

ICF SERIES

Impulse centrifugal fans



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

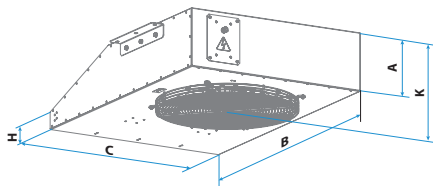
- Single- or double-speed 4-, 6- or 8-pole asynchronous motors.
- Motor ingress protection rating is IP55.

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 [in]					Weight [lb]
	A	B	C	H	K	
ICF-50N	11 3/8	53 3/8	36 3/4	3 1/2	13 3/4	212
ICF-85N	13	63 1/4	43 1/2	4 3/8	15 3/8	300
ICF-100N	13	63 1/4	43 1/2	4 3/8	15 3/8	304

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...+50 °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]	Frequene [Hz]	Max. air capacity [CFM]	Power [kW]	Fan pull [N]	Air speed [ft/s]	RPM	Operating temperature [°C]*	Fire resistance	Weight [lb]
50N, SINGLE-SPEED											
ICF-50N-4-...	1	3-400	50	3649	1.5	50	67	1500	-25 - +55 °C	55 °C	212
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	3649 / 2413	1.5 / 0.37	50 / 20	67 / 44	1500 / 1000	-25 - +55 °C	55 °C	212
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	3649 / 1825	1.6 / 0.4	50 / 13	67 / 33	1500 / 750	-25 - +55 °C	55 °C	212
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	5739	2.2	85	73	1500	-25 - +55 °C	55 °C	300
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	5739 / 3502	2.2 / 0.7	85 / 28	73 / 45	1500 / 1000	-25 - +55 °C	55 °C	300
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	5739 / 2443	2.2 / 0.55	85 / 20	73 / 31	1500 / 750	-25 - +55 °C	55 °C	300
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	6003	3.0	100	76	1500	-25 - +55 °C	55 °C	304
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	6003 / 3031	2.8 / 0.7	100 / 26	76 / 39	1500 / 750	-25 - +55 °C	55 °C	304
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