



BRAVA Unit Heaters-Coolers

BRAVA heating units with cooling option intended for the installation under ceilings extends the offer of heating and cooling devices produced by JUWENT. BRAVA units are characterised by modern design allowing them to be used in spaces of elegant interior decoration. Their housing is made of high quality plastic in the form of a pentagon with intake grilles for the control of intake air blowing direction and range. The units use highly-efficient and low-speed fans equipped with three-stage rotational speed controllers as a standard which ensures particularly silent appliance operation. The units are intended for the use in the compartments with the height not exceeding 5m. The units are intended for the use in the compartments requiring application of devices with an aesthetic and innovative appearance, such as:

- showrooms,
- shops,
- shopping centres,
- large offices,
- receptions of buildings,
- car showrooms,
- service and production premises etc.

PRODUCT DESCRIPTION

The unit includes:

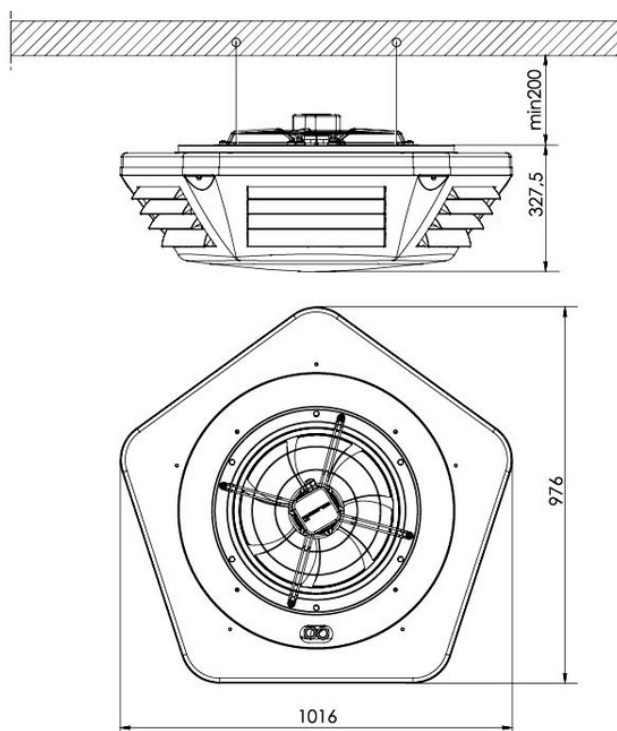
- highly-efficient axial fan;
- ring fin single- or double-row heat exchanger;
- plastic housing with five-way air diffuser;

WORKING CONDITIONS

The heat exchanger can be supplied with heating medium with the temperature of up to 150°C and the pressure of up to 1,5 MPa.

BRAVA-I

DIMENSIONS



| Fan specifications | |
|-----------------------|------------|
| Voltage [V] | 1~200÷240V |
| Motor power [kW] | 0,17 |
| Current [A] | 1,7÷1,45 |
| Revolutions [min-1] | 1210 |
| IP | 54 |
| Insulation class | F |
| Operating temperature | to +70°C |

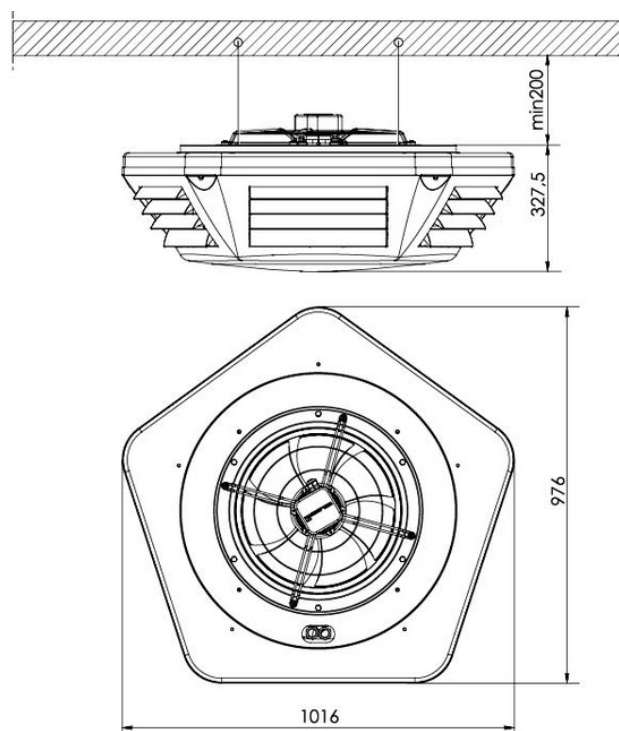
| | | | | | | | |
|--|-----------------------|------|----|-----|------|----|-----|
| Water capacity [dm ³] | | 2,0 | | | | | |
| Control signal | | 8V | | | 4V | | |
| Air flow [m ³ /h] | | 3200 | | | 2250 | | |
| Thermal power of units with water heater | | | | | | | |
| Water temp. [°C] | Inflow air temp. [°C] | kW | °C | kPa | kW | °C | kPa |

| | | | | | | | |
|-------|----|------|----|---|------|----|---|
| 90/70 | 0 | 17,5 | 15 | 6 | 14,5 | 18 | 4 |
| | 10 | 14,7 | 23 | 5 | 12,2 | 26 | 3 |
| | 20 | 12,1 | 31 | 3 | 10,0 | 33 | 2 |
| 80/60 | 0 | 14,8 | 13 | 5 | 12,2 | 16 | 3 |
| | 10 | 12,2 | 21 | 3 | 10,2 | 23 | 2 |
| | 20 | 9,7 | 29 | 2 | 8,1 | 31 | 2 |
| 70/50 | 0 | 12,2 | 11 | 3 | 10,1 | 13 | 2 |
| | 10 | 9,7 | 18 | 2 | 8,1 | 17 | 2 |
| | 20 | 7,4 | 26 | 1 | 6,1 | 28 | 1 |
| 60/40 | 0 | 9,8 | 9 | 2 | 8,1 | 11 | 2 |
| | 10 | 7,4 | 16 | 1 | 6,1 | 18 | 1 |
| | 20 | 5,1 | 25 | 1 | 4,2 | 26 | 1 |

| Operation noise level [dB(A)] | |
|-------------------------------|-------------|
| Control signal | Noise level |
| 8V | 50 |
| 4V | 43 |
| Unit weight | |
| Weight [kg] | 32 |

BRAVA-II

DIMENSIONS



| EC fan specifications | |
|-----------------------|------------|
| Supply voltage [V] | 1~200÷240V |
| Motor power [W] | 170 |
| Current [A] | 1,7÷1,45 |
| Speed [min-1] | 1210 |
| IP | 54 |
| Insulation class | F |
| Operating temperature | +70°C |

| Heating capacity | | | | | | | | |
|--|----------------------------|--|------|----|------|----|----|-----|
| Number of coil rows | | | II | | | | | |
| Water capacity [dm³] | | | 3,2 | | | | | |
| Control signal | | | 8V | | 4V | | | |
| Air flow [m³/h] | | | 3100 | | 2150 | | | |
| Heating capacity [kW], air outlet temperature [°C], and resistance of water flow [kPa] | | | | | | | | |
| Water temp. [°C] | Air inlet temperature [°C] | | kW | °C | kPa | kW | °C | kPa |

| | | | | | | | |
|-------|----|------|----|----|------|----|---|
| 90/70 | 0 | 31,7 | 28 | 12 | 25,5 | 34 | 8 |
| | 10 | 26,8 | 35 | 8 | 21,6 | 39 | 5 |
| | 20 | 22,0 | 41 | 6 | 17,8 | 45 | 4 |
| 80/60 | 0 | 27,0 | 24 | 9 | 21,8 | 29 | 6 |
| | 10 | 22,0 | 30 | 6 | 18,0 | 34 | 4 |
| | 20 | 17,8 | 37 | 4 | 14,4 | 40 | 3 |
| 70/50 | 0 | 22,5 | 20 | 6 | 18,1 | 24 | 4 |
| | 10 | 17,9 | 26 | 4 | 14,5 | 30 | 3 |
| | 20 | 13,6 | 33 | 3 | 11,0 | 35 | 2 |
| 60/40 | 0 | 18,0 | 16 | 4 | 14,6 | 19 | 3 |
| | 10 | 13,7 | 22 | 3 | 11,1 | 25 | 2 |
| | 20 | 9,5 | 29 | 2 | 7,7 | 31 | 1 |

| Cooling capacity | | | | | | | | | |
|---|----------------------------|------|----|--------|-----|------|----|--------|-----|
| Number of coil rows | | II | | | | | | | |
| Water capacity [dm³] | | 3,2 | | | | | | | |
| Control signal | | 8V | | | | 4V | | | |
| Air flow [m³/h] | | 3100 | | | | 2150 | | | |
| Cooling capacity [kW] , air outlet temperature [°C], water flow [m³/h] and resistance of water flow [kPa] | | | | | | | | | |
| Water temp. [°C] | Air inlet temperature [°C] | kW | °C | [m³/h] | kPa | kW | °C | [m³/h] | kPa |
| 5/10 | 26 | 8,9 | 20 | 1,50 | 20 | 7,4 | 19 | 1,25 | 14 |
| | 24 | 7,4 | 19 | 1,25 | 14 | 5,7 | 18 | 0,97 | 9 |
| | 22 | 6,2 | 17 | 1,07 | 11 | 4,7 | 17 | 0,81 | 7 |
| 6/12 | 26 | 8,2 | 20 | 1,20 | 13 | 6,7 | 19 | 0,94 | 9 |
| | 24 | 6,3 | 19 | 0,90 | 8 | 4,9 | 18 | 0,67 | 5 |
| | 22 | 4,6 | 18 | 0,66 | 5 | 3,9 | 17 | 0,57 | 4 |

| Operation noise level [dB(A)] | |
|-------------------------------|-------------|
| Control signal | Noise level |
| 8V | 50 |
| 4V | 43 |
| Unit weight | |
| Weight [kg] | 35,5 |