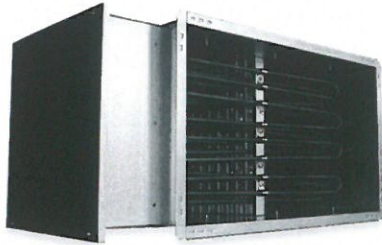


Electric duct heater



Duct heaters are designed to heat clean air in ventilation systems and to preheat air handling units. Corrosion resistant casing with excellent thermal reflectivity is made from AluZinc. Duct connection is with rolled rubber seals, duct heater elements are made from stainless steel. To ensure safety in duct heaters are installed 2 protection thermostats and screw terminals for easy connection.

To ensure long service time of heaters, heaters casing is manufactured from AluZinc coated steel and heating elements from stainless steel AISI 304. AluZinc for heaters casing was selected for it's properties:

- › Good corrosion resistance at high temperatures (up to 315°C).
- › Excellent thermal reflectivity.
- › Good abrasion resistance because of its surface hardness.
- › Durability: under normal conditions the AZ 150 coating grade will protect the steel substrate from corrosion for a minimum period of 15 years.

Double overheat protection.

To ensure security in case of fire in all electric air heaters are installed 2 heat protection thermostats:

- › First overheat protection automatically activates if temperature reaches 50°C, then protection disconnects heating elements, until it has cooled. When the temperature falls to the working temperature, heater automatically switches on.
- › Second overheat protection automatically activates if temperature reaches 100°C, then protection disconnects heating elements, until it has cooled. In this case need to figure the cause of the overheating of the heater. Heater needs to be reset manually with the pushbutton on the heaters casing.

Duct connection

For easy duct connection heaters casing is with rolled rubber seals.

MARKING

EKS NV 40 x 20/21 PTC/PS

1 2 3 4 5 6 7

1. EKA – circular duct heater.

2. NV – heater type.

Type NV - you can set temperature of heater with potentiometer installed on heaters casing.

Type NI - you can set temperature from distance with wired remote potentiometer TR5K.

Type NIS – heater control from distance with 0 – 10V signal.

3. 40 – heater height cm.

4. 20 – heaters width.

5. 21 – power of heater kW.

6. PTC – heater with installed air flow sensor.

7. PS – heater with installed pressure sensor.

PTC/PS type can be marked also as NV PH if temperature setpoint of the heater -20°C to -5°C.

RECTANGULAR DUCT HEATER TYPES

Model	Control	Control type
EKS	External controller EKR	External control
EKS NV	Built-in controller EKR-KN NV	Control on heaters casing, default temperature setpoint 0°C ... +30°C
EKS NV PTC/PS, NV PH	Built-in controller EKR-KN NV PTC/PS EKR-KN NV PH	Control on heaters casing, default temperature setpoint -10°C ... +50°C. Air flow sensor and pressure sensor are installed inside the heater. Difference between heaters is EKS NV PTC/PS and EKS NV PH, that EKS NV PH temperature setpoint is -20°C iki -5°C.
EKS NI	Built-in controller EKR-KN NI	Remote control with wired potentiometer, default temperature setpoint 0°C ... +30°C
EKS NIS	Built-in controller EKR-KN NIS	0-10V control

In heaters type NV PTC/PS are installed controllers with default temperature setpoint -10°C ... +50°C, on your needs we can install controllers with different temperature setpoints:

-40°C till -10°C	0°C till +30°C	-5°C till 0°C
-20°C till -5°C	-10°C till 0°C	-20°C till +30°C
-10°C till +40°C	-	-

ACCESSORIES

Controller for electrical heater



EKR 6.1

Controller for electrical heater



P.7 EKR 15.1

Controller for electrical heater



P.8 EKR 15.1P P.8

Controller for electrical heater



EKR 30 P.9

Controller for electrical heater



EKR 30P P.9

Temperature sensor



TJK-10K 106331

The company reserves the right to make changes of technical data without prior notice

EKS

CONTROL

Model	Controlled load [kW]	Extra load control*	Full load	Relay output	Voltage output**
EKR15.1	15 kW	Up to 12 kW	27 kW	1x5A/230V	3x230/3x400
EKR15.1P	15 kW	Up to 225 kW	240 kW	4x5A/230V	3x230/3x400
EKR30	30 kW	Up to 42 kW	42 kW	1x5A/230V	3x230/3x400
EKR30P	30 kW	Up to 420 kW	450 kW	4x5A/230V	3x230/3x400

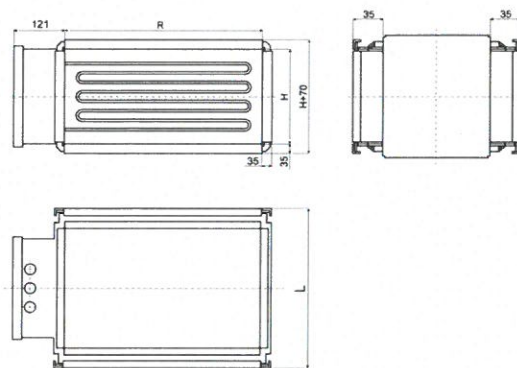
* Extra load control with contactor.

** Available voltage 3x230V, according to the current selected controlled power.

Model	Controlled load [kW]	Maximum controlled current [A]	Voltage output
EKR 6.1	6,4 kW/400V	16 A	2x400V
	3.2 kW/230V		1x230V

DUCT HEATERS POWER & DIMENSIONS

All, regardless of the type of electric duct heaters ECS dimensions and power (voltage 3x400V)*



EKS NV/NIS/PTC/PS/PH 400x200	
Length L [mm]	370 420 520
Total rated power [kW]	6 9 12 15 21

EKS NV/NIS/PTC/PS/PH 500x250	
Length L [mm]	370 420 520 600 820 970
Total rated power [kW]	9 12 15 21 24 36 45

EKS NV/NIS/PTC/PS/PH 500x300	
Length L [mm]	370 440 520 600
Total rated power [kW]	9 12 15 18 21 24 27 30 33 36 42 45

EKS NV/NIS/PTC/PS/PH 600x300	
Length L [mm]	370 440 520 600
Total rated power [kW]	9 12 15 18 21 24 27 30 33 36 42 45

EKS NV/NIS/PTC/PS/PH 600x350	
Length L [mm]	370 420 500
Total rated power [kW]	9 12 15 18 21 24 27 30 33 36 39 42 45

EKS NV/NIS/PTC/PS/PH 700x400	
Length L [mm]	370 440 520
Total rated power [kW]	9 12 15 18 21 24 27 30 33 36 42 45 51 60 66

EKS NV/NIS/PTC/PS/PH 800x500	
Length L [mm]	370 420 440 500
Total rated power [kW]	9 12 15 18 21 24 27 30 33 36 39 42 45 51 54 60 66

EKS NV/NIS/PTC/PS/PH 1000x500	
Length L [mm]	370 420 440 500
Total rated power [kW]	9 12 15 18 21 24 27 30 33 36 39 42 45 51 54 60 66

*According to the technical inquiries can be made non-standard power, voltage, and dimensions heaters.

The company reserves the right to make changes of technical data without prior notice