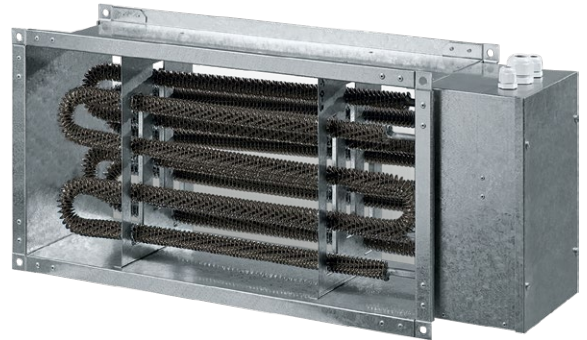


# EKH

## Duct electrical heaters for rectangular ducts

### Use

- For warming up of supply air in heating, ventilation and air conditioning systems installed in various premises.
- Compatible with 400x200 up to 1000x500 mm rectangular air ducts.



### Design

- Galvanized steel case and junction box.
- Heating elements are made of stainless steel and have additional ribbing to increase heat exchange surface.
- Several power options for each standard size.
- For higher heating capacity several heaters may be installed in series.
- Equipped with overheat protection thermostats:
  - basic protection with automatic restart at +50 °C;
  - emergency protection with manual restart at +90 °C.

### Mounting

- Fixing to rectangular ducts with flange connection.
- Any mounting position except for the junction box downwards to prevent condensate leakage and short circuit.
- Install a filter upstream to the heater to protect heating elements against dirt ingress.
- Recommended distance between the heater and other system components must be not less than one air heater diagonal for air flow stabilization.

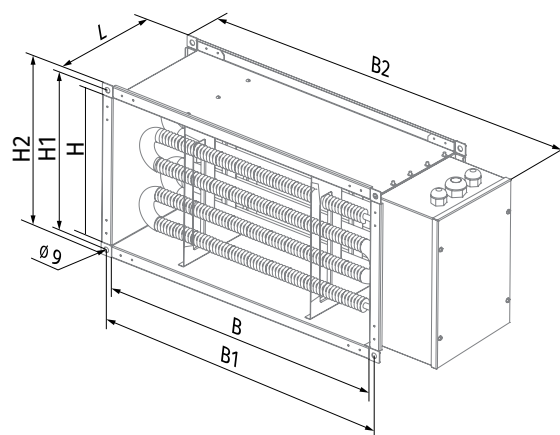
- Duct heaters are rated for minimum air flow speed 1.5 m/s and maximum operating air temperature supplied to the units 40 °C. In case of speed regulation with a speed controller the minimum air speed through the heater must be provided.
- For correct and safe heater operation an automatic control and protection system is recommended, including the following functions:
  - regulation of the heating capacity and temperature of the air heated up;
  - filter clogging control by a differential air pressure sensor;
  - power cut-off in case of the supply fan shutdown or low air flow speed as well as in case of actuating the overheat protection thermostats;
  - heat removal from the heating elements after ventilation system shutdown.

#### Designation key

Series	Flange size (WxH) [cm]	Heater power [kW]
EKH	40x20; 50x25; 50x30; 60x30; 60x35; 70x40; 80x50; 90x50; 100x50	- 4.5; 6; 7.5; 9; 10.5; 12; 15; 18; 21; 24; 27; 36; 45; 54

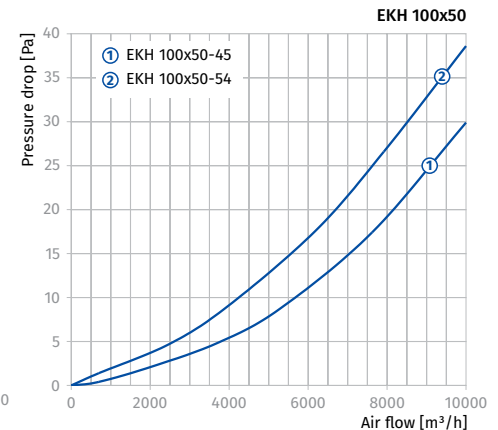
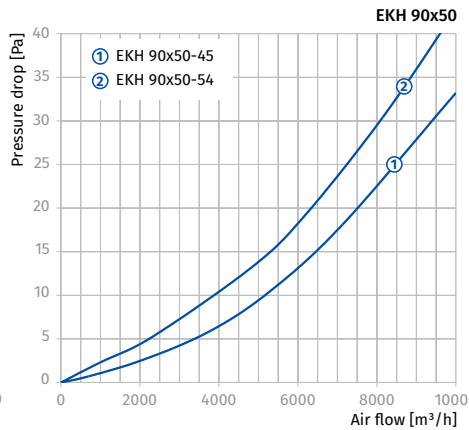
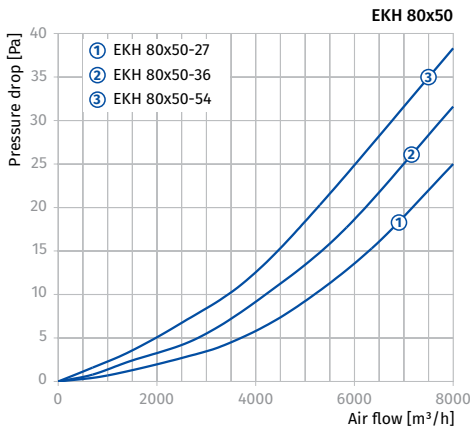
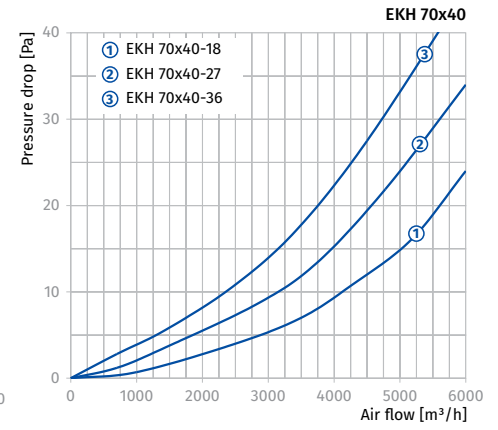
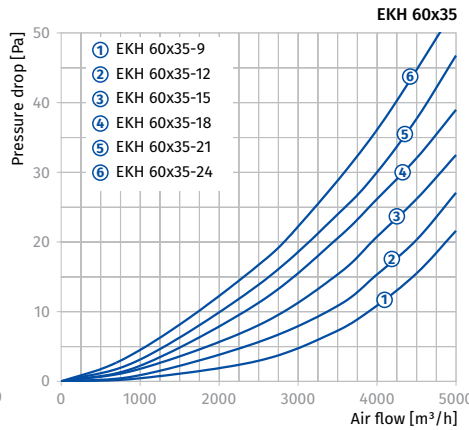
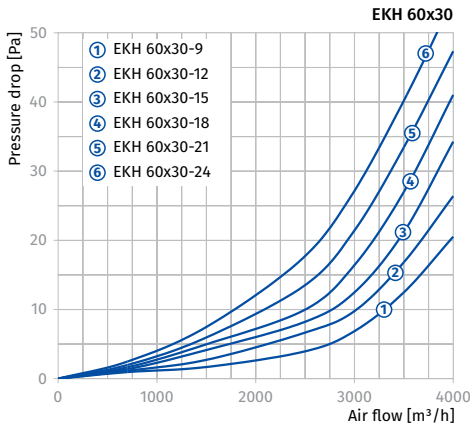
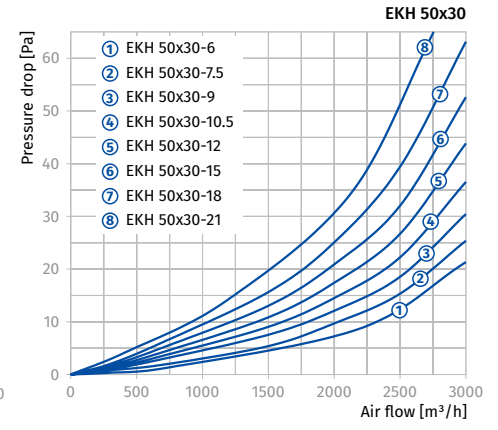
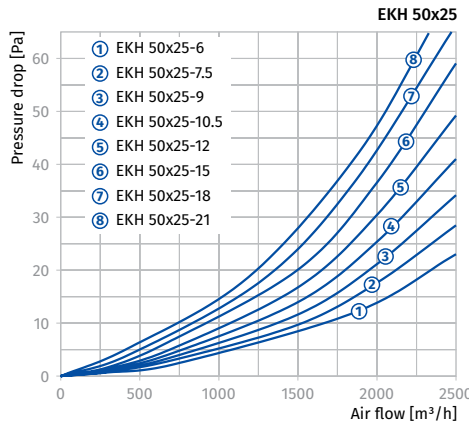
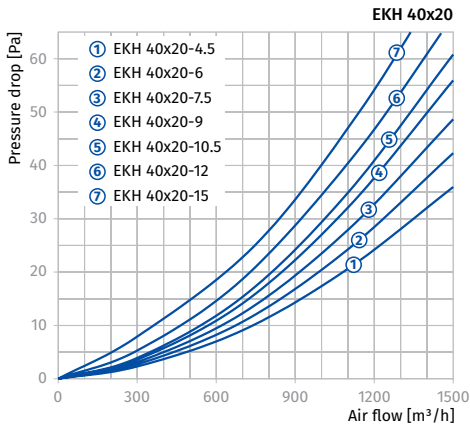
**Overall dimensions [mm]**

Model	B	B1	B2	B3	H	H1	H2	L
EKH 40x20-4.5	400	420	440	540	200	220	240	200
EKH 40x20-6	400	420	440	540	200	220	240	200
EKH 40x20-7.5	400	420	440	540	200	220	240	200
EKH 40x20-9	400	420	440	540	200	220	240	200
EKH 40x20-10.5	400	420	440	540	200	220	240	200
EKH 40x20-12	400	420	440	540	200	220	240	200
EKH 40x20-15	400	420	440	540	200	220	240	200
EKH 50x25-6	500	520	540	640	250	270	290	200
EKH 50x25-7.5	500	520	540	640	250	270	290	200
EKH 50x25-9	500	520	540	640	250	270	290	200
EKH 50x25-10.5	500	520	540	640	250	270	290	200
EKH 50x25-12	500	520	540	640	250	270	290	200
EKH 50x25-15	500	520	540	640	250	270	290	200
EKH 50x25-18	500	520	540	640	250	270	290	200
EKH 50x25-21	500	520	540	640	250	270	290	200
EKH 50x30-6	500	520	540	640	300	320	340	200
EKH 50x30-7.5	500	520	540	640	300	320	340	200
EKH 50x30-9	500	520	540	640	300	320	340	200
EKH 50x30-10.5	500	520	540	640	300	320	340	200
EKH 50x30-12	500	520	540	640	300	320	340	200
EKH 50x30-15	500	520	540	640	300	320	340	200
EKH 50x30-18	500	520	540	640	300	320	340	200
EKH 50x30-21	500	520	540	640	300	320	340	200
EKH 60x30-9	600	620	640	740	300	320	340	200
EKH 60x30-12	600	620	640	740	300	320	340	200
EKH 60x30-15	600	620	640	740	300	320	340	200
EKH 60x30-18	600	620	640	740	300	320	340	200
EKH 60x30-21	600	620	640	740	300	320	340	200
EKH 60x30-24	600	620	640	740	300	320	340	200
EKH 60x35-9	600	620	640	740	350	370	390	200
EKH 60x35-12	600	620	640	740	350	370	390	200
EKH 60x35-15	600	620	640	740	350	370	390	200
EKH 60x35-18	600	620	640	740	350	370	390	200
EKH 60x35-21	600	620	640	740	350	370	390	200
EKH 60x35-24	600	620	640	740	350	370	390	200
EKH 70x40-18	700	720	740	840	400	420	440	390
EKH 70x40-27	700	720	740	840	400	420	440	510
EKH 70x40-36	700	720	740	840	400	420	440	750
EKH 80x50-27	800	820	840	940	500	520	540	390
EKH 80x50-36	800	820	840	940	500	520	540	510
EKH 80x50-54	800	820	840	940	500	520	540	750
EKH 90x50-45	900	920	940	1040	500	520	540	750
EKH 90x50-54	900	920	940	1040	500	520	540	750
EKH 100x50-45	1000	1020	1040	1140	500	520	540	750
EKH 100x50-54	1000	1020	1040	1140	500	520	540	750



**Technical data**

Model	Minimum air flow [m <sup>3</sup> /h (l/s)]	Current [A]	Voltage [V]	Power [kW]	Number of heating coils x capacity [kW]	Weight [kg]
EKH 40x20-4.5	330 (92)	6.5	400	4.5	3x1.5	6.5
EKH 40x20-6	440 (122)	8.7	400	6.0	3x2.0	6.5
EKH 40x20-7.5	550 (153)	10.9	400	7.5	3x2.5	6.5
EKH 40x20-9	660 (183)	13.0	400	9.0	3x3.0	6.5
EKH 40x20-10.5	770 (214)	15.2	400	10.5	3x3.5	6.5
EKH 40x20-12	880 (244)	17.4	400	12.0	3x4.0	6.5
EKH 40x20-15	1100 (306)	21.7	400	15.0	3x5.0	6.5
EKH 50x25-6	440 (122)	8.7	400	6.0	3x2.0	7.65
EKH 50x25-7.5	550 (153)	10.9	400	7.5	3x2.5	7.65
EKH 50x25-9	660 (183)	13.0	400	9.0	3x3.0	7.65
EKH 50x25-10.5	770 (214)	15.2	400	10.5	3x3.5	7.65
EKH 50x25-12	880 (244)	17.4	400	12.0	3x4.0	7.65
EKH 50x25-15	1100 (306)	21.7	400	15.0	3x5.0	7.65
EKH 50x25-18	1320 (367)	26.0	400	18.0	3x6.0	7.65
EKH 50x25-21	1540 (428)	30.0	400	21.0	3x7.0	7.65
EKH 50x30-6	440 (122)	8.7	400	6.0	3x2.0	8.2
EKH 50x30-7.5	550 (153)	10.9	400	7.5	3x2.5	8.2
EKH 50x30-9	660 (183)	13.0	400	9.0	3x3.0	8.2
EKH 50x30-10.5	770 (214)	15.2	400	10.5	3x3.5	8.2
EKH 50x30-12	880 (244)	17.4	400	12.0	3x4.0	8.2
EKH 50x30-15	1100 (306)	21.7	400	15.0	3x5.0	8.2
EKH 50x30-18	1320 (367)	26.0	400	18.0	3x6.0	8.2
EKH 50x30-21	1540 (428)	30.0	400	21.0	3x7.0	8.2
EKH 60x30-9	660 (183)	13.0	400	9.0	3x3.0	9.4
EKH 60x30-12	880 (244)	17.4	400	12.0	3x4.0	9.4
EKH 60x30-15	1100 (306)	21.7	400	15.0	3x5.0	9.4
EKH 60x30-18	1320 (367)	26.0	400	18.0	3x6.0	9.4
EKH 60x30-21	1540 (428)	30.0	400	21.0	3x7.0	9.4
EKH 60x30-24	1760 (489)	34.7	400	24.0	3x8.0	9.4
EKH 60x35-9	660 (183)	13.0	400	9.0	3x3.0	9.75
EKH 60x35-12	880 (244)	17.4	400	12.0	3x4.0	9.75
EKH 60x35-15	1100 (306)	21.7	400	15.0	3x5.0	9.75
EKH 60x35-18	1320 (367)	26.0	400	18.0	3x6.0	9.75
EKH 60x35-21	1540 (428)	30.0	400	21.0	3x7.0	9.75
EKH 60x35-24	1760 (489)	34.7	400	24.0	3x8.0	9.75
EKH 70x40-18	1320 (367)	26.0	400	18.0	6x3.0	14.0
EKH 70x40-27	1980 (550)	39.0	400	27.0	9x3.0	18.5
EKH 70x40-36	2640 (733)	52.0	400	36.0	12x3.0	25.0
EKH 80x50-27	1980 (550)	39.0	400	27.0	9x3.0	19.0
EKH 80x50-36	2640 (733)	52.0	400	36.0	12x3.0	23.5
EKH 80x50-54	3960 (1100)	78.0	400	54.0	18x3.0	30.0
EKH 90x50-45	3300 (917)	65.0	400	45.0	15x3.0	31.0
EKH 90x50-54	3960 (1100)	78.0	400	54.0	18x3.0	33.5
EKH 100x50-45	3300 (917)	65.0	400	45.0	15x3.0	33.0
EKH 100x50-54	3960 (1100)	78.0	400	54.0	18x3.0	36.0



**Air temperature increase as a function of air flow**

