

SELECTION GUIDE

Industrial Thermoregulation products and accessories for electrical panels

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



ABOUT US



Founded in Italy in 1954, **Finder** has been designing and manufacturing a wide range of electromechanical and electronic components for the residential and industrial sectors. Today, thanks to a global vision, Finder distributes these 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, 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

29

SUBSIDIARIES

80+

OFFICIAL DISTRIBUTORS





Industrial Thermoregulation products and accessories for electrical panels

7T Series

Thermo-hygrostats and ThermostatsPage 4

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

7F Series

Filter FansPage 6

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

7H Series

HeatersPage 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 lightsPage 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 BlocksPage 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 CA** **EAC** **cRU[®] US**



Drying kilns



Industrial refrigeration



Road / tunnel lighting



Industrial furnaces and ovens



Automatic car-washes



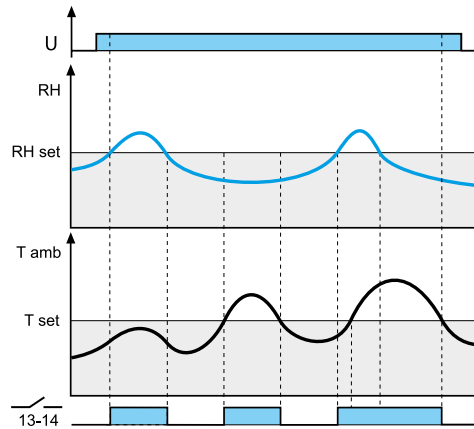
Panels for electrical distribution



Control panels



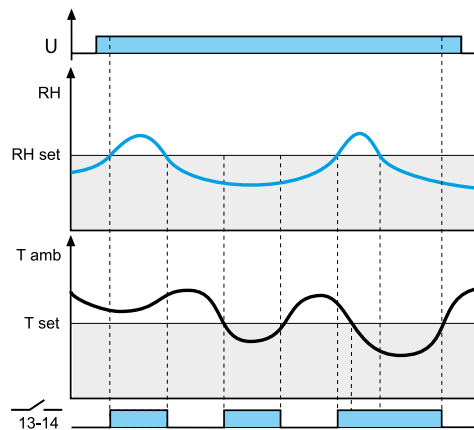
Forced-air ventilators



HT: RH > RHset OR Tamb > 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 (Tamb) is > of set temperature (Tset).

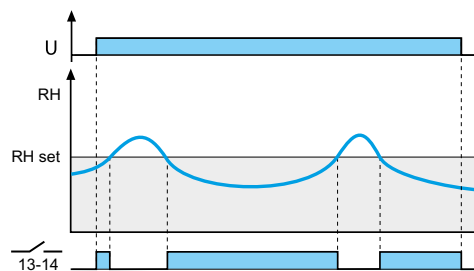
When contact is closed, LED is ON



TH: RH > RHset OR Tamb < Tset

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

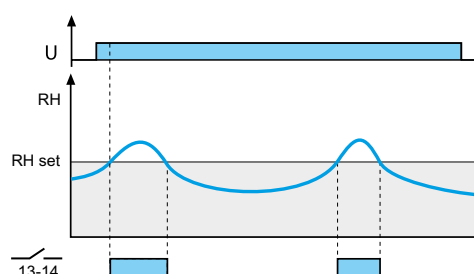
When contact is closed, LED is ON



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

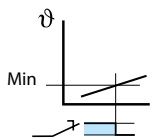
Approvals (according to type):      



Type 7T.81.0.000.240x

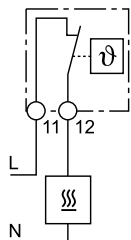


Type 7T.81.0.000.230x



Heating control

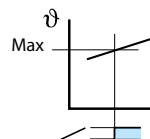
Should the panel temperature fall below the (minimum) set temperature the contact will close to call for heat. The contact will open when this set temperature is exceeded.



Heating: Red Dial

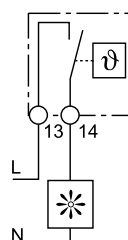
Temperature ranges:

(-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

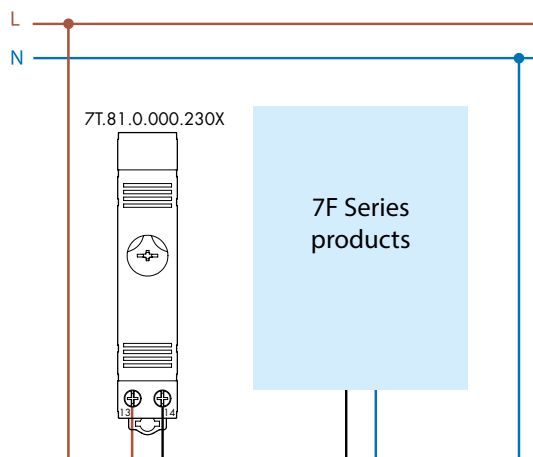
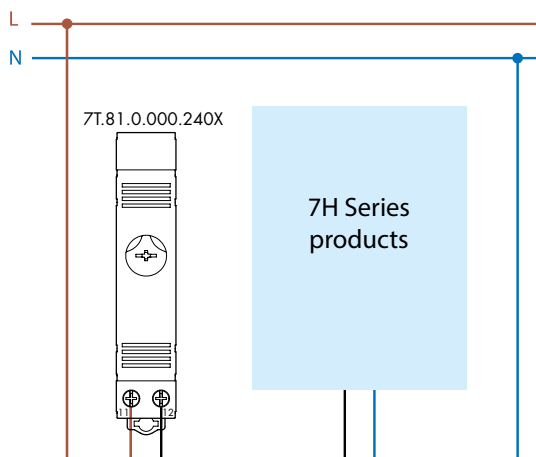
Should the panel temperature exceed the (maximum) set temperature then the contact will close to call for cooling. The contact will open when the temperature falls below this set temperature.



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
- Black colour RAL 9004 available
- Dimensions from 4" to 12"

• 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

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
- Black colour RAL 9004 available

Approvals (according to type):      



Compact size



Very low acoustic noise



Time-saving installation and maintenance



Type 7F.2x.x.xxx.1020
Type 7F.2x.x.xxx.2055
Type 7F.2x.x.xxx.3100



Type 7F.02.0.000.1000
for Type 7F.2x.x.xxx.1020

Type 7F.02.0.000.2000
for Type 7F.2x.x.xxx.2055

Type 7F.02.0.000.3000
for Type 7F.2x.x.xxx.3100



Type 7F.2x.x.xxx.4250



Type 7F.02.x.000.4000
for Type 7F.2x.x.xxx.4250



Type 7F.2x.8.xxx.4400



Type 7F.02.8.000.4000
for Type 7F.2x.8.xxx.4400



Type 7F.2x.8.xxx.5550



Type 7F.02.8.000.5000
for Type 7F.2x.8.xxx.5550



Type 7F.2x.8.xxx.5700



Type 7F.02.8.000.5000
for Type 7F.2x.8.xxx.5700

7F Series

Filter Fans and Exhaust Filters



Drying kilns



Textile machines



Machines for paper processing



Machines for ceramics



Wood-processing machines



Panels for electrical distribution



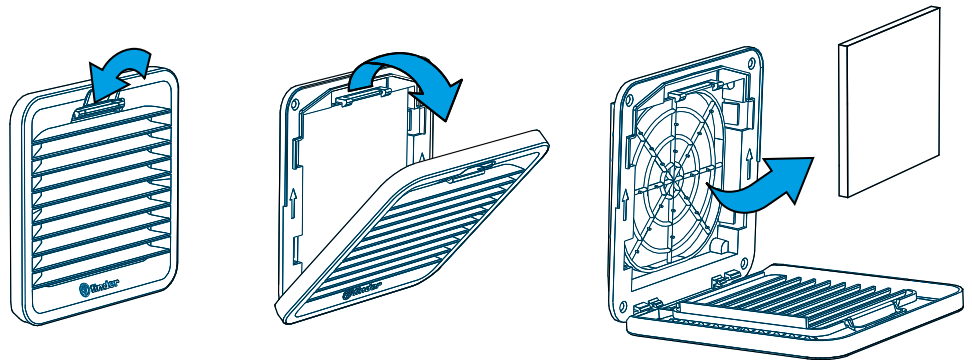
Control panels



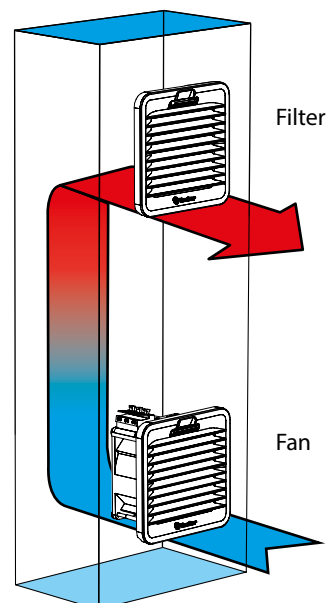
Forced-air ventilators



Replacement of Filter mat



Mounting arrangement of Filter Fan and Exhaust Filter



Standard Filter Fan	Operating voltage (V AC)	Operating voltage (V DC)	Air volume (CFM)	Rated power (W) 50/60 Hz	Size	Standard Exhaust Filter	Reverse flow versions	Filter mat
7F.20.8.120.1020	120 V AC	—	17	27/21	4" 1 (120 x 120 mm)	7F.02.0.000.1000	7F.21.8.120.1020	07F.15
7F.20.8.230.1020	230 V AC	—	17	23/18	4" 1 (120 x 120 mm)	7F.02.0.000.1000	7F.21.8.230.1020	07F.15
7F.20.9.024.1020	—	24 V DC	14	3.6	4" 1 (120 x 120 mm)	7F.02.0.000.1000	7F.21.9.024.1020	07F.15
7F.20.8.120.2055	120 V AC	—	37	30/25	6" 2 (155 x 155 mm)	7F.02.0.000.2000	7F.21.8.120.2055	07F.25
7F.20.8.230.2055	230 V AC	—	37	29/25	6" 2 (155 x 155 mm)	7F.02.0.000.2000	7F.21.8.230.2055	07F.25
7F.20.9.024.2055	—	24 V DC	32	7	6" 2 (155 x 155 mm)	7F.02.0.000.2000	7F.21.9.024.2055	07F.25
7F.20.8.120.3100	120 V AC	—	68	30/25	8" 3 (209 x 209 mm)	7F.02.0.000.3000	7F.21.8.120.3100	07F.35
7F.20.8.230.3100	230 V AC	—	68	29/25	8" 3 (209 x 209 mm)	7F.02.0.000.3000	7F.21.8.230.3100	07F.35
7F.20.9.024.3100	—	24 V DC	59	7	8" 3 (209 x 209 mm)	7F.02.0.000.3000	7F.21.9.024.3100	07F.35
7F.20.8.120.4250	120 V AC	—	174	42/48	10" 4 (255 x 255 mm)	7F.02.0.000.4000	7F.21.8.120.4250	07F.45
7F.20.8.230.4250	230 V AC	—	174	46/50	10" 4 (255 x 255 mm)	7F.02.0.000.4000	7F.21.8.230.4250	07F.45
7F.20.9.024.4250	—	24 V DC	147	43	10" 4 (255 x 255 mm)	7F.02.0.000.4000	7F.21.9.024.4250	07F.45
7F.20.8.120.4400	120 V AC	—	262	72/120	10" 4 (255 x 255 mm)	7F.02.0.000.4000	7F.21.8.120.4400	07F.46
7F.20.8.230.4400	230 V AC	—	262	69/112	10" 4 (255 x 255 mm)	7F.02.0.000.4000	7F.21.8.230.4400	07F.46
7F.20.8.120.5550	120 V AC	—	356	75/102	12" 5 (320 x 320 mm)	7F.02.0.000.5000	7F.21.8.120.5550	07F.56
7F.20.8.230.5550	230 V AC	—	356	76/116	12" 5 (320 x 320 mm)	7F.02.0.000.5000	7F.21.8.230.5550	07F.56
7F.20.8.120.5700	120 V AC	—	412	110/140	12" 5 (320 x 320 mm)	7F.02.0.000.5000	7F.20.8.120.5700	07F.55
7F.20.8.230.5700	230 V AC	—	412	106/120	12" 5 (320 x 320 mm)	7F.02.0.000.5000	7F.20.8.230.5700	07F.55

Drilling template

Size 1
4"

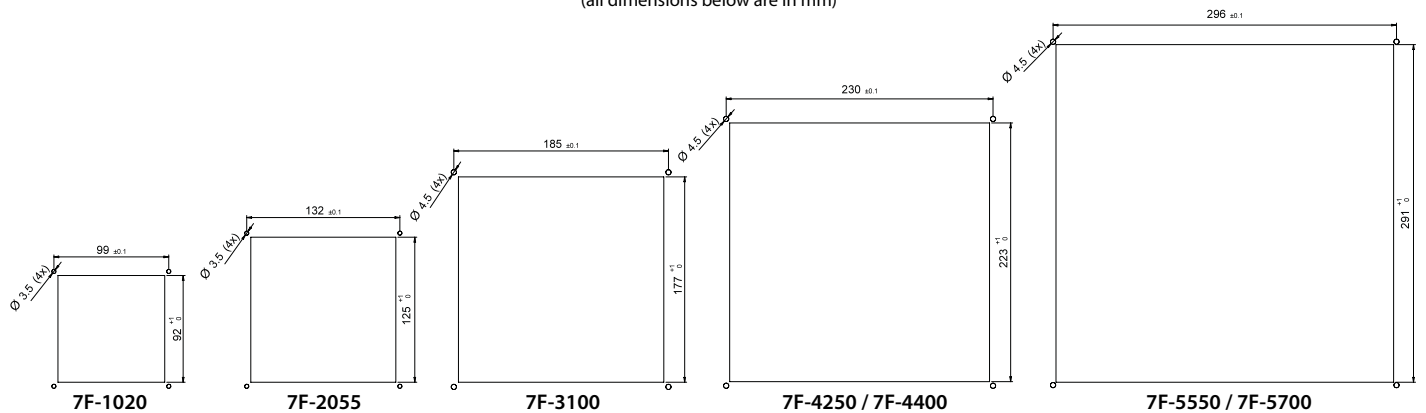
Size 2
6"

Size 3
8"

Size 4
10"

Size 5
12"

(all dimensions below are in mm)



7H Series

Panel Heaters

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): **CE** **UK** **EAC** **cULus**



Drying kilns



Hoists and cranes



Road / tunnel lighting



Plastic moulding machines



Automatic car-washes



Panels for electrical distribution



Control panels



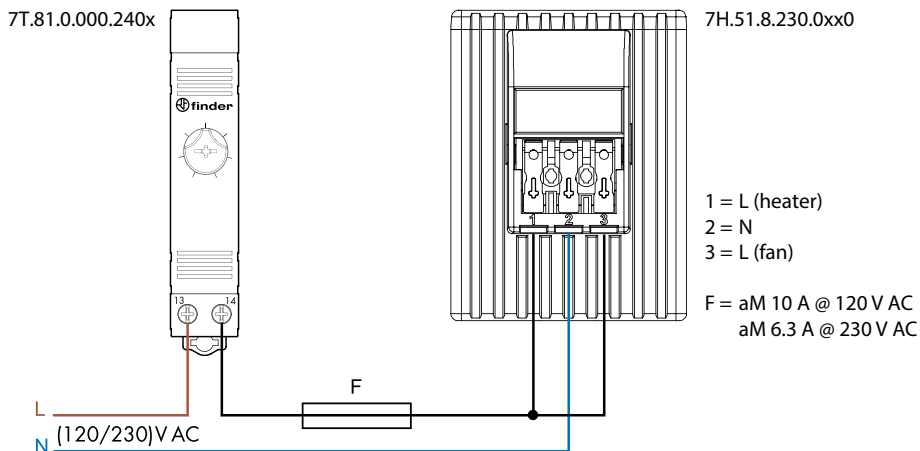
Forced-air ventilators



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 CA** **EAC** **cRU[®] 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

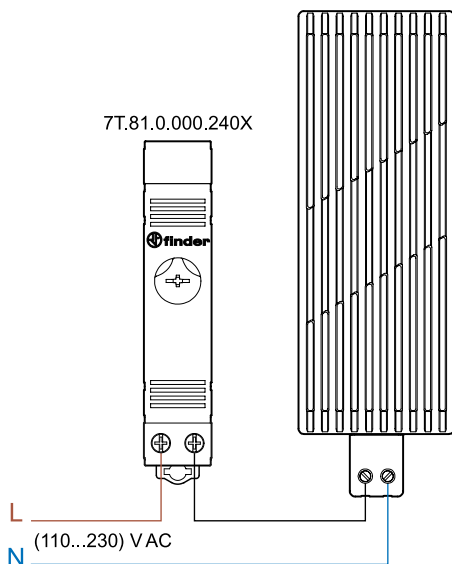


Type 7H.51.0.230.0150
 Heater power 150 W
 Dimensions (w x h x d): 70 x 220 x 63 mm

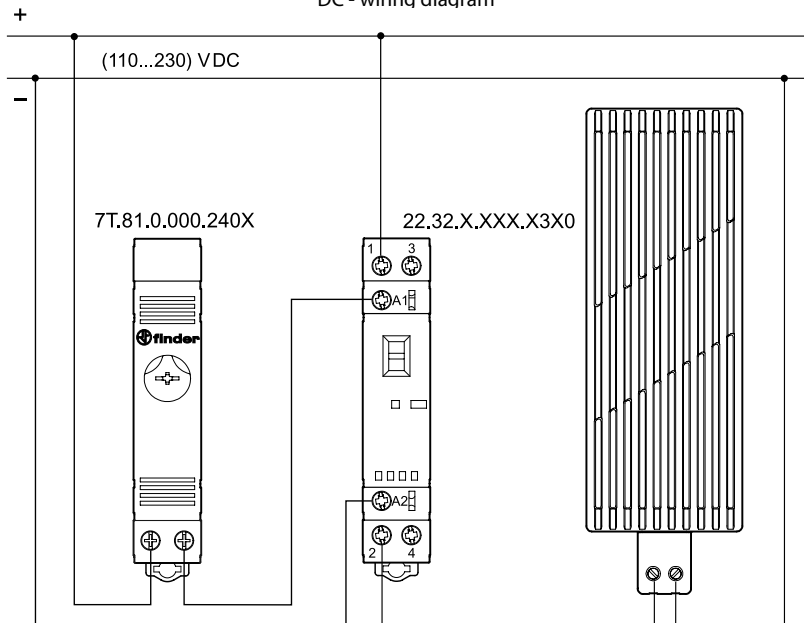
Type 7H.51.0.230.0050
 Heater power 50 W

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

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



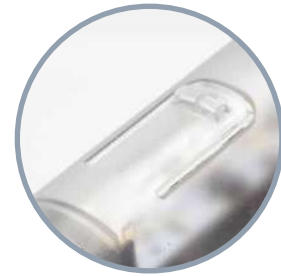
②

Switching via PIR - motion detector



③

Switching via soft latch ON/OFF switch



MOUNTING OPTIONS

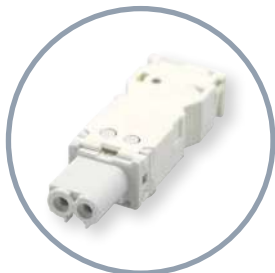
Magnetic mount directly to metallic panel



Magnetic mount via screwmounted metallic bracket

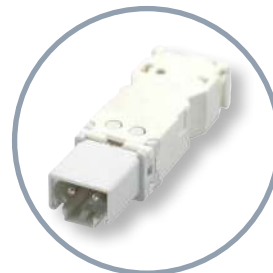


Rotational adjustment 30°



*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).

- Nominal current: 80, 125, 175, 250 or 400 A
- Available with 7, 8 or 12 connections (according to type)
- Daisy chain blocks for further expansion of output terminals
- Cable connection capacity up to 185 mm² cross section
- Screw terminals
- 35 mm rail (EN 60715) mount

Approvals (according to type):    



Panels for electrical distribution



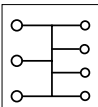
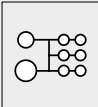
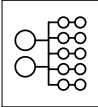
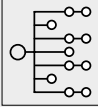
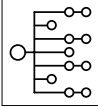
Control panels



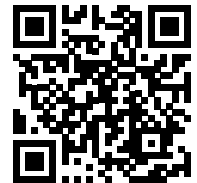
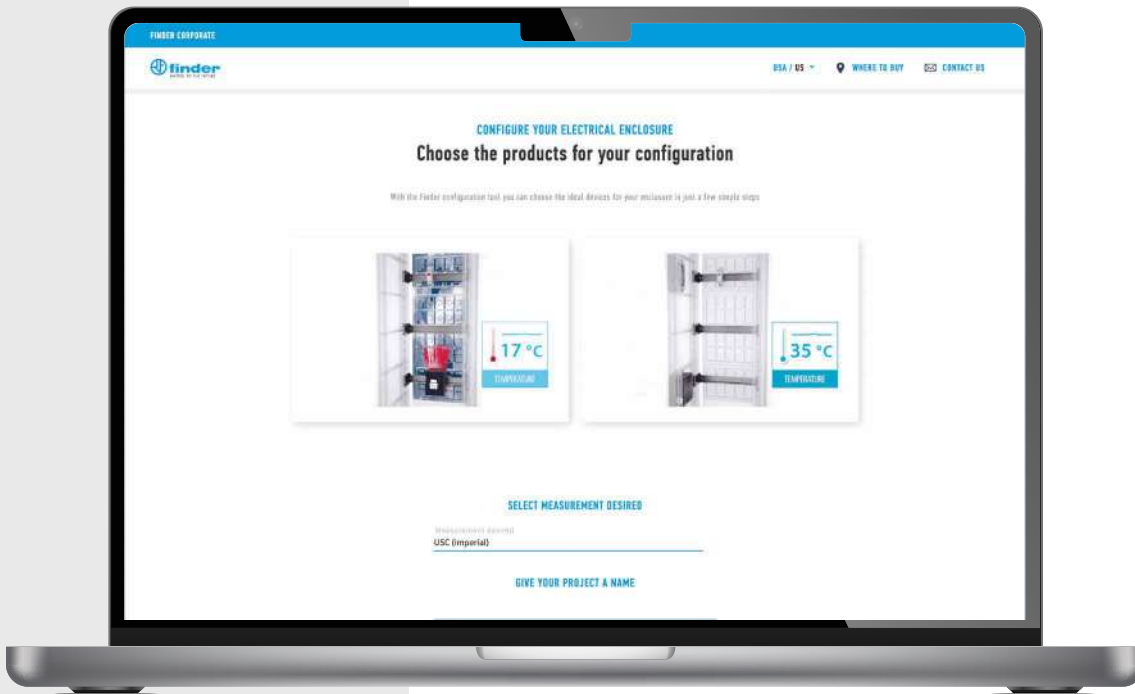
Type 9D.01.5.250.0111
Type 9D.01.5.400.0111



Type 9D.01.5.080.0304
Type 9D.01.5.125.0206
Type 9D.01.5.175.0210

Code	Current (A)	Inputs	Input wire specification		Output	Output wire specification		Connections
			mm ²	AWG		mm ²	AWG	
9D.01.5.080.0304	80	3	16	6	4	6	10	
9D.01.5.125.0206	125	2	35	2	6	16	6	
9D.01.5.175.0210	175	2	70	2/0	10	16	6	
9D.01.5.250.0111	250	1	120	250 Kcmil	11	35	2	
9D.01.5.400.0111	400	1	185	400 Kcmil	11	35	2	

FINDER THERMO CONFIGURATOR



<https://configurator.findernet.com/us/>

Easy; Efficient; Informative.

Building a new panel and would like an easy way to select your thermoregulation components? Finder has a new **Thermo Configurator** to help you choose your thermostats, filter fans, panel heaters and even panel lights. Links to technical information right alongside the product summary – no searching the web.

Try it out today, explore the Configurator, explore thermoregulation products, explore everything Finder.



FINDER RELAYS, INC.
4191 Capital View Drive, Suwanee, GA 30024 - U.S.A.
(770) 271-4431
sales@finder-us.com

finder-us.com

FINDER COMPONENTS INC.
5028 South Service Road, Burlington, ONTARIO L7L 5Y7
Toll Free 1-800-265-6263 - Local 905 681 7767
finder.ca@findernet.com

findernet.com



JOIN US FOR AN ENGAGING VIDEO CALL
EXPERIENCE AND REVIEW FINDER'S
THERMO-REGULATION PRODUCTS HANDS ON

