

# Panel Heaters

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

**7H**  
SERIES



Drying kilns



Hoists and cranes



Road / tunnel  
lighting



Plastic  
moulding  
machines



Automatic  
car-washes



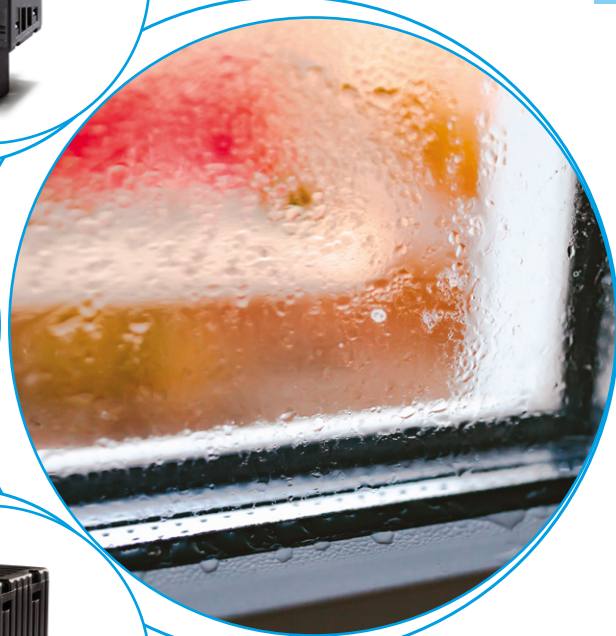
Panels for  
electrical  
distribution



Control panels



Forced-air  
ventilators





**Panel heaters**

**Type 7H.51.0.230.0025**

- Heating power 25 W

**Type 7H.51.0.230.0050**

- Heating power 50 W

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

7H.51.0025/0050  
Screw terminal



**7H.51.0.230.0025**



- Heating power 25 W
- Nominal voltage (110...230)V AC/DC
- Safe touch

**7H.51.0.230.0050**



- Heating power 50 W
- Nominal voltage (110...230)V AC/DC
- Safe touch

\* At 20°C ambient temperature

\*\* Except upper protection grille

For outline drawings see page 7

**Heating specification**

Heating power *	W	25	50
Heater		PTC resistor, self-regulating heating system	
Surface temperature**	°C	≤ 100	≤ 100
Housing		Plastic according to UL94 – V0, black	

**Supply specification**

Nominal voltage (U <sub>N</sub> )	V AC (50/60 Hz)/DC	110...230	110...230
Rated current	A	0.13	0.20
Operating range	V AC/DC	88...253	88...253

**Technical data**

Radiator		Alluminium profile	
Electrical connection		Screw terminals	
Fitting position		Vertical	
Ambient temperature	°C	-45...+50	-45...+50
Protection category		IP 20	IP 20

**Approvals** (according to type)



## Panel heaters

## Type 7H.51.0.230.0100

- Heating power 100 W

## Type 7H.51.0.230.0150

- Heating power 150 W

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

7H.51.0100/0150

Screw terminal



## 7H.51.0.230.0100



- Heating power 100 W
- Nominal voltage (110...230)V AC/DC
- Safe touch

## 7H.51.0.230.0150



- Heating power 150 W
- Nominal voltage (110...230)V AC/DC
- Safe touch

\* At 20°C ambient temperature

\*\* Except upper protection grille

For outline drawings see page 8

## Heating specification

Heating power *	W	100	150
Heater	PTC resistor, self-regulating heating system		
Surface temperature**	°C	≤ 80	≤ 80
Housing	Plastic according to UL94 – V0, black		

## Supply specification

Nominal voltage (U <sub>N</sub> )	V AC (50/60 Hz)/DC	110...230	110...230
Rated current	A	0.45	0.70
Operating range	V AC/DC	88...253	88...253

## Technical data

Radiator	Alluminium profile		
Electrical connection	Screw terminals		
Fitting position	Vertical		
Ambient temperature	°C	-45...+50	-45...+50
Protection category		IP 20	IP 20

## Approvals (according to type)



**Panel heaters fan assisted**

**Type 7H.51.8.xxx.0250**

- Heating power 250 W

**Type 7H.51.8.xxx.0400**

- Heating power 400 W

- Nominal voltage 110 or 230 V AC
- Safe touch
- PTC resistor, self regulating heating system
- Fast wiring terminals
- Clip for 35 mm rail (EN 60715) mount

7H.51.0250/0400  
Push-in terminal



**NEW** 7H.51.8.xxx.0250



- Heating power 250 W
- Nominal voltage 110 or 230 V AC
- Fan assisted

**NEW** 7H.51.8.xxx.0400



- Heating power 400 W
- Nominal voltage 110 or 230 V AC
- Fan assisted

\* At 20°C ambient temperature

\*\* Except upper protection grille

For outline drawings see page 8

**Heating specification**

Heating power *	W	250	400
Heater	PTC resistor, self-regulating heating system		
Surface temperature**	°C	≤ 30	≤ 30
Air flow rate	m <sup>3</sup> /h	30	
Fan - Life time at 25 °C	h	50 000	50 000
Housing	Plastic according to UL94 – V0, black		

**Supply specification**

Nominal voltage (U <sub>N</sub> )	V AC (50/60 Hz)	110	230	110	230
Rated current	A	2	1	3	1.7
Operating range	V AC	88...121	184...253	88...121	184...253

**Technical data**

Radiator	Alluminium profile			
Electrical connection	Push-in terminal			
Fitting position	Vertical			
Ambient temperature	°C	-40...+50		-40...+50
Protection category		IP 20		IP 20

**Approvals (according to type)**



## Ordering information

Example: 7H series, Panel heaters, heating power 50 W, 110...230 V AC/DC.

**7 H . 5 1 . 0 . 2 3 0 . 0 0 5 0**

### Series

### Type

51 = Panel heaters safe touch

### Supply version

0 = AC (50/60 Hz)/DC

8 = AC (50/60 Hz) only fan assisted version

### Supply voltage

230 = 110...230 V

110 = 110 V only fan assisted version

230 = 230 V only fan assisted version

### Heater power

0025 = 25 W

0050 = 50 W

0100 = 100 W


0150 = 150 W

0250 = 250 W

0400 = 400 W

## General data

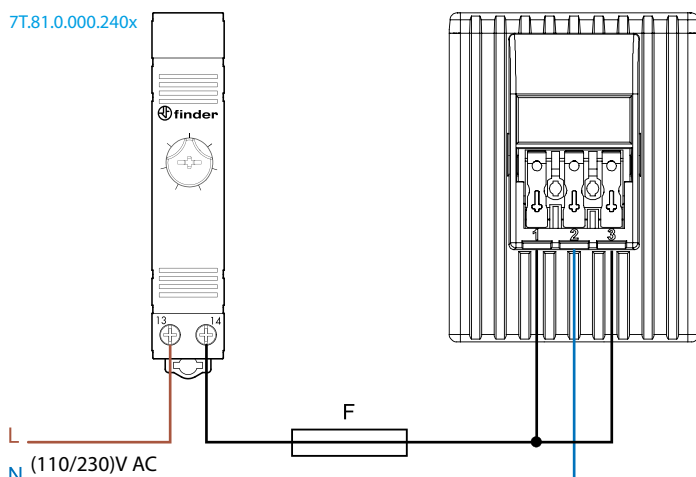
Insulation		7H.51.0...025/050/100/150	7H.51.8...250/400
Rated voltage of power supply system	V AC	120/240	240
Rated insulations voltage	V AC	250	
Pollution degree		3	
Terminal insulation			
Dielectric strenght between L and N to metal clip on the housing	V AC (3s)	2500	
Overvoltage category		II	
Rated impulse voltage (1.2/50)µs	kV	2.5	

Terminals		solid cable	stranded cable
Max. wire size (push-in terminals)	mm <sup>2</sup>	2 x 1.5	2 x 1.5
	AWG	2 x 16	2 x 16
Max. wire size (screw terminals)	mm <sup>2</sup>	1 x 2.5	1 x 1.5
	AWG	1 x 12	1 x 16
 Screw torque	Nm	0.5	

## Wiring diagrams

### Fan assisted version

7T.81.0.000.240x



**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).

1 = L (heater)

2 = N

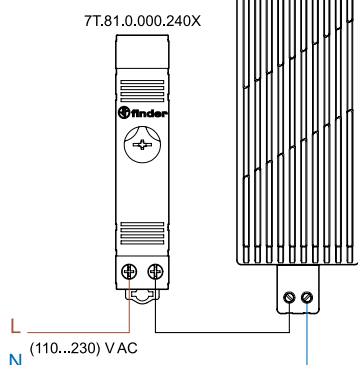
3 = L (fan)

F = aM 10 A @110 V AC  
aM 6.3 A @230 V AC

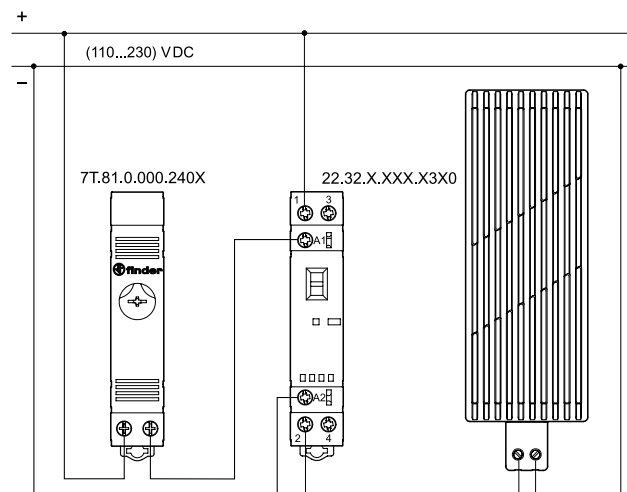
## Wiring diagrams

### NOT Fan assisted versions

#### AC version



#### DC version



### SAFETY NOTE

For reasons of safety and performance, heaters must be mounted in the following way:

1. keep a distance of 100 mm. from components above and below and of 60 mm from side components
2. install vertically (cables below heater) in the bottom part of cabinet
3. do not mount heaters over easily inflammable materials
4. do not operate in corrosive ambient air

### WARNING

Do not cover the heater.

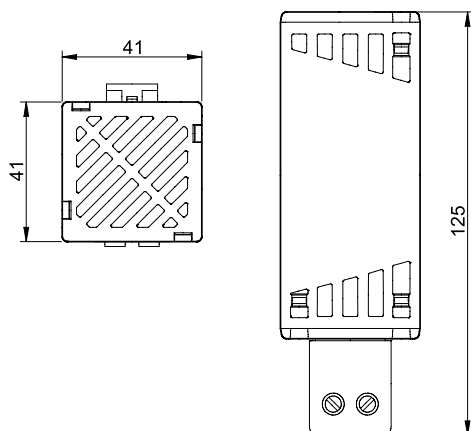
The 7H.51 Heater surface is very hot for 15-20 minutes after disconnecting.

During working and maintenance, don't touch it.

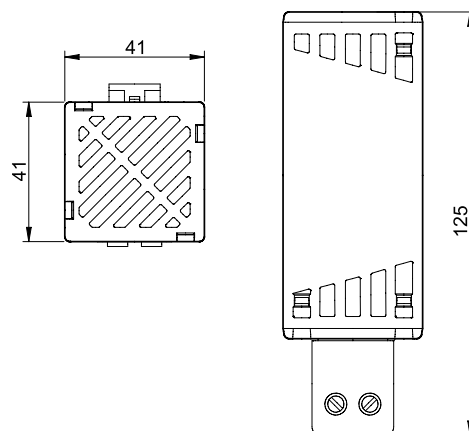
**Caution:** risk of burns, temperatur of the side less than +100 °C..

## Outline drawings

Type 7H.51.0025  
Screw terminal



Type 7H.51.0050  
Screw terminal

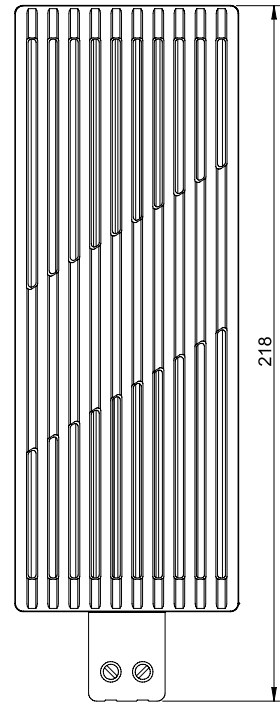
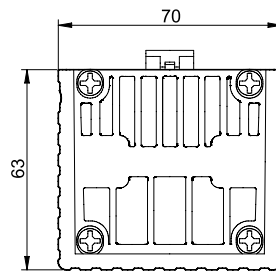
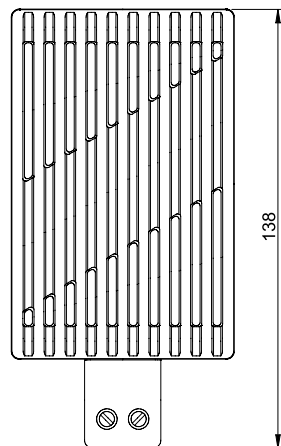
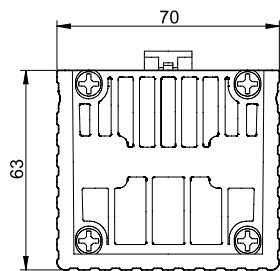


## Outline drawings

Type 7H.51.0100  
Screw terminal



Type 7H.51.0150  
Screw terminal



G

Types 7H.51.0250 / 0400  
Push-in terminal

