

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 IP55.

■ **Impeller**

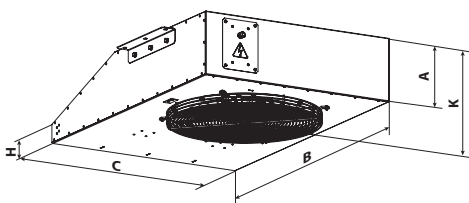
The impeller with backward curved steel blades.

■ **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 wiring diagram shown in the terminal box.



Model	Dimensions [mm]					Weight [kg]
	A	B	C	H	K	
ICF-50N	290	1355	935	90	350	96
ICF-85N	330	1605	1105	110	390	136
ICF-100N	330	1605	1105	110	390	138

Model	Fan pull [N]	Pole number	Climatic category	Fire resistance limit/hrs
ICF (impulsion centrifugal fan)	50 N 85 N 100 N	4 4/6 (applicable for double-speed models) 4/8 (applicable for double-speed models)	U: moderate climate (-40...+40 °C) HL: cold climate (-60...+40 °C) UHL: moderate and cold climate (-60...+40 °C) T: tropical climate (-10...+40 °C) M: maritime moderately cold climate (-40...+40 °C) O: general climatic modification (except maritime climate) (-60...+50 °C) OM: general maritime climatic modification (-40...+40 °C) V: universal climatic modification (-60...+50 °C)	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	Number of speeds	Unit voltage [V]	Frequency [Hz]	Max. air capacity [m ³ /h]	Power [kW]	Fan pull [N]	Air speed [m/s]	RPM	Operating temperature [°C]*	Fire resistance	Weight [kg]
50N, SINGLE-SPEED											
ICF-50N-4...	1	3~400	50	6200	1.5	50	20.5	1500	-25 – +55 °C	55 °C	96
ICF-50N-4...-200/2									200 °C/2 h	F200	
ICF-50N-4...-300/2									300 °C/2 h	F300	
ICF-50N-4...-400/2									400 °C/2 h	F400	
50N, DOUBLE-SPEED											
ICF-50N-4/6...	2	3~400	50	6200 / 4100	1.5 / 0.37	50 / 20	20.5 / 13.5	1500 / 1000	-25 – +55 °C	55 °C	96
ICF-50N-4/6...-200/2									200 °C/2 h	F200	
ICF-50N-4/6...-300/2									300 °C/2 h	F300	
ICF-50N-4/6...-400/2									400 °C/2 h	F400	
ICF-50N-4/8...	2	3~400	50	6200 / 3100	1.6 / 0.4	50 / 13	20.5 / 10.2	1500 / 750	-25 – +55 °C	55 °C	96
ICF-50N-4/8...-200/2									200 °C/2 h	F200	
ICF-50N-4/8...-300/2									300 °C/2 h	F300	
ICF-50N-4/8...-400/2									400 °C/2 h	F400	
85N, SINGLE-SPEED											
ICF-85N-4...	1	3~400	50	9750	2.2	85	22.3	1500	-25 – +55 °C	55 °C	136
ICF-85N-4...-200/2									200 °C/2 h	F200	
ICF-85N-4...-300/2									300 °C/2 h	F300	
ICF-85N-4...-400/2									400 °C/2 h	F400	
85N, DOUBLE-SPEED											
ICF-85N-4/6...	2	3~400	50	9750 / 5950	2.2 / 0.7	85 / 28	22.3 / 13.6	1500 / 1000	-25 – +55 °C	55 °C	136
ICF-85N-4/6...-200/2									200 °C/2 h	F200	
ICF-85N-4/6...-300/2									300 °C/2 h	F300	
ICF-85N-4/6...-400/2									400 °C/2 h	F400	
ICF-85N-4/8...	2	3~400	50	9750 / 4150	2.2 / 0.55	85 / 20	22.3 / 9.5	1500 / 750	-25 – +55 °C	55 °C	136
ICF-85N-4/8...-200/2									200 °C/2 h	F200	
ICF-85N-4/8...-300/2									300 °C/2 h	F300	
ICF-85N-4/8...-400/2									400 °C/2 h	F400	
100N, SINGLE-SPEED											
ICF-100N-4...	1	3~400	50	10200	3.0	100	23.3	1500	-25 – +55 °C	55 °C	138
ICF-100N-4...-200/2									200 °C/2 h	F200	
ICF-100N-4...-300/2									300 °C/2 h	F300	
ICF-100N-4...-400/2									400 °C/2 h	F400	
100N, DOUBLE-SPEED											
ICF-100N-4/8...	2	3~400	50	10200 / 5150	2.8 / 0.7	100 / 26	23.3 / 11.8	1500 / 750	-25 – +55 °C	55 °C	138
ICF-100N-4/8...-200/2									200 °C/2 h	F200	
ICF-100N-4/8...-300/2									300 °C/2 h	F300	
ICF-100N-4/8...-400/2									400 °C/2 h	F400	

* Smoke extraction mode: once for two hours