



## Smoke exhauster modified DMU

The modified DMU smoke exhauster is designed to remove explosion-proof flue gases from the furnaces of boiler plants or units equipped with effectively operating ash collection systems, as well as to remove flue gases from the furnaces of low-power gas-oil boiler units (up to 1 t/h) in conditions of a moderate (U) climate (third location category) according to DSTU 15150. Provided that the smoke exhauster is protected from the effects of atmospheric precipitation, operation in conditions of "U" and "T" of the 1st and 2nd categories is allowed.

Ambient temperature from  $-30^{\circ}\text{C}$  to  $+40^{\circ}\text{C}$ . Operating temperature - no more than  $200^{\circ}\text{C}$ , or by special order - up to  $400^{\circ}\text{C}$ .

***General information about the DMU smoke extractor:***

- radial (centrifugal) smoke exhauster;
- one-sided suction;
- temperature of transported gases - no more than  $200^{\circ}\text{C}$ , or by special order - up to  $400^{\circ}\text{C}$ ;
- the body and impeller of the smoke exhauster are made of carbon or stainless steel;
- spiral rotating housing;
- the direction of rotation of the impeller - right or left (clockwise rotation of the wheel is considered right, when viewed from the side of the electric motor).

***Purpose of the DMU smoke exhauster:***

- flue gas removal from gas, oil, steam and hot water boiler units;
- gas purification;
- dust collection;
- aspiration;
- exhaust gases from various technological installations;
- other sanitary and production purposes.

***The DMU smoke exhauster is installed:***

- on gas-fired boilers;
- on steam boilers;
- on water heating boilers;
- at thermal power plants;

The principle of operation of the smoke extractor is similar to that of centrifugal fans, namely: an electric motor transmits mechanical energy to the impeller. The impeller of the smoke extractor, due to rotation, sucks air through the inlet. The air moves from the center to the periphery and is thrown out by the blades into the outlet of the spiral housing (perpendicular to the inlet) due to centrifugal force.

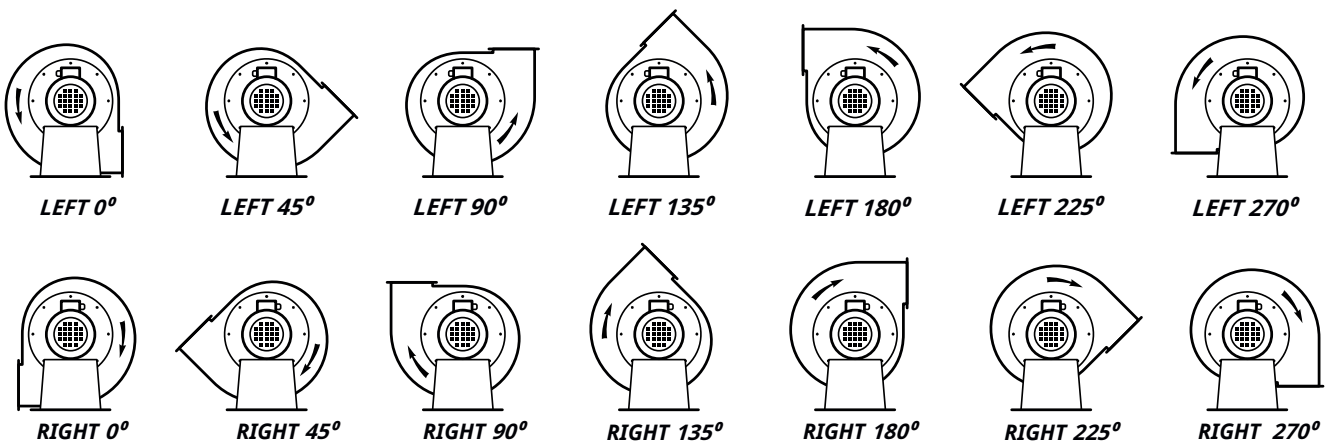
### Marking

Example:

Modified DMU smoke exhauster, 25 standard sizes, 1 execution scheme, up to 200 degrees, left 0, 5.5 kW and 3000 rpm.

DMU - 25-1 - O - Left 0 - 5.5/3000

Type of smoke extractor: <b>State Medical University</b> - modified smoke exhauster;			
Standard size and layout: <b>25-1; 28-1; 35-1; 35-3; 40-1; 40-3;</b>			
Appointment: <b>O</b> - general industrial, up to 200°C; <b>VZI</b> - explosion-proof; <b>K</b> - corrosion-resistant (specify the brand of stainless steel);			
Smoke exhauster body position, °: <b>Left/Right -0°; 45°; 90°; 135°; 270°; 315°;</b>			
Electric motor parameters, Ny/n: <b>Ny</b> - power, kW; <b>n</b> - synchronous speed, rpm (750; 1000; 1500; 3000);			



### Modified smoke exhauster DMU-25

Figure 1 – Aerodynamic characteristics of the DMU-25 series smoke exhauster

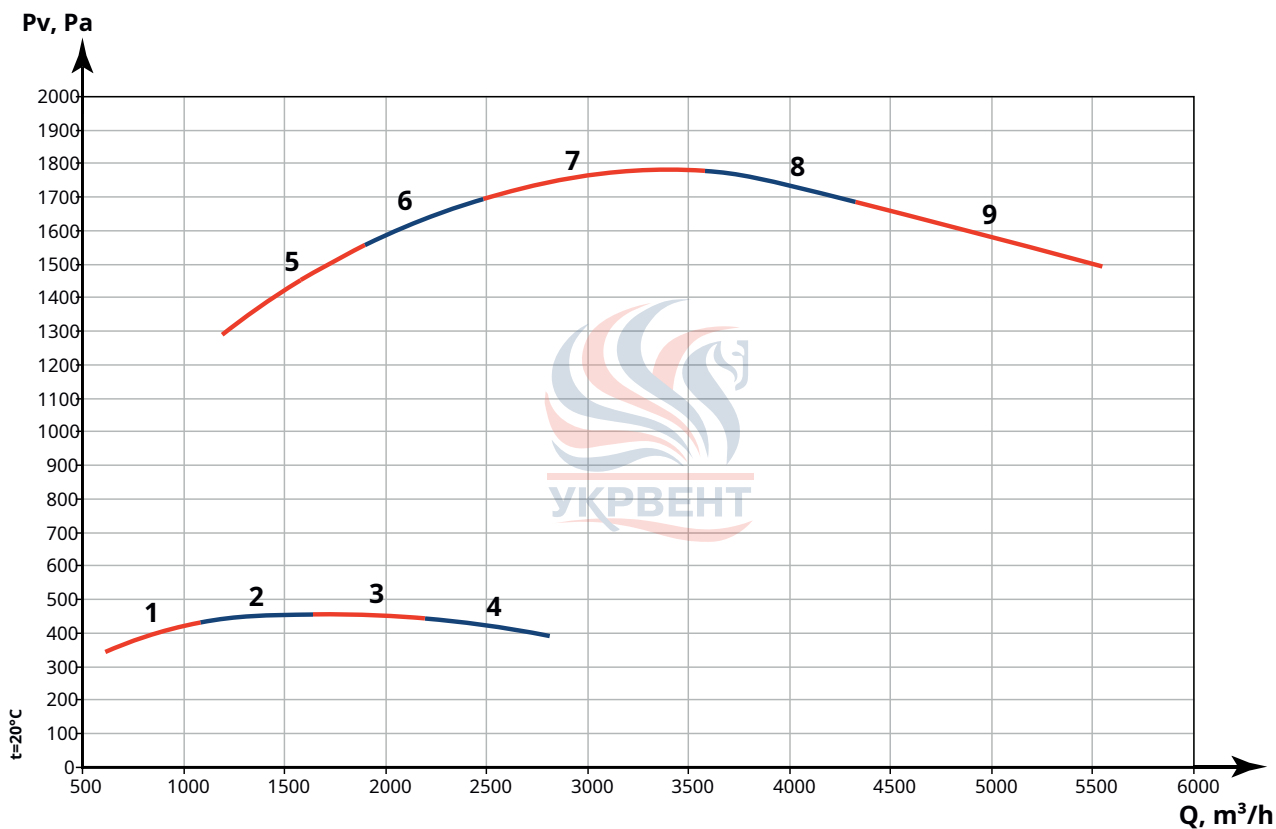


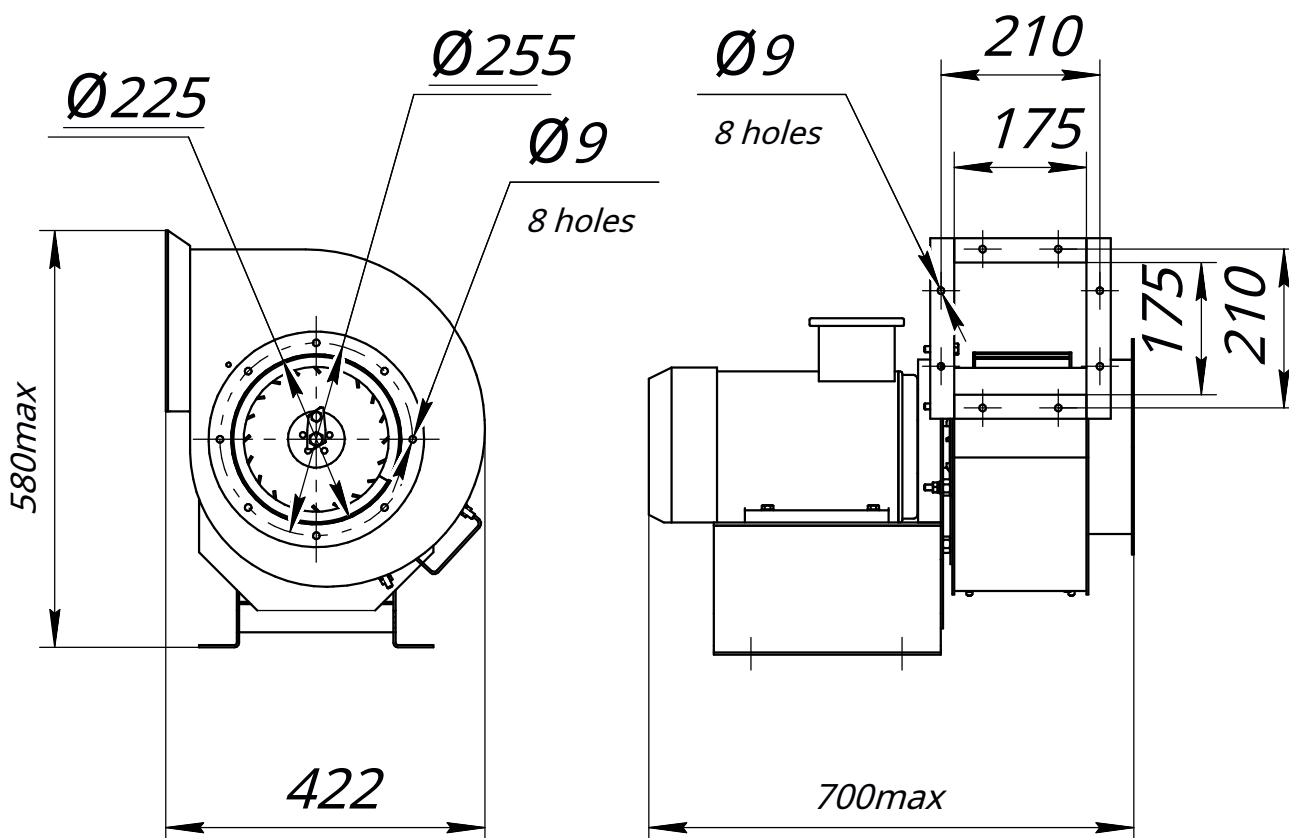
Table 1 – Technical characteristics of the DMU-25 series smoke exhauster

curve №	Power, kW,	Rotation frequency impeller, rpm	Rated current, A	Smoke exhauster weight, max kg
1	0.25	1325	0.82	31
2	0.37	1325	1.12	32
3	0.55	1390	1.57	33
4	0.75	1390	2.05	35
5	1.5	2850	3.46	38
6	2.2	2855	4.85	40
7	3	2860	6.34	42
8	4	2880	8.20	46
9	5.5	2900	11.10	53



## Modified smoke exhauster DMU-25-1

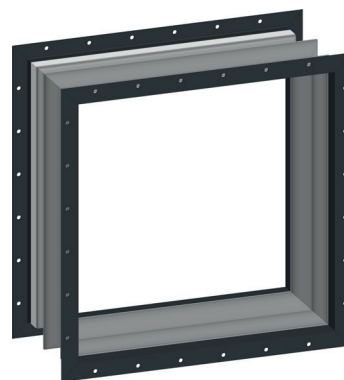
Overall and connection dimensions of the modified DMU-25-1 smoke exhauster



### Additional equipment



Flexible heat-resistant round insert VTK-25



Flexible heat-resistant rectangular insert VTP-25

### Modified smoke exhauster DMU-28

Figure 2 – Aerodynamic characteristics of the DMU-28 series smoke exhauster

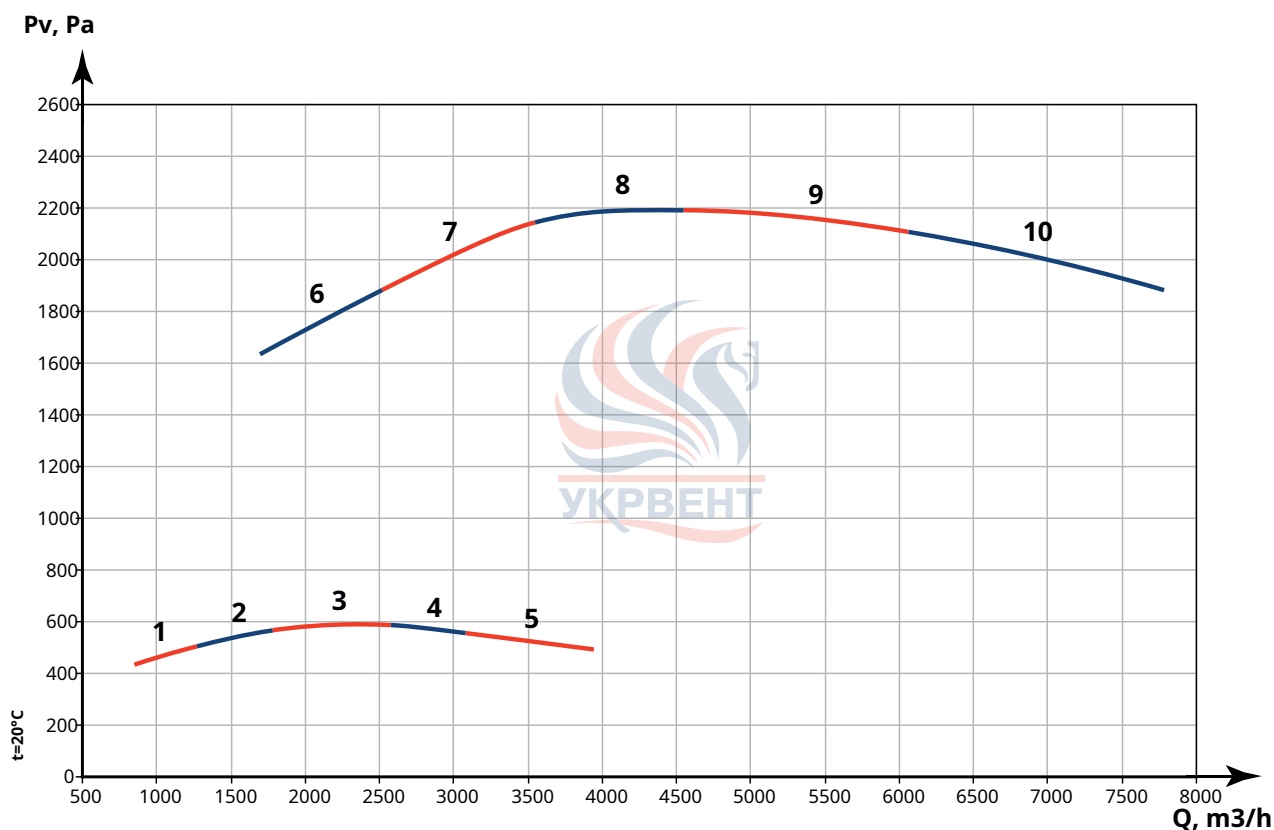
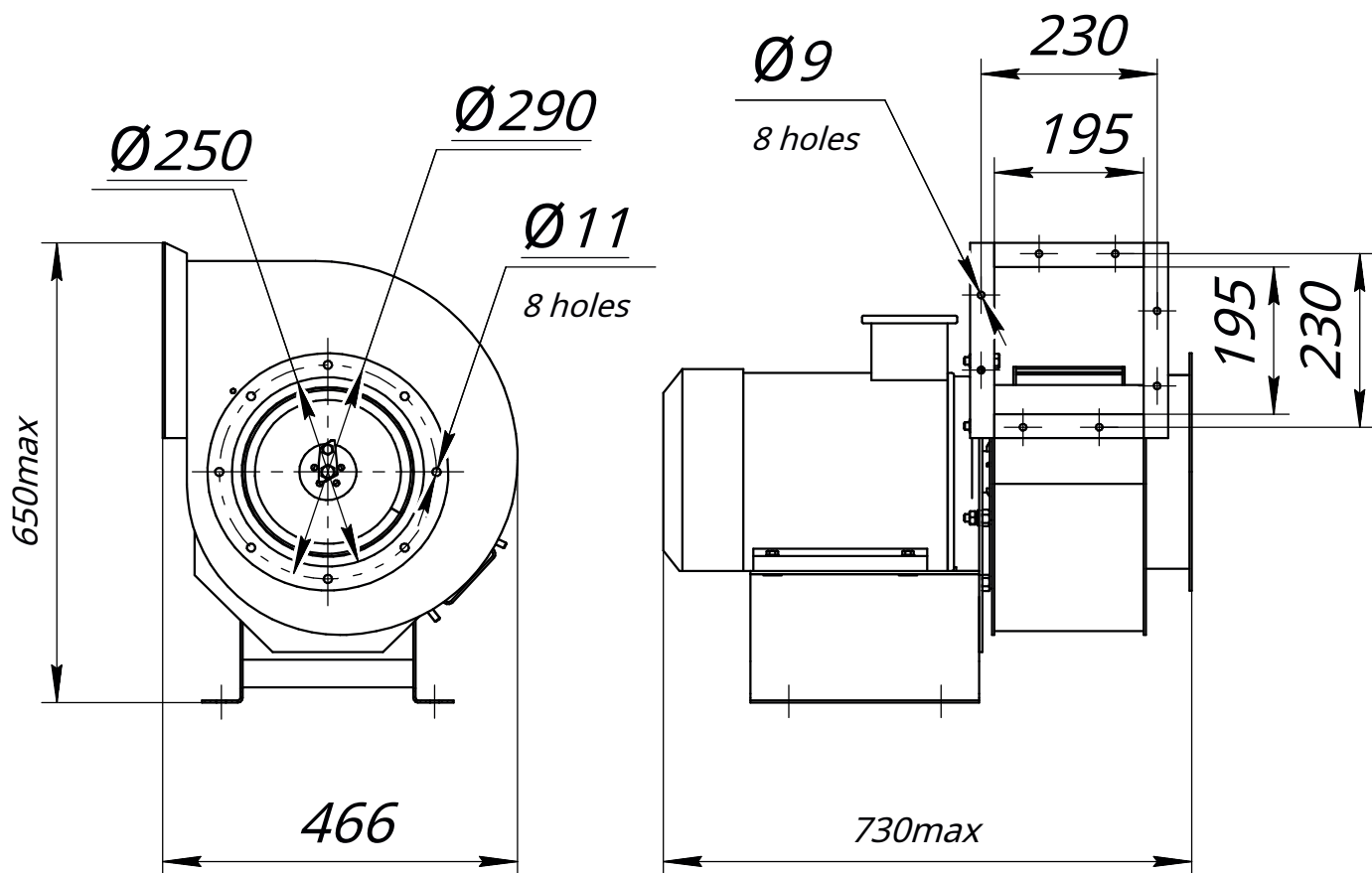


Table 2 – Technical characteristics of the DMU-28 series smoke exhauster

curve №	Power, kW,	Rotation frequency impeller, rpm	Rated current, A	Smoke exhauster weight, max kg
1	0.37	1325	1.12	41
2	0.55	1390	1.57	42
3	0.75	1390	2.05	44
4	1.1	1390	2.85	48
5	1.5	1400	3.72	50
6	3	2860	6.34	51
7	4	2880	8.20	55
8	5.5	2900	11.10	62
9	7.5	2895	14.90	83
10	11	2900	21.20	88

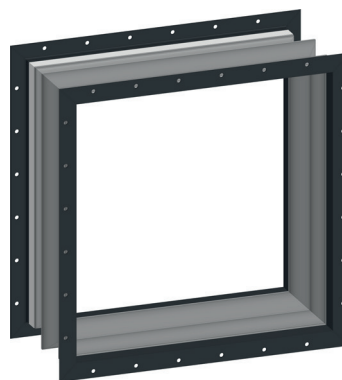
Overall and connection dimensions of the modified DMU-28-1 smoke exhauster



**Additional equipment**



Flexible heat-resistant round insert VTK-28



Flexible heat-resistant rectangular insert VTP-28

### Modified smoke exhauster DMU-35

Figure 3 – Aerodynamic characteristics of the DMU-35 series smoke exhauster

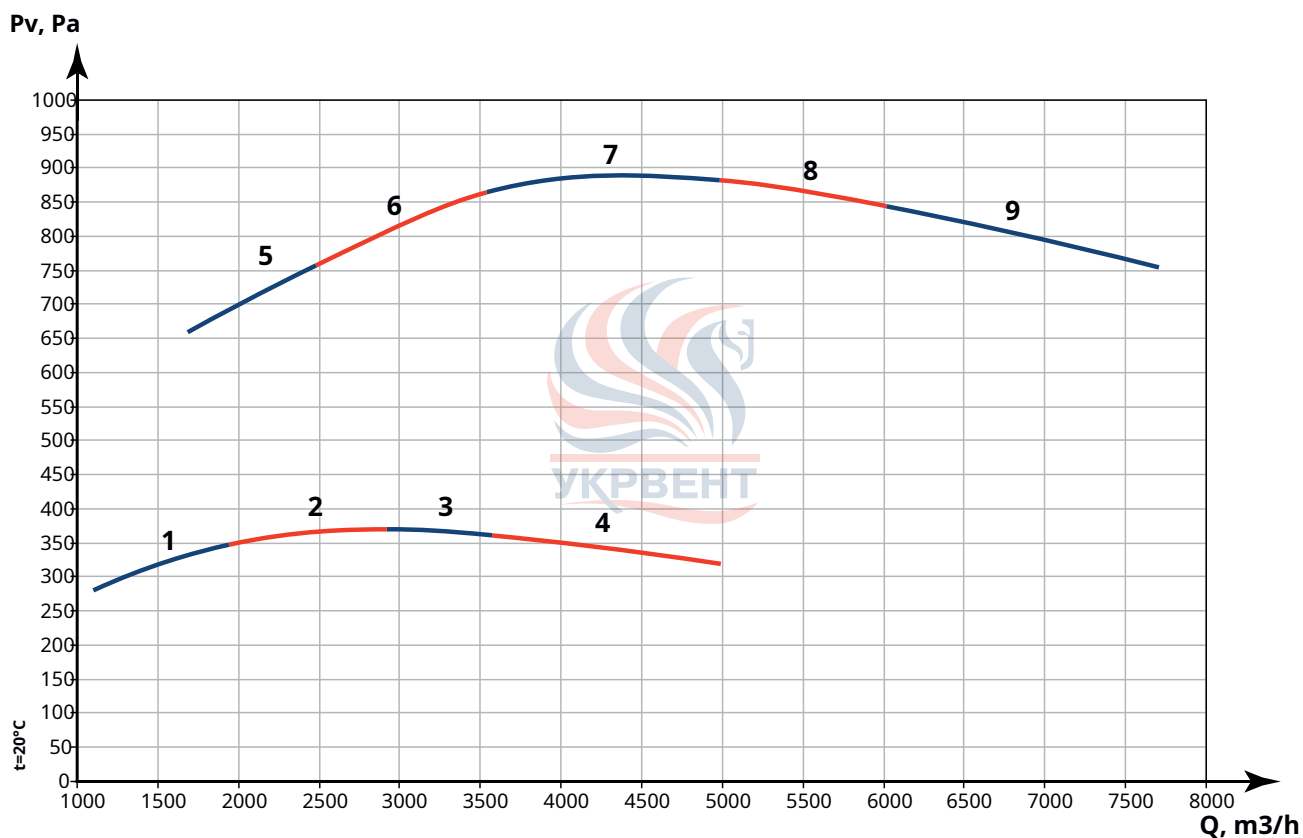
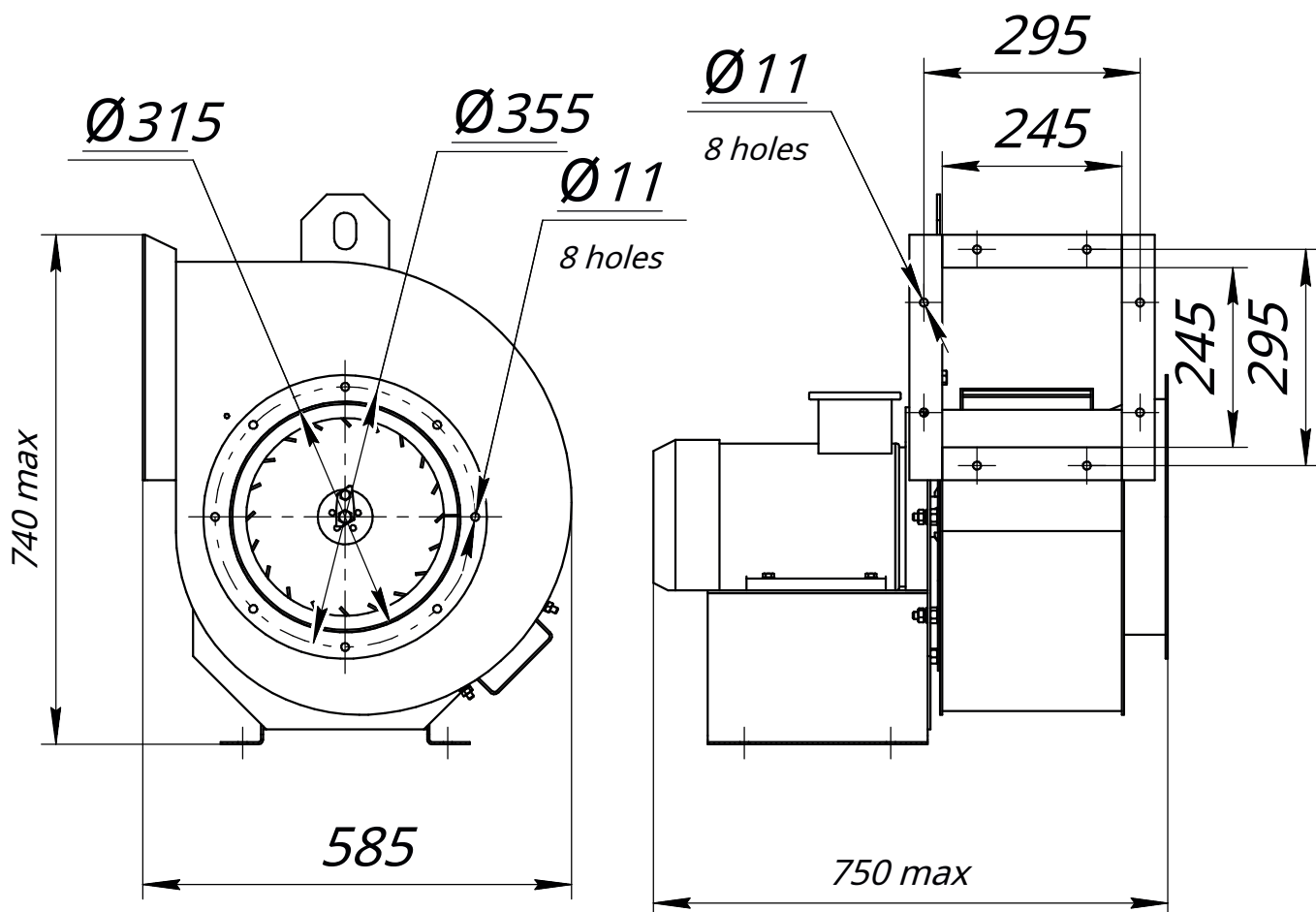


Table 3 – Technical characteristics of the DMU-35 series smoke exhauster

curve №	Power, kW,	Rotation frequency impeller, rpm	Rated current, A	Smoke exhauster weight, max kg
1	0.37	880	1.30	60/100
2	0.55	880	1.80	62/102
3	0.75	905	2.30	66/106
4	1.1	905	3.20	68/108
5	1.1	1390	2.85	66/106
6	1.5	1400	3.72	68/108
7	2.2	1410	5.10	69/109
8	3	1410	6.80	73/113
9	4	1435	8.80	89/129

**Modified smoke exhauster DMU-35-1**

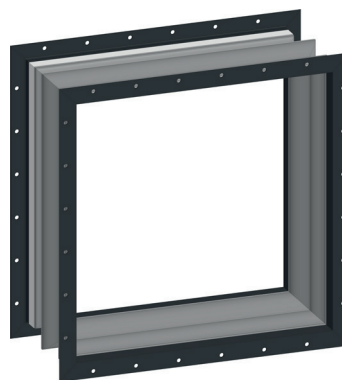
Overall and connection dimensions of the modified DMU-35-1 smoke exhauster



**Additional equipment**



Flexible heat-resistant round insert VTK-35

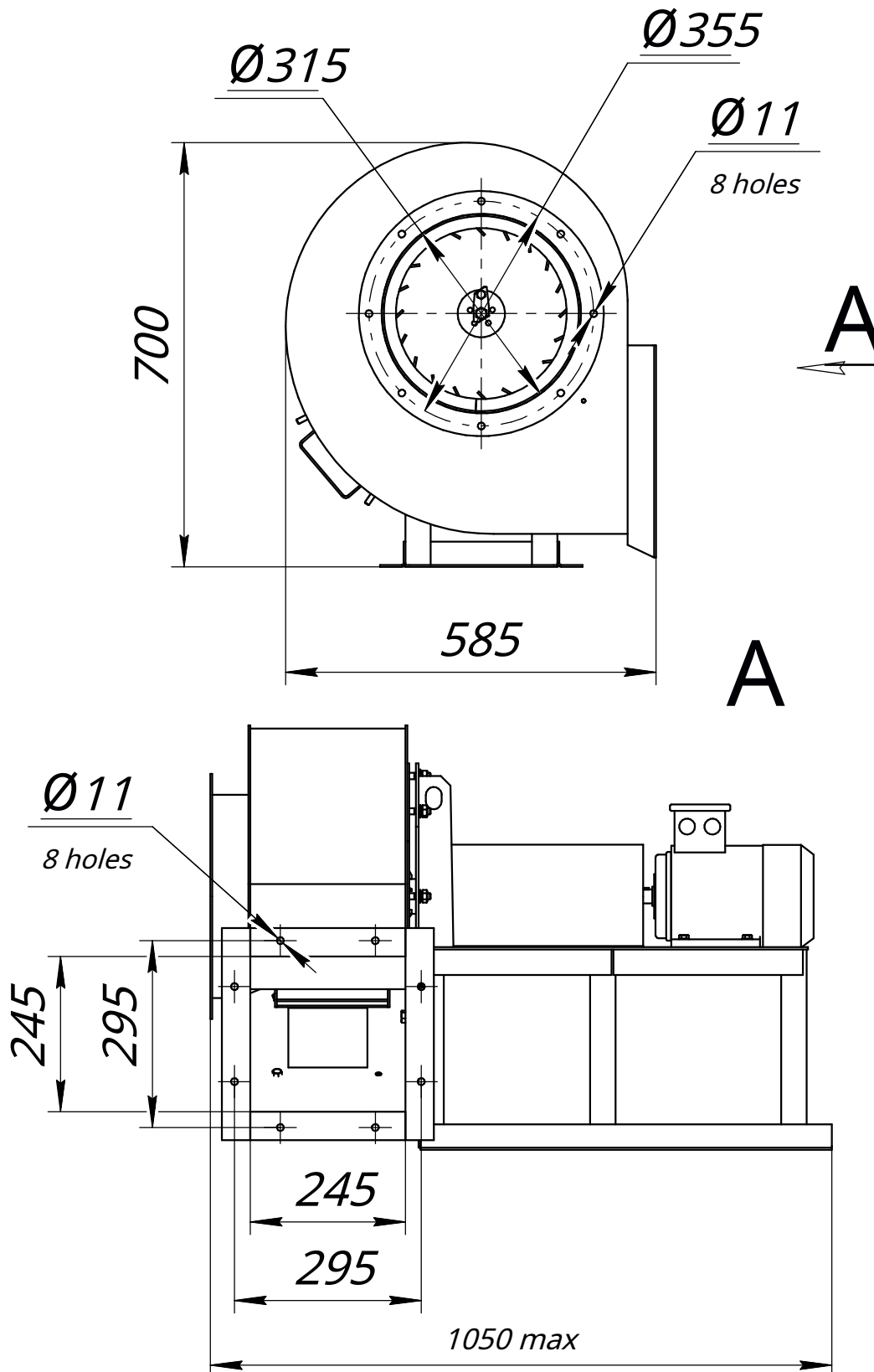


Flexible heat-resistant rectangular insert VTP-35



### Modified smoke exhauster DMU-35-3

Overall and connection dimensions of the modified DMU-35-3 smoke exhauster



### Modified smoke exhauster DMU-40

Figure 4 – Aerodynamic characteristics of the DMU-40 series smoke exhauster

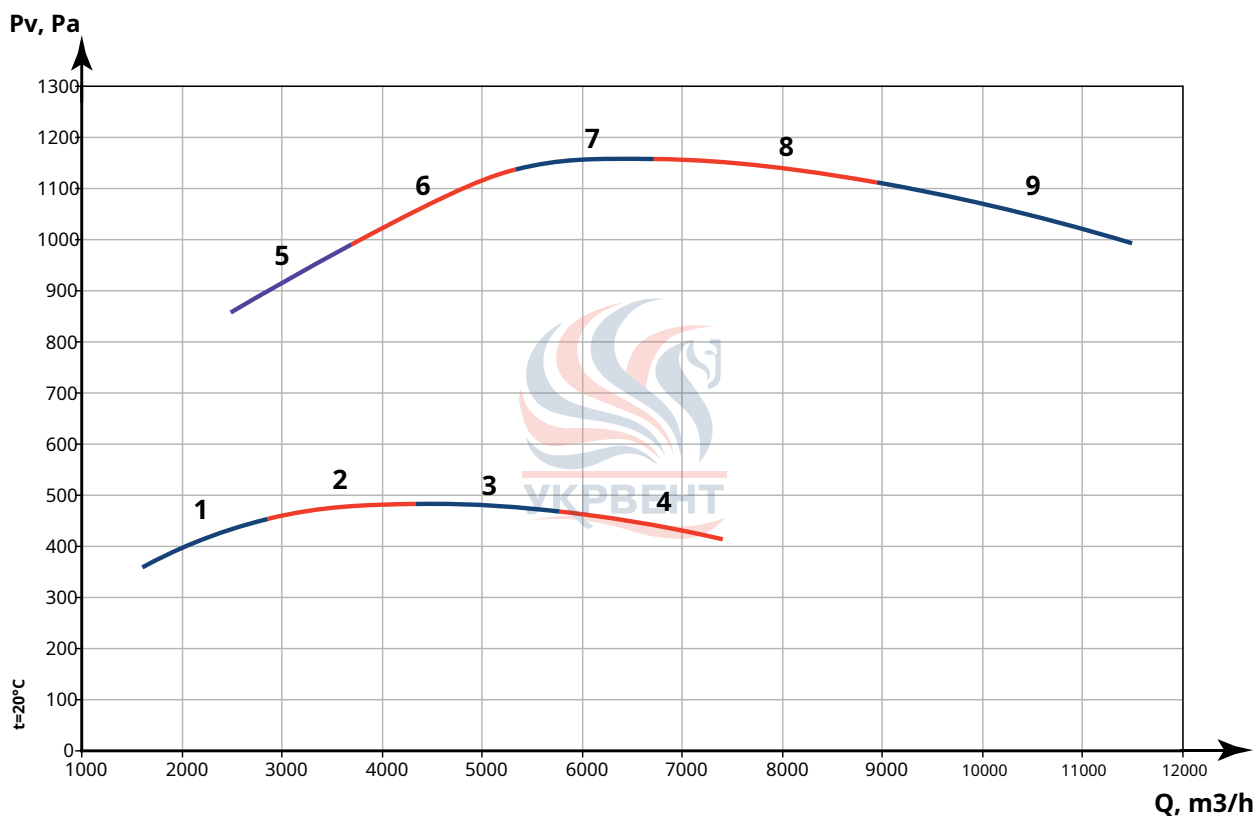


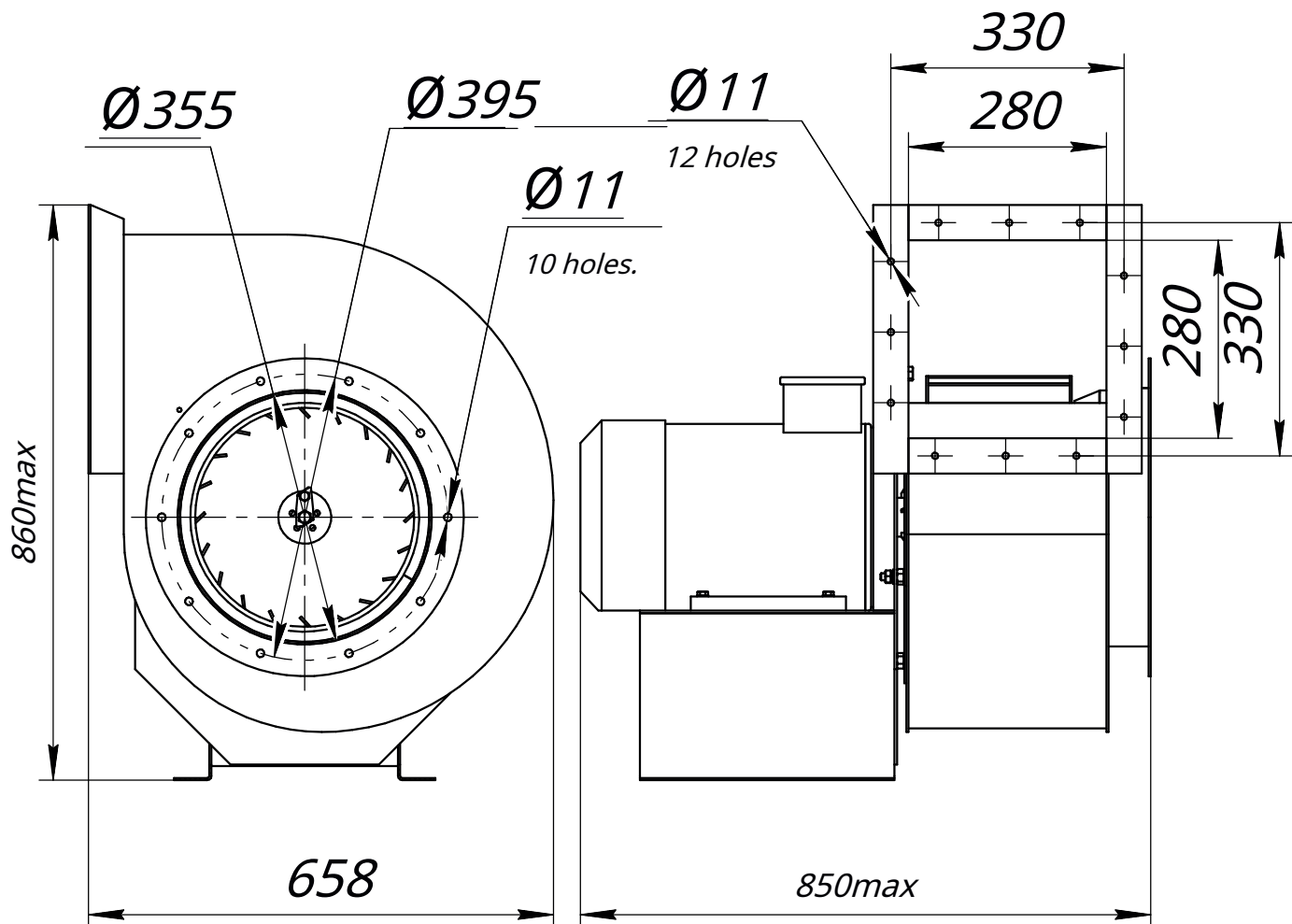
Table 2 – Technical characteristics of the DMU-40 series smoke exhauster

curve №	Power, kW,	Rotation frequency impeller, rpm	Rated current, A	Smoke exhauster weight, max kg
1	0.75	905	2.30	78/122
2	1.1	905	3.20	80/124
3	1.5	920	4.00	82/126
4	2.2	935	5.60	98/142
5	2.2	1410	5.10	81/125
6	3	1410	6.80	85/129
7	4	1435	8.80	101/145
8	5.5	1440	11.70	109/153
9	7.5	1450	15.60	116/160



## Modified smoke exhauster DMU-40-1

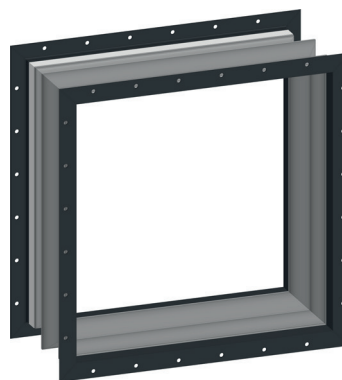
Overall and connection dimensions of the modified DMU-40-1 smoke exhauster



### Additional equipment



Flexible heat-resistant round insert VTK-40



Flexible heat-resistant rectangular insert VTP-40



### Modified smoke exhauster DMU-40-3

Overall and connection dimensions of the modified DMU-40-3 smoke exhauster

