

# HCDF

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



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



ATEX certified, wall mounted 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.
- Steel sheet support frame. with aluminum band in the propeller area according to EN 14986.
- Protection grid against contacts according to UNE-EN ISO 12499.
- 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 °C +40 °C.

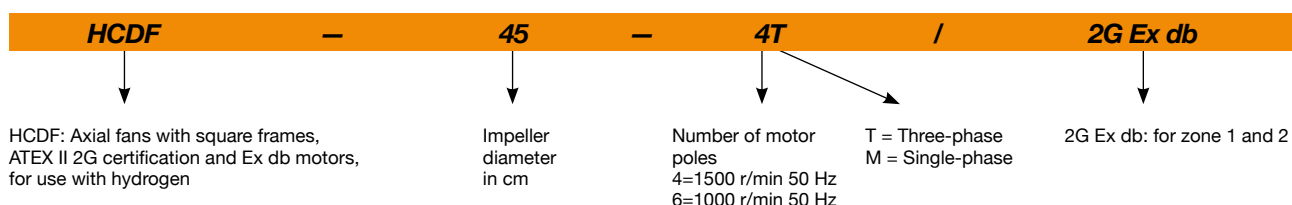
**Finish:**

- Anti-corrosive with ATEX paint, free of iron components, in polyester resin polymerized at 190 °C, 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



## Technical characteristics

Model	Speed (r/min)	Maximum admissible current (A)		Installed power (kW)	Maximum flow rate (m³/h)	Sound pressure level <sup>1</sup> dB (A)		Approx. weight (Kg)
		230V	400V			Inlet		
HCDF-25-4T/2G Ex db	1370	0.78	0.45	0.09	895	41		7
HCDF-25-4M/2G Ex db	1410	1.00		0.06	895	41		7
HCDF-31-4T/2G Ex db	1370	0.78	0.45	0.09	1695	44		8
HCDF-31-4M/2G Ex db	1410	1.00		0.06	1695	44		8
HCDF-35-4T/2G Ex db	1370	0.78	0.45	0.09	2985	48		9
HCDF-35-4M/2G Ex db	1410	1.00		0.06	2985	48		9
HCDF-40-4T/2G Ex db	1420	1.30	0.75	0.25	4415	53		13
HCDF-45-4T/2G Ex db	1420	1.30	0.75	0.25	6465	56		15
HCDF-50-4T/2G Ex db	1390	1.73	1.00	0.37	8675	60		17
HCDF-56-4T/2G Ex db	1390	3.08	1.78	0.55	10560	63		37
HCDF-56-6T/2G Ex db	910	1.59	0.92	0.25	8450	54		31

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

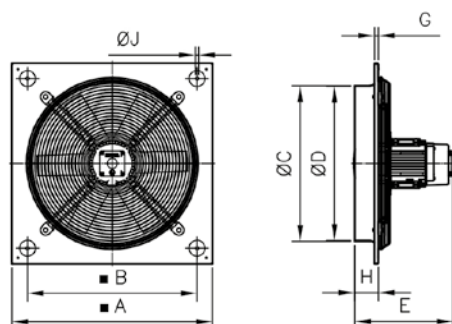
## Acoustic characteristics

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

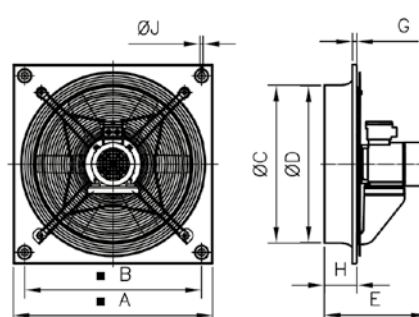
	63	125	250	500	1000	2000	4000	8000		63	125	250	500	1000	2000	4000	8000
HCDF-25-4T	22	37	56	55	56	55	50	41	HCDF-40-4T	34	49	68	67	68	67	62	53
HCDF-25-4M	22	37	56	55	56	55	50	41	HCDF-45-4T	37	52	71	70	71	70	65	56
HCDF-31-4T	25	40	59	58	59	58	53	44	HCDF-50-4T	42	56	75	75	76	74	70	61
HCDF-31-4M	25	40	59	58	59	58	53	44	HCDF-56-4T	45	59	78	78	79	77	73	64
HCDF-35-4T	29	44	63	62	63	62	57	48	HCDF-56-6T	36	50	69	69	70	68	64	55
HCDF-35-4M	29	44	63	62	63	62	57	48									

## Dimensions mm

HCDF-25/50



HCDF-56



	A	B	ØC	ØD	E	G	H	ØJ
HCDF-25	330	275	262	260	275	11	56	8.5
HCDF-31	400	336	311	308	285	11	65	10.5
HCDF-35	465	390	363	360	296	11	76	10.5
HCDF-40	532	452	413	410	335	11	98	10.5
HCDF-45	596	504	463	460	331	11	105	10.5
HCDF-50	665	562	517	514	345	11	105	10.5
HCDF-56-4T	710	630	563	560	397	15	115	10.5
HCDF-56-6T	710	630	563	560	386	15	115	10.5

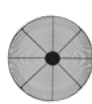
## Accessories



INT/ATEX



P



RI

### Characteristic curves

Q= Flow rate in m<sup>3</sup>/h, m<sup>3</sup>/s and cfm

Pe= Static pressure in mm H<sub>2</sub>O, Pa and inwg

