

SELECTION GUIDE

Industrial thermoregulation products and accessories for electrical panels

- 7T Series - Thermo-Hygrostats and Thermostats
- 7F Series - Filter Fans and Exhaust Filters
- 7H Series - Panel Heaters
- 7L Series - LED Panel Lights
- 9D Series - High Current Terminal Blocks



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.



14,500 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



- 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.

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 system



ISO 14001:2015
Environmental management system



ISO 45001:2018
Health and safety management system



ISO 14064-1 2018
Carbon Footprint verification



ISO 50001:2018
Energy management system



FSC
Forest Stewardship Council



AEOF
Simplified customs and enhanced supply chain security



Crisis Prime Company
Recognition of highest reliability of commercial relations



Industrial thermoregulation products and accessories for electrical panels

7T Series

Thermo-hygrostats and Thermostats Page 4

Ensuring the performance of components and instrumentation within control panels and enclosures - often enhancing product life.

7F Series

Filter Fans and Exhaust Filters Page 6

New filter fan range to ventilate and safeguard against high enclosure temperatures. Air flow from 17 CFM to 412 CFM.

7H Series

Heaters Page 10

Preventing the formation of condensation and ensuring the optimum temperature within electrical enclosures. Heating power from 25 W to 400 W.

7L Series

LED panel lights Page 12

Available in two brightness levels, 600 lumens or 1200 lumens, these 7L Series LED panel lights featuring magnetic mounting are the ideal solution for perfect lighting for machines and electrical panels.

9D Series

High Current Terminal Blocks Page 15

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



Type 7T.51.0.230.4360

- Electronic control
- Small, compact size (17.5 mm wide)
- 1 NO 10 A - 250 V AC1
- 4 functions
- Nominal voltage 110 to 240 V AC/DC
- Temperature ranges from (+10 to +60)°C , (+50 to +140)°F
- Humidity range up to 90%
- LED status indication contact ON

Approvals (according to type): **CE** **UK** **EAC** **cULus**



Drying kilns



Industrial refrigeration



Road / tunnel lighting



Industrial furnaces and ovens



Automatic car-washes



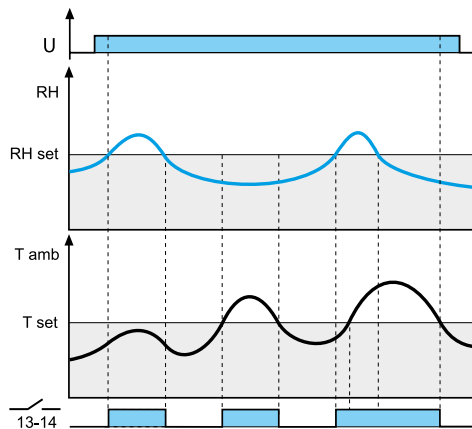
Panels for electrical distribution



Control panels



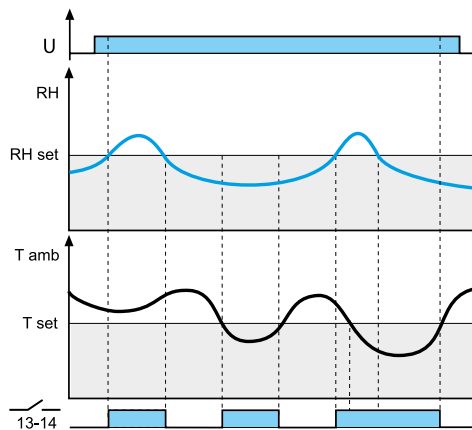
Forced-air ventilators



HT: RH > RHset OR T amb > Tset

Power is permanently applied to the thermo-hygrostat.
The contact 13-14 closes if the ambient humidity (RH) is > of set humidity (RHset) OR if the ambient temperature (T amb) is > of set temperature (Tset).

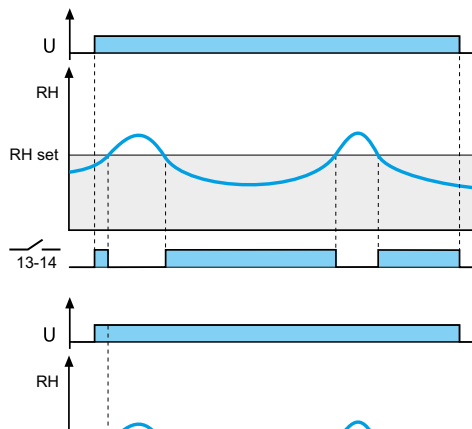
When contact is closed, LED is ON



TH: RH > RHset OR T amb < Tset

The contact 13-14 closes if the ambient humidity (RH) is > of set humidity (RHset) OR if the ambient temperature (T amb) is < of set temperature (Tset).

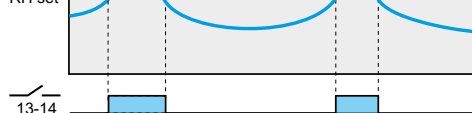
When contact is closed, LED is ON



HL: RH < RHset

The contact 13-14 closes if the ambient humidity (RH) is < of set humidity (RHset).

When contact is closed, LED is ON



HM: RH > RHset

The contact 13-14 closes if the ambient humidity (RH) is > of set humidity (RHset).

When contact is closed, LED is ON

Thermostats

- Small, compact size (17.5 mm wide)
- 1 NO - 1 NC 10 A - 250 V AC1
- Snap action thermostatic Bimetal sensor
- Wide temperature setting range
- Long electrical life

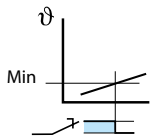
Approvals (according to type):     



Type 7T.81.0.000.240x

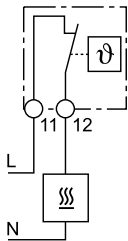


Type 7T.81.0.000.230x



Heating control

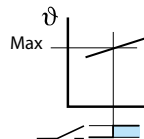
Should the panel temperature fall below the (minimum) set temperature the contact will close to call for heat. The contact will open when this set temperature is exceeded.



Heating: Red Dial

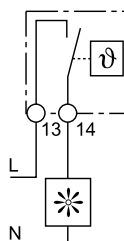
Temperature ranges:

(-20 to +40)°C	(-4 to +104)°F
(-20 to +60)°C	(-4 to +140)°F
(0° to +60)°C	(+32 to +140)°F



Ventilation control

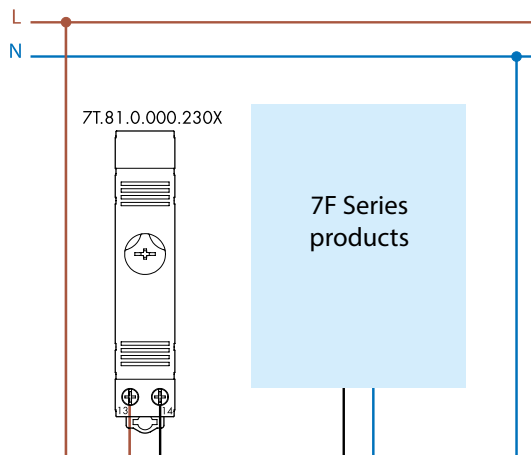
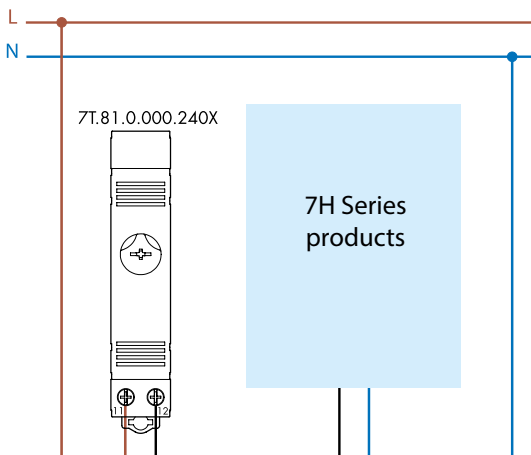
Should the panel temperature exceed the (maximum) set temperature then the contact will close to call for cooling. The contact will open when the temperature falls below this set temperature.



Ventilation: Blue Dial

Temperature ranges:

(-20 to +40)°C	(-4 to +104)°F
(-20 to +60)°C	(-4 to +140)°F
(0° to +60)°C	(+32 to +140)°F



7F Series

Filter Fans

- Operating voltage: 120 V AC, 230 V AC or 24 V DC (according to type)
- Easily replaceable filter mat
- Minimal depth within enclosure
- Air volume (17 to 412) CFM
- Time-saving installation and maintenance
- Very low acoustic noise
- UL Type 12 (7F.20)
- UL Type 3R (7F.30)
- Reverse air flow versions available (7F.21 and 7F.31)
- Black colour RAL 9004 available (7F.20)
- Dimensions from 4" to 12"

Approvals (according to type):      

Exhaust Filters

- The size of the Exhaust Filter should match the size of the Filter Fan to achieve the best ventilation within the cabinet
- Minimal depth within enclosure
- Time-saving installation and maintenance
- Easily replaceable filter mat
- UL Type 12 (7F.02)
- UL Type 3R (7F.03)
- Black colour RAL 9004 available (7F.02)

Approvals (according to type):      



Drying kilns



Textile machines



Machines for paper processing



Machines for ceramics



Wood-processing machines



Panels for electrical distribution



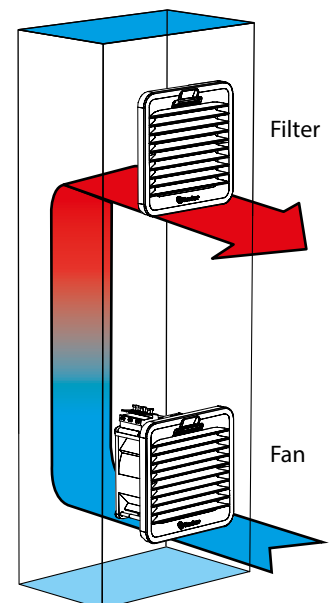
Control panels



Forced-air ventilators



Mounting arrangement of Filter Fan and Exhaust Filter

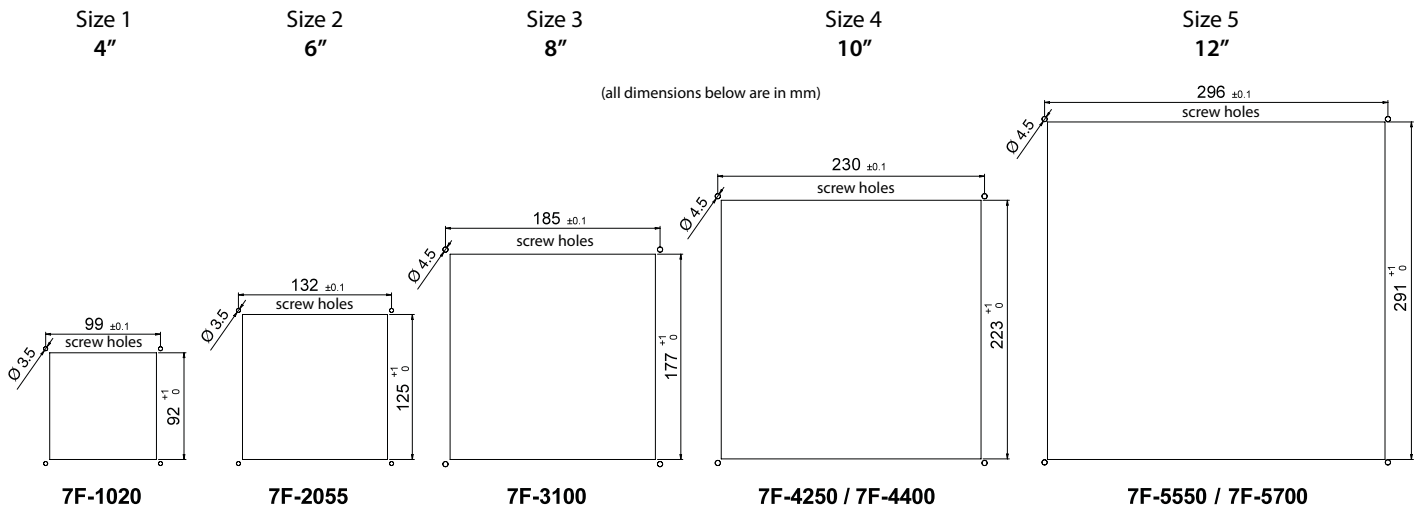


Filter Fans and Exhaust Filters

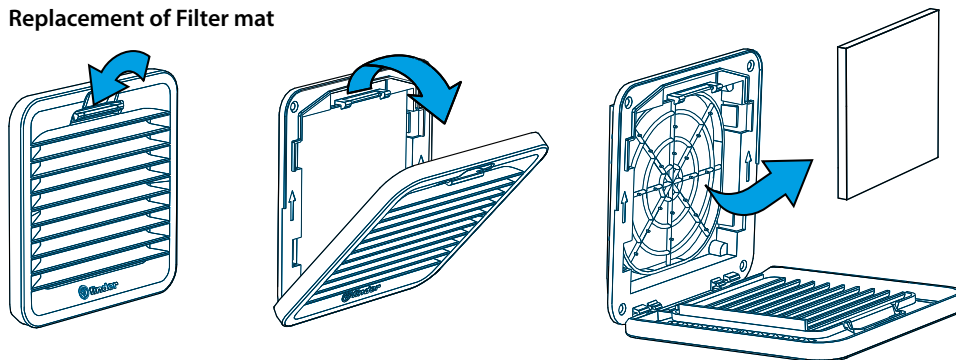
Standard Filter Fan	Operating voltage (V AC 60 Hz)	Operating voltage (V DC)	Air volume (CFM) free flow	Air volume (CFM) exh. filter installed	Rated power (W) 60 Hz	Size	Standard Exhaust Filter	Reverse flow versions	Filter mat
7F.x0.8.120.1020	120 V AC	—	17	10	21	4" 1 (120 x 120 mm)	7F.0x.0.000.1000	7F.x1.8.120.1020	07F.15
7F.x0.8.230.1020	230 V AC	—	17	10	18	4" 1 (120 x 120 mm)	7F.0x.0.000.1000	7F.x1.8.230.1020	07F.15
7F.x0.9.024.1020	—	24 V DC	14	8	3.6	4" 1 (120 x 120 mm)	7F.0x.0.000.1000	7F.x1.9.024.1020	07F.15
7F.x0.8.120.2055	120 V AC	—	37	27	25	6" 2 (155 x 155 mm)	7F.0x.0.000.2000	7F.x1.8.120.2055	07F.25
7F.x0.8.230.2055	230 V AC	—	37	27	25	6" 2 (155 x 155 mm)	7F.0x.0.000.2000	7F.x1.8.230.2055	07F.25
7F.x0.9.024.2055	—	24 V DC	32	24	7	6" 2 (155 x 155 mm)	7F.0x.0.000.2000	7F.x1.9.024.2055	07F.25
7F.x0.8.120.3100	120 V AC	—	68	50	25	8" 3 (209 x 209 mm)	7F.0x.0.000.3000	7F.x1.8.120.3100	07F.35
7F.x0.8.230.3100	230 V AC	—	68	50	25	8" 3 (209 x 209 mm)	7F.0x.0.000.3000	7F.x1.8.230.3100	07F.35
7F.x0.9.024.3100	—	24 V DC	59	44	7	8" 3 (209 x 209 mm)	7F.0x.0.000.3000	7F.x1.9.024.3100	07F.35
7F.x0.8.120.4250	120 V AC	—	174	134	48	10" 4 (255 x 255 mm)	7F.0x.0.000.4000	7F.x1.8.120.4250	07F.45
7F.x0.8.230.4250	230 V AC	—	174	134	50	10" 4 (255 x 255 mm)	7F.0x.0.000.4000	7F.x1.8.230.4250	07F.45
7F.x0.9.024.4250	—	24 V DC	147	115	43	10" 4 (255 x 255 mm)	7F.0x.0.000.4000	7F.x1.9.024.4250	07F.45
7F.x0.8.120.4400	120 V AC	—	262	177	120	10" 4 (255 x 255 mm)	7F.0x.0.000.4000	7F.x1.8.120.4400	07F.46
7F.x0.8.230.4400	230 V AC	—	262	177	112	10" 4 (255 x 255 mm)	7F.0x.0.000.4000	7F.x1.8.230.4400	07F.46
7F.x0.8.120.5550	120 V AC	—	356	259	102	12" 5 (320 x 320 mm)	7F.0x.0.000.5000	7F.x1.8.120.5550	07F.56
7F.x0.8.230.5550	230 V AC	—	356	259	116	12" 5 (320 x 320 mm)	7F.0x.0.000.5000	7F.x1.8.230.5550	07F.56
7F.x0.8.120.5700	120 V AC	—	412	353	140	12" 5 (320 x 320 mm)	7F.0x.0.000.5000	7F.x0.8.120.5700	07F.55
7F.x0.8.230.5700	230 V AC	—	412	353	120	12" 5 (320 x 320 mm)	7F.0x.0.000.5000	7F.x0.8.230.5700	07F.55

* 07F.45 for 7F.0x-4000 / 07F.55 for 7F.0x-5000

Drilling template and mounting cut-outs for Filter Fans and Exhaust Filter



Replacement of Filter mat



7F Series

Filter Fans and Exhaust Filters for indoor use (7F.20)



Drying kilns



Textile machines



Machines for paper processing



Machines for ceramics



Wood-processing machines



Panels for electrical distribution



Control panels



Forced-air ventilators

7F.20.x.xxx.1020
7F.20.x.xxx.2055
7F.20.x.xxx.3100



7F.02.0.000.1000
7F.02.0.000.2000
7F.02.0.000.3000



7F.20.8.xxx.4250



7F.02.0.000.4000



7F.20.8.xxx.4400



7F.02.0.000.4000



7F.20.8.xxx.5550



7F.02.0.000.5000



7F.20.8.xxx.5700



7F.02.0.000.5000



Filter Fans and Exhaust Filters for outdoor use (7F.30)

7F.30.x.xxx.1020
7F.30.x.xxx.2055
7F.30.x.xxx.3100



7F.03.0.000.1000
7F.03.0.000.2000
7F.03.0.000.3000



7F.30.8.xxx.4250



7F.03.0.000.4000



7F.30.8.xxx.4400



7F.03.0.000.4000



7F.30.8.xxx.5550



7F.03.0.000.5000



7F.30.8.xxx.5700



7F.03.0.000.5000



7H Series

Panel Heaters



Drying kilns



Hoists and cranes



Road / tunnel lighting



Plastic moulding machines



Automatic car-washes



Panels for electrical distribution



Control panels



Forced-air ventilators

Fan assisted heaters

- Nominal voltage 120 or 230 V AC
- PTC resistor, self regulating heating system
- Fan assisted heaters
- Air flow volume 18 CFM
- Fast wiring terminals
- Safe touch
- Clip for 35 mm rail (EN 60715) mount

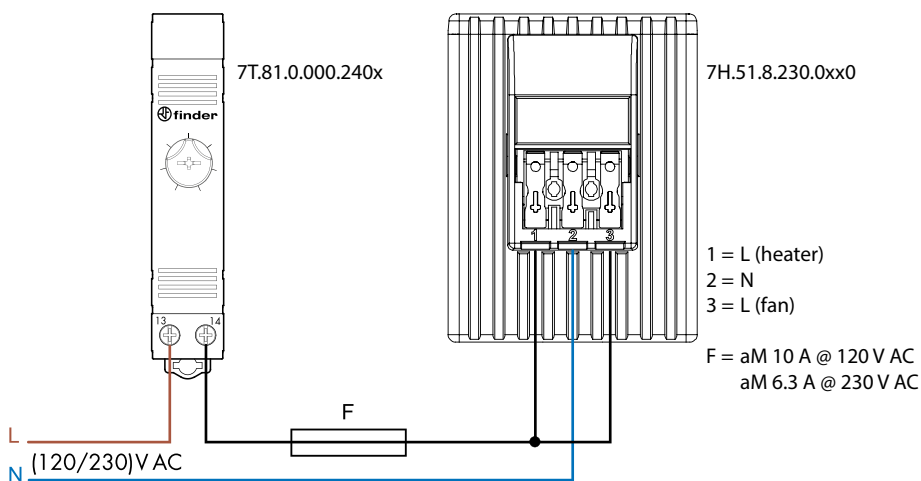
Approvals (according to type):



Type 7H.51.8.110.0250
Type 7H.51.8.230.0250
 Heater power 250 W
 Fan assisted
 Dimensions (w x h x d): 88.2 x 28.7 x 67 mm



Type 7H.51.8.110.0400
Type 7H.51.8.230.0400
 Heater power 400 W
 Fan assisted
 Dimensions (w x h x d): 88.2 x 28.7 x 67 mm



NOTE

Separate supply (L) terminals for the heater and the internal fan allow them to be powered independently. So, dependent on the specific situation, the installer might wish the heating element to be controlled by an upstream thermostat but require the fan to run continuously (although the latter will significantly reduce the product's life).

Heaters

- Nominal voltage (110 to 230)V AC/DC
- PTC self regulating heating system
- Screw terminals
- Safe touch
- Clip for 35 mm rail (EN 60715) mount

Approvals (according to type): **CE** **UK** **EAC** **c** **RU** **US**



Type 7H.51.0.230.0025
Heater power 25 W



Type 7H.51.0.230.0100
Heater power 100 W
Dimensions (w x h x d): 70 x 140 x 63 mm

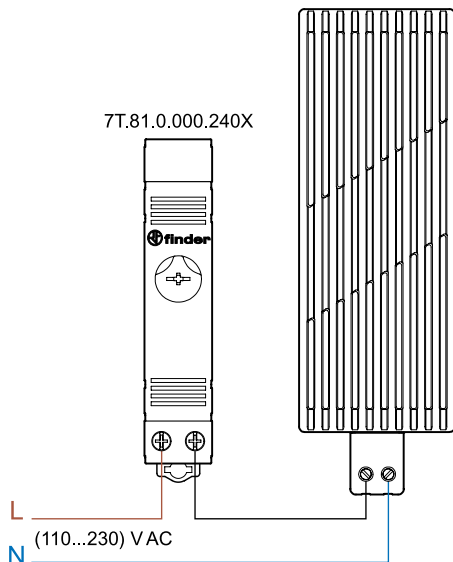


Type 7H.51.0.230.0150
Heater power 150 W
Dimensions (w x h x d): 70 x 220 x 63 mm

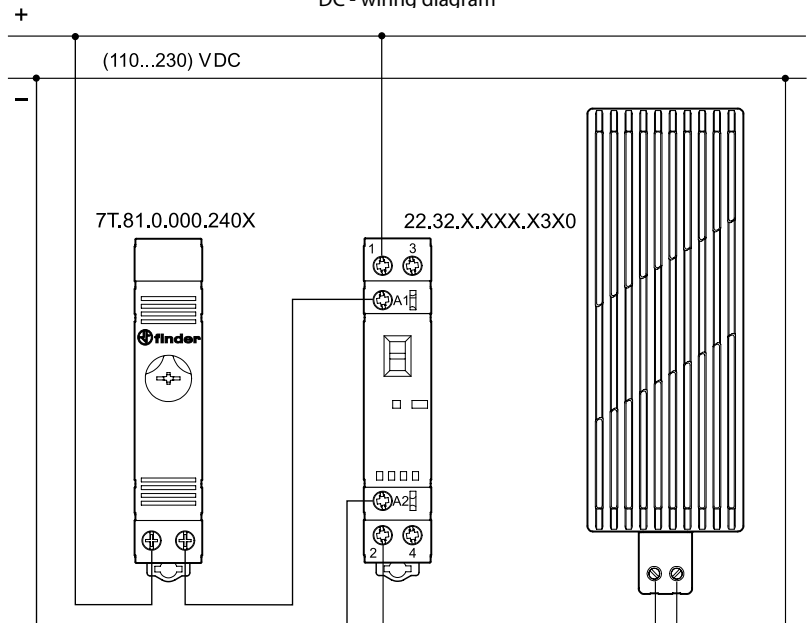
Type 7H.51.0.230.0050
Heater power 50 W

Dimensions (w x h x d): 41 x 125 x 41 mm

AC - wiring diagram



DC - wiring diagram







7L Series

LED panel lights

Type 7L.43.0.xxx.xx00 - Brightness level: 600 lumens

Type 7L.46.0.xxx.xx00 - Brightness level: 1200 lumens

- Direct magnetic mounting or through a screw-fixed metallic support
- Power supply - Multi-voltage: 12 to 48 V AC/DC and 110 to 240 V AC/DC
- Low energy consumption
- Nominal power consumption: 6 W (600 lm), 9 W (1200 lm)
- Push-in terminals for the connection to a single unit
- Plug-in terminals for the connection to a single or multiple units (up to 7 lamps)

Approvals (according to type):    



Panels for electrical distribution



Control panels



Radiation angle: 120°



Multi-voltage



Colour temperature: 5000 K



Protection category: IP20



Push-in terminals for the connection to a single unit



Plug-in terminals for the connection to a single or multiple units (up to 7 lamps)

Design by MINELLI | FOSSATI

LED panel lights

Code Lamps	Lumen	Code Lamps	Lumen	Supply voltage	Switching	Connections
7L.43.0.024.0100	600	7L.46.0.024.0100	1200	024 = (12 to 48)V AC/DC	Direct switching	Push-in
7L.43.0.024.0200	600	7L.46.0.024.0200	1200	024 = (12 to 48)V AC/DC	Direct switching	Plug-in*
7L.43.0.230.0100	600	7L.46.0.230.0100	1200	230 = (110 to 240)V AC/DC	Direct switching	Push-in
7L.43.0.230.0200	600	7L.46.0.230.0200	1200	230 = (110 to 240)V AC/DC	Direct switching	Plug-in*
7L.43.0.024.1100	600	7L.46.0.024.1100	1200	024 = (12 to 48)V AC/DC	ON/OFF soft latch switch	Push-in
7L.43.0.024.1200	600	7L.46.0.024.1200	1200	024 = (12 to 48)V AC/DC	ON/OFF soft latch switch	Plug-in*
7L.43.0.024.2100	600	7L.46.0.024.2100	1200	024 = (12 to 48)V AC/DC	PIR - motion detector	Push-in
7L.43.0.024.2200	600	7L.46.0.024.2200	1200	024 = (12 to 48)V AC/DC	PIR - motion detector	Plug-in*
7L.43.0.230.1100	600	7L.46.0.230.1100	1200	230 = (110 to 240)V AC/DC	ON/OFF soft latch switch	Push-in
7L.43.0.230.1200	600	7L.46.0.230.1200	1200	230 = (110 to 240)V AC/DC	ON/OFF soft latch switch	Plug-in*
7L.43.0.230.2100	600	7L.46.0.230.2100	1200	230 = (110 to 240)V AC/DC	PIR - motion detector	Push-in
7L.43.0.230.2200	600	7L.46.0.230.2200	1200	230 = (110 to 240)V AC/DC	PIR - motion detector	Plug-in*



Push-in connection



Plug-in* connection

SWITCHING OPTIONS



1 Direct switching



2 Switching via PIR - motion detector



3 Switching via soft latch ON/OFF switch

MOUNTING OPTIONS



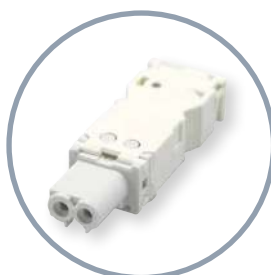
Magnetic mount directly to metallic panel



Magnetic mount via screwmounted metallic bracket

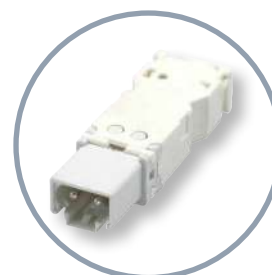


Rotational adjustment 30°



***Type 07L.11**
Included in the package on all 7L.4x.0.xxx.x200 part numbers.

Socket for connection to a 2 wire cable (2 x 1.5 mm²), e.g. H05VV-5, 2 x 1.5 mm²



Type 07L.12
Plug for output side to allow connection to a 2 wire cable (2 x 1.5 mm²).

One plug is required for each added lamp on 7L.4x.0.xxx.x200 part numbers (up to 7 lamps).

9D Series

3 configurations available in a single product:

- Single, pole splitter: Split of main power input into 4, 6, 10 or 11 outputs
- Multiple, pole splitters: Splitting with increased number of outputs
- Grouping: Combining several inputs to make a single output (eg. solar applications)



Panels for electrical distribution



Control panels

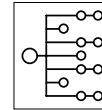
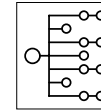
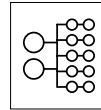
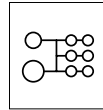
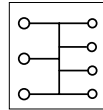
High Current Terminal Blocks

- Nominal current: 80, 125, 175, 250 or 400 A
- SCCR Rating – 100 kA
- Available with 7, 8 or 12 connections (according to type)
- Cable connection capacity up to 185 mm² cross section
- Screw terminals
- 35 mm rail (EN 60715) mount



Approvals (according to type):

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
• 80 A • 7 connections	• 125 A • 8 connections	• 175 A • 12 connections	• 250 A • 12 connections	• 400 A • 12 connections



INPUT WIRE SPECIFICATION (Solid/Stranded)

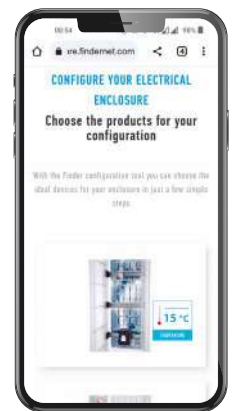
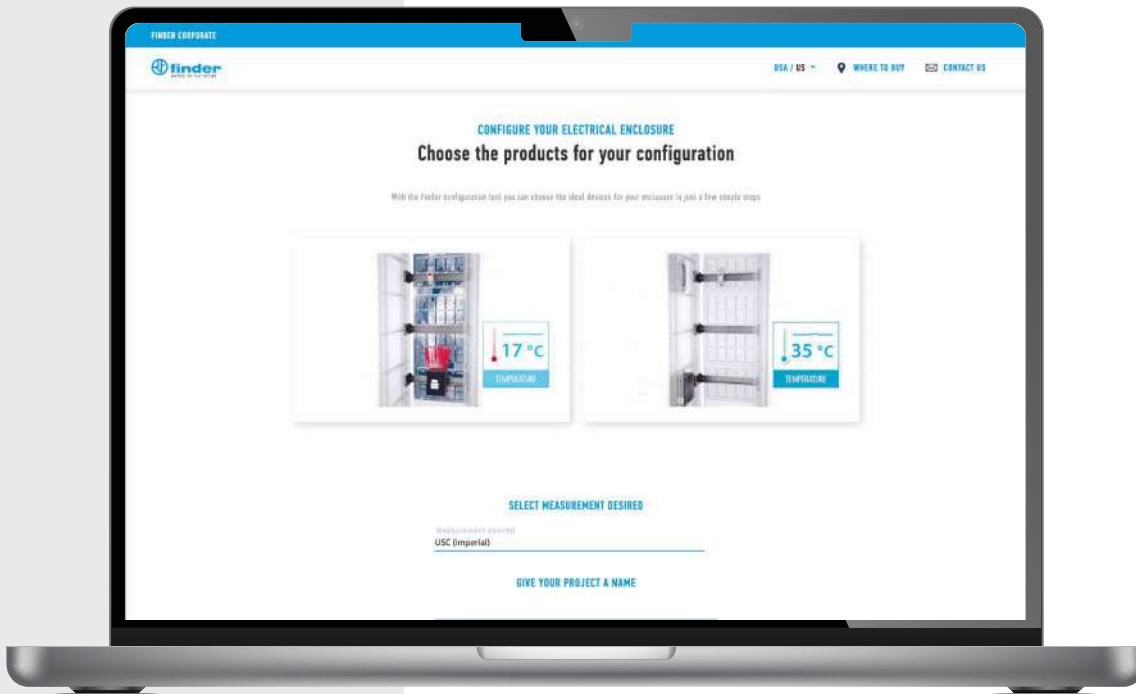
Number of input		3	1	2	1	1
Terminal diameter	Ømm	6.6	9.8	11.8	15.3	15.3
Min. wire size	mm ²	2.5	10	10	35	95
	AWG	14	8	6	2	3/0
Max. wire size	mm ²	16	35	70	120	185
	AWG	6	2	2/0	250 Kcmil	400 Kcmil
Wire input stripping length	mm	15	15	15	28	28
Tool		Posidriv - flat screwdriver	Allen Key	Allen Key	Allen Key	Allen Key
Tool dimension	mm	5.5/PZ2	4	5	6	8
Torque	Nm	1.5...2	3.5...5	6...10	19...21	25

OUTPUT WIRE SPECIFICATION (Solid/Stranded)

Number of output		4	1	6	10	2	5	4	2	5	4
Terminal diameter	Ømm	4.5	6.8	6.4	6.4	8.7	6.4	5.7	8.7	6.4	5.7
Min. wire size	mm ²	2.5	6	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
	AWG	14	10	14	14	14	14	14	14	14	14
Max. wire size	mm ²	6	16	16	16	35	16	10	35	16	10
	AWG	10	6	6	6	2	6	8	2	6	8
Wire input stripping length	mm	11	11	11	11	11	11	11	11	11	11
Tool		Posidriv - flat screwdriver	Allen Key	Posidriv-flat screwdriver	Posidriv - flat screwdriver	Allen Key			Allen Key		
Tool dimension	mm	4/PZ1	3	5.5 PZ2	5.5/PZ2	4	3	3	4	3	3
Torque	Nm	0.8...12	2...3	2...3	2...3	3.5...5	2...3	2...3	3.5...5	2...3	2...3

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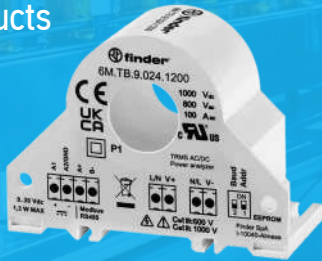
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