IMPULSE CENTRIFUGAL FANS

ICF SERIES

Impulse centrifugal fans with fire resistance limit 200 °C/2 h, 300 °C/2 h and 400 °C/2 h for ventilation of underground parkings. Compactness. Power. Efficiency.

Application

Impulse centrifugal fans ICF are designed for general purpose ventilation of underground and semiopened parkings, smoke extraction in case of fire as a part of smoke extract system.

The fans generate a high-speed and high-pressure directed air jet.

Modifications

Single-speed

Double-speed

Design

ICF casing is made of polymer coated steel.

Due to low height of the casing the fan is recommended for use in low-ceilinged room.

The protecting grille on the intake side prevents ingress of foreign objects into the fan.

Deflector plates on the exhaust side of the fan ensure correct air flow distribution.

Motor

Single- or double-speed 4-, 6- or 8-pole asynchronous motors.

Motor ingress protection rating is IP 55.

Impeller

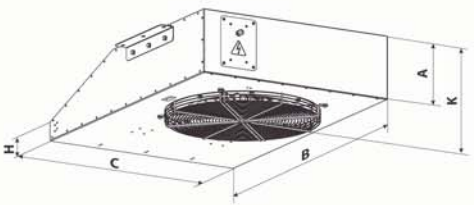
The impeller with backward curved steel blades.

Mounting

ICF fans are designed for ceiling mounting and fixation by means of the supplied fixing brackets.

Power is supplied through the internal terminal box.

The fan wiring and mounting must be made according to the instructions and the wirind diagram shown in the terminal box.



Model	Dimensions [mm]					Weight [kg]
	A	B	C	H	K	
ICF-50N-1.5-4	290	1355	935	90	350	96
ICF-85N-2.2-4	330	1605	1105	110	390	136

Model	Fan pull [N]	Pole number	Fire resistance limit/hrs
ICF (Impulsion Centrifugal Fan)	50 N 75 N (85 N) 100 N	**4** **4/6** (applicable for double-speed models) **4/8** (applicable for double-speed models)	**no number:** max. +55 °C **200/2** – 200 °C/2 hrs. **300/2** – 300 °C/2 hrs. **400/2** – 400 °C/2 hrs.

Technical data

Model	Max. air capacity [m³/h]	Power [kW]	Fan pull [N]	Air speed [m/s]	RPM	Operating temperature [°C]
50 N, SINGLE-SPEED						
ICF-50N-4	6200	1.5	50	20.5	1500	-25 – +55 °C
ICF-50N-4-200/2	6150	1.5	50	20.3	1500	200 °C/ 2 h
ICF-50N-4-300/2	6100	1.5	50	20.1	1500	300 °C/ 2 h
ICF-50N-4-400/2	6050	1.5	50	20	1500	400 °C/ 2 h
50 N, DOUBLE-SPEED						
ICF-50N-4/6	6200 / 4100	1.5 / 0.37	50 / 20	20.5 / 13.5	1500 / 1000	-25 – +55 °C
ICF-50N-4/6-200/2	6150 / 4070	1.5 / 0.37	50 / 20	20.3 / 13.4	1500 / 1000	200 °C/ 2 h
ICF-50N-4/6-300/2	6100 / 4030	1.5 / 0.37	50 / 20	20.1 / 13.3	1500 / 1000	300 °C/ 2 h
ICF-50N-4/6-400/2	6050 / 4000	1.5 / 0.37	50 / 20	20 / 13.2	1500 / 1000	400 °C/ 2 h
ICF-50N-4/8	6200 / 3100	1.6 / 0.4	50 / 13	20.5 / 10.2	1500 / 750	-25 – +55 °C
ICF-50N-4/8-200/2	6150 / 3060	1.6 / 0.4	50 / 13	20.3 / 10.1	1500 / 750	200 °C/ 2 h
ICF-50N-4/8-300/2	6100 / 3030	1.6 / 0.4	50 / 13	20.1 / 10	1500 / 750	300 °C/ 2 h
ICF-50N-4/8-400/2	6050 / 300	1.6 / 0.4	50 / 13	20 / 9.9	1500 / 750	400 °C/ 2 h
85 N, SINGLE-SPEED						
ICF-85N-4	9750	2.2	85	22.3	1500	-25 – +55 °C
ICF-85N-4-200/2	9700	2.2	85	22.2	1500	200 °C/ 2 h
ICF-85N-4-300/2	9660	2.2	85	22.1	1500	300 °C/ 2 h
ICF-85N-4-400/2	9620	2.2	85	22	1500	400 °C/ 2 h
85 N, DOUBLE-SPEED						
ICF-85N-4/6	9750 / 5950	2.2 / 0.7	85 / 28	22.3 / 13.6	1500 / 1000	-25 – +55 °C
ICF-85N-4/6-200/2	9700 / 5900	2.2 / 0.7	85 / 28	22.2 / 13.5	1500 / 1000	200 °C/ 2 h
ICF-85N-4/6-300/2	9660 / 5860	2.2 / 0.7	85 / 28	22.1 / 13.4	1500 / 1000	300 °C/ 2 h
ICF-85N-4/6-400/2	9620 / 5820	2.2 / 0.7	85 / 28	22 / 13.3	1500 / 1000	400 °C/ 2 h
ICF-85N-4/8	9750 / 4150	2.2 / 0.55	85 / 20	22.3 / 9.5	1500 / 750	-25 – +55 °C
ICF-85N-4/8-200/2	9700 / 4100	2.2 / 0.55	85 / 20	22.2 / 9.4	1500 / 750	200 °C/ 2 h
ICF-85N-4/8-300/2	9660 / 4050	2.2 / 0.55	85 / 20	22.1 / 9.3	1500 / 750	300 °C/ 2 h
ICF-85N-4/8-400/2	9620 / 4000	2.2 / 0.55	85 / 20	22 / 9.1	1500 / 750	400 °C/ 2 h
100 N, SINGLE-SPEED						
ICF-100N-4	10200	3.0	100	23.3	1500	-25 – +55 °C
ICF-100N-4-200/2	10140	3.0	100	23.2	1500	200 °C/ 2 h
ICF-100N-4-300/2	10080	3.0	100	23	1500	300 °C/ 2 h
ICF-100N-4-400/2	10000	3.0	100	22.9	1500	400 °C/ 2 h
100 N, DOUBLE-SPEED						
ICF-100N-4/8	10200 / 5150	2.8 / 0.7	100 / 26	23.3 / 11.8	1500 / 750	-25 – +55 °C
ICF-100N-4/8-200/2	10140 / 5100	2.8 / 0.7	100 / 26	23.2 / 11.7	1500 / 750	200 °C/ 2 h
ICF-100N-4/8-300/2	10080 / 5050	2.8 / 0.7	100 / 26	23 / 11.5	1500 / 750	300 °C/ 2 h
ICF-100N-4/8-400/2	10000 / 5000	2.8 / 0.7	100 / 26	22.9 / 11.4	1500 / 750	400 °C/ 2 h

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