for all types of charging stations.



**Easy to install, configure and maintain** thanks to its specifically targeted product design and NFC technology.

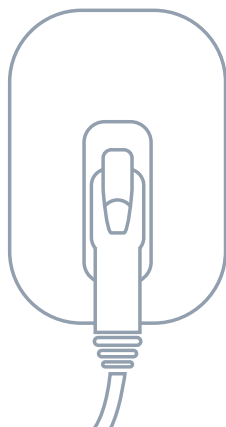


**Unrivalled technical specifications within the industry**

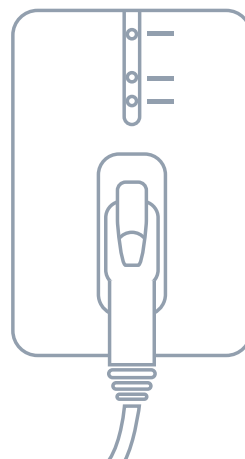
- 7M series smart energy meters with NFC technology. Fully compliant accuracy class up to 70°C with no current derating. Energy measurements readable via NFC even without power to the meter.
- Modular relays and contactors with high load capability up to 70°C



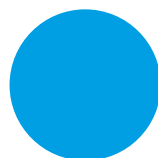
# DEVICES FOR EV CHARGING SOLUTIONS



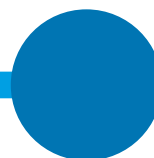
WALL BOX  
FOR RESIDENTIAL USE



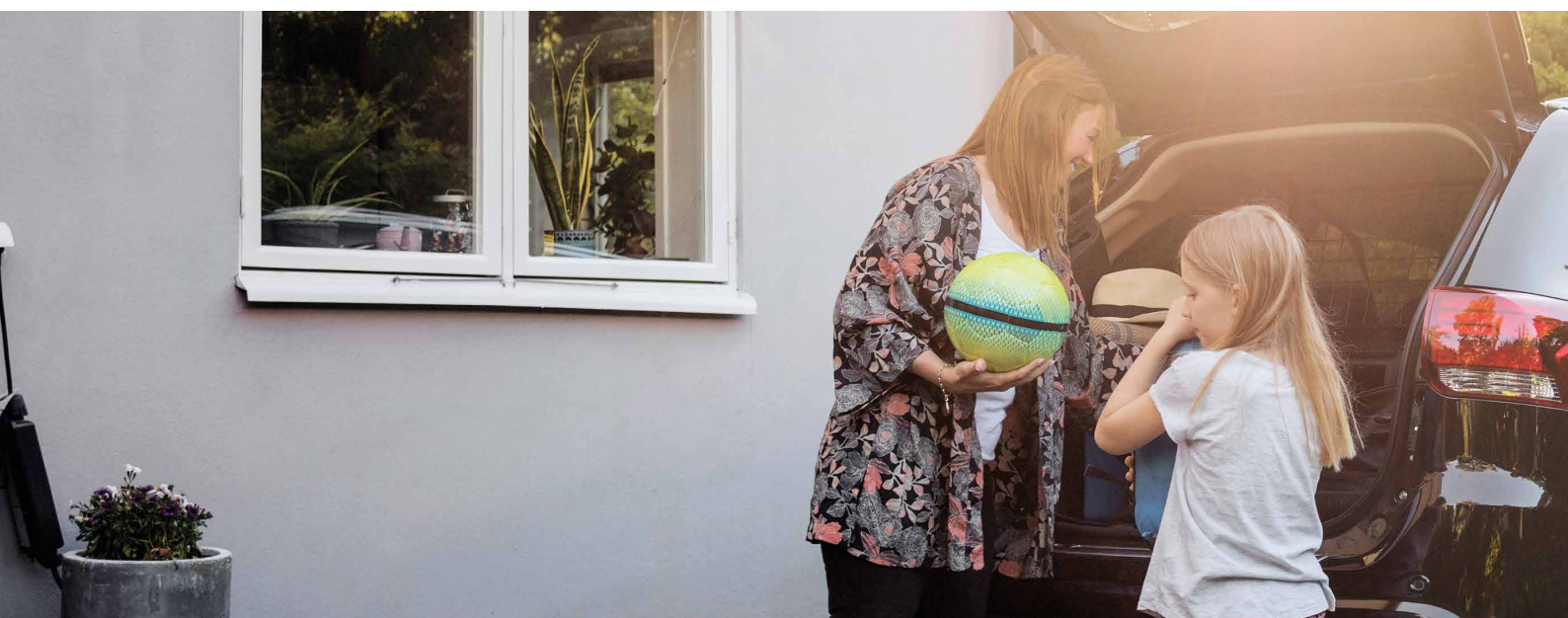
CHARGING STATION  
FOR RESIDENTIAL/  
COMMERCIAL USE

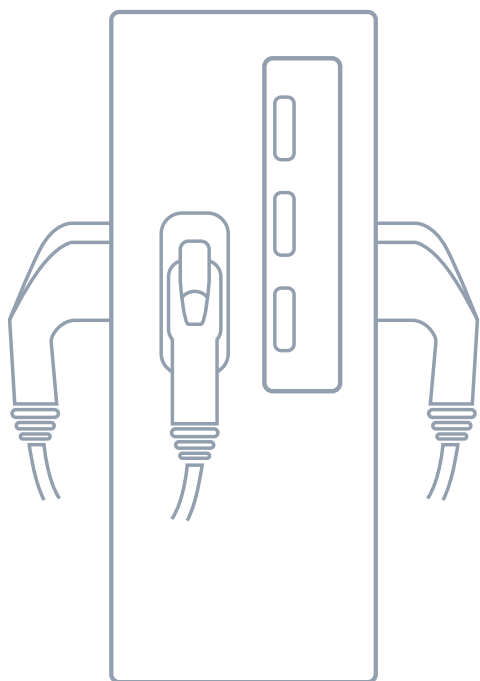


3 kW



33 kW

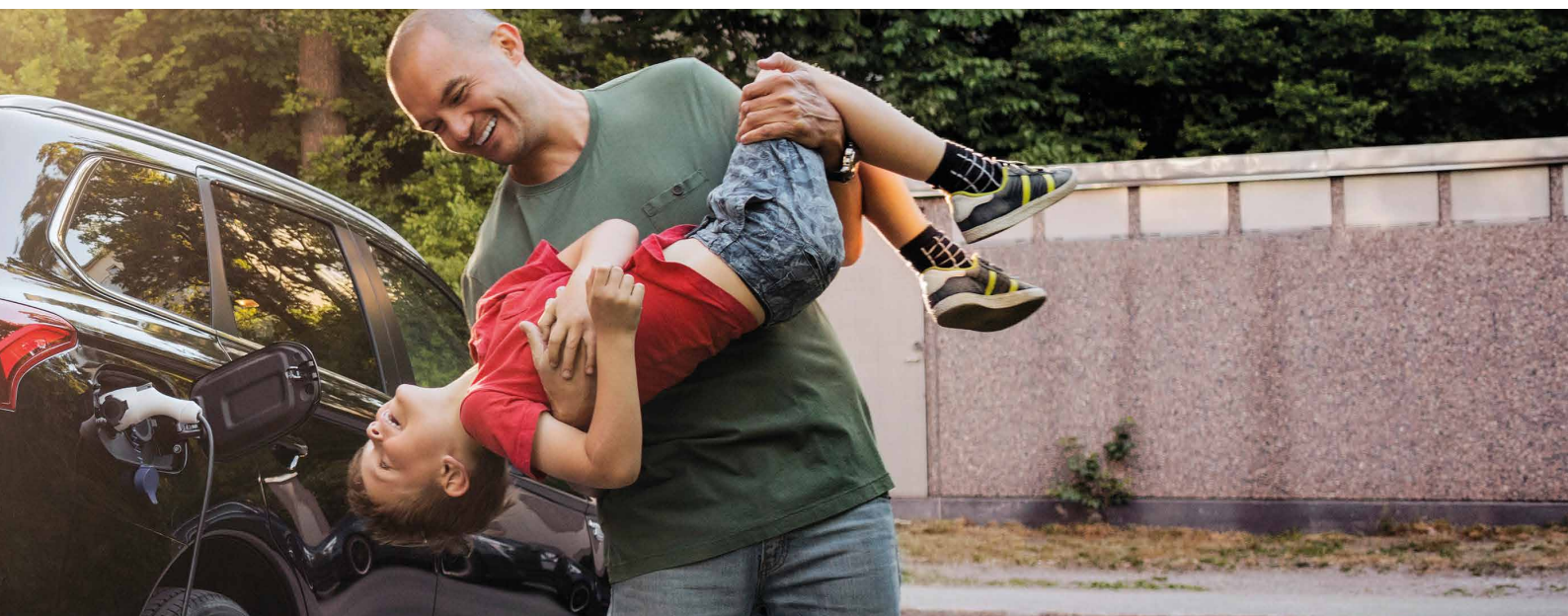


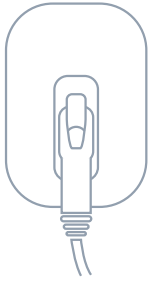


CHARGING STATION  
FOR COMMERCIAL USE



over 55 kW





## PRODUCTS FOR WALL BOX: 3...7.5 kW



### POWER MANAGEMENT

Power relays  
– 45 – 66 – 67 Series  
Modular contactors with Mirror Contact  
– 22 Series



### MEASUREMENT OF ENERGY USAGE

Single-phase, smart MID energy meter, programmable via NFC  
Also available in ModBus version, MID-certified at 70°C  
– Type 7M.24



### SYSTEM PROTECTION AGAINST SURGES

– Type 7P.02, surge protection device (SPD) type 1+2, single-phase  
– Type 7P.22, surge protection device (SPD) type 2 single-phase



### POWER SUPPLIES

– Types 78.12 and 78.25 up to 25 W







## PRODUCTS FOR CHARGING STATIONS: 7.5...33 kW



### POWER MANAGEMENT

Power relays

– 45 – 66 – 67 – 68 Series

Modular contactors with Mirror Contact

– 22 Series



### MEASUREMENT OF ENERGY USAGE

Smart single and three-phase energy meter, programmable via NFC

ModBus communication protocol

– Type 7M.38



### SYSTEM PROTECTION AGAINST SURGES

– Type 7P.02, surge protection device (SPD) type 1+2, single-phase

– Type 7P.04, surge protection device (SPD) type 1+2, three-phase

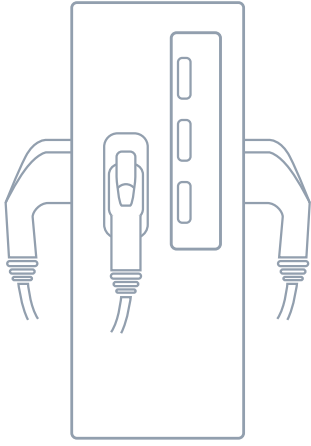


### POWER SUPPLIES

– Type 78.25 or Type 78.60, 25 to 60 W



# PRODUCTS FOR CHARGING STATIONS: 11...55 kW





### POWER MANAGEMENT

Power relays  
– 45 – 66 – 67 – 68 Series  
Modular contactors with Mirror Contact  
– 22 Series



### MEASUREMENT OF ENERGY USAGE

Smart single and three-phase energy meter, programmable via NFC and ModBus communication protocol  
– Type 7M.38



### SYSTEM PROTECTION AGAINST SURGES

– Type 7P.04, surge protection device (SPD) class 1+2, three-phase  
– Type 7P.24, surge protection device (SPD) class 2, three-phase



### POWER SUPPLIES

– Types 78.50 and 78.60

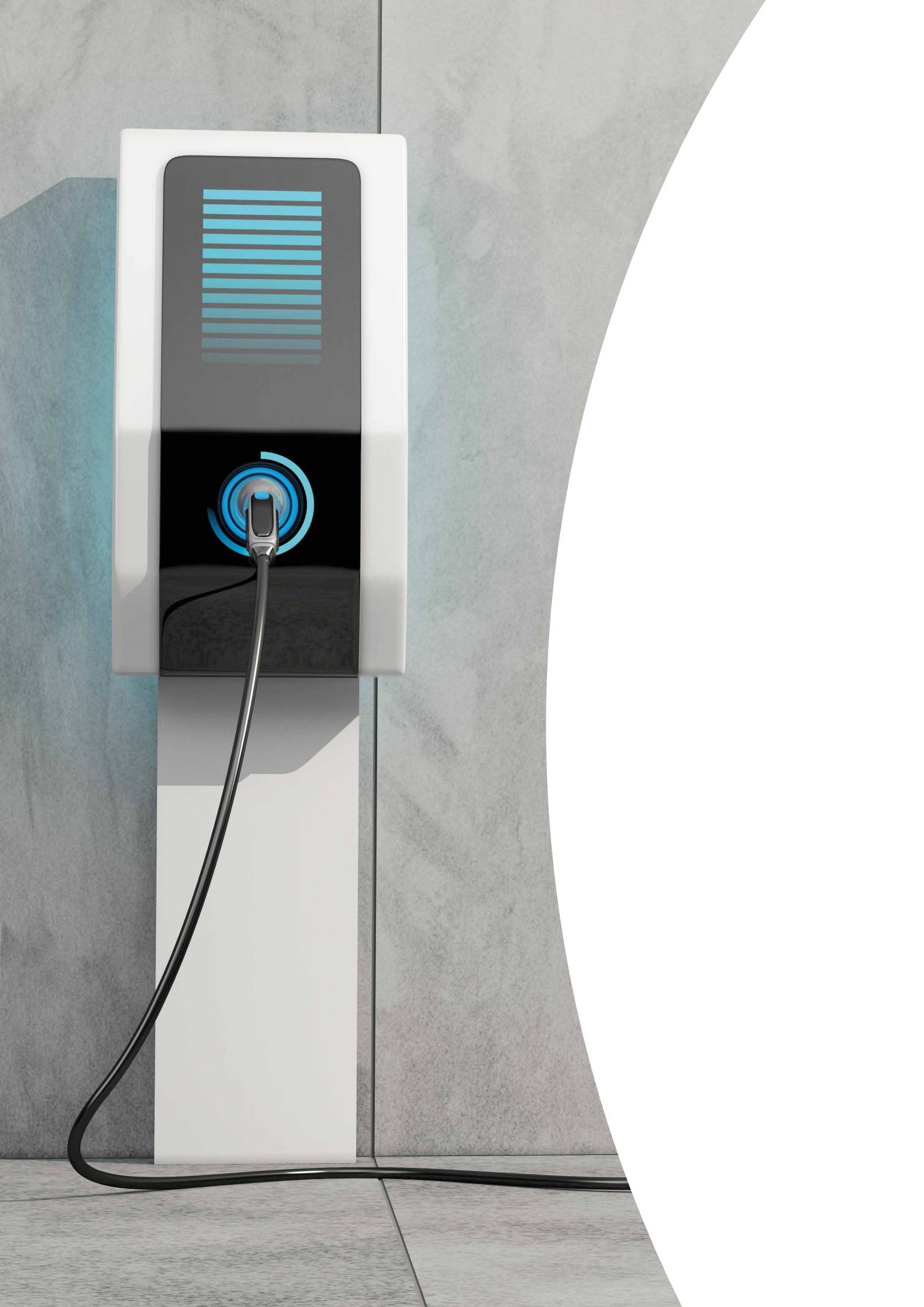


### TEMPERATURE REGULATION ACCESSORIES FOR CHARGING STATIONS

Panel Thermo-Hygrostat and thermostats – 7T Series  
Panel heaters – 7H Series  
Filter fans – 7F Series









# THE PRODUCTS



## POWER MANAGEMENT

Power relays, 45 - 66 - 67 - 68 Series

Power contactors, 22 Series

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## ENERGY MEASUREMENT

Smart energy meters, 7M Series

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## CHARGING SYSTEM PROTECTION

Surge protection devices (SPD), 7P Series

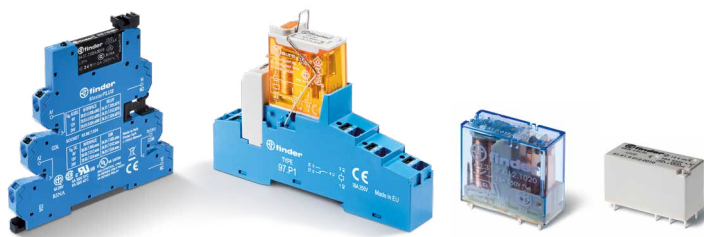
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## POWER SUPPLY

Switch mode power supplies, 78 Series

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## INTERFACES

MasterIN, 39 - 4C Series

PCB or 35 mm rail mounting  
34 - 40 - 41 Series

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## TEMPERATURE REGULATION

Thermo-hygrostats - Thermostat,  
7T Series

Panel Heaters, 7H Series

Filter fans, 7F Series

# POWER MANAGEMENT

## Power relays, 45 - 66 - 67 - 68 Series, for PCB



Type 45.31.x.xxx.x310 - 1 NO double break 16 A, up to 105°C



Type 66.22 - 2 NO 30 A, up to 70°C



Type 67.22 - 2 NO double break 50 A, up to 70°C  
Type 67.23 - 3 NO double break 50 A, up to 70°C



Type 68.22 - 2 NO double break 100 A, up to 70°C

## Modular Power contactors with Mirror Contact, 22 Series



Type 22.72 - single phase 32 A, up to 55°C - 25 A, up to 70°C  
Type 22.74 - three phase 32 A, up to 55°C - 25 A, up to 70°C



Type 22.44 - three phase 40 A, up to 55°C - 40 A, up to 70°C  
Type 22.64 - three phase 63 A, up to 55°C - 50 A, up to 70°C

According to type          

# ENERGY MEASUREMENT

## Smart energy meters, 7M Series

The only product in its accuracy class on the market today with NFC and energy metering capabilities up to 70°C.

### NFC technology: features and benefits

Designed for quick and user-friendly programming using a smartphone and for data storage and sharing during maintenance.

The meters can be read even in presence of a power failure for utmost operator convenience and safety.



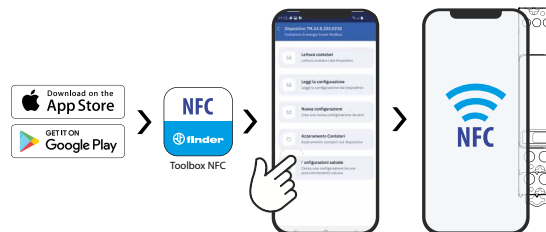
**50 pulse output**  
Type 7M.24.8.230.0110 - single phase 40 A, MID, up to 55°C



**Modbus communication protocol RS485**  
Type 7M.24.8.230.0210 - single phase 40 A, MID, up to 70°C



**Modbus communication protocol RS485**  
Type 7M.38.8.400.0212 - three phase 80 A, MID, up to 70°C



**7M Series Energy meters** are suitable for use up to 70°C without current derating, and they are the only models on the market to allow the reading of the measured energy counters on your smartphone, using the Finder NFC app.

CE MID

# CHARGING SYSTEM PROTECTION

## Surge protection devices (SPD), 7P Series

### ADVANCED PROTECTION

Ideal for **single and three-phase systems** featuring MOV+GDT technology to prevent leakage currents to earth and as a result, achieve a much higher operational lifetime. Provided with remote signalling contacts to monitor the protection level.



**Type 7P.02** - leakage free  
Surge protection device (SPD), type 1+ 2, single and three-phase



**Type 7P.04** - leakage free  
Surge protection device (SPD), type 1+ 2, three-phase

### CONVENTIONAL PROTECTION

**Type-2 surge protection devices** are recommended for single and/or three-phase systems featuring **MOV technology** and a **remote signalling contact** (depending on types) to monitor the operating status of the SPD and to inform the user and the system about the need for maintenance.



**Type 7P.22.8.275.x020**  
Surge protection device (SPD), type 2,  
AC single-phase - DC three-phase



**Type 7P.24.8.275.x020**  
Surge protection device (SPD), type 2, three-phase

According to type    



# POWER SUPPLIES

## Switch mode power supplies, 78 Series

High-performance switch mode power supplies suitable for electrical and electronic applications with adjustable output voltage and with surge and short-circuit protection.

### ADVANTAGES



- High efficiency and reliability
- Compact size
- Low power consumption in stand-by
- Front panel access for easy input protection fuse replacement
- Separate signalling contact for thermal alarms



### Type 78.12

Low profile modular power supplies  
24 V DC, 12 W output



### Type 78.50

Low profile modular power supplies, high efficiency,  
12 V DC, 50 W output.  
Output adjustable between 12-15 V and ZVS technology.



### Type 78.60

Low profile modular power supplies  
24 V DC, 60 W output.  
ZVS technology (zero-voltage-switching).

According to type   

# INTERFACES

## MasterIN - Modular relay interface modules, 39 - 4C Series

Both slim and power interface modules can be used to communicate logic status or signals, and can be mounted on 35 mm rail (EN 60715).

The interface modules making up the MasterIN system make wiring operations easy and quick, offering significant savings in time and money as each single module or relay element can be replaced individually.

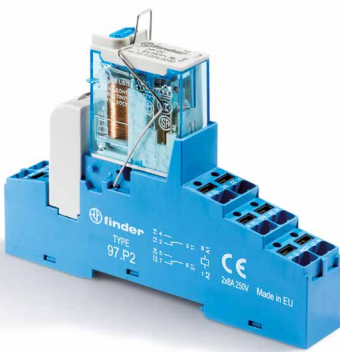
### Simple, quick and safe installation

Push-in terminals allow for quick connection using a rigid or flexible cable with ferrule. Additionally, a measurement aperture enables introduction of a multimeter probe tip to take accurate measurements under fully safe conditions.



#### Type 39.x1

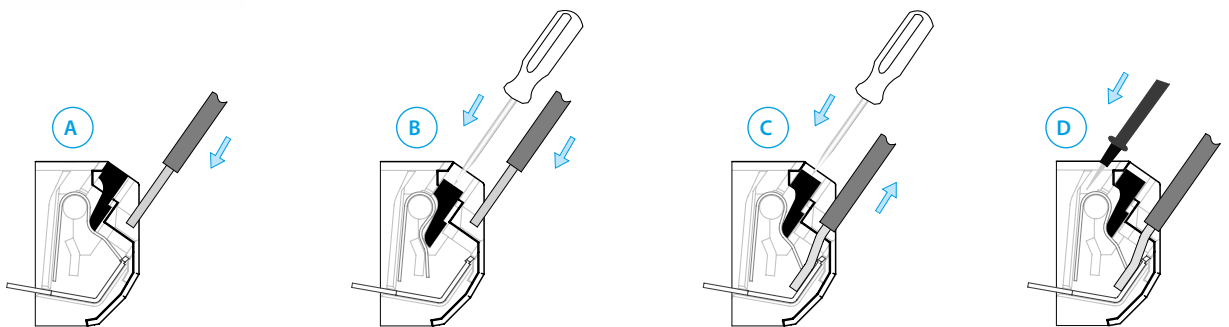
Electromechanical relay 1 CO - 6A, up to 70°C  
6.2 mm wide, Screw terminal and Push-in terminal  
Timer version




#### 4C Series

2 CO - 8 A, up to 70°C  
1 CO - 10 A or 16 A, up to 70°C  
Available with lockable test button and mechanical indicator  
Screwless or Push-in terminals, EMC and coil suppression modules

Push-in connection



According to type  US

# RELAYS

## PCB relays, 34 - 40 - 41 Series

Finder PCB relays operating to up to 85°C are the perfect solution for the communication of logic status and signals, and are alternatives to the 35 mm rail mount versions. This range also has models with gold-plated contacts for very low current and low power switching.



### 34 Series

Electromechanical relays, 5 mm wide  
1 changeover contact 6 A



### 40 Series

Electromechanical relays  
1 or 2 changeover contacts 8 – 10 - 12 - 16 A  
Available with monostable and bistable operation



### 41 Series

Low-profile electromechanical relays  
1 or 2 changeover contacts 8 – 12 – 16 A  
Available with monostable and bistable operation  
with two coils

According to type      RINA  

# TEMPERATURE REGULATION FOR EV CHARGING SYSTEMS

## Thermo-hygrostat and Thermostats, 7T Series

The importance of the correct environment within the charging station.  
Maintaining the correct temperature within the charging station is key to achieving the highest reliability and longevity.



### Type 7T.51

Panel electronic thermo-hygrostat for heating, ventilation and humidity control in the charging station, with the following setting ranges:

- Temperature: +10...+60°C
- Humidity: 50...90 %

**THERMOSTATS** may be typically set at 20°C and 5°C to initiate cooling or heating according to the prevailing conditions.



Charging station ventilation:

### Type 7T.81.0.000.230x

- Temperature: 0...+60°C, -20...+40°C or -20...+60°C



Charging station heating:

### Type 7T.81.0.000.240x

- Temperature: 0...+60°C, -20...+40°C or -20...+60°C





# TEMPERATURE REGULATION FOR EV CHARGING SYSTEMS

## Filter fans, 7F Series

Fans used for charging station cooling - air flow rate from 24 m<sup>3</sup>/h to 700 m<sup>3</sup>/h (depending on size); available in push or pull configuration, with or without an exhaust filter.



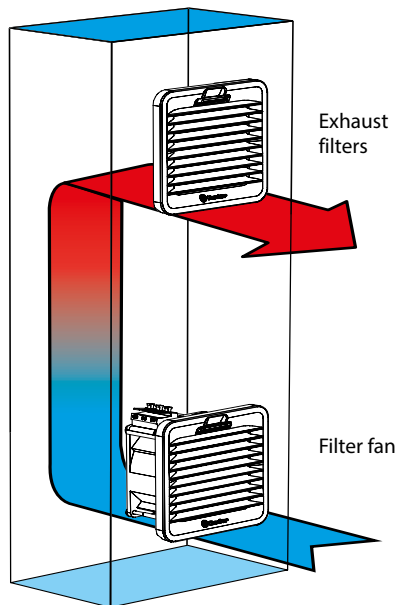
Fans

Type Grey RAL 7035	Type Black RAL 9004	Nominal voltage	Air volume (m <sup>3</sup> /h)	Rated power (W)	Size
7F.20.8.xxx.1020	7F.20.8.xxx.1020.0	(120 or 230)V AC	24	13	1
7F.20.9.024.1020	7F.20.9.024.1020.0	24V DC	24	3.6	1
7F.20.8.xxx.2055	7F.20.8.xxx.2055.0	(120 or 230)V AC	55	22	2
7F.20.9.024.2055	7F.20.9.024.2055.0	24V DC	55	9	2
7F.20.8.xxx.3100	7F.20.8.xxx.3100.0	(120 or 230)V AC	100	22	3
7F.20.9.024.3100	7F.20.9.024.3100.0	24V DC	100	22	3
7F.20.8.xxx.4250	7F.20.8.xxx.4250.0	(120 or 230)V AC	250	45	4
7F.20.9.024.4250	7F.20.9.024.4250.0	24V DC	250	45	4
7F.20.8.xxx.4400	7F.20.8.xxx.4400.0	(120 or 230)V AC	400	70	4



Filters

Type Grey RAL 7035	Type Black RAL 9004	For fan	Size
7F.02.0.000.1000	7F.02.0.000.1000.0	7F.20.x.xxx.1020	1
7F.02.0.000.2000	7F.02.0.000.2000.0	7F.20.x.xxx.2055	2
7F.02.0.000.3000	7F.02.0.000.3000.0	7F.20.x.xxx.3100	3
7F.02.0.000.4000	7F.02.0.000.4000.0	7F.20.x.xxx.4250 and 7F.20.8.xxx.4400	4



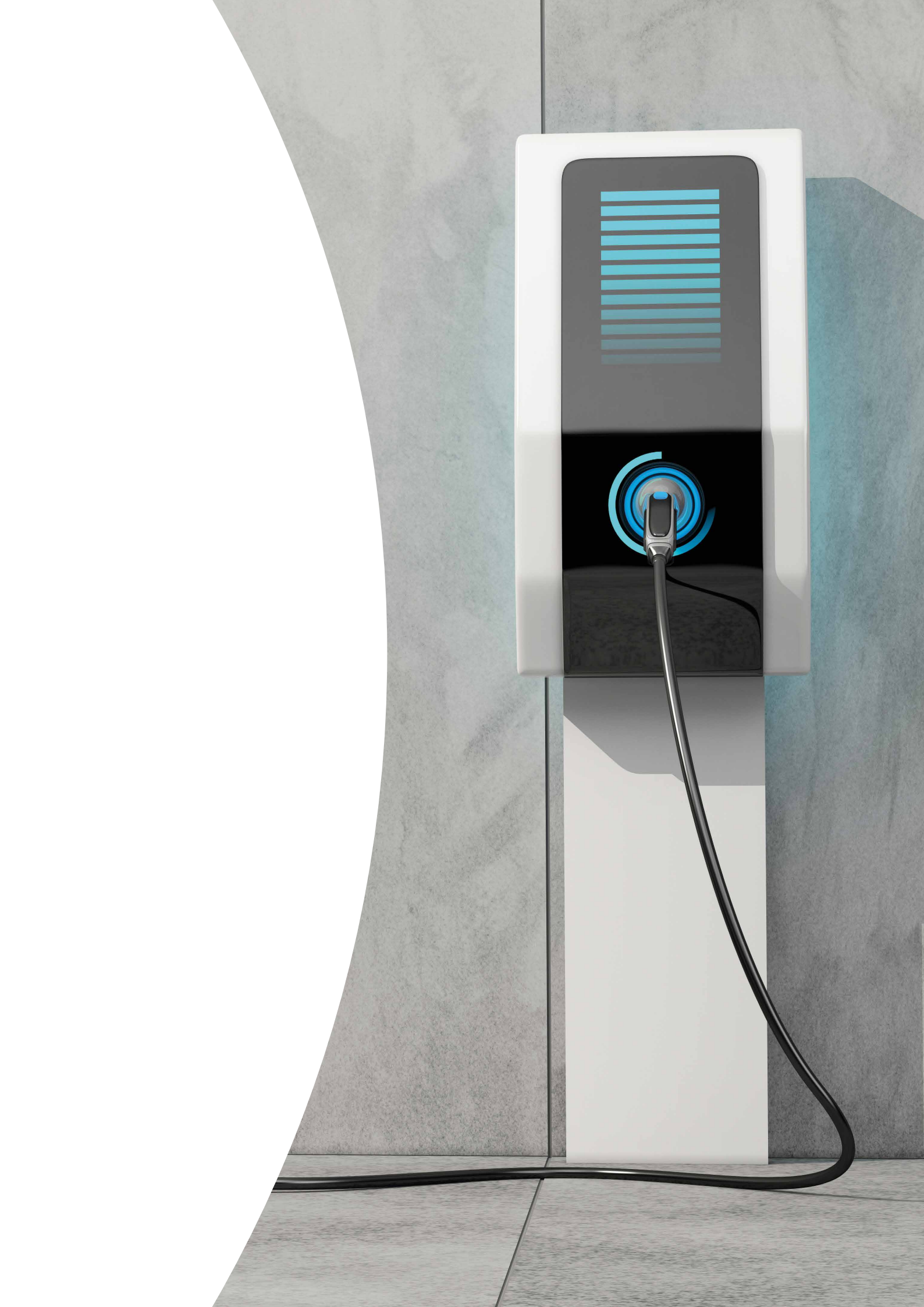
# TEMPERATURE REGULATION FOR EV CHARGING SYSTEMS

## Panel heaters, 7H Series

Electric heaters designed for internal temperature and humidity regulation, compact in size, featuring a protective cover over the heating element and PTC regulation.

Powers up to 400 W are available, also combination with forced ventilation for enhanced heat distribution.

	Type	Heating power (W)	Dimensions l x h x p (mm)	Ventilated version
	7H.51.0.230.0025	25	41 x 125 x 41	—
	7H.51.0.230.0050	50	41 x 125 x 41	—
	7H.51.0.230.0100	100	70 x 140 x 63	—
	7H.51.0.230.0150	150	70 x 218 x 63	—
	7H.51.8.xxx.0250	250	88.2 x 28.7 x 67	✓
	7H.51.8.xxx.0400	400	88.2 x 28.7 x 67	✓



# TECHNICAL ADVANTAGES



Ultimate quality, **ISO 9001** certified and fully **MADE IN EUROPE**



**Easy to install, configure and maintain** thanks to its user-friendly design and NFC technology



**Product type-approvals**  
Finder products have been awarded a multitude of certifications by the major certification bodies worldwide which attest to its certified quality in all applications





# SERVICES



**Supply assurance**, thanks to the vertically integrated supply chain and ultra quick deliveries



**Guaranteed after-sales and commercial service** thanks to our network of 28 subsidiaries located all over the world to provide high quality before and after-sale service wherever the customer is



**Technical advice and expertise**, directly from the manufacturer, creating a quick and efficient relationship









FINDER reserves the right to alter characteristics, at any time without notice. FINDER assumes no liability for damage to persons or property, caused as a result of the incorrect use or application of its products.



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