

ICF-100N-4/8-300-2

Impulse centrifugal fans



Impulse centrifugal fans with fire resistance limit 300 °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

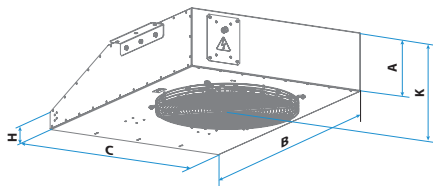
- Single- or double-speed 4-, 6- or 8-pole asynchronous motors.
- Motor ingress protection rating is IP55.

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-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)	100 N	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 300/2: 300 °C/2 hrs.

TECHNICAL DATA

Model	Number of speeds	Unit voltage [V]	Frequency [Hz]	Max. air capacity [CFM]	Power [kW]	Fan pull [N]	Air speed [ft/s]	RPM	Operating temperature [°C]*	Fire resistance	Weight [lb]
ICF-100N-4/8-...-300/2	2	3-400	50	6003 / 3031	2.8 / 0.7	100 / 26	76 / 39	1500 / 750	-25 – +55 °C	55 °C	304
									300 °C/2 h	F300	

* Smoke extraction mode: once for two hours



Micro Drive FC-51 frequency converter

Purpose

This general-purpose variable frequency drive is designed for regulating the rotation speed of an AC electric motor with a maximum power output of 22 kW. This unit is only suitable for general ventilation systems.

Features

The drive construction prevents forced air flow passage through its internal electronic components. The internal circuit boards are well-protected.

Inputs and outputs

- 5 programmable digital inputs
- PNP/NPN logic
- 20-5000 Hz pulse input
- One 0-10 V or 0-20 mA analogue input
- One 0-20 mA analogue input
- Thermistor input (analogue or digital)
- 1 analogue output
- 1 relay, 240 V, 2 A
- RS 485
- Modbus RTU

Filter

The unit features an integrated HF filter which blocks RF interference from the motor and enables the use of a shielded cable up to 15 m long or unshielded cable up to 50 m long as per the applicable EU regulations.

Installation

Back-to-back installation for space savings. Thanks to a compact design the drives can be mounted immediately next to one another without any performance penalties.