



KP/BN Air Curtains

The air curtains KP/BN with air outlet slot located closer to gate plane are used to protect against uncontrolled external air inflow through the doors or gates in such facilities as: shopping malls and supermarkets, restaurants, bars, hotels, banks, public service buildings, offices, hospitals, pharmacies, warehouses etc. The units are suitable for taking and heating air from the inside of the premises. They can be used without air heating as "cold" curtains. The curtains are intended for the use at the height of 2÷6m. They may be positioned above gates (horizontal operation position) or at the their sides (vertical operation position). The curtains can be installed next to each other so their length is close to the door width.

The curtains consist of:

- housing made of galvanized sheet (single side painted on RAL 9010 colour) with outlet slot along the whole length;
- water heater;
- axial-flow fans (2,3 or 4).

The curtains are offered in two sizes 1 and 2, with four lengths (150, 200, 250, 300cm) in each. In agreement with manufacturer KP/BN air curtains could be made with:

- three-phase motors;
- painted on other colours.

Working conditions

The curtains allow for air speed at the floor within the limits of 4÷6m/s. The water heating coils are supplied with water with the temperature of 110°C or lower and the pressure of up to 1,5MPa. In agreement with manufacturer there is Possibility of supply of curtains with water heater with water temperature up to 150°C. There is the possibility of extension of curtains air flow regulation up to 5 steps with the use of additional speed controller of the fans.

KP/BN-1-150-Z

DIMENSIONS

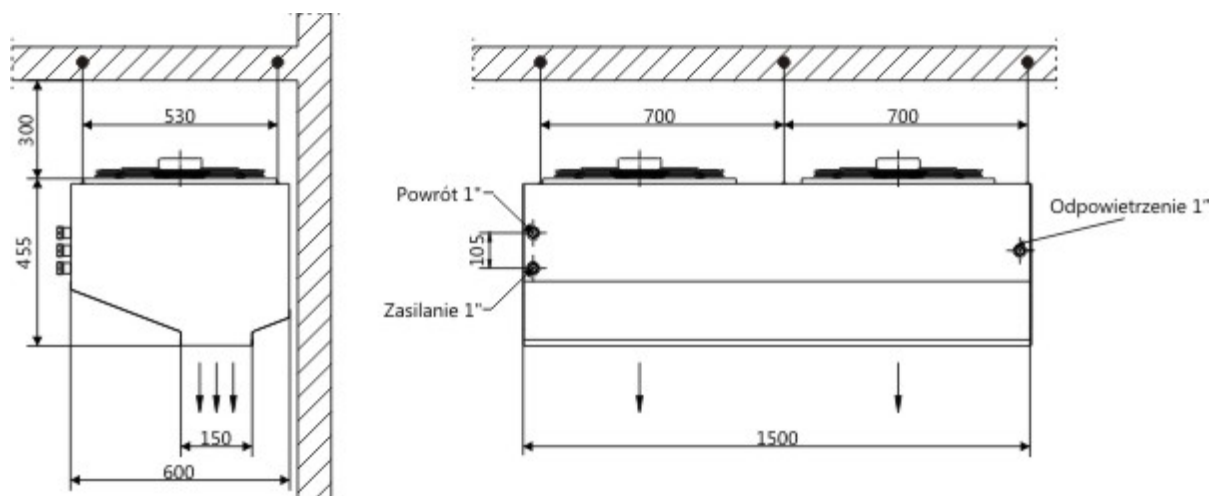


| The parameters of the air curtain fans | |
|--|------|
| The number of fans | 2 |
| Voltage [V] | 230 |
| Motor power [kW] | 0,18 |
| Current [A] | 0,82 |
| Rotations per minute [min-1] | 1380 |
| Airflow efficiency [m ³ /h] | 6500 |

| Operating noise level of the air curtain [dB(A)] | |
|--|----|
| Sound level at a distance of 3 meters | 60 |
| Weight of the air curtain | |
| Mass [kg] | 52 |

KP/BN-1-150-W

DIMENSIONS



The parameters of the air curtain fans

| | |
|------------------------------|------|
| The number of fans | 2 |
| Voltage [V] | 230 |
| Motor power [kW] | 0,18 |
| Current [A] | 0,82 |
| Rotations per minute [min-1] | 1380 |

Thermal capacities of the water-heated air curtain

| Airflow rate [m³/h] | | | 6500 | | |
|---|-----------------------------|------|------|-----|--|
| Heat output [kW], outlet air temperature [°C] water flow resistance [kPa] | | | | | |
| Water parameters [°C] | Inlet air temperature. [°C] | kW | °C | kPa | |
| 90/70 | 5 | 40,6 | 22 | 1,2 | |
| | 10 | 37,0 | 26 | 1,1 | |
| | 15 | 33,5 | 30 | 1,1 | |
| 80/60 | 5 | 33,7 | 19 | 1,0 | |
| | 10 | 30,3 | 23 | 1,0 | |
| | 15 | 26,9 | 27 | 0,9 | |
| 70/50 | 5 | 27,1 | 16 | 0,9 | |
| | 10 | 23,8 | 20 | 0,8 | |
| | 15 | 20,6 | 24 | 0,8 | |

| | | | | |
|--------------|-----------|------|----|-----|
| 60/40 | 5 | 20,7 | 14 | 0,8 |
| | 10 | 17,7 | 17 | 0,6 |
| | 15 | 14,7 | 21 | 0,6 |

| Operating noise level of the air curtain [dB(A)] | |
|---|----|
| Sound level at a distance of 3 meters | 60 |
| Weight of the air curtain | |
| Mass [kg] | 70 |

KP/BN-1-200-Z

DIMENSIONS

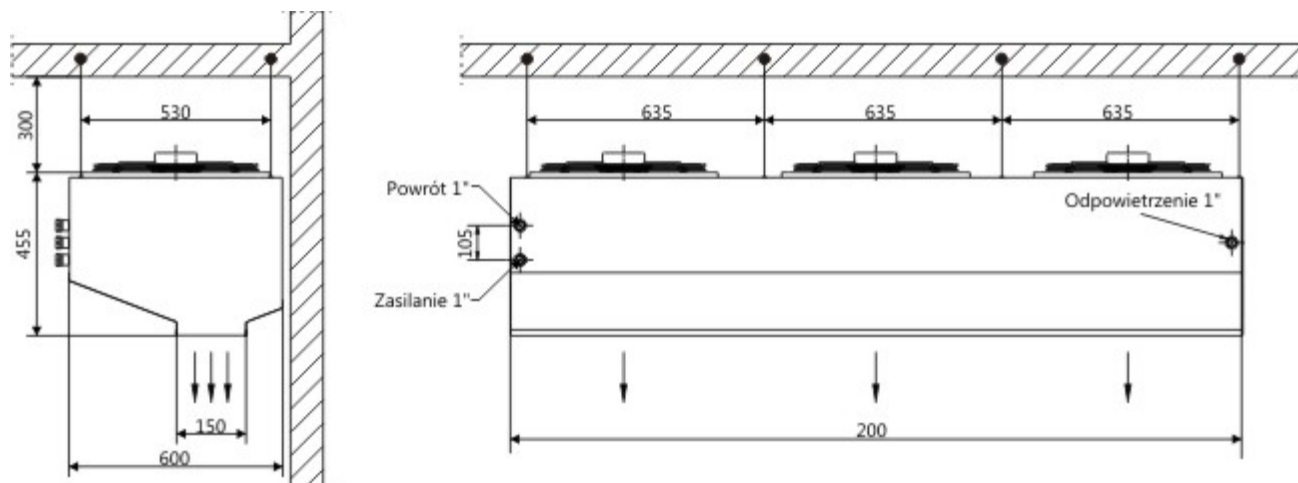


| Parameters of the fans in the air curtain | |
|---|------|
| Number of fans | 3 |
| Voltage [V] | 230 |
| Motor power [kW] | 0,18 |
| Current [A] | 0,82 |
| Rotations per minute [min-1] | 1380 |
| Airflow efficiency [m ³ /h] | 9750 |

| Operating noise level of the air curtain [dB(A)] | |
|--|----|
| Sound level at a distance of 3 meters | 60 |
| Weight of the air curtain | |
| Mass [kg] | 69 |

KP/BN-1-200-W

DIMENSIONS



| Parameters of the fans in the air curtain | |
|---|------|
| Number of fans | 3 |
| Voltage [V] | 230 |
| Motor power [kW] | 0,18 |
| Current [A] | 0,82 |
| Rotations per minute [min-1] | 1380 |

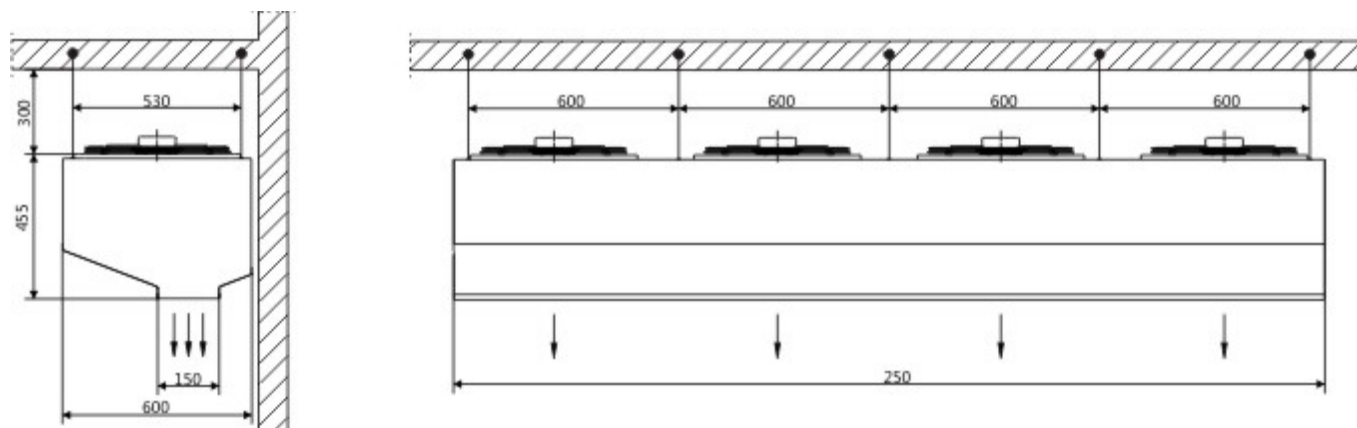
| Thermal capacities of the water-heated air curtain | | | | |
|---|----------------------------|------|------|-----|
| Airflow rate [m³/h] | | | 9750 | |
| Heat output [kW], outlet air temperature [°C] water flow resistance [kPa] | | | | |
| Water parameters [°C] | Inlet air temperature [°C] | kW | °C | kPa |
| 90/70 | 5 | 66,4 | 24 | 3,2 |
| | 10 | 60,3 | 27 | 2,8 |
| | 15 | 54,8 | 31 | 2,4 |
| 80/60 | 5 | 55,2 | 21 | 2,4 |
| | 10 | 49,3 | 24 | 2,0 |
| | 15 | 44,1 | 28 | 1,8 |
| 70/50 | 5 | 44,4 | 17 | 1,7 |
| | 10 | 39,0 | 21 | 1,3 |
| | 15 | 33,9 | 25 | 1,2 |

| | | | | |
|--------------|-----------|------|----|-----|
| 60/40 | 5 | 34,1 | 15 | 1,2 |
| | 10 | 29,0 | 18 | 1,1 |
| | 15 | 24,1 | 22 | 1,0 |

| Operating noise level of the air curtain [dB(A)] | |
|---|----|
| Sound level at a distance of 3 meters | 60 |
| Weight of the air curtain | |
| Mass [kg] | 91 |

KP/BN-1-250-Z

DIMENSIONS

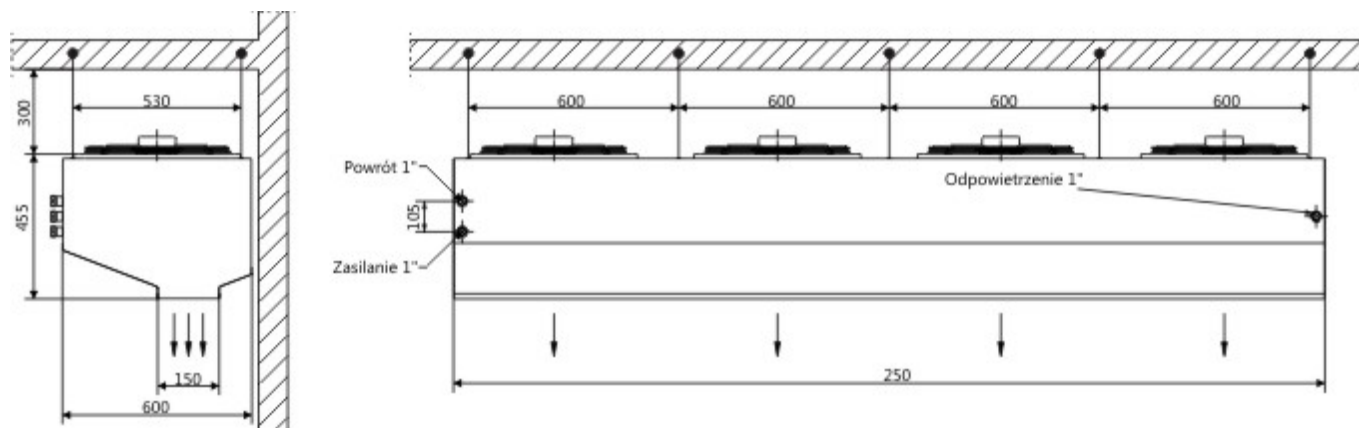


| Parameters of the fans in the air curtain | |
|---|-------|
| Number of fans | 4 |
| Voltage [V] | 230 |
| Motor power [kW] | 0,18 |
| Current [A] | 0,82 |
| Rotations per minute [min-1] | 1380 |
| Airflow efficiency [m ³ /h] | 13000 |

| Operating noise level of the air curtain [dB(A)] | |
|--|----|
| Sound level at a distance of 3 meters | 60 |
| Weight of the air curtain | |
| Mass [kg] | 86 |

KP/BN-1-250-W

DIMENSIONS



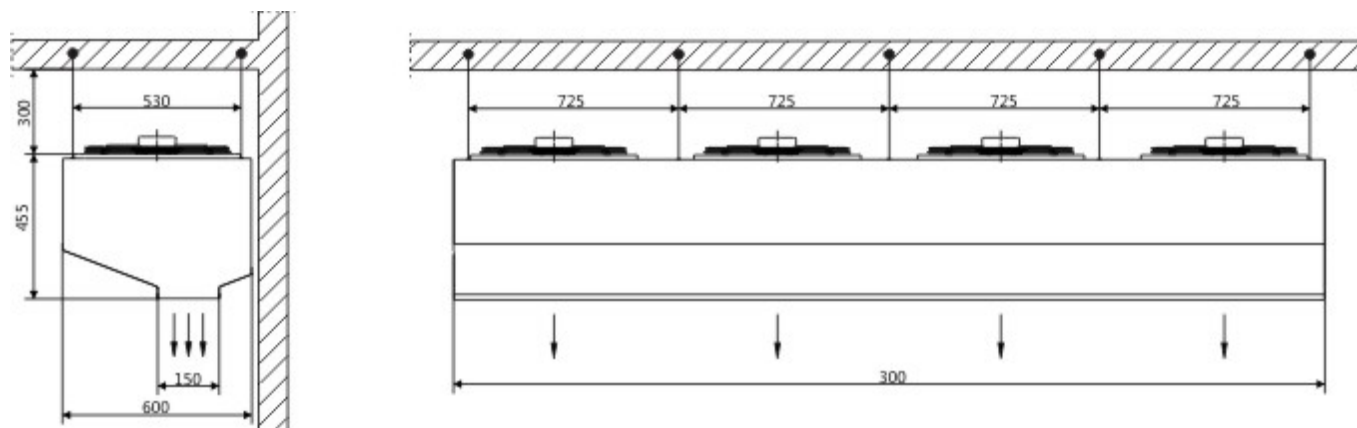
| Parameters of the fans in the air curtain | |
|---|------|
| Number of fans | 4 |
| Voltage [V] | 230 |
| Motor power [kW] | 0,18 |
| Current [A] | 0,82 |
| Rotations per minute [min-1] | 1380 |

| Thermal capacities of the water-heated air curtain | | | | |
|---|----------------------------|------|-------|-----|
| Airflow rate [m³/h] | | | 13000 | |
| Heat output [kW], outlet air temperature [°C] water flow resistance [kPa] | | | | |
| Water parameters [°C] | Inlet air temperature [°C] | kW | °C | kPa |
| 90/70 | 5 | 94,9 | 25 | 7,5 |
| | 10 | 86,6 | 29 | 6,8 |
| | 15 | 78,4 | 32 | 6,0 |
| 80/60 | 5 | 78,9 | 22 | 6,0 |
| | 10 | 70,9 | 25 | 4,4 |
| | 15 | 63,1 | 29 | 3,5 |
| 70/50 | 5 | 63,5 | 19 | 3,5 |
| | 10 | 55,9 | 22 | 3,0 |
| | 15 | 48,7 | 26 | 2,5 |
| 60/40 | 5 | 48,8 | 15 | 2,3 |
| | 10 | 41,6 | 19 | 1,8 |
| | 15 | 34,6 | 22 | 1,4 |

| Operating noise level of the air curtain [dB(A)] | |
|--|-----|
| Sound level at a distance of 3 meters | 60 |
| Weight of the air curtain | |
| Mass [kg] | 114 |

KP/BN-1-300-Z

DIMENSIONS

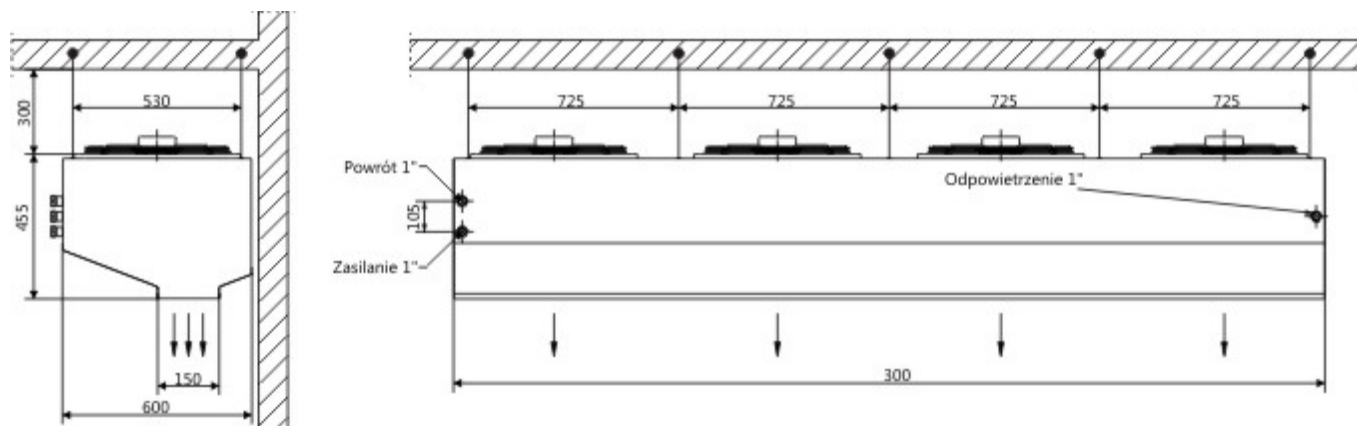


| Parameters of the fans in the air curtain | |
|---|-------|
| Number of fans | 4 |
| Voltage [V] | 230 |
| Motor power [kW] | 0,18 |
| Current [A] | 0,82 |
| Rotations per minute [min-1] | 1380 |
| Airflow efficiency [m ³ /h] | 13000 |

| Operating noise level of the air curtain [dB(A)] | |
|--|----|
| Sound level at a distance of 3 meters | 60 |
| Weight of the air curtain | |
| Mass [kg] | 98 |

KP/BN-1-300-W

DIMENSIONS



| Parameters of the fans in the air curtain | |
|---|------|
| Number of fans | 4 |
| Voltage [V] | 230 |
| Motor power [kW] | 0,18 |
| Current [A] | 0,82 |
| Rotations per minute [min-1] | 1380 |

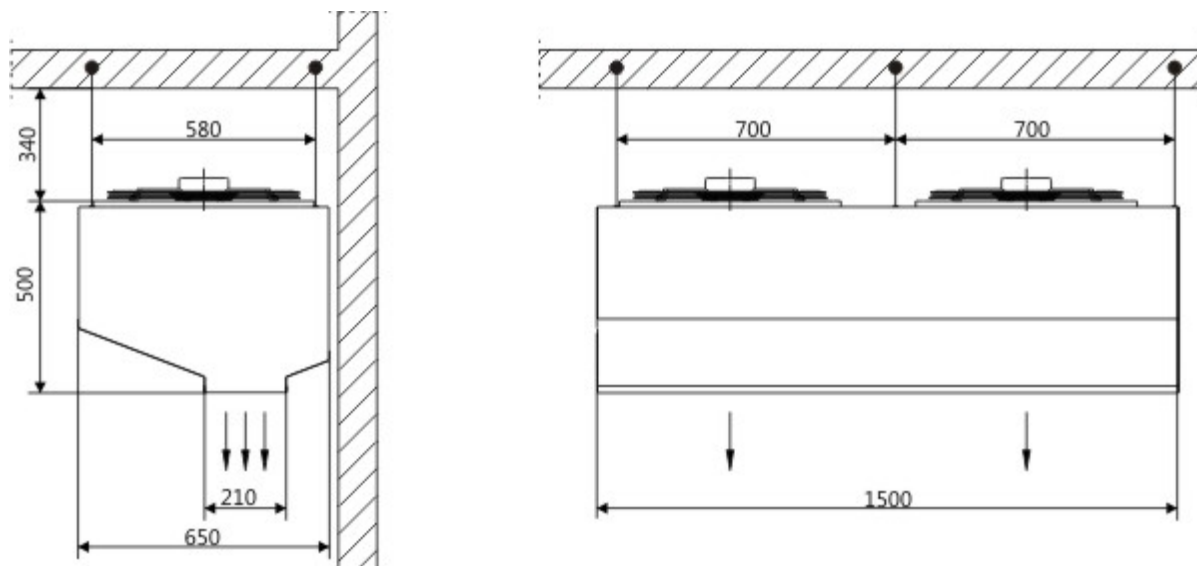
| Thermal capacities of the water-heated air curtain | | | | |
|---|----------------------------|-------|-------|-----|
| Airflow rate [m³/h] | | | 13000 | |
| Heat output [kW], outlet air temperature [°C] water flow resistance [kPa] | | | | |
| Water parameters [°C] | Inlet air temperature [°C] | kW | °C | kPa |
| 90/70 | 5 | 105,9 | 28 | 9,9 |
| | 10 | 96,6 | 31 | 8,8 |
| | 15 | 87,4 | 34 | 7,1 |
| 80/60 | 5 | 88,1 | 24 | 7,1 |
| | 10 | 79,2 | 27 | 5,8 |
| | 15 | 70,5 | 30 | 5,2 |
| 70/50 | 5 | 71,1 | 20 | 5,0 |
| | 10 | 62,6 | 23 | 4,4 |
| | 15 | 54,3 | 27 | 3,2 |

| | | | | |
|--------------|-----------|------|----|-----|
| 60/40 | 5 | 54,7 | 16 | 3,1 |
| | 10 | 46,6 | 20 | 2,5 |
| | 15 | 38,9 | 23 | 2,0 |

| Operating noise level of the air curtain [dB(A)] | |
|---|-----|
| Sound level at a distance of 3 meters | 60 |
| Weight of the air curtain | |
| Mass [kg] | 131 |

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DIMENSIONS



| Parameters of the fans in the air curtain | |
|---|------|
| Number of fans | 2 |
| Voltage [V] | 230 |
| Motor power [kW] | 0,25 |
| Current [A] | 1,2 |
| Rotations per minute [min-1] | 1380 |

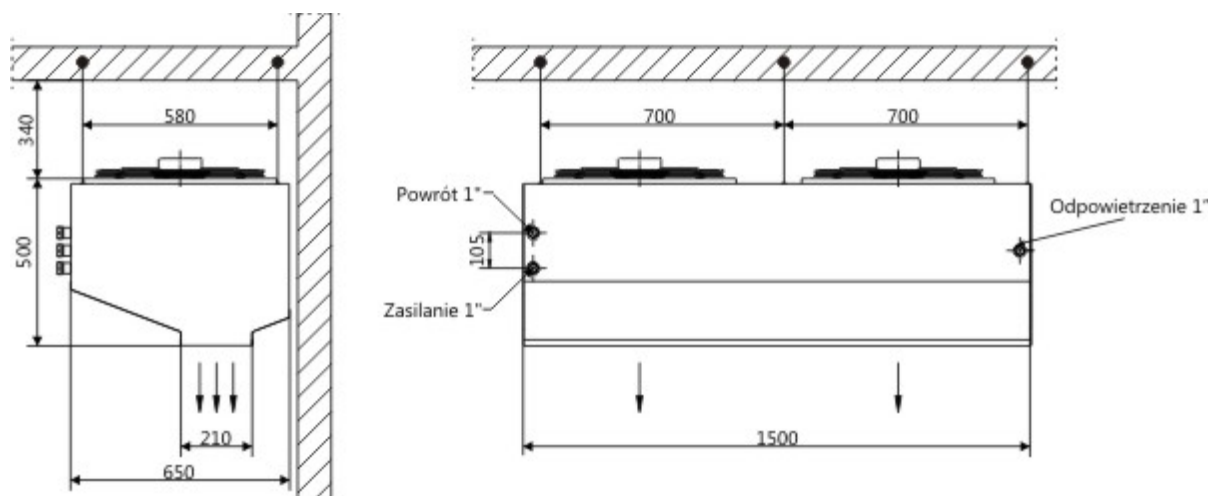
| Thermal capacities of the water-heated air curtain | | | | |
|---|------------------------------|------|------|-----|
| Airflow rate [m³/h] | | | 9000 | |
| Heat output [kW], outlet air temperature [°C] water flow resistance [kPa] | | | | |
| Water parameters [°C] | Temp. powietrza napływ. [°C] | kW | °C | kPa |
| 90/70 | 5 | 55,4 | 22 | 1,2 |
| | 10 | 50,6 | 26 | 1,1 |
| | 15 | 45,8 | 30 | 1,0 |
| 80/60 | 5 | 46,7 | 19 | 1,0 |
| | 10 | 41,4 | 23 | 0,9 |
| | 15 | 36,8 | 27 | 0,8 |
| 70/50 | 5 | 37,1 | 17 | 0,8 |
| | 10 | 32,5 | 20 | 0,7 |
| | 15 | 28,2 | 24 | 0,6 |

| | | | | |
|--------------|-----------|------|----|-----|
| 60/40 | 5 | 28,4 | 16 | 0,6 |
| | 10 | 24,1 | 18 | 0,7 |
| | 15 | 20,1 | 21 | 0,6 |

| Operating noise level of the air curtain [dB(A)] | |
|---|----|
| Sound level at a distance of 3 meters | 64 |
| Weight of the air curtain | |
| Mass [kg] | 79 |

KP/BN-2-150-W

DIMENSIONS



| Parameters of the fans in the air curtain | |
|---|------|
| Number of fans | 2 |
| Napięcie [V] | 230 |
| Motor power [kW] | 0,25 |
| Current [A] | 1,2 |
| Rotations per minute [min-1] | 1380 |

| Thermal capacities of the water-heated air curtain | | | | |
|---|----------------------------|------|------|-----|
| Airflow rate [m³/h] | | | 9000 | |
| Moc cieplna [kW], temperatura powietrza wpływającego [°C] oraz opory przepływu wody [kPa] | | | | |
| Water parameters [°C] | Inlet air temperature [°C] | kW | °C | kPa |
| 90/70 | 5 | 55,4 | 22 | 1,2 |
| | 10 | 50,6 | 26 | 1,1 |
| | 15 | 45,8 | 30 | 1,0 |
| 80/60 | 5 | 46,7 | 19 | 1,0 |
| | 10 | 41,4 | 23 | 0,9 |
| | 15 | 36,8 | 27 | 0,8 |
| 70/50 | 5 | 37,1 | 17 | 0,8 |
| | 10 | 32,5 | 20 | 0,7 |
| | 15 | 28,2 | 24 | 0,6 |
| 60/40 | 5 | 28,4 | 16 | 0,6 |
| | 10 | 24,1 | 18 | 0,7 |
| | 15 | 20,1 | 21 | 0,6 |

| Operating noise level of the air curtain [dB(A)] | |
|--|----|
| Sound level at a distance of 3 meters | 64 |
| Weight of the air curtain | |
| Mass [kg] | 79 |

KP/BN-2-200-Z

DIMENSIONS

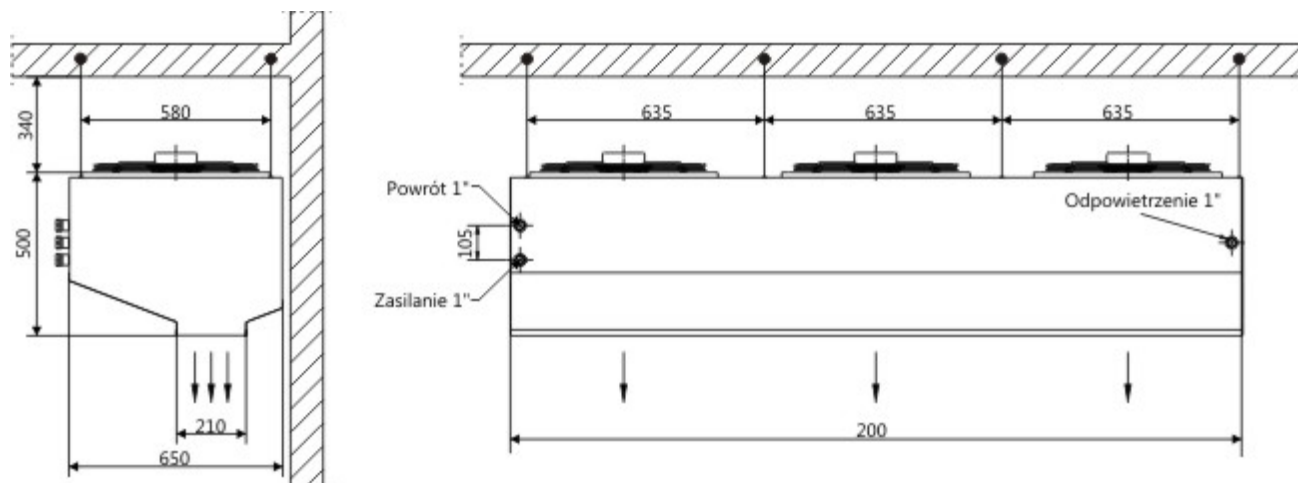


| Parameters of the fans in the air curtain | |
|---|-------|
| Number of fans | 3 |
| Voltage [V] | 230 |
| Motor power [kW] | 0,25 |
| Current [A] | 1,2 |
| Rotations per minute [min-1] | 1380 |
| Airflow efficiency [m ³ /h] | 13500 |

| Operating noise level of the air curtain [dB(A)] | |
|--|----|
| Sound level at a distance of 3 meters | 64 |
| Weight of the air curtain | |
| Mass [kg] | 76 |

KP/BN-2-200-W

DIMENSIONS



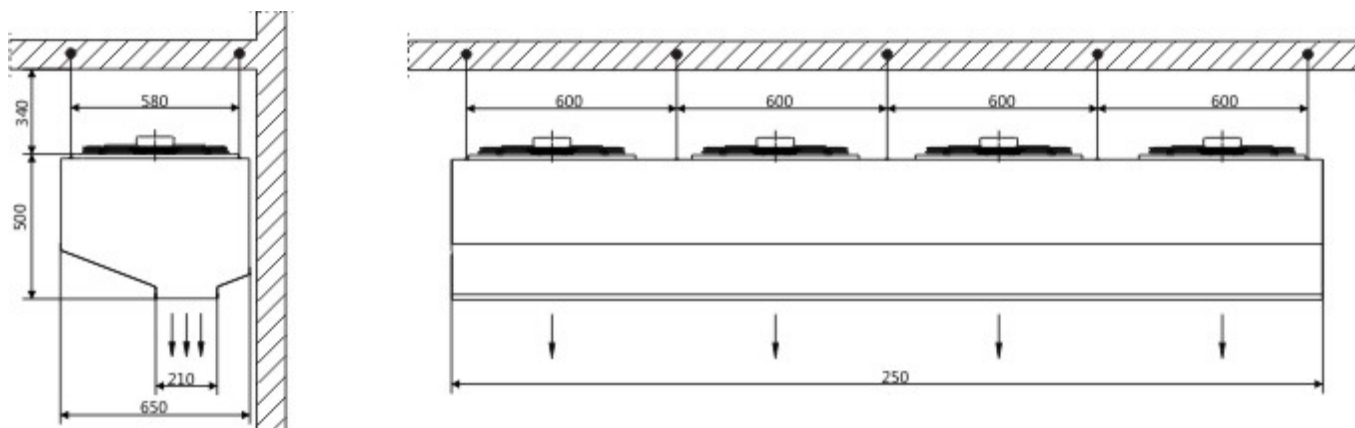
| Parameters of the fans in the air curtain | |
|---|------|
| Number of fans | 3 |
| Voltage [V] | 230 |
| Motor power [kW] | 0,25 |
| Current [A] | 1,2 |
| Rotations per minute [min-1] | 1380 |

| Thermal capacities of the water-heated air curtain | | | | |
|---|----------------------------|------|-------|-----|
| Airflow rate [m³/h] | | | 13500 | |
| Heat output [kW], outlet air temperature [°C] water flow resistance [kPa] | | | | |
| Water parameters [°C] | Inlet air temperature [°C] | kW | °C | kPa |
| 90/70 | 5 | 87,3 | 23 | 4,0 |
| | 10 | 79,6 | 27 | 3,5 |
| | 15 | 72,0 | 30 | 2,6 |
| 80/60 | 5 | 72,5 | 20 | 2,6 |
| | 10 | 65,2 | 24 | 2,2 |
| | 15 | 57,9 | 27 | 1,9 |
| 70/50 | 5 | 58,2 | 17 | 1,9 |
| | 10 | 21,2 | 21 | 1,6 |
| | 15 | 44,4 | 24 | 1,3 |
| 60/40 | 5 | 44,7 | 14 | 1,3 |
| | 10 | 38,1 | 18 | 1,0 |
| | 15 | 31,7 | 21 | 0,8 |

| Operating noise level of the air curtain [dB(A)] | |
|--|-----|
| Sound level at a distance of 3 meters | 64 |
| Weight of the air curtain | |
| Mass [kg] | 104 |

KP/BN-2-250-Z

DIMENSIONS

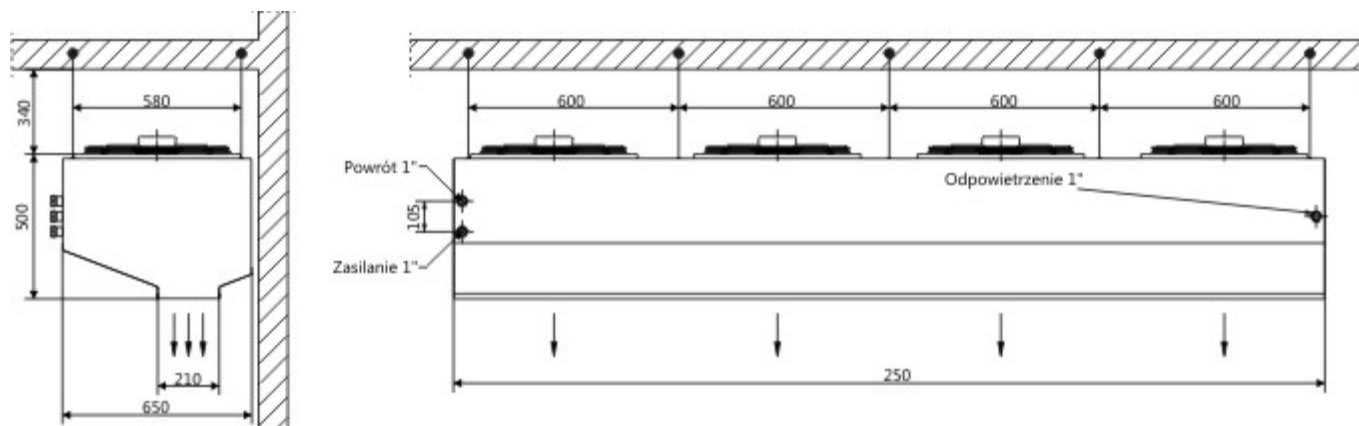


| Parameters of the fans in the air curtain | |
|---|-------|
| Number of fans | 4 |
| Voltage [V] | 230 |
| Motor power [kW] | 0,25 |
| Current [A] | 1,2 |
| Rotations per minute [min-1] | 1380 |
| Airflow efficiency [m ³ /h] | 18000 |

| Operating noise level of the air curtain [dB(A)] | |
|--|----|
| Sound level at a distance of 3 meters | 64 |
| Weight of the air curtain | |
| Mass [kg] | 96 |

KP/BN-2-250-W

DIMENSIONS



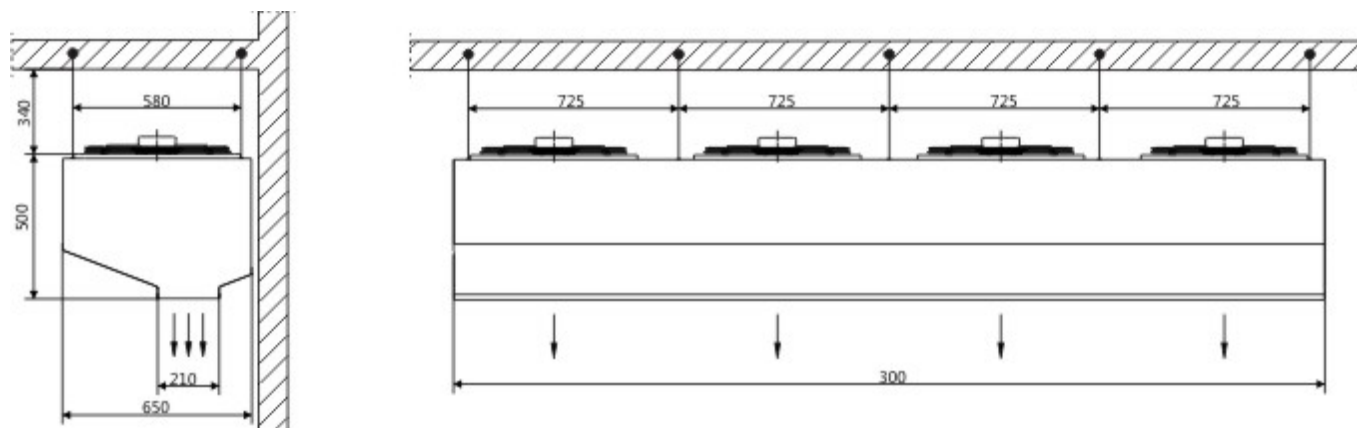
| Parameters of the fans in the air curtain | |
|---|------|
| Number of fans | 4 |
| Voltage [V] | 230 |
| Motor power [kW] | 0,25 |
| Current [A] | 1,2 |
| Rotations per minute [min-1] | 1380 |

| Thermal capacities of the water-heated air curtain/strong> | | | | |
|---|----------------------------|-------|-------|-----|
| Airflow rate [m³/h] | | | 18000 | |
| Heat output [kW], outlet air temperature [°C] water flow resistance [kPa] | | | | |
| Water parameters. [°C] | Inlet air temperature [°C] | kW | °C | kPa |
| 90/70 | 5 | 110,9 | 23 | 7,7 |
| | 10 | 101,0 | 26 | 5,4 |
| | 15 | 91,4 | 30 | 5,5 |
| 80/60 | 5 | 92,0 | 19 | 5,5 |
| | 10 | 82,6 | 23 | 5,0 |
| | 15 | 73,5 | 27 | 3,7 |
| 70/50 | 5 | 73,9 | 16 | 3,7 |
| | 10 | 65,0 | 20 | 3,0 |
| | 15 | 56,3 | 24 | 2,5 |
| 60/40 | 5 | 56,6 | 14 | 2,5 |
| | 10 | 48,2 | 17 | 1,7 |
| | 15 | 40,1 | 21 | 1,3 |

| Operating noise level of the air curtain [dB(A)] | |
|--|-----|
| Sound level at a distance of 3 meters | 64 |
| Weight of the air curtain | |
| Mass [kg] | 129 |

KP/BN-2-300-Z

DIMENSIONS

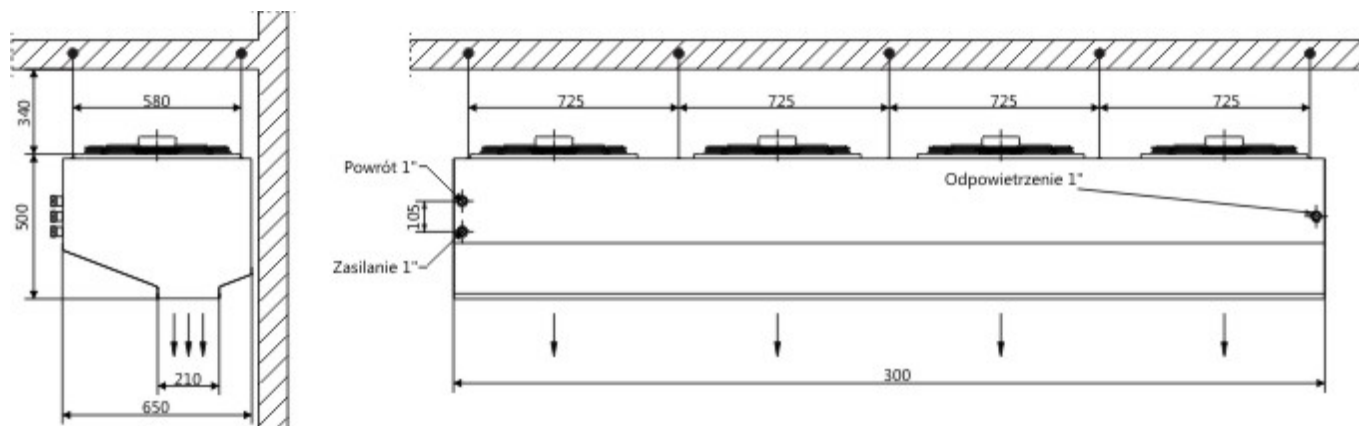


| Parameters of the fans in the air curtain | |
|---|-------|
| Number of fans | 4 |
| Voltage [V] | 230 |
| Motor power [kW] | 0,25 |
| Current [A] | 1,2 |
| Rotations per minute [min-1] | 1380 |
| Airflow efficiency [m ³ /h] | 18000 |

| Operating noise level of the air curtain [dB(A)] | |
|--|-----|
| Sound level at a distance of 3 meters | 64 |
| Weight of the air curtain | |
| Mass [kg] | 110 |

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DIMENSIONS



| Parameters of the fans in the air curtain | |
|---|------|
| Number of fans | 4 |
| Voltage [V] | 230 |
| Motor power [kW] | 0,25 |
| Current [A] | 1,2 |
| Rotations per minute [min-1] | 1380 |

| Thermal capacities of the water-heated air curtain | | | | |
|---|----------------------------|-------|-------|------|
| Airflow rate [m³/h] | | | 18000 | |
| Heat output [kW], outlet air temperature [°C] water flow resistance [kPa] | | | | |
| Water parameters [°C] | Inlet air temperature [°C] | kW | °C | kPa |
| 90/70 | 5 | 124,7 | 25 | 10,0 |
| | 10 | 113,7 | 28 | 8,8 |
| | 15 | 102,9 | 31 | 6,2 |
| 80/60 | 5 | 103,6 | 21 | 6,2 |
| | 10 | 93,1 | 25 | 5,6 |
| | 15 | 82,8 | 28 | 4,6 |
| 70/50 | 5 | 83,3 | 18 | 4,6 |
| | 10 | 73,3 | 21 | 3,4 |
| | 15 | 63,6 | 25 | 2,9 |
| 60/40 | 5 | 63,9 | 15 | 2,9 |
| | 10 | 54,5 | 18 | 2,1 |
| | 15 | 45,3 | 22 | 1,5 |

| Operating noise level of the air curtain [dB(A)] | |
|--|-----|
| Sound level at a distance of 3 meters | 64 |
| Weight of the air curtain | |
| Mass [kg]. | 148 |