HDF

Axial fans with circular frames, ATEX II 2G certification and Ex db motors, for use with hydrogen

Notified authority: LOM
Identification no.: LOM 03ATEX0157
Motor marking:
⟨Ex⟩ II 2G Ex db IIC T4 Gb

ATEX certified, circular axial fans with flameproof ExII2G Ex db motor for working in explosive atmospheres, with IIB+H2 T4 marking for use with hydrogen.

Fan:
- Cast aluminium impellers.
- Airflow direction from motor to impeller.
- Flameproof cable gland included.
- Support ring in sheet steel, with aluminum band in the propeller area according to EN 14986 standard.
- Standard marking with flameproof motor (Ex db): II 2G Ex h IIB+H2 T4 Gb.

Motor:
- Class F motors, with ball bearings, IP55 protection, ATEX 2G certification, flameproof Ex db.
- Single-phase 230 V 50 Hz and three-phase 230/400 V 50 Hz (up to 4 kW) and 400/690 V 50 Hz (powers greater than 4 kW).
- Working temperature: -20 ºC +40 ºC.

Finish:
- Anti-corrosive with ATEX paint, free of iron components, in polyester resin polymerized at 190 ºC, after degreasing with phosphate-free nanotechnological treatment.

On request:
- Special windings for different voltages and frequencies.
- ATEX construction for different categories.
- Fans with 2 speed motor.

Order code

HDF	—	71	—	4T	/	2G Ex db
HDF: Axial fans with circular frames, ATEX II 2G certification and Ex db motors, for use with hydrogen		Impeller diameter in cm		Number of motor poles 4=1500 r/min 50 Hz 6=1000 r/min 50 Hz	T = Three-phase	2G Ex db: for zone 1 and 2

Technical characteristics

Model	Speed	Maximum admissible current (A)		Installed power	Maximum flow rate	Sound pressure level[1] dB (A)	Approx. weight
	(r/min)	230V	400V	(kW)	(m³/h)	Inlet	(Kg)
HDF-63-4T/2G Ex db	1380	4.35	2.50	1.10	15015	69	49
HDF-63-6T/2G Ex db	935	2.77	1.60	0.37	12530	57	37
HDF-71-4T/2G Ex db	1380	4.35	2.50	1.10	20110	74	52
HDF-71-6T/2G Ex db	930	3.46	2.00	0.55	13745	62	43
HDF-80-4T/2G Ex db	1410	11.11	6.39	3.00	34235	78	76
HDF-80-6T/2G Ex db	910	5.89	3.40	1.10	20225	67	66
HDF-90-4T/2G Ex db	1415	13.48	7.75	4.00	47670	85	87
HDF-90-6T/2G Ex db	940	7.62	4.40	1.50	30000	73	83

1. The noise level values are pressures in dB(A) measured at a distance of 3 metres in a free field.

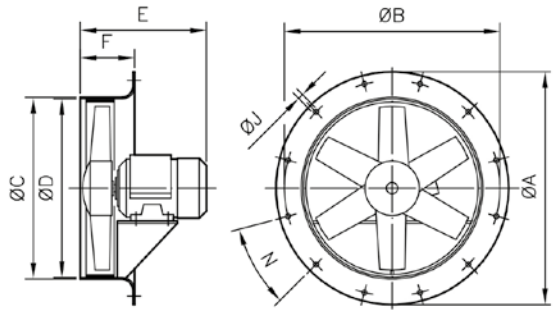
Acoustic characteristics

Sound power spectrum Lw(A) in dB(A) per Hz frequency band
Values measured at inlet with maximum flow rate

	63	125	250	500	1000	2000	4000	8000
HDF-63-4T	51	65	84	84	85	83	79	70
HDF-63-6T	39	53	72	72	73	71	67	58
HDF-71-4T	56	76	84	89	91	88	81	70
HDF-71-6T	44	64	72	77	79	76	69	58

	63	125	250	500	1000	2000	4000	8000
HDF-80-4T	60	80	88	93	95	92	85	74
HDF-80-6T	49	69	77	82	84	81	74	63
HDF-90-4T	67	88	95	100	103	99	92	81
HDF-90-6T	55	76	83	88	91	87	80	69

Dimensions mm



	ØA	ØB	ØC	D	E	F	ØJ	N
HDF-63-4T	730	690	645	640	370	150	12	12x30º
HDF-63-6T	730	690	645	640	330	150	12	12x30º
HDF-71-4T	810	770	715	710	349	150	12	16x22º30´
HDF-71-6T	810	770	715	710	323	150	12	16x22º30´
HDF-80-4T	900	860	805	800	421	180	12	16x22º30´
HDF-80-6T	900	860	805	800	371	180	12	16x22º30´
HDF-90-4T	1015	970	906	900	457	180	15	16x22º30´
HDF-90-6T	1015	970	906	900	415	180	15	16x22º30´

Accessories


INT/ATEX


P


R

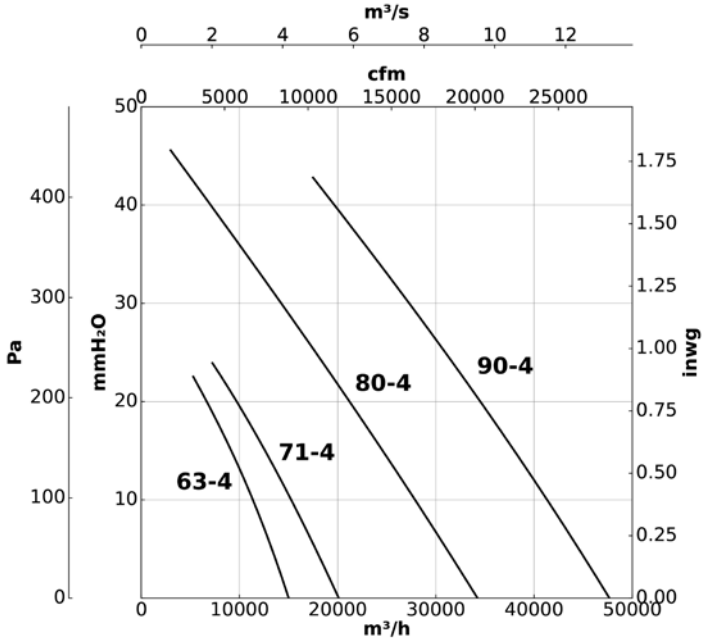

RI


ACE ACE/400

Characteristic curves

Q= Flow rate in m³/h, m³/s and cfm Pe= Static pressure in mm H_2O, Pa and inwg

4T=1500 r/min



6T=1000 r/min