

Smoke Extraction Motors

Cast Iron Frame

Improved Efficiency EFF2

Standard Features:

- Three-phase, multivoltage, IP55, TEFC
- Output: 0.15 up to 330kW
- Frames: 80 up to 355M/L
- Voltage: 220-240/380-415V (up to 100L)
380-415/660V (from 112M and up)
- Class "F" insulation ($\Delta T=80K$)
- Continuous duty: S1
- Design N
- Ambient temperature: 40°C, at 1000 m.a.s.l.
- Squirrel cage rotor/Aluminium die cast
- Enclosure: TEFC or TEAO
- Pad mounted model:
frame sizes 80 up to 250 (132M/L and 180M are not available)
- Foot mounted model: frame sizes 80 up to 355
- Construction form: B3 (B30 for Pad Mounted Motors)
- Labyrinth seals (except 200°C/2 hours motors)
- Krytox (Except 200°C/2 hours motor)
- Drain Plug
- One meter long flying leads for pad mounted motors (without terminal box)

- Regreasing Nipple for frame:
160 and up (300°C/1 hour and 400°C/2 hours)
225 and up (200°C/2 hours)
- Painting provided with modified Phenolic Resin
- Color - Aluminium

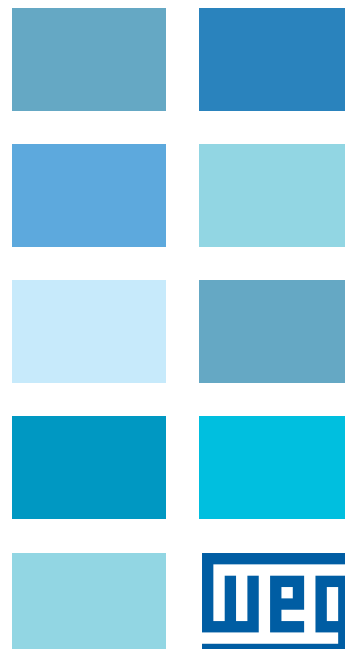
Options available, on request.

Typical Applications:

These motors are used where a large concentration of people in commercial and industrial facilities is present:

- Large buildings,
- Shopping malls,
- Factories,
- Warehouses,
- Enclosed parking lots
- Other ventilation systems

	F200	F300	F400
Service	S1 - 40°C	S1 - 40°C	S1 - 40°C
	S2* - 200°C - 2 hours	S2* - 300°C - 1 hour	S2* - 400°C - 2 hours
Certification	BSRIA - U.K. Frames: 132 to 280	BSRIA - U.K. Frames: 80 to 250 Also available certification for 300° C/2 hours	BSRIA - U.K. Frames: 80 to 180
			CTICM - France Frames: 90 to 280
			Pole: IV, VI, VIII, VI/IV, VII/Vpoles
Insulation Class	Ins. Class F; Temp. Rise 80K	Ins. Class H; Temp. Rise 80K or 105K	
Standard	EM 12101-3		
Pole / Frame Sizes	II, IV/II pole (frame sizes 80 up to 250)		
available	IV, VI, VIII/IV, VI/IV pole (frame sizes 80 up to 355M/L)		
Construction	TEFC or TEAO (Foot or flange mounted / pad mounted for frame sizes 80 up to 250)		



Features and Benefits

Bearings

WEG motors are fitted with the highest quality bearings selected from the best manufacturers in the world and designed to ensure long life of the motor even under heavy operating conditions. For motors supplied with high temperature grease, bearings are designed to meet critical operating conditions. WEG uses Krytox Grease that provides protection from rusting, high-temperature corrosion and antiwear. Krytox allows extended lubrication intervals.

Nameplate

Stainless steel nameplate ensuring a permanent record of all motor data.

Winding

The insulation system of the winding has been specially selected and tested to ensure that it will withstand the extreme temperature during the emergency period. The windings are impregnated with dipping and baking process (frames 80 up to 200L) and continuous resin flow process (frames 225S/M up to 355M/L). For 300°C/1hour and 400°C/2 hours motors WEG uses special wire and special varnish impregnation.

Shaft

WEG uses SAE/AISI 1040/45 carbon steel as standard, which provides high mechanical strength, preventing bending under load and minimizes fatigue which extends lifetime. Specially designed to withstand torques caused during motor acceleration and deceleration. Upon special design motor, shaft can have second shaft end.

Rotor

High pressure die cast rotor dynamically balanced, thus reducing vibrations.

Endshield

Made of cast iron offering a superior mechanical strength, corrosion-resistance and extended lifetime.

Frame

WEG motors are made of FC-200 high-grade cast iron (same density as flameproof motors). The frames are provided with fins aiming at improving the heat dissipation and adequately spaced to minimize air blockage due to accumulation of dirt. The assembly system is prepared for direct installation in ventilation ducts.

The motors can be mounted in either horizontal or vertical positions.

Terminal Box

Motor supplied with terminal box base and extended leads (1 meter) allowing lead connection outside of the duct. Loose terminal box and longer power supply leads can also be supplied.

Stator

Built with low magnetic loss steel lamination reducing losses and operating temperature.

Endshields

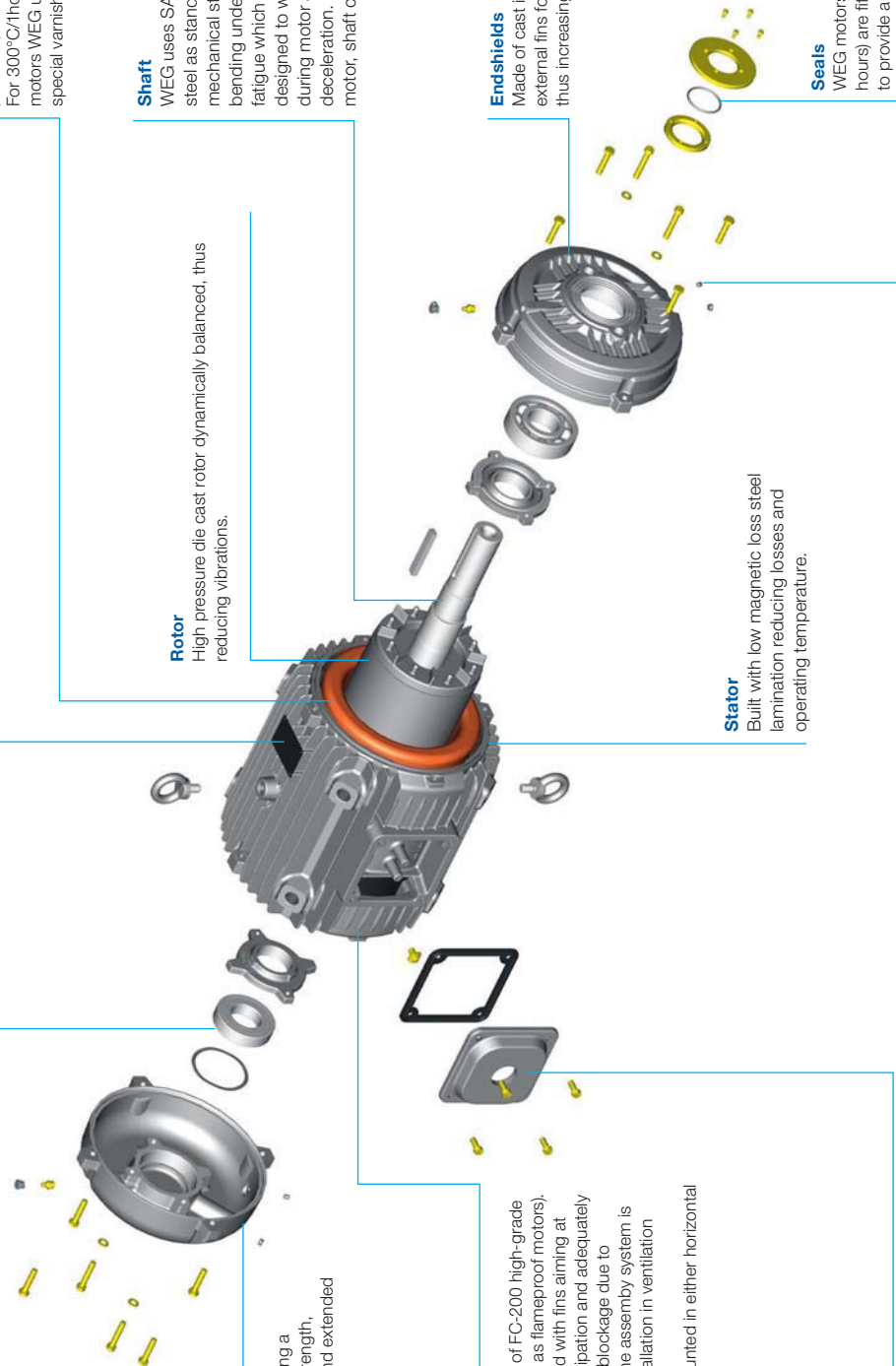
Made of cast iron, they are provided with external fins for better heat dissipation, thus increasing bearing life.

Seals

WEG motors (300°C/2 hours and 400°C/2 hours) are fitted with Taconite Labyrinth seals to provide a good protection in dusty and high moisture environments.

Drain Hole

Provided with plastic drain plug allowing drainage of condensed water.





Smoke Extraction Motors Cast Iron Frame - Single Speed - 200°C/2 hours Improved Efficiency EFF2

Output		IEC Frame	Full load torque C _n (Nm)	Locked rotor current I _L /I _n	Locked rotor torque T _L /T _n	Break- down torque T _B /T _n	Inertia J kgm ²	Allowable locked rotor time Hot/Cold (s)	Weight (kg)	Sound dB (A)	Rated speed (rpm)	400 V						Full load current I _n (A)
												% of full load						
												Efficiency η			Power Factor (Cos φ)			
kW	HP											50	75	100	50	75	100	
II Pole - 3000 rpm																		
0.75	1	80	2.52	5.8	2.9	3.1	0.00079	25/55	14	59	2790	76.0	80.0	79.5	0.76	0.84	0.87	1.57
1.1	1.5	80	3.75	6.0	3.0	2.9	0.00090	13/29	15	59	2810	77.1	80.2	79.7	0.69	0.80	0.86	2.32
1.5	2	90S	4.89	6.8	2.8	3.0	0.00205	14/31	20	68	2870	81.4	83.7	83.6	0.71	0.81	0.86	3.01
2.2	3	90L	7.42	6.6	2.8	3.0	0.00242	9/20	22	68	2840	82.2	83.7	83.4	0.69	0.80	0.85	4.48
3	4	100L	9.76	7.2	2.6	2.8	0.00616	9/20	31	67	2880	83.2	85.7	85.6	0.77	0.85	0.88	5.75
4	5.5	112M	13.4	7.6	2.7	3.1	0.00842	15/33	42	64	2890	85.0	87.5	87.5	0.76	0.84	0.88	7.50
5.5	7.5	132S	18.0	8.0	2.7	3.2	0.02056	18/40	61	68	2935	84.0	87.1	88.3	0.73	0.82	0.87	10.3
7.5	10	132S	24.0	7.3	2.5	2.9	0.02430	10/22	67	68	2925	86.5	88.9	89.2	0.77	0.86	0.89	13.6
11	15	160M	35.8	8.3	2.6	3.1	0.04706	12/26	104	70	2945	87.8	90.1	90.3	0.77	0.85	0.88	20.0
15	20	160M	47.7	7.8	2.5	3.2	0.05295	10/22	111	70	2945	89.6	91.1	91.2	0.76	0.84	0.88	27.0
18.5	25	160L	59.6	8.2	2.6	3.3	0.06471	10/22	126	70	2945	90.4	91.9	91.7	0.77	0.85	0.88	33.1
22	30	180M ¹⁾	71.4	8.2	2.8	3.1	0.11351	13/29	172	70	2950	90.5	92.1	92.1	0.78	0.86	0.89	38.7
30	40	200L	94.8	7.5	2.8	2.8	0.20630	19/42	239	74	2965	90.0	92.0	92.7	0.77	0.85	0.88	53.1
37	50	200L	118	7.6	2.9	2.9	0.22424	19/42	253	74	2965	91.3	92.8	93.0	0.75	0.84	0.88	65.3
45	60	225S/M	142	7.9	2.6	3.5	0.44846	24/53	414	78	2965	91.6	93.3	93.6	0.85	0.89	0.91	76.3
55	75	250S/M	178	8.5	2.8	3.0	0.50227	15/33	454	78	2960	91.8	93.5	93.8	0.85	0.89	0.91	93.0
HIGH-OUTPUT DESIGN																		
1.5	2	80	5.07	6.0	3.0	2.7	0.00096	10/22	16	59	2770	77.0	78.5	77.7	0.70	0.82	0.87	3.20
2.2	3	90S	7.39	7.0	3.0	3.2	0.00230	8/18	21	68	2850	81.5	83.0	83.1	0.64	0.77	0.84	4.55
3	4	90L*	9.93	6.2	3.2	3.1	0.00266	6/13	24	68	2830	81.0	82.0	82.0	0.55	0.68	0.78	6.77
4	5.5	100L	13.5	7.5	2.9	3.1	0.00672	7/15	33	67	2870	81.0	82.3	82.5	0.72	0.81	0.86	8.14
5.5	7.5	112M	18.4	7.7	2.5	3.0	0.00995	10/22	45	64	2870	86.5	87.5	87.5	0.80	0.87	0.90	10.1
7.5	10	112M*	24.8	7.1	2.7	3.0	0.00995	8/18	45	64	2830	86.0	87.0	87.0	0.73	0.83	0.88	14.1
11	15	132M	36.0	7.2	2.4	3.2	0.03178	13/29	79	68	2925	90.0	90.6	90.2	0.76	0.84	0.88	20.0
22	30	160L*	71.9	7.5	2.5	3.0	0.06766	6/13	132	70	2930	90.0	90.6	90.7	0.72	0.82	0.86	40.7
30	40	180L*	95.4	8.7	2.5	3.1	0.13622	9/20	197	70	2945	92.0	92.7	92.7	0.74	0.83	0.87	53.7
IV Pole - 1500 rpm																		
0.55	0.75	80	3.68	6.0	2.6	2.8	0.00242	17/37	14	44	1430	69.0	73.0	75.0	0.56	0.69	0.78	1.36
0.75	1	80	4.96	5.5	2.4	2.6	0.00294	14/31	15	44	1415	73.5	76.2	76.2	0.62	0.74	0.83	1.71
1.1	1.5	90S	7.32	6.5	3.0	3.0	0.00504	13/29	21	47	1440	76.0	80.0	80.6	0.57	0.69	0.78	2.53
1.5	2	90L	9.89	6.2	2.7	2.7	0.00672	12/26	24	47	1420	80.3	82.0	81.7	0.64	0.77	0.83	3.19
2.2	3	100L	14.8	6.7	2.7	2.9	0.00842	14/31	30	51	1420	81.0	82.3	83.0	0.65	0.78	0.83	4.61
3	4	100L	19.9	6.5	2.7	2.7	0.00995	10/22	33	51	1410	83.6	85.0	84.7	0.68	0.79	0.86	5.94
4	5.5	112M	27.0	7.5	2.7	2.8	0.01875	12/26	47	55	1430	86.0	87.4	87.1	0.70	0.81	0.87	7.62
5.5	7.5	132S	36.0	8.0	2.4	3.0	0.04652	11/24	61	58	1465	85.4	87.7	88.5	0.68	0.79	0.85	10.6
7.5	10	132M	48.0	8.0	2.5	2.8	0.05427	8/18	69	58	1465	86.4	88.4	88.6	0.70	0.80	0.86	14.2
11	15	160M	72.4	6.0	2.2	2.5	0.08029	16/35	106	62	1455	87.6	89.4	89.9	0.70	0.79	0.84	21.0
15	20	160L	96.6	6.0	2.2	2.4	0.10037	13/29	121	62	1455	89.0	90.4	90.6	0.71	0.80	0.84	28.4
18.5	25	180M1)	119	7.0	2.7	2.8	0.17939	18/40	174	64	1470	89.8	91.5	92.1	0.68	0.79	0.84	34.5
22	30	180L	143	7.5	2.8	2.8	0.19733	14/31	185	64	1470	91.0	92.2	92.4	0.67	0.78	0.83	41.4
30	40	200L	190	6.5	2.2	2.5	0.33095	17/37	248	67	1475	91.8	93.0	93.0	0.75	0.82	0.85	54.8
37	50	225S/M	237	7.2	2.3	2.7	0.62988	20/44	347	70	1480	91.2	92.2	92.8	0.76	0.85	0.88	65.4
45	60	225S/M	286	7.0	2.3	2.7	0.76985	16/35	379	70	1475	91.0	92.9	93.5	0.76	0.85	0.88	78.9
55	75	250S/M	357	7.5	2.3	2.6	0.97981	16/35	446	70	1475	92.7	93.1	93.4	0.80	0.87	0.90	94.4
75	100	280S/M	473	6.7	2.1	2.4	2.32858	44/97	720	74	1485	92.4	93.8	94.3	0.83	0.88	0.90	128
90	125	280S/M	591	7.1	2.4	2.5	2.56947	31/68	756	74	1485	92.3	93.9	94.2	0.82	0.87	0.89	155
110	150	315S/M	709	7.1	2.3	2.6	2.81036	27/59	857	77	1485	92.8	94.4	94.4	0.78	0.85	0.88	191
132	175	315S/M	828	7.3	2.5	2.6	3.77391	31/68	1007	77	1485	93.3	94.7	95.1	0.78	0.85	0.88	228
160	220	315S/M	1044	7.0	2.4	2.7	3.77391	22/48	994	77	1480	93.3	95.1	95.5	0.78	0.85	0.87	278
200	270	355M/L	1273	6.6	2.3	2.2	7.45663	44/97	1525	79	1490	94.0	95.0	95.2	0.82	0.86	0.88	345
250	340	355M/L	1603	6.9	2.2	2.5	8.38871	36/79	1651	79	1490	94.3	95.2	95.8	0.80	0.86	0.88	428
315	430	355M/L	2027	6.7	2.2	2.4	10.2529	42/92	1835	79	1490	94.8	95.9	96.2	0.79	0.86	0.89	531
330	450	355M/L	2121	6.5	2.3	2.3	11.1850	32/70	1865	79	1490	95.0	96.0	96.2	0.83	0.88	0.90	550
HIGH-OUTPUT DESIGN																		
1.1	1.5	80	7.61	5.0	2.3	2.3	0.00328	10/22	15	44	1385	65.0	68.5	69.0	0.55	0.70	0.81	2.84
1.5	2	90S	10.0	5.8	2.6	2.6	0.00504	8/18	21	47	1405	73.0	75.0	76.2	0.62	0.76	0.82	3.46
2.2	3	90L*	14.9	5.8	2.7	2.5	0.00672	8/18	24	47	1410	75.0	76.5	76.5	0.57	0.71	0.80	5.19
5.5	7.5	112M*	36.3	6.5	2.5	2.6	0.01875	8/18	47	55	1450	84.0	85.7	85.7	0.54	0.66	0.75	12.4
7.5	10	132S	48.0	8.0	2.5	2.8	0.05427	8/18	63	58	1465	86.4	88.4	88.6	0.70	0.80	0.86	14.2
11	15	132M/L*2)	72.4	7.5	2.4	2.7	0.06978	5/11	82	58	1455	87.0	88.4	88.0	0.70	0.81	0.88	20.5
15	20	160M	96.6	6.0	2.2	2.4	0.10037	13/29	119	62	1455	89.0	90.4	90.6	0.71	0.80	0.84	28.4
18.5	25	160L*	121	6.0	2.4	2.4	0.11542	12/26	128	62	1455	88.5	90.0	90.0	0.64	0.76	0.82	36.2
22	30	180M1)	143	7.5	2.8	2.8	0.19733	14/31	183	64	1470	91.0	92.2	92.4	0.67	0.78	0.83	41.4
30	40	200M	190	6.5	2.2	2.5	0.33095	17/37	233	67	1475	91.8	93.0	93.0	0.75	0.82	0.85	54.8
37	50	200L	239	7.0	2.3	2.5	0.38611	14/31	269	67	1470	91.5	92.5	92.3	0.73	0.82	0.86	67.3
55	75	225S/M	357	7.5	2.3	2.6	0.97981	16/35	423	70	1475	92.7	93.1	93.4	0.80	0.87	0.90	94.4
75	100	250S/M	475	7.2	2.4	2.6	1.15478	12/26	488	70	1480	92.9						

Smoke Extraction Motors Cast Iron Frame - Single Speed - 200°C/2 hours Improved Efficiency EFF2

Output		380 V								415 V							
		Rated speed (rpm)	% of full load						Full load current I _n (A)	Rated speed (rpm)	% of full load						Full load current I _n (A)
			Efficiency η			Power Factor (Cos φ)					Efficiency η			Power Factor (Cos φ)			
kW	HP		50	75	100	50	75	100			50	75	100	50	75	100	
II Pole - 3000 rpm																	
0.75	1	2770	76.5	79.7	78.5	0.79	0.86	0.89	1.63	2810	75.5	80.1	80.0	0.73	0.82	0.86	1.52
1.1	1.5	2790	78.2	80.4	79.3	0.74	0.84	0.88	2.39	2825	76.0	79.8	79.8	0.64	0.76	0.84	2.28
1.5	2	2855	81.8	83.8	83.0	0.75	0.84	0.88	3.12	2880	80.0	83.7	83.8	0.67	0.78	0.84	2.96
2.2	3	2820	82.8	83.6	83.3	0.75	0.84	0.87	4.61	2850	81.5	83.6	84.3	0.64	0.76	0.83	4.37
3	4	2870	83.5	85.6	85.1	0.80	0.86	0.89	6.02	2890	82.8	85.6	85.6	0.74	0.84	0.87	5.60
4	5.5	2880	85.5	87.5	87.2	0.80	0.86	0.89	7.83	2900	84.5	87.4	88.2	0.72	0.82	0.87	7.25
5.5	7.5	2930	84.5	87.5	88.2	0.77	0.85	0.89	10.6	2940	83.5	86.8	88.2	0.69	0.80	0.85	10.2
7.5	10	2915	87.0	89.0	88.8	0.81	0.87	0.90	14.3	2930	86.0	88.8	89.3	0.73	0.83	0.87	13.4
11	15	2940	88.3	90.1	90.2	0.80	0.86	0.89	20.8	2950	87.3	90.0	90.4	0.74	0.83	0.87	19.5
15	20	2935	90.1	91.2	91.0	0.81	0.87	0.89	28.1	2950	89.1	91.0	91.2	0.72	0.81	0.87	26.3
18.5	25	2940	90.7	92.0	91.5	0.81	0.87	0.89	34.5	2950	90.1	91.8	92.0	0.73	0.83	0.86	32.5
22	30	2945	91.0	92.1	92.0	0.82	0.88	0.90	40.4	2955	90.0	92.0	92.1	0.75	0.84	0.87	38.2
30	40	2960	90.5	92.1	92.6	0.80	0.87	0.89	55.3	2970	89.5	91.8	92.7	0.73	0.83	0.87	51.8
37	50	2960	91.7	93.0	93.0	0.80	0.87	0.89	67.9	2965	90.8	92.6	93.0	0.70	0.81	0.86	64.4
45	60	2960	91.9	93.4	93.5	0.86	0.9	0.92	79.5	2970	91.5	93.3	93.9	0.84	0.88	0.9	74.1
55	75	2960	91.8	93.2	93.5	0.87	0.91	0.92	97.1	2965	91.6	93.5	94	0.83	0.88	0.91	89.5
HIGH-OUTPUT DESIGN																	
1.5	2	2750	78.0	78.5	76.5	0.75	0.85	0.89	3.35	2790	76.0	78.5	78.5	0.65	0.78	0.85	3.13
2.2	3	2830	82.3	83.3	83.0	0.71	0.82	0.87	4.63	2860	80.2	82.5	83.1	0.58	0.72	0.80	4.60
3	4	2800	82.0	82.5	81.5	0.61	0.74	0.81	6.90	2845	80.0	81.5	81.5	0.50	0.64	0.74	6.92
4	5.5	2850	81.5	82.5	82.0	0.77	0.84	0.88	8.42	2890	80.3	82.0	82.5	0.68	0.78	0.84	8.03
5.5	7.5	2860	87.0	87.5	87.2	0.83	0.89	0.91	10.5	2880	86.0	87.5	87.7	0.77	0.85	0.89	9.80
7.5	10	2815	86.5	87.0	86.5	0.79	0.87	0.90	14.6	2840	85.5	87.0	87.0	0.68	0.80	0.86	13.9
11	15	2920	89.5	90.8	90.2	0.80	0.87	0.90	20.6	2930	89.3	90.5	90.2	0.72	0.82	0.86	19.7
22	30	2925	90.5	90.7	90.5	0.77	0.85	0.88	42.0	2935	89.5	90.5	90.7	0.68	0.79	0.84	40.2
30	40	2940	92.0	92.3	92.3	0.78	0.84	0.88	56.1	2950	92.0	92.7	92.7	0.71	0.80	0.85	53.0
IV Pole - 1500 rpm																	
0.55	0.75	1420	70.0	73.5	75.0	0.61	0.73	0.81	1.38	1440	67.0	72.5	74.6	0.53	0.66	0.75	1.37
0.75	1	1400	75.0	76.5	76.0	0.66	0.78	0.85	1.76	1430	72.0	76.0	76.2	0.59	0.71	0.81	1.69
1.1	1.5	1420	77.5	80.5	80.5	0.63	0.74	0.81	2.56	1445	74.5	79.0	80.3	0.53	0.64	0.74	2.58
1.5	2	1410	81.2	82.2	81.0	0.68	0.80	0.85	3.31	1430	79.3	81.5	81.8	0.61	0.74	0.81	3.15
2.2	3	1410	81.5	82.0	81.7	0.69	0.81	0.85	4.81	1430	80.5	82.3	83.0	0.61	0.75	0.81	4.55
3	4	1400	84.0	84.9	84.2	0.72	0.82	0.87	6.22	1420	83.2	85.1	84.9	0.65	0.77	0.84	5.85
4	5.5	1420	86.5	87.5	86.7	0.74	0.84	0.89	7.88	1440	85.2	87.2	86.7	0.67	0.78	0.84	7.64
5.5	7.5	1460	86.7	88.3	88.3	0.73	0.82	0.87	10.9	1470	84.2	87.0	88.4	0.64	0.75	0.83	10.4
7.5	10	1465	87.0	88.6	88.4	0.75	0.84	0.88	14.6	1470	85.6	88.0	88.6	0.65	0.77	0.83	14.2
11	15	1450	88.3	89.6	89.2	0.74	0.82	0.85	22.0	1460	86.8	89.0	89.8	0.65	0.76	0.82	20.8
15	20	1450	89.5	90.5	90.1	0.75	0.83	0.86	29.4	1460	88.4	90.3	90.6	0.67	0.78	0.83	27.8
18.5	25	1465	90.3	91.7	91.7	0.72	0.81	0.85	36.1	1470	89.3	91.3	92.1	0.65	0.76	0.82	34.1
22	30	1465	91.5	92.4	92.3	0.72	0.81	0.85	42.6	1475	90.5	92.0	92.5	0.63	0.75	0.81	40.8
30	40	1470	92.2	93.0	92.6	0.78	0.84	0.86	57.2	1480	91.5	93.0	93.2	0.72	0.80	0.84	53.3
37	50	1475	91.6	92.4	92.5	0.79	0.86	0.89	68.3	1480	90.8	92.1	92.9	0.72	0.83	0.87	63.7
45	60	1475	91.3	92.8	93.5	0.80	0.87	0.89	82.2	1480	91.0	92.9	93.5	0.72	0.83	0.87	77.0
55	75	1475	92.8	93.5	93.4	0.83	0.88	0.91	98.3	1480	92.5	93.4	93.6	0.77	0.85	0.89	91.9
75	100	1480	92.8	93.9	94.2	0.85	0.89	0.90	134	1485	92.2	93.8	94.3	0.81	0.87	0.89	124
90	125	1480	92.6	94.1	94.2	0.84	0.88	0.90	161	1485	92.0	93.9	94.2	0.80	0.86	0.89	149
110	150	1480	92.8	93.6	94.2	0.80	0.86	0.88	202	1485	92.8	94.4	94.5	0.76	0.83	0.87	186
132	175	1480	93.5	94.9	95.1	0.81	0.86	0.89	237	1485	93.3	94.7	95.1	0.76	0.84	0.87	222
160	220	1480	93.0	95.0	95.4	0.81	0.86	0.88	290	1485	94.2	95.1	95.5	0.77	0.84	0.87	268
200	270	1485	94.2	95.0	95.1	0.84	0.87	0.89	359	1490	93.8	94.9	95.1	0.80	0.85	0.87	336
250	340	1485	94.5	95.2	95.7	0.82	0.87	0.89	446	1490	94.1	95.0	95.7	0.77	0.85	0.87	418
315	430	1485	95.0	95.8	96.1	0.83	0.87	0.89	560	1490	94.5	95.8	96.2	0.76	0.84	0.88	518
330	450	1485	95.2	96.0	96.1	0.85	0.89	0.90	580	1490	94.8	95.8	96.2	0.81	0.87	0.89	536
HIGH-OUTPUT DESIGN																	
1.1	1.5	1370	68.0	69.0	69.5	0.61	0.76	0.86	2.80	1400	60.0	66.0	67.0	0.50	0.65	0.76	3.01
1.5	2	1385	72.0	74.0	75.0	0.68	0.80	0.85	3.57	1410	73.0	74.5	75.5	0.58	0.72	0.80	3.45
2.2	3	1390	76.0	77.0	76.0	0.65	0.75	0.83	5.30	1420	73.0	76.0	76.5	0.53	0.66	0.76	5.26
5.5	7.5	1445	85.0	86.0	85.7	0.60	0.72	0.79	12.3	1455	82.0	85.7	85.7	0.49	0.62	0.71	12.6
7.5	10	1465	87.0	88.6	88.4	0.75	0.84	0.88	14.6	1470	85.6	88.0	88.6	0.65	0.77	0.83	14.2
11	15	1450	87.5	88.4	87.7	0.75	0.84	0.89	21.4	1460	86.5	88.4	88.4	0.67	0.79	0.86	20.1
15	20	1450	89.5	90.5	90.1	0.75	0.83	0.86	29.4	1460	88.4	90.3	90.6	0.67	0.78	0.83	27.8
18.5	25	1450	89.0	90.0	89.4	0.70	0.80	0.84	37.4	1460	88.0	90.0	90.0	0.60	0.73	0.80	35.7
22	30	1465	91.5	92.4	92.3	0.72	0.81	0.85	42.6	1475	90.5	92.0	92.5	0.63	0.75	0.81	40.8
30	40	1470	92.2	93.0	92.6	0.78	0.84	0.86	57.2	1480	91.5	93.0	93.2	0.72	0.80	0.84	53.3
37	50	1465	92.0	92.5	92.0	0.77	0.84	0.87	70.2	1475	91.0	92.5	92.5	0.69	0.80	0.85	65.5
55	75	1475	92.8	93.5	93.4	0.83	0.88	0.91	98.3	1480	92.5	93.4	93.6	0.77	0.85	0.89	91.9
75	100	1475	92.6	93.4	93.5	0.80	0.86	0.88	138	1480	92.6	93.7	93.6	0.74	0.84	0.87	128
110	150	1480	92.8	93.6	94.2	0.80	0.86	0.88	202	1485	92.8	94.4	94.5	0.76	0.83	0.87	186
132	175	1480	92.5	93.5	93.5	0.81	0.86	0.89	241	1485	92.2	94.7	94.7	0.76	0.84	0.87	223
200	270	1480	94.5	95.0	95.4	0.78	0.84	0.86	370	1485	93.8	94.6	95.4	0.70	0.80	0.8	



Smoke Extraction Motors Cast Iron Frame - Single Speed - 200°C/2 hours Improved Efficiency EFF2

Output		IEC Frame	Full load torque C _n (Nm)	Locked rotor current I _L /I _n	Locked rotor torque T _L /T _n	Break-down torque T _b /T _n	Inertia J kgm ²	Allowable locked rotor time Hot/Cold (s)	Weight (kg)	Sound dB (A)	Rated speed (rpm)	400 V						Full load current I _n (A)
												% of full load						
												Efficiency η			Power Factor (Cos φ)			
												50	75	100	50	75	100	
kW	HP																	
VI Pole - 1000 rpm																		
0.25	0.33	80	2.44	4.6	2.5	2.9	0.00225	19/42	14	43	950	52.0	60.0	64.0	0.44	0.55	0.65	0.867
0.37	0.5	80	3.78	4.5	2.5	2.5	0.00242	12/26	14	43	930	54.0	62.5	65.0	0.45	0.57	0.67	1.23
0.55	0.75	80	5.66	4.5	2.3	2.3	0.00311	10/22	15	43	930	60.0	65.0	67.0	0.50	0.63	0.73	1.62
0.75	1	90S	7.63	4.8	2.1	2.1	0.00504	16/35	20	45	920	70.0	72.6	72.4	0.54	0.67	0.76	1.97
1.1	1.5	90L	11.4	4.8	2.3	2.2	0.00672	14/31	24	45	925	71.0	75.2	75.2	0.50	0.64	0.75	2.82
1.5	2	100L	14.9	4.8	2.2	2.5	0.01121	18/40	27	44	940	74.0	77.3	77.5	0.53	0.66	0.74	3.78
2.2	3	112M	22.4	5.0	2.2	2.3	0.01682	14/31	38	48	940	77.5	80.5	80.1	0.53	0.66	0.74	5.36
3	4	132S	29.3	5.3	2.0	2.2	0.03489	20/44	52	52	960	80.0	82.7	82.5	0.58	0.70	0.77	6.82
4	5.5	132M	40.2	6.0	2.1	2.3	0.05039	18/40	66	52	960	83.6	85.5	85.8	0.59	0.70	0.77	8.74
5.5	7.5	132M	54.9	6.4	2.2	2.4	0.06202	14/31	73	52	960	84.0	85.8	85.8	0.56	0.68	0.76	12.2
7.5	10	160M	72.4	6.1	2.3	2.6	0.12209	17/37	105	56	970	87.0	88.2	88.0	0.62	0.74	0.81	15.2
11	15	160L	109	6.6	2.4	2.9	0.17595	13/29	130	56	970	87.2	88.3	88.3	0.62	0.75	0.82	21.9
15	20	180L	146	7.5	2.5	2.6	0.30337	11/24	182	56	965	89.1	90.1	89.8	0.82	0.88	0.91	26.5
18.5	25	200L	180	6.0	2.3	2.5	0.37670	33/73	232	58	975	89.3	90.5	89.9	0.70	0.79	0.84	35.4
22	30	200L	216	6.0	2.3	2.4	0.41258	33/73	241	58	975	89.0	90.9	91.3	0.70	0.79	0.84	41.4
30	40	225S/M	285	7.2	2.6	2.7	0.98842	20/44	367	61	985	90.5	91.8	91.8	0.77	0.84	0.87	54.2
37	50	250S/M	358	7.5	2.7	2.6	1.22377	18/40	429	61	980	90.0	92.4	92.5	0.76	0.84	0.87	66.4
45	60	280S/M	428	6.8	2.4	2.6	2.29824	24/53	599	66	985	90.5	92.3	92.6	0.68	0.78	0.83	84.5
55	75	280S/M	535	6.5	2.3	2.5	2.64298	23/51	637	66	985	91.6	93.2	93.5	0.71	0.82	0.85	100
75	100	315S/M	713	6.7	2.3	2.5	3.44737	20/44	788	69	985	91.6	93.5	93.7	0.71	0.81	0.85	136
90	125	315S/M	891	6.3	2.1	2.3	3.67719	18/40	813	69	985	92.5	94.0	93.9	0.73	0.81	0.85	163
110	150	315S/M	1070	6.4	2.3	2.4	5.28596	18/40	988	69	985	93.4	94.5	94.6	0.71	0.80	0.84	200
132	175	355M/L	1242	6.1	2.0	2.3	8.10159	90/198	1100	73	990	92.5	94.7	94.7	0.65	0.75	0.80	251
160	220	355M/L	1561	6.2	1.9	2.1	9.53128	72/158	1526	73	990	93.0	95.0	95.4	0.67	0.77	0.82	295
200	270	355M/L	1916	6.3	2.1	2.3	12.3907	85/187	1754	73	990	93.5	94.5	94.8	0.70	0.78	0.81	376
250	340	355M/L	2400	6.1	2.2	2.2	14.7735	64/141	1916	73	995	94.0	95.1	95.6	0.70	0.79	0.82	460
315	430	355M/L*	3051	6.0	1.9	1.9	15.4883	38/84	1979	73	990	94.3	95.8	95.9	0.69	0.78	0.81	585
HIGH-OUTPUT DESIGN																		
3	4	112M	29.3	6.3	2.6	2.6	0.02617	10/22	45	48	960	78.5	81.7	84.0	0.53	0.65	0.73	7.06
4	5.5	132S	40.2	6.0	2.1	2.3	0.05039	18/40	62	52	960	83.6	85.5	85.8	0.59	0.70	0.77	8.74
45	60	250S/M	430	8.0	2.8	2.8	1.55324	18/40	486	61	980	91.0	92.3	92.6	0.78	0.85	0.88	79.7
75	100	280S/M	713	6.7	2.3	2.5	3.44737	20/44	726	69	985	91.6	93.5	93.7	0.71	0.81	0.85	136
132	175	315S/M*	1248	6.3	2.1	2.2	5.28596	13/29	986	69	985	93.5	94.7	94.7	0.72	0.81	0.85	237
VIII Pole - 750 rpm																		
0.18	0.25	80	2.51	3.1	1.9	2.1	0.00242	16/35	14	42	700	40.0	49.0	54.2	0.43	0.53	0.62	0.77
0.25	0.33	80	3.41	3.0	1.8	1.8	0.00294	21/46	15	42	680	47.5	55.0	57.0	0.45	0.56	0.65	0.97
0.37	0.5	90S	5.05	3.5	2.1	2.1	0.00448	29/64	19	43	695	51.0	59.0	61.0	0.43	0.53	0.64	1.37
0.55	0.75	90L	7.63	3.5	2.1	2.1	0.00616	21/46	22	43	690	57.0	63.0	65.0	0.45	0.56	0.65	1.88
0.75	1	100L	9.96	4.2	2.0	2.1	0.00952	30/66	26	50	705	65.0	70.0	71.0	0.42	0.54	0.63	2.42
1.1	1.5	100L	15.1	4.1	1.7	2.1	0.01289	23/51	30	50	700	66.0	71.5	72.2	0.43	0.56	0.65	3.38
1.5	2	112M	19.8	4.6	2.5	2.7	0.02430	32/70	44	46	710	76.5	77.8	78.0	0.48	0.60	0.69	4.02
2.2	3	132S	29.5	6.2	2.4	2.7	0.07527	23/51	68	48	715	78.5	81.5	82.5	0.53	0.65	0.73	5.27
3	4	132M	39.6	5.8	2.4	2.7	0.08531	22/48	75	48	710	78.0	82.7	83.5	0.52	0.64	0.72	7.20
4	5.5	160M	52.9	5.2	2.2	2.7	0.12209	33/73	105	51	730	81.3	84.3	86.0	0.47	0.60	0.69	9.73
5.5	7.5	160M	72.2	5.2	2.3	2.7	0.14364	23/51	114	51	730	81.5	84.1	85.2	0.46	0.59	0.69	13.5
7.5	10	160L	96.9	4.9	2.0	2.5	0.16518	15/33	125	51	725	83.5	85.7	85.5	0.51	0.63	0.72	17.6
11	15	180L	145	6.8	2.3	2.5	0.30337	12/26	173	51	725	87.0	88.5	88.3	0.70	0.79	0.84	21.4
15	20	200L	192	4.6	2.0	2.1	0.37670	36/79	229	53	730	86.5	88.6	89.0	0.56	0.68	0.75	32.4
18.5	25	225S/M	241	6.9	2.1	2.8	0.84722	17/37	339	56	730	88.5	90.1	90.0	0.72	0.80	0.85	34.9
22	30	225S/M	289	7.5	2.2	2.7	0.98842	19/42	364	56	730	89.0	91.0	91.0	0.73	0.82	0.85	41.1
30	40	250S/M	385	7.9	2.3	2.9	1.22377	17/37	425	56	730	89.5	91.2	91.6	0.70	0.79	0.84	56.3
37	50	280S/M	475	6.5	1.9	2.3	2.29824	29/64	589	59	740	90.5	92.2	92.3	0.67	0.77	0.81	71.4
45	60	280S/M	570	6.5	2.0	2.4	2.64298	26/57	631	59	740	90.5	92.1	92.3	0.65	0.75	0.80	88.0
55	75	315S/M	712	6.5	1.9	2.2	3.10263	27/59	732	62	740	91.2	93.1	93.0	0.69	0.78	0.82	104
75	100	315S/M	949	6.6	1.9	2.2	4.36666	20/44	872	62	740	92.0	93.4	93.5	0.67	0.79	0.82	141
90	125	315S/M	1186	6.8	2.1	2.4	5.28596	23/51	1021	62	740	92.5	93.8	94.2	0.70	0.78	0.83	166
110	150	355M/L	1424	6.4	1.5	2.2	11.9324	41/90	1390	70	740	92.5	94.1	94.5	0.63	0.74	0.80	210
132	175	355M/L	1661	6.5	1.6	2.2	13.1885	47/103	1445	70	740	93.0	94.5	94.8	0.63	0.73	0.79	254
160	220	355M/L	2088	6.6	1.6	2.2	16.3286	42/92	1620	70	740	93.3	94.7	94.7	0.64	0.75	0.80	305
200	270	355M/L	2563	6.8	1.6	2.1	19.4687	37/81	1800	70	740	93.3	94.6	95.2	0.60	0.72	0.79	384
HIGH-OUTPUT DESIGN																		
7.5	10	160M	96.9	4.9	2.0	2.5	0.16518	15/33	123	51	725	83.5	85.7	85.5	0.51	0.63	0.72	17.6
37	50	250S/M	481	8.2	2.3	2.8	1.55324	13/29	479	56	730	89.0	91.5	91.5	0.68	0.78	0.84	69.5
55	75	280S/M	712	6.5	1.9	2.2	3.10263	27/59	696	62	740	91.2	93.1	93.0	0.69	0.78	0.82	104

Notes:

*Class "F" insulation with ΔT105K

Standard voltage, connection and frequency: 220-240V Δ 50Hz

380-415V Y 50Hz

380-415V Δ 50Hz

660-690V Y 50Hz

The values shown are subject to change without prior notice. To obtain guaranteed values please access our website.

Smoke Extraction Motors Cast Iron Frame - Single Speed - 200°C/2 hours Improved Efficiency EFF2

Output		380 V								415 V							
		Rated speed (rpm)	% of full load						Full load current I _n (A)	Rated speed (rpm)	% of full load						Full load current I _n (A)
			Efficiency η			Power Factor (Cos φ)					Efficiency η			Power Factor (Cos φ)			
kW	HP		50	75	100	50	75	100			50	75	100	50	75	100	
VI Pole - 1000 rpm																	
0.25	0.33	945	54.0	62.0	65.0	0.47	0.59	0.68	0.86	955	50.0	58.0	63.0	0.41	0.51	0.62	0.89
0.37	0.5	920	56.0	64.0	66.0	0.49	0.62	0.72	1.18	935	52.0	61.0	64.0	0.42	0.54	0.64	1.26
0.55	0.75	920	62.0	65.8	68.0	0.54	0.67	0.77	1.60	935	58.0	64.0	66.0	0.47	0.59	0.68	1.70
0.75	1	910	71.5	72.8	71.5	0.58	0.71	0.79	2.02	930	68.5	72.4	72.4	0.50	0.64	0.73	1.97
1.1	1.5	915	72.0	75.5	74.8	0.55	0.69	0.78	2.86	935	70.0	75.2	75.2	0.46	0.61	0.72	2.83
1.5	2	930	75.0	77.5	77.0	0.58	0.70	0.76	3.89	950	73.0	77.3	77.6	0.50	0.63	0.71	3.79
2.2	3	930	79.0	80.8	79.7	0.58	0.70	0.76	5.52	950	76.0	80.3	80.5	0.50	0.63	0.72	5.28
3	4	955	81.0	83.0	82.0	0.61	0.72	0.79	7.04	965	79.0	82.5	82.6	0.53	0.66	0.74	6.83
4	5.5	955	84.5	85.7	85.4	0.61	0.72	0.79	9.01	965	82.6	85.3	85.9	0.56	0.67	0.75	8.64
5.5	7.5	955	85.0	86.1	85.6	0.58	0.71	0.77	12.7	965	83.0	85.5	86.0	0.53	0.65	0.74	12.0
7.5	10	965	87.5	88.4	87.5	0.66	0.78	0.83	15.7	970	86.5	88.0	88.0	0.58	0.71	0.79	15.0
11	15	970	88.0	88.5	88.0	0.67	0.78	0.84	22.6	975	86.5	88.0	88.3	0.58	0.72	0.80	21.7
15	20	960	89.0	90.0	89.5	0.84	0.89	0.91	28.0	970	89.0	90.5	90.5	0.80	0.87	0.90	25.6
18.5	25	970	89.7	90.7	89.8	0.74	0.82	0.86	36.4	980	88.9	90.3	91.2	0.66	0.76	0.82	34.4
22	30	970	89.6	91.0	91.2	0.74	0.82	0.85	43.1	980	88.4	90.7	91.3	0.66	0.76	0.82	40.9
30	40	980	91.0	91.8	91.6	0.80	0.86	0.88	56.5	985	90.0	91.8	92.2	0.73	0.81	0.86	52.6
37	50	980	90.5	92.5	92.4	0.80	0.86	0.88	69.1	985	89.5	92.4	92.6	0.73	0.82	0.86	64.6
45	60	985	91.0	92.3	92.6	0.72	0.81	0.85	86.9	990	90.0	92.3	92.7	0.64	0.76	0.82	82.4
55	75	985	92.0	93.2	93.4	0.74	0.84	0.87	103	990	91.2	93.2	93.6	0.68	0.80	0.84	97.3
75	100	985	92.0	93.5	93.5	0.74	0.82	0.86	142	990	91.2	93.5	93.8	0.69	0.80	0.84	132
90	125	985	92.8	93.9	93.6	0.75	0.83	0.86	170	990	92.2	93.9	93.9	0.71	0.79	0.84	159
110	150	985	93.6	94.4	94.4	0.74	0.82	0.85	208	985	93.2	94.5	94.7	0.69	0.79	0.83	195
132	175	990	93.0	94.7	94.5	0.70	0.80	0.82	259	995	92.0	94.7	94.7	0.60	0.70	0.77	252
160	220	990	93.5	95.2	95.2	0.73	0.80	0.84	304	990	92.5	94.9	95.4	0.63	0.74	0.80	292
200	270	990	94.0	94.7	94.8	0.74	0.81	0.83	386	990	93.0	94.3	94.8	0.66	0.75	0.79	372
250	340	995	94.3	95.2	95.5	0.74	0.81	0.83	479	995	93.7	95.0	95.8	0.67	0.77	0.81	448
315	430	985	94.8	96.0	95.8	0.73	0.80	0.82	609	990	93.8	95.6	95.8	0.65	0.76	0.80	572
HIGH-OUTPUT DESIGN																	
3	4	955	80.0	82.0	83.9	0.59	0.70	0.76	7.15	965	76.5	81.4	84	0.48	0.6	0.69	7.20
4	5.5	955	84.5	85.7	85.4	0.61	0.72	0.79	9.01	965	82.6	85.3	85.9	0.56	0.67	0.75	8.64
45	60	980	91.5	92.3	92.5	0.82	0.87	0.89	83.0	985	90.5	92.3	92.7	0.75	0.83	0.87	77.6
75	100	985	92.0	93.5	93.5	0.74	0.82	0.86	142	990	91.2	93.5	93.8	0.69	0.8	0.84	132
132	175	980	93.7	94.5	94.4	0.75	0.83	0.86	247	985	93.3	94.7	94.7	0.70	0.80	0.84	231
VIII Pole - 750 rpm																	
0.18	0.25	690	43.0	52.0	54.5	0.45	0.56	0.65	0.77	710	37.0	46.0	53.0	0.41	0.50	0.59	0.80
0.25	0.33	670	50.5	56.5	56.5	0.48	0.59	0.69	0.97	690	45.0	53.5	56.5	0.42	0.53	0.61	1.01
0.37	0.5	685	54.0	61.0	62.0	0.46	0.56	0.67	1.35	700	48.0	57.0	60.0	0.40	0.50	0.60	1.43
0.55	0.75	680	59.0	64.5	65.5	0.48	0.59	0.69	1.85	700	55.0	61.5	64.5	0.41	0.52	0.61	1.94
0.75	1	695	67.0	71.0	70.5	0.46	0.58	0.66	2.45	710	63.0	69.0	70.5	0.38	0.50	0.60	2.47
1.1	1.5	690	68.0	72.0	72.0	0.47	0.60	0.68	3.41	710	64.0	70.5	72.2	0.40	0.52	0.62	3.42
1.5	2	700	77.5	78.0	77.7	0.52	0.63	0.70	4.19	715	74.5	77.0	78.1	0.46	0.58	0.66	4.05
2.2	3	710	79.5	81.8	82.1	0.56	0.68	0.75	5.43	720	77.5	81.2	82.6	0.50	0.62	0.71	5.22
3	4	705	79.5	83.0	83.0	0.54	0.66	0.74	7.42	715	76.5	82.4	83.5	0.50	0.62	0.70	7.14
4	5.5	725	82.6	84.8	85.9	0.51	0.64	0.72	9.83	730	80.0	83.7	86.0	0.44	0.57	0.66	9.80
5.5	7.5	725	82.5	84.7	85.2	0.50	0.63	0.72	13.6	730	80.5	83.5	85.0	0.42	0.55	0.66	13.6
7.5	10	720	84.5	86.0	85.3	0.54	0.66	0.74	18.1	730	82.5	85.5	85.5	0.48	0.60	0.70	17.4
11	15	720	87.5	88.3	87.8	0.74	0.81	0.85	22.4	730	86.5	88.6	88.5	0.66	0.77	0.83	20.8
15	20	725	87.5	88.9	88.9	0.61	0.72	0.77	33.3	730	85.5	88.3	88.9	0.50	0.64	0.72	32.6
18.5	25	730	88.8	90.0	89.8	0.75	0.83	0.86	36.4	735	88.2	90.3	90.2	0.68	0.78	0.84	34.0
22	30	730	89.4	90.9	90.5	0.76	0.84	0.86	42.9	735	88.6	91.0	91.2	0.71	0.80	0.84	40.0
30	40	730	90.0	91.3	91.3	0.73	0.81	0.85	58.7	735	89.0	91.1	91.8	0.66	0.77	0.83	54.8
37	50	735	91.0	92.2	92.1	0.70	0.79	0.82	74.4	740	90.0	92.2	92.4	0.64	0.75	0.79	70.5
45	60	735	91.0	92.2	92.0	0.70	0.77	0.82	90.6	740	90.0	92.0	92.3	0.60	0.72	0.78	87.0
55	75	735	91.6	93.2	92.8	0.72	0.80	0.83	108	740	90.7	93.0	93.0	0.65	0.76	0.80	103
75	100	735	92.4	93.3	93.3	0.70	0.80	0.83	147	740	91.6	93.4	93.4	0.64	0.78	0.81	138
90	125	735	92.9	93.9	94.0	0.73	0.81	0.84	173	740	92.1	93.7	94.2	0.67	0.75	0.81	164
110	150	740	93.0	94.2	94.5	0.66	0.77	0.82	216	745	92.0	94.1	94.5	0.60	0.71	0.78	208
132	175	740	93.5	94.6	94.8	0.66	0.75	0.81	261	745	92.5	94.4	94.8	0.60	0.71	0.77	252
160	220	740	93.8	94.8	94.8	0.68	0.77	0.81	317	745	92.8	94.7	94.7	0.60	0.72	0.79	298
200	270	740	93.8	94.8	95.1	0.65	0.75	0.81	394	745	92.8	94.4	95.2	0.56	0.69	0.77	380
HIGH-OUTPUT DESIGN																	
7.5	10	720	84.5	86.0	85.3	0.54	0.66	0.74	18.1	730	82.5	85.5	85.5	0.48	0.60	0.70	17.4
37	50	730	89.5	91.5	91.0	0.72	0.82	0.86	71.8	735	88.5	91.5	91.5	0.64	0.76	0.82	68.6
55	75	735	91.6	93.2	92.8	0.72	0.80	0.83	108	740	90.7	93.0	93.0	0.65	0.76	0.80	103
110	150	735	93.0	94.1	94.8	0.66	0.75	0.80	220	740	92.0	94.1	94.8	0.56	0.71	0.77	210

¹⁾For Pad Mounted, please consider frame size 180L.

²⁾Frame size 132M/L is not available for Pad Mounted.
For Pad Mounted version frame sizes up to 250S/M.

Smoke Extraction Motors Cast Iron Frame - Two Speed - 200°C/2 hours Improved Efficiency EFF2 - Variable torque IV/II Pole - Dahlander Winding

Output		IEC Frame	Full load torque C _n (Nm)	Locked rotor current I _L /I _n	Locked rotor torque T _L /T _n	Break-down torque T _b /T _n	Inertia J kgm ²	Allowable locked rotor time Hot/Cold (s)	Weight (kg)	Sound dB (A)	Rated speed (rpm)	400 V						Full load current I _n (A)
												% of full load						
Efficiency η												Power Factor (Cos φ)						
kW	HP											50	75	100	50	75	100	
50Hz - 400V - IV/II pole (1500/3000 rpm) - Y / YY connection																		
0.20	0.27	80	1.35	4.5	2.0	2.5	0.00242	30/66	14	44	1400	64.0	68.0	68.5	0.48	0.61	0.70	0.60
0.80	1.08		2.69	6.0	2.5	3.2	0.00242	15		59	2820	70.0	72.0	73.0	0.66	0.77	0.83	1.91
0.25	0.33	80	1.67	3.8	2.2	2.5	0.00294	30/66	15	44	1390	66.0	70.0	70.5	0.48	0.60	0.68	0.75
1.1	1.5		3.75	6.0	2.5	2.8	0.00294	22		59	2810	74.0	75.0	75.0	0.71	0.83	0.88	2.41
0.37	0.5	90S	2.45	4.5	2.0	2.1	0.00476	18/40	20	47	1435	62.3	67.4	68.8	0.45	0.54	0.62	1.25
1.5	2		4.84	6.5	2.5	3.0	0.00476	33		68	2900	68.0	75.0	76.4	0.62	0.73	0.80	3.54
0.5	0.68	90L	3.36	3.5	1.8	2.2	0.00616	13/29	22	47	1420	67.0	70.0	71.0	0.47	0.58	0.66	1.54
2.2	3		7.41	6.0	2.2	2.6	0.00616	58		68	2845	75.0	77.8	78.9	0.71	0.80	0.87	4.63
0.65	0.88	100L	4.31	4.5	2.1	2.2	0.00765	22/48	30	51	1435	72.0	76.5	77.5	0.56	0.67	0.73	1.66
2.5	3.4		8.26	6.5	2.3	2.8	0.00765	118		67	2890	78.0	80.0	81.0	0.70	0.81	0.86	5.18
0.8	1.08	100L	5.30	4.6	2.1	2.2	0.00918	18/40	33	51	1430	75.0	77.0	77.5	0.57	0.68	0.75	1.99
3.1	4.2		10.2	7.2	2.3	2.8	0.00918	160		67	2890	80.0	81.5	82.0	0.73	0.83	0.88	6.20
1.1	1.5	112M	7.32	5.0	1.8	2.6	0.01741	22/48	43	55	1440	74.0	78.5	79.0	0.55	0.66	0.72	2.79
4.4	5.9		14.3	7.8	2.4	3.0	0.01741	242		64	2890	82.5	83.5	84.0	0.76	0.84	0.88	8.59
1.5	2	132S	9.62	5.6	2.0	2.4	0.0243	38/64	58	58	1460	77.0	81.5	83.0	0.50	0.62	0.71	3.67
6	8		19.2	8.3	2.5	3.0	0.0243	385		68	2930	83.5	85.0	85.0	0.73	0.84	0.89	11.4
2	2.7	132M	12.9	5.8	1.9	2.0	0.02804	38/64	67	58	1470	80.0	82.0	83.0	0.51	0.63	0.72	4.83
8	10.8		25.9	8.5	2.6	2.7	0.02804	6/13		68	2930	82.8	84.0	85.0	0.77	0.85	0.89	15.3
3	4	160M	19.1	6.0	2.0	2.4	0.05294	28/62	118	62	1470	80.0	83.0	84.0	0.50	0.63	0.71	7.26
12	16		38.1	8.5	2.5	2.9	0.05294	6/13		70	2950	83.0	85.0	86.0	0.71	0.81	0.87	23.1
4	5.5	160L	26.3	6.0	2.2	2.4	0.06766	30/66	135	62	1470	83.5	84.5	85.0	0.50	0.63	0.71	9.57
16	21.7		51.7	8.6	2.6	3.0	0.06766	6/13		70	2950	85.0	86.5	87.0	0.73	0.82	0.87	30.5
5.5	7.5	180M ¹⁾	36.0	4.7	1.6	2.7	0.11352	40/88	160	64	1465	84.5	87.0	87.0	0.54	0.65	0.72	12.7
20	27.2		64.7	9.2	2.7	3.5	0.11352	6/13		70	2955	87.5	89.5	90.0	0.76	0.84	0.89	36.0
6.3	8.6	180L	41.2	4.7	1.6	2.4	0.21527	35/77	180	64	1465	86.5	88.0	88.5	0.54	0.65	0.72	14.3
25	34		81.0	8.9	2.7	3.4	0.21527	6/13		70	2950	90.0	90.7	91.0	0.76	0.85	0.89	44.6
8.5	11.5	200L	55.0	4.2	2.0	2.0	0.22426	50/110	242	67	1470	88.5	89.5	90.0	0.58	0.69	0.74	18.4
33	44.8		106	8.2	3.2	2.8	0.22426	10/22		74	2960	89.5	91.0	91.2	0.80	0.87	0.89	58.7

Notes:

*Class "F" insulation with ΔT105K

Standard voltage, connection and frequency: 220-240V Δ 50Hz

380-415V Y 50Hz

380-415V Δ 50Hz

660-690V Y 50Hz

The values shown are subject to change without prior notice. To obtain guaranteed values please access our website.

¹⁾For Pad Mounted, please consider frame size 180L.

²⁾Frame size 132M/L is not available for Pad Mounted.

For Pad Mounted version frame sizes up to 250S/M.

Smoke Extraction Motors Cast Iron Frame - Two Speed - 200°C/2 hours Improved Efficiency EFF2 - Variable torque VIII/VI Pole - Dahlander Winding

Output		IEC Frame	Full load torque C _n (Nm)	Locked rotor current I _L /I _n	Locked rotor torque T _L /T _n	Break-down torque T _B /T _n	Inertia J kgm ²	Allowable locked rotor time Hot/Cold (s)	Weight (kg)	Sound dB (A)	Rated speed (rpm)	400 V						Full load current I _n (A)
												% of full load						
												Efficiency η			Power Factor (Cos φ)			
kW	HP											50	75	100	50	75	100	
50Hz - 400V - VIII/IV pole (750/1500 rpm) - Y / YY connection																		
0.15	0.2	80	1.98	3.1	2.3	2.5	0.00294	20/44	15	42	710	31.0	39.0	46.0	0.47	0.54	0.62	0.76
0.6	0.8		3.90	5.5	2.2	2.7		6/13		51	1440	57.0	65.0	68.5	0.51	0.64	0.72	1.76
0.2	0.27	80	2.75	2.7	1.7	2.0	0.00294	18/40	15	42	690	37.0	45.0	49.5	0.50	0.60	0.66	0.88
0.8	1.08		5.36	4.7	1.7	2.1		6/13		51	1415	64.0	69.0	70.0	0.59	0.73	0.83	1.99
0.3	0.4	90S	3.99	3.1	2.2	2.2	0.00560	28/62	20	43	705	46.0	54.0	57.0	0.42	0.50	0.59	1.29
1.2	1.6		7.86	5.5	2.3	2.7		6/13		53	1430	72.0	75.0	76.0	0.55	0.69	0.78	2.92
0.4	0.55	90L	5.52	3.2	2.2	2.3	0.00672	17/37	23	43	700	49.0	56.0	59.0	0.40	0.50	0.58	1.69
1.6	2.17		10.7	5.7	2.3	2.6		6/13		54	1420	73.0	76.0	77.0	0.57	0.70	0.79	3.80
0.55	0.75	100L	7.53	3.5	2.3	2.5	0.01345	20/44	30	50	700	55.0	63.0	65.0	0.40	0.52	0.61	2.00
2.2	3		14.7	6.9	2.5	2.8		6/13		55	1430	77.0	79.0	80.0	0.62	0.75	0.82	4.84
0.7	0.95	100L	9.67	3.6	2.2	2.4	0.01457	20/44	33	50	690	58.0	64.5	66.5	0.42	0.53	0.63	2.41
2.8	3.8		18.9	6.0	2.4	2.6		6/13		55	1410	77.5	80.0	80.0	0.64	0.77	0.84	6.01
1	1.4	112M	13.9	4.0	2.0	2.1	0.02617	18/40	43	46	710	70.0	73.0	74.0	0.50	0.64	0.71	2.75
3.8	5.2		25.4	7.0	2.6	2.8		6/13		57	1440	76.0	78.5	80.0	0.62	0.76	0.83	8.26
1.3	1.77	132S	17.0	6.2	2.1	2.8	0.07527	20/44	68	48	730	72.0	75.0	76.5	0.48	0.61	0.70	3.50
5	6.8		33.2	8.5	2.7	2.8		6/13		62	1440	77.0	79.0	80.0	0.71	0.82	0.87	10.4
1.8	2.45	132M/L ²⁾	23.7	6.2	2.1	2.5	0.09535	21/46	80	48	725	76.0	79.0	80.0	0.50	0.63	0.70	4.64
7.2	9.8		48.1	8.5	2.7	2.7		6/13		62	1430	79.0	81.0	82.0	0.71	0.82	0.88	14.4
3	4	160M	38.8	4.3	1.7	2.1	0.14364	30/66	119	51	725	81.0	82.0	82.5	0.54	0.67	0.75	7.00
11	15		72.4	7.0	2.4	2.7		6/13		64	1455	84.0	85.5	86.0	0.71	0.83	0.88	21.0
3.5	4.8	160L	46.5	4.2	1.9	2.2	0.18673	30/66	135	51	725	81.0	83.0	83.0	0.51	0.64	0.72	8.45
14	19		91.7	7.2	2.6	2.9		6/13		64	1455	84.0	86.0	86.5	0.71	0.83	0.88	26.5
4.3	5.8	180M ¹⁾	55.8	4.0	1.7	2.0	0.19734	20/44	162	51	730	80.0	83.0	84.2	0.39	0.50	0.58	12.7
17	23		110	8.0	2.4	2.8		7/15		69	1475	88.6	89.5	89.5	0.62	0.75	0.82	33.4
5	6.8	180L	65.4	5.1	2.0	2.0	0.33095	20/44	177	51	730	79.0	82.7	82.7	0.40	0.54	0.62	14.1
20	27		129	8.8	2.5	2.6		7/15		69	1470	85.0	88.0	89.0	0.65	0.77	0.84	38.6
6.5	8.8	200L	84.1	3.6	1.9	2.0	0.38609	20/44	235	53	735	83.5	86.5	87.0	0.43	0.54	0.60	18.0
28	38		180	7.4	2.6	2.8		8/18		70	1480	90.5	91.5	91.5	0.71	0.81	0.85	52.0
8	10.8	200L*	104	4.0	1.8	2.0	0.41370	20/44	255	53	730	82.5	86.0	87.0	0.41	0.53	0.61	21.8
35	47		225	7.8	2.4	2.8		6/13		70	1470	89.0	90.0	90.5	0.66	0.78	0.83	67.3
9.2	12.5	225S/M	119	5.5	2.8	3.1	0.75686	18/40	360	56	740	81.0	85.0	87.0	0.43	0.53	0.60	25.4
37	50		237	9.5	3.1	4.2		6/13		70	1485	86.5	89.0	90.0	0.62	0.74	0.80	74.2
11	15	225S/M	142	5.0	2.2	2.2	1.12963	20/44	425	56	740	83.0	86.0	87.0	0.47	0.58	0.67	27.2
44	59.7		283	8.0	2.4	3.0		8/18		74	1480	89.0	90.5	91.0	0.73	0.83	0.87	80.2
14.7	19.9	225S/M	190	4.6	1.8	2.0	1.55324	18/40	450	56	735	86.0	87.5	88.0	0.45	0.58	0.66	36.5
55	75		356	9.0	2.6	3.0		6/13		74	1480	89.0	90.5	91.0	0.71	0.82	0.87	100
17	23	280S/M	218	4.2	1.5	1.6	3.33245	20/44	650	59	740	83.2	86.4	88.6	0.47	0.57	0.63	44.0
68	92.3		437	8.0	2.5	2.5		10/22		74	1485	85.1	89.0	90.0	0.76	0.83	0.86	127
20	27	280S/M	256	4.2	1.6	1.6	3.67719	20/44	690	59	740	83.9	87.3	89.0	0.46	0.57	0.61	53.2
80	109		516	8.6	2.7	2.8		10/22		78	1485	86.5	89.0	90.3	0.76	0.81	0.84	152
27	37	315S/M	351	4.0	1.7	1.7	4.82631	20/44	890	62	740	81.9	86.8	88.5	0.40	0.50	0.56	78.6
110	150		709	8.5	2.6	2.7		10/22		78	1485	88.0	90.2	91.3	0.69	0.72	0.82	212
33	44.8	315S/M	425	4.0	1.7	1.8	5.40087	20/44	990	62	740	83.5	87.8	89.4	0.40	0.51	0.58	91.9
130	177		837	8.4	2.6	2.7		10/22		78	1485	87.3	90.0	91.3	0.65	0.76	0.82	251
40	55	315S/M	522	4.0	1.6	1.6	5.40087	20/44	1000	62	740	89.2	91.0	91.3	0.43	0.59	0.59	107
160	217		1026	8.0	2.3	2.5		10/22		78	1485	91.3	92.8	93.9	0.74	0.84	0.84	293

Smoke Extraction Motors Cast Iron Frame - Two Speed - 200°C/2 hours Improved Efficiency EFF2 - Variable torque VI/IV Pole - Independent Winding

Output		IEC Frame	Full load torque C _n (Nm)	Locked rotor current I _L /I _n	Locked rotor torque T _L /T _n	Break-down torque T _B /T _n	Inertia J kgm ²	Allowable locked rotor time Hot/Cold (s)	Weight (kg)	Sound dB (A)	Rated speed (rpm)	400 V						Full load current I _n (A)
												% of full load						
												Efficiency η			Power Factor (Cos φ)			
kW	HP											50	75	100	50	75	100	
50Hz - 400V - VI/IV pole (1000/1500 rpm) - Y / Y connection																		
0.2	0.27	80	1.96	3.7	1.9	2.7	0.0033	9/20	11	48	970	31.0	40.0	46.0	0.44	0.52	0.60	1.05
0.55	0.75		3.63	5.0	1.9	2.7		6/13		54	1450	52.0	60.0	65.7	0.48	0.61	0.69	1.75
0.25	0.33	80	2.39	3.9	2.5	3.4	0.0035	7/15	12	48	970	33.0	41.5	48.0	0.42	0.50	0.57	1.32
0.75	1		4.91	4.7	1.4	2.1		6/13		54	1430	62.0	67.0	68.0	0.59	0.72	0.82	1.94
0.3	0.4	90S	2.90	5.1	2.6	3.2	0.00560	9/20	16	45	970	38.0	48.0	53.0	0.39	0.46	0.54	1.51
1.1	1.5		7.32	5.4	2.0	2.6		6/13		57	1440	65.0	71.0	72.5	0.51	0.65	0.75	2.92
0.37	0.5	90L	3.62	4.5	2.1	2.6	0.0067	8/18	20	45	970	40.0	50.0	55.0	0.43	0.50	0.60	1.62
1.5	2		9.76	5.5	1.9	2.4		6/13		57	1440	70.0	74.0	75.0	0.55	0.69	0.79	3.65
0.6	0.82	100L	5.94	5.0	2.2	3.1	0.0135	9/20	25	44	970	51.0	59.0	63.0	0.41	0.50	0.59	2.33
1.7	2.3		11.1	6.5	2.1	2.7		6/13		59	1450	68.0	73.0	75.0	0.52	0.65	0.74	4.42
0.7	0.95	100L	6.88	5.5	2.8	3.5	0.01000	10/22	27	44	970	57.0	64.0	68.0	0.40	0.50	0.60	2.48
2.2	3		14.7	6.0	1.7	2.2		6/13		59	1430	76.0	77.0	77.0	0.64	0.77	0.84	4.91
1	1.36	112M	9.70	6.2	3.0	3.5	0.0262	7/15	36	48	985	54.0	63.0	68.0	0.37	0.46	0.55	3.86
3	4		19.2	7.6	2.6	3.0		6/13		61	1460	76.0	80.0	81.0	0.58	0.70	0.78	6.85
1.5	2	132S	14.2	7.0	3.0	3.8	0.0507	8/18	68	52	990	64.0	71.0	76.0	0.35	0.45	0.53	5.38
4.5	6		28.8	7.5	2.8	3.1		8/18		65	1465	76.0	80.0	82.0	0.58	0.70	0.78	10.2
2.2	3	132M	21.3	7.4	2.8	3.2	0.0624	7/15	79	52	990	72.0	78.0	80.0	0.37	0.48	0.57	6.96
6	8.1		38.8	7.8	2.5	3.1		6/13		65	1465	75.0	80.0	82.0	0.57	0.70	0.78	13.7
2.5	3.4	160M	24.4	7.0	2.5	3.6	0.1149	12/26	96	56	980	74.5	79.0	81.0	0.49	0.64	0.74	6.02
5.5	7.5		35.7	7.5	2.0	3.3		6/13		68	1475	75.5	80.0	81.5	0.60	0.74	0.83	11.7
3.3	4.5	160M	32.4	4.0	2.0	2.3	0.10610	18/40	120	56	975	75.5	78.5	79.0	0.48	0.61	0.69	8.74
10	13.6		64.8	7.0	3.0	3.2		7/15		68	1475	83.0	86.0	87.0	0.56	0.69	0.76	22.0
3.5	4.8	160M	34.4	6.6	2.3	3.2	0.1436	9/20	118	56	980	77.0	81.0	82.0	0.53	0.68	0.78	7.90
7.5	10		47.6	8.0	2.2	3.5		6/13		68	1475	78.0	82.0	83.5	0.60	0.75	0.83	15.6
4.5	6	160L	43.2	4.5	1.9	2.0	0.1313	8/18	135	56	975	77.0	79.0	79.0	0.56	0.68	0.75	11.0
14	19		90.8	7.0	3.0	3.0		8/18		68	1470	84.5	87.0	88.0	0.66	0.77	0.82	28.0
5	6.8	180M ¹⁾	48.5	8.0	2.2	2.7	0.2758	6/13	163	56	985	85.0	86.0	86.0	0.73	0.83	0.87	9.65
11	15		71.7	10.0	2.6	3.3		5/11		71	1470	86.5	88.0	88.5	0.85	0.90	0.92	19.5
6.5	8.8	180M ¹⁾	63.1	7.6	2.1	2.9	0.3331	5/11	195	56	980	85.5	86.0	86.3	0.73	0.83	0.87	12.5
16	21.7		104	8.5	2.4	2.9		5/11		71	1465	88.0	88.5	88.5	0.89	0.91	0.92	28.4
8.5	11.5	180L	82.0	8.7	2.5	3.5	0.3792	5/11	230	56	985	86.5	87.5	87.5	0.68	0.80	0.86	16.3
20	27.2		130	9.0	2.4	3.3		5/11		71	1465	88.5	89.0	89.0	0.86	0.91	0.93	34.9
9	12.2	200L	86.6	8.1	3.0	3.2	0.50550	7/15	280	58	990	84.5	87.5	88.5	0.58	0.70	0.79	18.6
26	35.5		168	7.5	2.5	3.1		13/29		74	1480	88.5	90.5	90.5	0.74	0.83	0.87	47.7
12	16	225S/M	114	8.3	3.5	3.5	0.7748	9/20	379	61	990	82.0	85.5	87.0	0.50	0.62	0.71	28.0
34	46.2		219	8.5	2.5	3.2		6/13		76	1485	87.0	89.0	89.0	0.72	0.82	0.87	63.4
14	19	225S/M	135	8.0	3.2	3.3	0.8452	5/11	433	61	990	81.5	85.5	87.0	0.48	0.61	0.71	32.7
40	55		260	9.0	2.9	3.5		5/11		76	1485	88.5	90.5	91.0	0.71	0.81	0.87	72.9
18	24.4	225S/M	173	8.1	3.3	3.6	1.1622	9/20	520	61	990	86.0	88.0	89.0	0.51	0.65	0.73	40.0
50	68		322	8.6	2.6	3.4		5/11		76	1485	90.0	91.5	92.0	0.73	0.83	0.87	90.2
25	34	280S/M	241	8.0	3.6	3.2	2.5859	11/24	685	66	990	84.0	87.5	89.0	0.50	0.61	0.69	58.8
70	95		449	7.5	2.3	2.8		20/44		81	1485	90.5	92.0	93.0	0.78	0.85	0.87	125
28	38	280S/M	270	7.1	3.1	2.7	2.8284	24/53	748	66	990	86.0	89.0	90.5	0.55	0.66	0.73	61.2
80	109		514	9.0	2.7	3.4		12/26		81	1490	89.0	91.5	92.6	0.71	0.80	0.85	147
34	46	315S/M	325	8.8	3.7	3.4	3.3941	8/18	898	69	995	85.0	88.0	90.0	0.49	0.61	0.69	79.0
95	129		610	8.1	2.9	2.9		15/33		81	1485	91.0	92.7	93.5	0.79	0.85	0.88	167
40	54.3	315S/M	385	7.0	3.3	3.3	3.79810	15/33	1005	69	990	88.5	90.5	91.5	0.50	0.62	0.70	90.1
115	156		735	9.0	3.0	3.8		11/24		81	1490	91.4	93.2	93.9	0.62	0.73	0.80	221
45	60	315S/M	426	6.5	2.7	2.5	3.79810	8/18	1005	69	990	90.0	91.0	91.5	0.60	0.71	0.77	92.2
125	170		801	9.0	2.9	3.5		13/29		81	1490	93.0	94.0	94.5	0.70	0.80	0.83	230
55	75	315S/M	532	7.2	3.2	2.9	3.79810	5/11	1005	69	990	90.0	91.0	91.6	0.56	0.68	0.75	116
145	197		932	8.0	2.5	3.0		9/20		81	1485	93.5	94.5	94.5	0.73	0.83	0.84	264

Notes:

*Class "F" insulation with ΔT105K

Standard voltage, connection and frequency: 220-240V Δ 50Hz

380-415V Y 50Hz

380-415V Δ 50Hz

660-690V Y 50Hz

The values shown are subject to change without prior notice. To obtain guaranteed values please access our website.

Smoke Extraction Motors Cast Iron Frame - Two Speed - 200°C/2 hours Improved Efficiency EFF2 - Variable torque IV/II Pole - Dahlander Winding

Output		IEC Frame	Full load torque C _n (Nm)	Locked rotor current I _f /I _n	Locked rotor torque T _f /T _n	Break- down torque T _b /T _n	Inertia J kgm ²	Allowable locked rotor time Hot/Cold (s)	Weight (kg)	Sound dB (A)	Rated speed (rpm)	400 V						Full load current I _n (A)
												% of full load						
Efficiency η												Power Factor (Cos φ)						
kW	HP	50	75	100	50	75	100											
50Hz - 400V - IV/II pole (1500/3000 rpm) - D / YY connection																		
0.48	0.65	80	3.31	4.0	2.3	2.3	0.00079	20/44	14	44	1380	61.0	67.0	68.1	0.50	0.62	0.72	1.41
0.60	0.82		2.04	6.1	2.5	2.8		12/26		59	2830	69.0	72.0	73.0	0.72	0.82	0.87	1.36
0.70	0.95	80	4.91	4.0	2.2	2.2	0.00096	18/40	15	44	1360	65.0	68.0	68.4	0.50	0.62	0.71	2.08
0.85	1.15		2.86	6.2	2.5	2.8		10/22		59	2820	72.0	75.5	76.5	0.73	0.82	0.88	1.82
1.1	1.5	90S	7.53	5.0	2.1	2.2	0.00504	7/15	20	47	1400	71.0	73.5	74.0	0.66	0.78	0.84	2.55
1.4	1.9		4.85	6.0	2.2	2.2		6/13		68	2750	68.0	72.0	73.0	0.70	0.81	0.90	3.08
1.5	2	90L	9.96	5.2	2.3	2.4	0.00616	8/18	22	47	1410	73.0	75.3	76.0	0.61	0.76	0.83	3.43
1.9	2.6		6.50	5.5	2.3	2.5		6/13		68	2810	68.0	72.0	72.5	0.74	0.84	0.90	4.20
2	2.7	100L	13.5	6.0	2.4	2.4	0.00918	12/26	34	51	1410	72.4	75.5	76.2	0.62	0.74	0.83	4.56
2.4	3.3		8.08	6.7	2.4	2.5		8/18		67	2870	72.0	74.0	76.0	0.75	0.85	0.89	5.12
2.6	3.5	100L	17.4	5.5	2.4	2.5	0.00918	8/18	34	51	1410	74.0	77.3	78.0	0.62	0.74	0.83	5.80
3.1	4.2		10.3	6.8	2.5	2.8		6/13		67	2870	74.0	77.0	77.5	0.67	0.80	0.87	6.64
3.7	5	112M	24.6	6.0	2.3	2.3	0.01607	8/18	45	55	1430	79.5	80.0	80.0	0.68	0.80	0.86	7.76
4.4	5.9		14.4	7.3	2.4	2.7		6/13		64	2885	79.0	80.0	80.5	0.77	0.86	0.91	8.67
4.9	6.6	132S	32.0	6.5	1.7	2.0	0.04264	8/18	62	58	1450	82.0	83.0	83.0	0.78	0.86	0.89	9.57
5.9	7.9		19.2	6.5	2.0	2.3		6/13		68	2890	77.5	78.5	79.0	0.82	0.89	0.92	11.7
6.8	9.2	132M	44.6	6.4	1.6	2.0	0.05427	7/15	68	58	1450	83.0	84.0	84.0	0.75	0.84	0.88	13.3
8	10.9		26.3	6.5	2.0	2.3		6/13		68	2910	79.0	81.0	82.0	0.75	0.87	0.91	15.5
9.5	12.9	160M	62.5	5.0	2.0	2.1	0.09535	20/44	110	62	1450	83.5	84.2	85.0	0.77	0.84	0.86	18.8
11	15		35.8	8.0	2.8	2.8		10/22		70	2940	80.0	82.1	83.0	0.78	0.86	0.87	22.0
12	16.3	160L*	79.0	5.0	1.9	2.0	0.11542	20/44	126	62	1450	83.9	85.5	86.0	0.78	0.85	0.87	23.1
15	20		48.3	7.0	2.1	2.6		8/18		70	2910	82.5	85.0	85.4	0.85	0.90	0.92	27.6
15	20	180M ¹⁾	96.2	6.3	2.2	2.3	0.19733	17/37	170	64	1460	86.5	87.7	88.0	0.72	0.81	0.86	28.6
18	24.5		58.3	7.5	2.3	2.8		10/22		70	2950	86.5	87.5	88.0	0.84	0.89	0.92	32.1
18	24.5	180L	117	6.7	2.2	2.4	0.22424	15/33	190	64	1465	87.5	88.7	89.0	0.71	0.81	0.85	34.3
21.5	29.2		69.5	8.5	2.5	2.9		9/20		70	2950	86.5	88.0	88.7	0.79	0.87	0.90	38.9
26	35	200L	167	6.2	2.0	2.2	0.35853	22/48	250	67	1475	89.0	90.0	90.5	0.69	0.79	0.84	49.4
33	45		107	8.0	2.2	2.5		8/18		74	2950	85.5	88.0	88.8	0.83	0.89	0.91	58.9
32	43.5	225S/M	206	8.1	2.6	3.3	0.69987	11/24	350	70	1480	89.0	90.1	90.6	0.76	0.83	0.88	57.9
38	52		123	8.7	2.6	3.3		8/18		78	2960	84.6	87.3	88.5	0.83	0.87	0.89	69.6
38	52	225S/M	247	7.8	2.3	2.6	0.76985	12/26	380	70	1480	89.0	90.4	91.0	0.75	0.83	0.88	68.5
45	60		142	8.3	2.5	2.8		7/15		78	2960	85.0	87.9	89.0	0.77	0.84	0.87	83.9
46	63	250S/M	301	8.0	2.3	2.6	0.97981	7/15	440	70	1470	89.2	90.8	91.4	0.76	0.83	0.88	82.5
55	75		179	8.6	2.2	2.8		6/13		78	2940	85.5	88.4	89.5	0.82	0.87	0.90	98.6

¹⁾For Pad Mounted, please consider frame size 180L.

²⁾Frame size 132M/L is not available for Pad Mounted.
For Pad Mounted version frame sizes up to 250S/M.

Smoke Extraction Motors Cast Iron Frame - Two Speed - 200°C/2 hours Improved Efficiency EFF2 - Variable torque VIII/IV Pole - Dahlander Winding

Output		IEC Frame	Full load torque C _n (Nm)	Locked rotor current I _L /I _n	Locked rotor torque T _L /T _n	Break-down torque T _b /T _n	Inertia J kgm ²	Allowable locked rotor time Hot/Cold (s)	Weight (kg)	Sound dB (A)	Rated speed (rpm)	400 V						Full load current I _n (A)
												% of full load						
kW	HP											Efficiency η			Power Factor (Cos φ)			
50Hz - 400V - VIII/IV pole (750/1500 rpm) - Δ / YY connection																		
0.27	0.37	80	3.79	2.5	1.8	1.8	0.00294	10/22	15	42	685	35.0	41.0	48.0	0.46	0.55	0.64	1.27
0.4	0.55		2.72	4.2	1.6	1.8		9/20		51	1420	65.0	68.0	69.1	0.60	0.71	0.81	1.03
0.4	0.54	90S	5.42	3.2	2.0	2.0	0.00504	13/29	19	43	700	40.0	50.0	53.0	0.42	0.52	0.60	1.82
0.7	0.95		4.77	5.0	1.8	2.0		8/18		53	1400	71.5	73.0	73.0	0.68	0.80	0.86	1.61
0.52	0.71	90L	7.12	3.3	2.0	2.0	0.00672	8/18	23	43	700	45.0	53.0	57.0	0.42	0.53	0.63	2.09
0.9	1.22		6.16	5.2	1.8	2.0		7/15		54	1390	73.5	75.0	75.0	0.70	0.81	0.86	2.01
0.7	0.95	100L	9.40	4.2	1.9	2.2	0.01121	13/29	29	50	710	60.0	66.0	68.0	0.42	0.53	0.64	2.32
1.1	1.5		7.32	5.8	2.0	2.4		6/13		55	1440	71.0	75.0	75.0	0.61	0.74	0.82	2.58
1.1	1.5	100L	15.1	4.2	1.9	2.3	0.01289	12/26	31	50	700	62.0	67.0	68.5	0.44	0.56	0.66	3.51
1.8	2.45		12.0	5.5	2.1	2.4		6/13		55	1430	70.0	75.0	75.0	0.64	0.75	0.82	4.22
1.5	2	112M	19.5	5.0	2.5	2.5	0.02617	8/18	45	46	720	66.0	71.0	75.0	0.43	0.53	0.64	4.51
2.5	3.4		16.6	7.0	2.5	2.7		6/13		57	1440	78.0	80.0	80.5	0.72	0.82	0.88	5.09
1.9	2.58	132S	25.2	6.3	2.6	2.6	0.07527	7/15	68	48	720	70.0	74.5	76.0	0.44	0.57	0.67	5.39
3.7	5		24.6	7.0	2.4	2.4		6/13		62	1430	79.2	80.1	82.0	0.78	0.87	0.90	7.24
3.3	4.5	132M/L ²⁾	43.9	6.3	2.6	2.8	0.09535	10/22	80	48	720	74.0	77.0	78.0	0.47	0.60	0.70	8.72
5.5	7.5		36.8	7.5	2.7	2.7		6/13		62	1430	79.6	80.6	82.5	0.78	0.87	0.90	10.7
3.7	5	160M	48.1	5.4	2.3	2.8	0.12927	10/22	119	51	730	72.5	77.5	79.5	0.43	0.55	0.65	10.3
7	9.5		46.0	6.5	2.2	2.6		6/13		64	1450	83.5	84.2	84.5	0.79	0.87	0.90	13.3
5.5	7.5	160M	73.2	5.0	2.1	2.4	0.14364	15/33	119	51	720	74.0	77.5	79.6	0.48	0.60	0.70	14.2
8.8	12		58.1	6.5	2.1	2.4		7/15		64	1450	83.2	84.3	84.5	0.79	0.86	0.88	17.1
7	9.5	160L	92.0	5.0	2.3	2.4	0.16518	12/26	127	51	725	75.0	79.5	80.5	0.46	0.58	0.68	18.5
11	15		72.4	6.5	2.2	2.6		6/13		64	1455	84.0	85.0	85.0	0.77	0.86	0.89	21.0
11	15	180L	144	7.3	2.3	2.5	0.30337	6/13	177	51	730	82.0	82.6	84.0	0.50	0.63	0.70	27.0
18	24.5		118	8.5	2.2	2.4		6/13		69	1460	85.8	86.3	87.0	0.81	0.88	0.90	33.2
17	23	200L	220	4.5	2.0	2.2	0.50227	26/57	255	53	735	84.5	86.5	87.2	0.54	0.67	0.74	38.0
27	37		177	6.0	2.0	2.4		10/22		67	1465	88.0	89.0	89.5	0.85	0.89	0.91	47.8
22	30	225S/M	289	7.5	2.0	2.3	1.22377	9/20	360	56	730	86.5	87.5	88.0	0.65	0.76	0.82	44.0
32	43.5		209	8.5	2.0	2.5		6/13		70	1465	87.5	88.5	89.0	0.89	0.93	0.94	55.2
26	35	225S/M	339	7.5	2.0	2.3	1.36497	7/15	425	56	725	86.2	87.3	88.0	0.67	0.78	0.82	52.0
37	50		242	8.8	2.0	2.3		6/13		70	1450	87.2	88.1	88.7	0.85	0.89	0.91	66.2
33	45	250S/M	433	7.2	1.9	2.2	1.55324	6/13	450	56	730	87.0	88.3	89.0	0.67	0.78	0.82	65.3
47	64		308	9.0	2.2	2.4		6/13		70	1460	87.5	88.4	90.0	0.86	0.90	0.92	81.9
38	52	280S/M	494	5.0	1.8	2.2	3.33245	25/55	650	59	740	87.8	89.5	90.5	0.53	0.63	0.69	87.8
56	76		359	7.0	1.8	2.2		12/26		77	1485	89.5	90.5	91.0	0.83	0.86	0.88	101
46	63	280S/M	602	4.5	1.7	2.0	2.5692	30/66	690	59	735	89.0	90.0	90.2	0.53	0.63	0.70	105
67	91		430	7.0	2.0	2.2		15/33		77	1485	90.5	91.4	91.8	0.84	0.88	0.89	118
56	76	315S/M	726	4.5	1.8	2.0	3.21158	30/66	890	62	735	89.5	90.5	91.0	0.53	0.64	0.70	127
83	113		536	7.0	2.0	2.2		15/33		77	1480	90.5	91.5	92.0	0.84	0.88	0.90	145
78	106	315S/M	1006	7.0	1.8	2.2	5.28596	10/22	990	62	740	88.6	90.6	91.1	0.65	0.76	0.80	154
115	156		738	8.4	2.0	2.3		6/13		77	1485	88.0	90.0	91.2	0.88	0.90	0.92	198

Notes:

*Class "F" insulation with ΔT105K

Standard voltage, connection and frequency: 220-240V Δ 50Hz

380-415V Y 50Hz

380-415V Δ 50Hz

660-690V Y 50Hz

The values shown are subject to change without prior notice. To obtain guaranteed values please access our website.

Smoke Extraction Motors Cast Iron Frame - Two Speed - 200°C/2 hours Improved Efficiency EFF2 - Variable torque VIII/IV Pole - Dahlander Winding

Output		IEC Frame	Full load torque C _n (Nm)	Locked rotor current I _f /I _n	Locked rotor torque T _f /T _n	Break- down torque T _b /T _n	Inertia J kgm ²	Allowable locked rotor time Hot/Cold (s)	Weight (kg)	Sound dB (A)	Rated speed (rpm)	400 V						Full load current I _n (A)
												% of full load						
Efficiency η												Power Factor (Cos φ)						
50	75											100	50	75	100			
kW	HP																	
50Hz - 400V - V/IV pole (1000/1500 rpm) - Y/Y connection																		
0.22	0.3	80	2.19	4.0	2.3	2.8	0.00346	11/24	12	48	960	37.0	46.0	52.0	0.41	0.50	0.56	1.09
0.32	0.43		2.07	5.2	2.1	2.6		6/13		54	1460	48.0	55.0	61.0	0.40	0.51	0.59	1.28
0.26	0.36	80	2.63	3.5	2.1	2.7	0.00346	12/26	12	48	960	37.0	46.0	52.0	0.43	0.52	0.60	1.20
0.4	0.54		2.60	5.0	1.8	2.9		8/18		54	1460	50.0	58.0	62.0	0.49	0.60	0.69	1.35
0.38	0.52	90S	3.77	6.2	2.4	3.3	0.00560	6/13	16	45	970	48.0	58.0	63.7	0.40	0.50	0.59	1.46
0.65	0.88		4.23	6.4	2.0	2.9		5/11		57	1460	61.5	68.0	72.3	0.52	0.64	0.74	1.75
0.55	0.75	90L	5.49	4.0	2.2	2.9	0.00672	12/26	20	45	960	52.0	60.0	65.0	0.41	0.52	0.61	2.00
0.9	1.22		5.95	5.6	2.0	2.8		5/11		57	1440	67.0	72.0	73.0	0.54	0.67	0.77	2.31
0.9	1.22	100L	9.07	4.7	2.2	2.4	0.01121	9/20	21	44	945	59.0	65.0	67.7	0.51	0.62	0.71	2.70
1.3	1.77		8.63	5.8	1.8	2.4		8/18		59	1440	69.5	72.0	72.4	0.61	0.72	0.81	3.20
1.1	1.5	100L	11.2	4.5	2.1	2.3	0.00925	9/20	25	44	940	65.0	69.0	69.2	0.48	0.61	0.74	3.10
1.7	2.3		11.2	6.0	2.0	2.7		5/11		59	1440	73.5	76.5	76.7	0.56	0.70	0.80	4.00
1.5	2	112M	14.5	5.8	2.6	3.0	0.01889	10/22	36	48	970	70.0	74.0	77.0	0.51	0.62	0.69	4.08
2.3	3.1		14.9	6.6	1.8	2.6		5/11		61	1460	73.0	76.0	78.0	0.63	0.75	0.81	5.25
2	2.7	132S	19.3	6.2	2.8	3.2	0.05072	9/20	68	52	985	63.0	70.0	73.0	0.45	0.57	0.66	5.99
3.1	4.2		20.2	7.8	2.2	2.9		12/26		65	1460	82.0	84.0	84.2	0.64	0.75	0.83	6.40
2.8	3.8	132M	27.1	7.9	2.5	2.9	0.06242	9/20	79	52	985	77.0	81.0	82.0	0.48	0.60	0.69	7.14
4.3	5.8		27.8	7.2	2.2	2.5		8/18		65	1465	80.0	81.0	82.0	0.70	0.80	0.85	8.90
4.3	5.8	160M	41.8	5.5	2.0	2.6	0.11565	8/18	96	56	975	79.0	80.0	81.0	0.59	0.74	0.82	9.34
6.6	8.97		42.7	6.9	2.0	3.0		5/11		68	1475	76.0	80.0	82.0	0.60	0.75	0.84	13.8
5.7	7.7	160L	55.5	5.7	2.0	2.6	0.14456	7/15	127	56	975	80.5	81.5	82.6	0.60	0.75	0.83	12.0
8.7	11.8		56.4	6.0	1.9	3.0		6/13		68	1470	79.2	82.5	83.4	0.67	0.80	0.87	17.3
9.5	12.9	180M ¹⁾	92.5	8.4	2.5	2.9	0.30532	5/11	179	56	980	86.0	86.5	87.0	0.78	0.86	0.87	18.1
14	19		90.8	8.6	2.1	3.0		5/11		71	1470	86.5	87.0	87.2	0.88	0.91	0.92	25.2
11	15	180L	108	6.5	2.0	2.2	0.33308	5/11	200	56	975	84.0	85.0	85.5	0.80	0.86	0.88	21.1
16.5	22.4		107	9.6	2.4	2.9		5/11		71	1470	86.5	87.5	88.0	0.85	0.90	0.93	29.1
16	21.7	200L	155	7.0	2.7	2.8	0.46939	8/18	280	58	985	88.0	89.5	90.0	0.64	0.75	0.81	31.7
24	32.6		155	7.0	2.3	2.6		10/22		74	1475	88.5	90.0	90.0	0.80	0.87	0.89	43.2
21	28.5	225S/M	202	7.0	2.8	3.0	0.77479	7/15	379	61	990	84.0	87.0	88.3	0.55	0.68	0.78	44.0
31	42		198	7.7	2.5	3.3		7/15		76	1490	85.0	87.5	88.5	0.70	0.80	0.86	58.8
25	34	225S/M	241	7.0	2.9	3.2	0.91566	7/15	469	61	990	85.0	87.0	88.0	0.52	0.66	0.74	55.4
37	50		237	8.1	2.4	3.2		7/15		76	1480	90.5	91.0	91.5	0.76	0.85	0.88	66.3
32	43.5	250S/M	309	6.8	2.7	3.4	1.16219	6/13	520	61	990	86.3	88.0	89.0	0.57	0.69	0.77	67.4
47	64		303	8.6	2.6	3.4		7/15		76	1485	90.0	91.5	92.0	0.76	0.85	0.88	83.8
45	60	280S/M	424	7.1	2.9	2.4	2.58594	11/24	685	66	995	87.0	89.0	90.0	0.60	0.70	0.75	96.2
66	90		426	8.5	2.5	3.0		11/24		81	1485	89.0	91.0	92.0	0.72	0.82	0.86	120
54	73	280S/M	518	7.1	3.0	2.5	3.07081	14/31	810	66	990	87.5	90.0	91.0	0.60	0.70	0.75	114
80	109		516	8.4	2.6	3.1		10/22		81	1485	89.5	91.5	92.5	0.75	0.83	0.86	145
62	84	315S/M	596	7.7	3.0	3.3	3.39405	11/24	898	69	990	85.0	88.5	90.0	0.56	0.67	0.72	138
92	126		596	8.5	2.8	2.9		9/20		81	1485	88.0	90.5	91.5	0.80	0.86	0.87	169
75	100	315S/M*	709	7.0	2.9	2.8	3.79811	5/11	1005	69	990	86.0	89.0	90.0	0.60	0.69	0.75	160
110	150		712	6.6	2.2	2.4		5/11		81	1480	89.0	91.0	92.0	0.81	0.86	0.88	196

¹⁾For Pad Mounted, please consider frame size 180L.

²⁾Frame size 132M/L is not available for Pad Mounted.
For Pad Mounted version frame sizes up to 250S/M.



Smoke Extraction Motors Cast Iron Frame - Single Speed - 300°C/1 hour Improved Efficiency EFF2

Output		IEC Frame	Full load torque C _n (Nm)	Locked rotor current I _L /I _n	Locked rotor torque T _L /T _n	Break- down torque T _b /T _n	Inertia J kgm ²	Allowable locked rotor time Hot/Cold (s)	Weight (kg)	Sound dB (A)	Rated speed (rpm)	400 V						Full load current I _n (A)
												% of full load						
												Efficiency η			Power Factor (Cos ϕ)			
												50	75	100	50	75	100	
II Pole - 3000 rpm																		
0.75	1	80	2.52	5.8	2.9	3.1	0.00079	25/55	14	59	2790	76.0	80.0	79.5	0.76	0.84	0.87	1.57
1.1	1.5	80	3.75	6.0	3.0	2.9	0.00090	13/29	15	59	2810	77.1	80.2	79.7	0.69	0.80	0.86	2.32
1.5	2	90S	4.89	6.8	2.8	3.0	0.00205	14/31	20	68	2870	81.4	83.7	83.6	0.71	0.81	0.86	3.01
2.2	3	90L	7.42	6.6	2.8	3.0	0.00242	9/20	22	68	2840	82.2	83.7	83.4	0.69	0.80	0.85	4.48
3	4	100L	9.76	7.2	2.6	2.8	0.00616	9/20	31	67	2880	83.2	85.7	85.6	0.77	0.85	0.88	5.75
4	5.5	112M	13.4	7.6	2.7	3.1	0.00842	15/33	42	64	2890	85.0	87.5	87.5	0.76	0.84	0.88	7.50
5.5	7.5	132S	18.0	8.0	2.7	3.2	0.02056	18/40	61	68	2935	84.0	87.1	88.3	0.73	0.82	0.87	10.3
7.5	10	132S	24.0	7.3	2.5	2.9	0.02430	10/22	67	68	2925	86.5	88.9	89.2	0.77	0.86	0.89	13.6
11	15	160M	35.8	8.3	2.6	3.1	0.04706	12/26	104	70	2945	87.8	90.1	90.3	0.77	0.85	0.88	20.0
15	20	160M	47.7	7.8	2.5	3.2	0.05295	10/22	111	70	2945	89.6	91.1	91.2	0.76	0.84	0.88	27.0
18.5	25	160L	59.6	8.2	2.6	3.3	0.06471	10/22	126	70	2945	90.4	91.9	91.7	0.77	0.85	0.88	33.1
22	30	180M ¹⁾	71.4	8.2	2.8	3.1	0.11351	13/29	172	70	2950	90.5	92.1	92.1	0.78	0.86	0.89	38.7
30	40	200L	94.8	7.5	2.8	2.8	0.20630	19/42	239	74	2965	90.0	92.0	92.7	0.77	0.85	0.88	53.1
37	50	200L	118	7.6	2.9	2.9	0.22424	19/42	253	74	2965	91.3	92.8	93.0	0.75	0.84	0.88	65.3
HIGH-OUTPUT DESIGN																		
1.5	2	80	5.07	6.0	3.0	2.7	0.00096	10/22	16	59	2770	77.0	78.5	77.7	0.70	0.82	0.87	3.20
2.2	3	90S	7.39	7.0	3.0	3.2	0.00230	8/18	21	68	2850	81.5	83.0	83.1	0.64	0.77	0.84	4.55
3	4	90L*	9.93	6.2	3.2	3.1	0.00266	6/13	24	68	2830	81.0	82.0	82.0	0.55	0.68	0.78	6.77
4	5.5	100L	13.5	7.5	2.9	3.1	0.00672	7/15	33	67	2870	81.0	82.3	82.5	0.72	0.81	0.86	8.14
5.5	7.5	112M	18.4	7.7	2.5	3.0	0.00995	10/22	45	64	2870	86.5	87.5	87.5	0.80	0.87	0.90	10.1
7.5	10	112M*	24.8	7.1	2.7	3.0	0.00995	8/18	45	64	2830	86.0	87.0	87.0	0.73	0.83	0.88	14.1
11	15	132M	36.0	7.2	2.4	3.2	0.03178	13/29	79	68	2925	90.0	90.6	90.2	0.76	0.84	0.88	20.0
22	30	160L*	71.9	7.5	2.5	3.0	0.06766	6/13	132	70	2930	90.0	90.6	90.7	0.72	0.82	0.86	40.7
30	40	180L*	95.4	8.7	2.5	3.1	0.13622	9/20	197	70	2945	92.0	92.7	92.7	0.74	0.83	0.87	53.7
IV Pole - 1500 rpm																		
0.55	0.75	80	3.68	6.0	2.6	2.8	0.00242	17/37	14	44	1430	69.0	73.0	75.0	0.56	0.69	0.78	1.36
0.75	1	80	4.96	5.5	2.4	2.6	0.00294	14/31	15	44	1415	73.5	76.2	76.2	0.62	0.74	0.83	1.71
1.1	1.5	90S	7.32	6.5	3.0	3.0	0.00504	13/29	21	47	1440	76.0	80.0	80.6	0.57	0.69	0.78	2.53
1.5	2	90L	9.89	6.2	2.7	2.7	0.00672	12/26	24	47	1420	80.3	82.0	81.7	0.64	0.77	0.83	3.19
2.2	3	100L	14.8	6.7	2.7	2.9	0.00842	14/31	30	51	1420	81.0	82.3	83.0	0.65	0.78	0.83	4.61
3	4	100L	19.9	6.5	2.7	2.7	0.00995	10/22	33	51	1410	83.6	85.0	84.7	0.68	0.79	0.86	5.94
4	5.5	112M	27.0	7.5	2.7	2.8	0.01875	12/26	47	55	1430	86.0	87.4	87.1	0.70	0.81	0.87	7.62
5.5	7.5	132S	36.0	8.0	2.4	3.0	0.04652	11/24	61	58	1465	85.4	87.7	88.5	0.68	0.79	0.85	10.6
7.5	10	132M	48.0	8.0	2.5	2.8	0.05427	8/18	69	58	1465	86.4	88.4	88.6	0.70	0.80	0.86	14.2
11	15	160M	72.4	6.0	2.2	2.5	0.08029	16/35	106	62	1455	87.6	89.4	89.9	0.70	0.79	0.84	21.0
15	20	160L	96.6	6.0	2.2	2.4	0.10037	13/29	121	62	1455	89.0	90.4	90.6	0.71	0.80	0.84	28.4
18.5	25	180M ¹⁾	119	7.0	2.7	2.8	0.17939	18/40	174	64	1470	89.8	91.5	92.1	0.68	0.79	0.84	34.5
22	30	180L	143	7.5	2.8	2.8	0.19733	14/31	185	64	1470	91.0	92.2	92.4	0.67	0.78	0.83	41.4
30	40	200L	190	6.5	2.2	2.5	0.33095	17/37	248	67	1475	91.8	93.0	93.0	0.75	0.82	0.85	54.8
37	50	225S/M	237	7.2	2.3	2.7	0.62988	20/44	347	70	1480	91.2	92.2	92.8	0.76	0.85	0.88	65.4
45	60	225S/M	286	7.0	2.3	2.7	0.76985	16/35	379	70	1475	91.0	92.9	93.5	0.76	0.85	0.88	78.9
55	75	250S/M	357	7.5	2.3	2.6	0.97981	16/35	446	70	1475	92.7	93.1	93.4	0.80	0.87	0.90	94.4
75	100	280S/M	473	6.7	2.1	2.4	2.32858	44/97	720	74	1485	92.4	93.8	94.3	0.83	0.88	0.90	128
90	125	280S/M	591	7.1	2.4	2.5	2.56947	31/68	756	74	1485	92.3	93.9	94.2	0.82	0.87	0.89	155
110	150	315S/M	709	7.1	2.3	2.6	2.81036	27/59	857	77	1485	92.8	94.4	94.4	0.78	0.85	0.88	191
132	175	315S/M	828	7.3	2.5	2.6	3.77391	31/68	1007	77	1485	93.3	94.7	95.1	0.78	0.85	0.88	228
160	220	315S/M	1044	7.0	2.4	2.7	3.77391	22/48	994	77	1480	93.3	95.1	95.5	0.78	0.85	0.87	278
200	270	355M/L	1273	6.6	2.3	2.2	7.45663	44/97	1525	79	1490	94.0	95.0	95.2	0.82	0.86	0.88	345
250	340	355M/L	1603	6.9	2.2	2.5	8.38871	36/79	1651	79	1490	94.3	95.2	95.8	0.80	0.86	0.88	428
315	430	355M/L	2027	6.7	2.2	2.4	10.2529	42/92	1835	79	1490	94.8	95.9	96.2	0.79	0.86	0.89	531
330	450	355M/L	2121	6.5	2.3	2.3	11.1850	32/70	1865	79	1490	95.0	96.0	96.2	0.83	0.88	0.90	550
HIGH-OUTPUT DESIGN																		
1.1	1.5	80	7.61	5.0	2.3	2.3	0.00328	10/22	15	44	1385	65.0	68.5	69.0	0.55	0.70	0.81	2.84
1.5	2	90S	10.0	5.8	2.6	2.6	0.00504	8/18	21	47	1405	73.0	75.0	76.2	0.62	0.76	0.82	3.46
2.2	3	90L*	14.9	5.8	2.7	2.5	0.00672	8/18	24	47	1410	75.0	76.5	76.5	0.57	0.71	0.80	5.19
5.5	7.5	112M*	36.3	6.5	2.5	2.6	0.01875	8/18	47	55	1450	84.0	85.7	85.7	0.54	0.66	0.75	12.4
7.5	10	132S	48.0	8.0	2.5	2.8	0.05427	8/18	63	58	1465	86.4	88.4	88.6	0.70	0.80	0.86	14.2
15	20	160M	96.6	6.0	2.2	2.4	0.10037	13/29	119	62	1455	89.0	90.4	90.6	0.71	0.80	0.84	28.4
18.5	25	160L*	121	6.0	2.4	2.4	0.11542	12/26	128	62	1455	88.5	90.0	90.0	0.64	0.76	0.82	36.2
37	50	200L	239	7.0	2.3	2.5	0.38611	14/31	269	67	1470	91.5	92.5	92.3	0.73	0.82	0.86	67.3
55	75	225S/M	357	7.5	2.3	2.6	0.97981	16/35	423	70	1475	92.7	93.1	93.4	0.80	0.87	0.90	94.4
75	100	250S/M	475	7.2	2.4	2.6	1.15478	12/26	488	70	1480	92.5	93.6	93.7	0.77	0.85	0.87	133
110	150	280S/M	709	7.1	2.3	2.6	2.81036	27/59	793	77	1485	92.8	94.4	94.4	0.78	0.85	0.88	191
132	175	280S/M	828	7.5	2.3	2.6	3.37243	13/29	940	74	1485	93.0	94.0	94.6	0.78	0.85	0.88	229
200	270	315S/M*	1281	6.7	2.3	2.6	3.77391	17/37	1011	77	1480	94.2	94.8	95.4	0.74	0.82	0.85	356

Notes:

*Class "F" insulation with $\Delta T105K$ Standard voltage, connection and frequency: 220-240V Δ 50Hz

Smoke Extraction Motors Cast Iron Frame - Single Speed - 300°C/1 hour Improved Efficiency EFF2

Output		380 V								415 V							
		Rated speed (rpm)	% of full load						Full load current I _n (A)	Rated speed (rpm)	% of full load						Full load current I _n (A)
			Efficiency η			Power Factor (Cos φ)					Efficiency η			Power Factor (Cos φ)			
kW	HP		50	75	100	50	75	100			50	75	100	50	75	100	
II Pole - 3000 rpm																	
0.75	1	2770	76.5	79.7	78.5	0.79	0.86	0.89	1.63	2810	75.5	80.1	80.0	0.73	0.82	0.86	1.52
1.1	1.5	2790	78.2	80.4	79.3	0.74	0.84	0.88	2.39	2825	76.0	79.8	79.8	0.64	0.76	0.84	2.28
1.5	2	2855	81.8	83.8	83.0	0.75	0.84	0.88	3.12	2880	80.0	83.7	83.8	0.67	0.78	0.84	2.96
2.2	3	2820	82.8	83.6	83.3	0.75	0.84	0.87	4.61	2850	81.5	83.6	84.3	0.64	0.76	0.83	4.37
3	4	2870	83.5	85.6	85.1	0.80	0.86	0.89	6.02	2890	82.8	85.6	85.6	0.74	0.84	0.87	5.60
4	5.5	2880	85.5	87.5	87.2	0.80	0.86	0.89	7.83	2900	84.5	87.4	88.2	0.72	0.82	0.87	7.25
5.5	7.5	2930	84.5	87.5	88.2	0.77	0.85	0.89	10.6	2940	83.5	86.8	88.2	0.69	0.80	0.85	10.2
7.5	10	2915	87.0	89.0	88.8	0.81	0.87	0.90	14.3	2930	86.0	88.8	89.3	0.73	0.83	0.87	13.4
11	15	2940	88.3	90.1	90.2	0.80	0.86	0.89	20.8	2950	87.3	90.0	90.4	0.74	0.83	0.87	19.5
15	20	2935	90.1	91.2	91.0	0.81	0.87	0.89	28.1	2950	89.1	91.0	91.2	0.72	0.81	0.87	26.3
18.5	25	2940	90.7	92.0	91.5	0.81	0.87	0.89	34.5	2950	90.1	91.8	92.0	0.73	0.83	0.86	32.5
22	30	2945	91.0	92.1	92.0	0.82	0.88	0.90	40.4	2955	90.0	92.0	92.1	0.75	0.84	0.87	38.2
30	40	2960	90.5	92.1	92.6	0.80	0.87	0.89	55.3	2970	89.5	91.8	92.7	0.73	0.83	0.87	51.8
37	50	2960	91.7	93.0	93.0	0.80	0.87	0.89	67.9	2965	90.8	92.6	93.0	0.70	0.81	0.86	64.4
HIGH-OUTPUT DESIGN																	
1.5	2	2750	78.0	78.5	76.5	0.75	0.85	0.89	3.35	2790	76.0	78.5	78.5	0.65	0.78	0.85	3.13
2.2	3	2830	82.3	83.3	83.0	0.71	0.82	0.87	4.63	2860	80.2	82.5	83.1	0.58	0.72	0.80	4.60
3	4	2800	82.0	82.5	81.5	0.61	0.74	0.81	6.90	2845	80.0	81.5	81.5	0.50	0.64	0.74	6.92
4	5.5	2850	81.5	82.5	82.0	0.77	0.84	0.88	8.42	2890	80.3	82.0	82.5	0.68	0.78	0.84	8.03
5.5	7.5	2860	87.0	87.5	87.2	0.83	0.89	0.91	10.5	2880	86.0	87.5	87.7	0.77	0.85	0.89	9.80
7.5	10	2815	86.5	87.0	86.5	0.79	0.87	0.90	14.6	2840	85.5	87.0	87.0	0.68	0.80	0.86	13.9
11	15	2920	89.5	90.8	90.2	0.80	0.87	0.90	20.6	2930	89.3	90.5	90.2	0.72	0.82	0.86	19.7
22	30	2925	90.5	90.7	90.5	0.77	0.85	0.88	42.0	2935	89.5	90.5	90.7	0.68	0.79	0.84	40.2
30	40	2940	92.0	92.3	92.3	0.78	0.84	0.88	56.1	2950	92.0	92.7	92.7	0.71	0.80	0.85	53.0
IV POLE - 1500 RPM																	
0.55	0.75	1420	70.0	73.5	75.0	0.61	0.73	0.81	1.38	1440	67.0	72.5	74.6	0.53	0.66	0.75	1.37
0.75	1	1400	75.0	76.5	76.0	0.66	0.78	0.85	1.76	1430	72.0	76.0	76.2	0.59	0.71	0.81	1.69
1.1	1.5	1420	77.5	80.5	80.5	0.63	0.74	0.81	2.56	1445	74.5	79.0	80.3	0.53	0.64	0.74	2.58
1.5	2	1410	81.2	82.2	81.0	0.68	0.80	0.85	3.31	1430	79.3	81.5	81.8	0.61	0.74	0.81	3.15
2.2	3	1410	81.5	82.0	81.7	0.69	0.81	0.85	4.81	1430	80.5	82.3	83.0	0.61	0.75	0.81	4.55
3	4	1400	84.0	84.9	84.2	0.72	0.82	0.87	6.22	1420	83.2	85.1	84.9	0.65	0.77	0.84	5.85
4	5.5	1420	86.5	87.5	86.7	0.74	0.84	0.89	7.88	1440	85.2	87.2	86.7	0.67	0.78	0.84	7.64
5.5	7.5	1460	86.7	88.3	88.3	0.73	0.82	0.87	10.9	1470	84.2	87.0	88.4	0.64	0.75	0.83	10.4
7.5	10	1465	87.0	88.6	88.4	0.75	0.84	0.88	14.6	1470	85.6	88.0	88.6	0.65	0.77	0.83	14.2
11	15	1450	88.3	89.6	89.2	0.74	0.82	0.85	22.0	1460	86.8	89.0	89.8	0.65	0.76	0.82	20.8
15	20	1450	89.5	90.5	90.1	0.75	0.83	0.86	29.4	1460	88.4	90.3	90.6	0.67	0.78	0.83	27.8
18.5	25	1465	90.3	91.7	91.7	0.72	0.81	0.85	36.1	1470	89.3	91.3	92.1	0.65	0.76	0.82	34.1
22	30	1465	91.5	92.4	92.3	0.72	0.81	0.85	42.6	1475	90.5	92.0	92.5	0.63	0.75	0.81	40.8
30	40	1470	92.2	93.0	92.6	0.78	0.84	0.86	57.2	1480	91.5	93.0	93.2	0.72	0.80	0.84	53.3
37	50	1475	91.6	92.4	92.5	0.79	0.86	0.89	68.3	1480	90.8	92.1	92.9	0.72	0.83	0.87	63.7
45	60	1475	91.3	92.8	93.5	0.80	0.87	0.89	82.2	1480	91.0	92.9	93.5	0.72	0.83	0.87	77.0
55	75	1475	92.8	93.5	93.4	0.83	0.88	0.91	98.3	1480	92.5	93.4	93.6	0.77	0.85	0.89	91.9
75	100	1480	92.8	93.9	94.2	0.85	0.89	0.90	134	1485	92.2	93.8	94.3	0.81	0.87	0.89	124
90	125	1480	92.6	94.1	94.2	0.84	0.88	0.90	161	1485	92.0	93.9	94.2	0.80	0.86	0.89	149
110	150	1480	92.8	93.6	94.2	0.80	0.86	0.88	202	1485	92.8	94.4	94.5	0.76	0.83	0.87	186
132	175	1480	93.5	94.9	95.1	0.81	0.86	0.89	237	1485	93.3	94.7	95.1	0.76	0.84	0.87	222
160	220	1480	93.0	95.0	95.4	0.81	0.86	0.88	290	1485	94.2	95.1	95.5	0.77	0.84	0.87	268
200	270	1485	94.2	95.0	95.1	0.84	0.87	0.89	359	1490	93.8	94.9	95.1	0.80	0.85	0.87	336
250	340	1485	94.5	95.2	95.7	0.82	0.87	0.89	446	1490	94.1	95.0	95.7	0.77	0.85	0.87	418
315	430	1485	95.0	95.8	96.1	0.83	0.87	0.89	560	1490	94.5	95.8	96.2	0.76	0.84	0.88	518
330	450	1485	95.2	96.0	96.1	0.85	0.89	0.90	580	1490	94.8	95.8	96.2	0.81	0.87	0.89	536
HIGH-OUTPUT DESIGN																	
1.1	1.5	1370	68.0	69.0	69.5	0.61	0.76	0.86	2.80	1400	60.0	66.0	67.0	0.50	0.65	0.76	3.01
1.5	2	1385	72.0	74.0	75.0	0.68	0.80	0.85	3.57	1410	73.0	74.5	75.5	0.58	0.72	0.80	3.45
2.2	3	1390	76.0	77.0	76.0	0.65	0.75	0.83	5.30	1420	73.0	76.0	76.5	0.53	0.66	0.76	5.26
5.5	7.5	1445	85.0	86.0	85.7	0.60	0.72	0.79	12.3	1455	82.0	85.7	85.7	0.49	0.62	0.71	12.6
7.5	10	1465	87.0	88.6	88.4	0.75	0.84	0.88	14.6	1470	85.6	88.0	88.6	0.65	0.77	0.83	14.2
15	20	1450	89.5	90.5	90.1	0.75	0.83	0.86	29.4	1460	88.4	90.3	90.6	0.67	0.78	0.83	27.8
18.5	25	1450	89.0	90.0	89.4	0.70	0.80	0.84	37.4	1460	88.0	90.0	90.0	0.60	0.73	0.80	35.7
37	50	1465	92.0	92.5	92.0	0.77	0.84	0.87	70.2	1475	91.0	92.5	92.5	0.69	0.80	0.85	65.5
55	75	1475	92.8	93.5	93.4	0.83	0.88	0.91	98.3	1480	92.5	93.4	93.6	0.77	0.85	0.89	91.9
75	100	1475	92.6	93.4	93.5	0.80	0.86	0.88	138	1480	92.6	93.7	93.6	0.74	0.84	0.87	128
110	150	1480	92.8	93.6	94.2	0.80	0.86	0.88	202	1485	92.8	94.4	94.5	0.76	0.83	0.87	186
132	175	1480	92.5	93.5	93.5	0.81	0.86	0.89	241	1485	92.2	94.7	94.7	0.76	0.84	0.87	223
200	270	1480	94.5	95.0	95.4	0.78	0.84	0.86	370	1485	93.8	94.6	95.4	0.70	0.80	0.84	347

¹⁾For Pad Mounted, please consider frame size 180L.

²⁾Frame size 132M/L is not available for Pad Mounted.
For Pad Mounted version frame sizes up to 250S/M.



Smoke Extraction Motors Cast Iron Frame - Single Speed - 300°C/1 hour Improved Efficiency EFF2

Output			IEC Frame	Full load torque C _n (Nm)	Locked rotor current I _L /I _n	Locked rotor torque T _L /T _n	Break-down torque T _b /T _n	Inertia J kgm ²	Allowable locked rotor time Hot/Cold (s)	Weight (kg)	Sound dB (A)	Rated speed (rpm)	400 V						Full load current I _n (A)
													% of full load						
Efficiency η													Power Factor (Cos φ)						
																50	75	100	
kW	HP																		
VI Pole - 1000 rpm																			
0.25	0.33	80	2.44	4.6	2.5	2.9	0.00225	19/42	14	43	950	52.0	60.0	64.0	0.44	0.55	0.65	0.867	
0.37	0.5	80	3.78	4.5	2.5	2.5	0.00242	12/26	14	43	930	54.0	62.5	65.0	0.45	0.57	0.67	1.23	
0.55	0.75	80	5.66	4.5	2.3	2.3	0.00311	10/22	15	43	930	60.0	65.0	67.0	0.50	0.63	0.73	1.62	
0.75	1	90S	7.63	4.8	2.1	2.1	0.00504	16/35	20	45	920	70.0	72.6	72.4	0.54	0.67	0.76	1.97	
1.1	1.5	90L	11.4	4.8	2.3	2.2	0.00672	14/31	24	45	925	71.0	75.2	75.2	0.50	0.64	0.75	2.82	
1.5	2	100L	14.9	4.8	2.2	2.5	0.01121	18/40	27	44	940	74.0	77.3	77.5	0.53	0.66	0.74	3.78	
2.2	3	112M	22.4	5.0	2.2	2.3	0.01682	14/31	38	48	940	77.5	80.5	80.1	0.53	0.66	0.74	5.36	
3	4	132S	29.3	5.3	2.0	2.2	0.03489	20/44	52	52	960	80.0	82.7	82.5	0.58	0.70	0.77	6.82	
4	5.5	132M	40.2	6.0	2.1	2.3	0.05039	18/40	66	52	960	83.6	85.5	85.8	0.59	0.70	0.77	8.74	
5.5	7.5	132M	54.9	6.4	2.2	2.4	0.06202	14/31	73	52	960	84.0	85.8	85.8	0.56	0.68	0.76	12.2	
7.5	10	160M	72.4	6.1	2.3	2.6	0.12209	17/37	105	56	970	87.0	88.2	88.0	0.62	0.74	0.81	15.2	
11	15	160L	109	6.6	2.4	2.9	0.17595	13/29	130	56	970	87.2	88.3	88.3	0.62	0.75	0.82	21.9	
15	20	180L	146	7.5	2.5	2.6	0.30337	11/24	182	56	965	89.1	90.1	89.8	0.82	0.88	0.91	26.5	
18.5	25	200L	180	6.0	2.3	2.5	0.37670	33/73	232	58	975	89.3	90.5	89.9	0.70	0.79	0.84	35.4	
22	30	200L	216	6.0	2.3	2.4	0.41258	33/73	241	58	975	89.0	90.9	91.3	0.70	0.79	0.84	41.4	
30	40	225S/M	285	7.2	2.6	2.7	0.98842	20/44	367	61	985	90.5	91.8	91.8	0.77	0.84	0.87	54.2	
37	50	250S/M	358	7.5	2.7	2.6	1.22377	18/40	429	61	980	90.0	92.4	92.5	0.76	0.84	0.87	66.4	
45	60	280S/M	428	6.8	2.4	2.6	2.29824	24/53	599	66	985	90.5	92.3	92.6	0.68	0.78	0.83	84.5	
55	75	280S/M	535	6.5	2.3	2.5	2.64298	23/51	637	66	985	91.6	93.2	93.5	0.71	0.82	0.85	100	
75	100	315S/M	713	6.7	2.3	2.5	3.44737	20/44	788	69	985	91.6	93.5	93.7	0.71	0.81	0.85	136	
90	125	315S/M	891	6.3	2.1	2.3	3.67719	18/40	813	69	985	92.5	94.0	93.9	0.73	0.81	0.85	163	
110	150	315S/M	1070	6.4	2.3	2.4	5.28596	18/40	988	69	985	93.4	94.5	94.6	0.71	0.80	0.84	200	
132	175	355M/L	1242	6.1	2.0	2.3	8.10159	90/198	1100	73	990	92.5	94.7	94.7	0.65	0.75	0.80	251	
200	270	355M/L	1916	6.3	2.1	2.3	12.3907	85/187	1754	73	990	93.5	94.5	94.8	0.70	0.78	0.81	376	
250	340	355M/L	2400	6.1	2.2	2.2	14.7735	64/141	1916	73	995	94.0	95.1	95.6	0.70	0.79	0.82	460	
315	430	355M/L*	3051	6.0	1.9	1.9	15.4883	38/84	1979	73	990	94.3	95.8	95.9	0.69	0.78	0.81	585	
HIGH-OUTPUT DESIGN																			
3	4	112M	29.3	6.3	2.6	2.6	0.02617	10/22	45	48	960	78.5	81.7	84.0	0.53	0.65	0.73	7.06	
4	5.5	132S	40.2	6.0	2.1	2.3	0.05039	18/40	62	52	960	83.6	85.5	85.8	0.59	0.70	0.77	8.74	
45	60	250S/M	430	8.0	2.8	2.8	1.55324	18/40	486	61	980	91.0	92.3	92.6	0.78	0.85	0.88	79.7	
75	100	280S/M	713	6.7	2.3	2.5	3.44737	20/44	726	69	985	91.6	93.5	93.7	0.71	0.81	0.85	136	
132	175	315S/M*	1248	6.3	2.1	2.2	5.28596	13/29	986	69	985	93.5	94.7	94.7	0.72	0.81	0.85	237	
VIII Pole - 750 rpm																			
0.18	0.25	80	2.51	3.1	1.9	2.1	0.00242	16/35	14	42	700	40.0	49.0	54.2	0.43	0.53	0.62	0.77	
0.25	0.33	80	3.41	3.0	1.8	1.8	0.00294	21/46	15	42	680	47.5	55.0	57.0	0.45	0.56	0.65	0.97	
0.37	0.5	90S	5.05	3.5	2.1	2.1	0.00448	29/64	19	43	695	51.0	59.0	61.0	0.43	0.53	0.64	1.37	
0.55	0.75	90L	7.63	3.5	2.1	2.1	0.00616	21/46	22	43	690	57.0	63.0	65.0	0.45	0.56	0.65	1.88	
0.75	1	100L	9.96	4.2	2.0	2.1	0.00952	30/66	26	50	705	65.0	70.0	71.0	0.42	0.54	0.63	2.42	
1.1	1.5	100L	15.1	4.1	1.7	2.1	0.01289	23/51	30	50	700	66.0	71.5	72.2	0.43	0.56	0.65	3.38	
1.5	2	112M	19.8	4.6	2.5	2.7	0.02430	32/70	44	46	710	76.5	77.8	78.0	0.48	0.60	0.69	4.02	
2.2	3	132S	29.5	6.2	2.4	2.7	0.07527	23/51	68	48	715	78.5	81.5	82.5	0.53	0.65	0.73	5.27	
3	4	132M	39.6	5.8	2.4	2.7	0.08531	22/48	75	48	710	78.0	82.7	83.5	0.52	0.64	0.72	7.20	
4	5.5	160M	52.9	5.2	2.2	2.7	0.12209	33/73	105	51	730	81.3	84.3	86.0	0.47	0.60	0.69	9.73	
5.5	7.5	160M	72.2	5.2	2.3	2.7	0.14364	23/51	114	51	730	81.5	84.1	85.2	0.46	0.59	0.69	13.5	
7.5	10	160L	96.9	4.9	2.0	2.5	0.16518	15/33	125	51	725	83.5	85.7	85.5	0.51	0.63	0.72	17.6	
11	15	180L	145	6.8	2.3	2.5	0.30337	12/26	173	51	725	87.0	88.5	88.3	0.70	0.79	0.84	21.4	
15	20	200L	192	4.6	2.0	2.1	0.37670	36/79	229	53	730	86.5	88.6	89.0	0.56	0.68	0.75	32.4	
18.5	25	225S/M	241	6.9	2.1	2.8	0.84722	17/37	339	56	730	88.5	90.1	90.0	0.72	0.80	0.85	34.9	
22	30	225S/M	289	7.5	2.2	2.7	0.98842	19/42	364	56	730	89.0	91.0	91.0	0.73	0.82	0.85	41.1	
30	40	250S/M	385	7.9	2.3	2.9	1.22377	17/37	425	56	730	89.5	91.2	91.6	0.70	0.79	0.84	56.3	
37	50	280S/M	475	6.5	1.9	2.3	2.29824	29/64	589	59	740	90.5	92.2	92.3	0.67	0.77	0.81	71.4	
45	60	280S/M	570	6.5	2.0	2.4	2.64298	26/57	631	59	740	90.5	92.1	92.3	0.65	0.75	0.80	88.0	
55	75	315S/M	712	6.5	1.9	2.2	3.10263	27/59	732	62	740	91.2	93.1	93.0	0.69	0.78	0.82	104	
75	100	315S/M	949	6.6	1.9	2.2	4.36666	20/44	872	62	740	92.0	93.4	93.5	0.67	0.79	0.82	141	
90	125	315S/M	1186	6.8	2.1	2.4	5.28596	23/51	1021	62	740	92.5	93.8	94.2	0.70	0.78	0.83	166	
110	150	355M/L	1424	6.4	1.5	2.2	11.9324	41/90	1390	70	740	92.5	94.1	94.5	0.63	0.74	0.80	210	
132	175	355M/L	1661	6.5	1.6	2.2	13.1885	47/103	1445	70	740	93.0	94.5	94.8	0.63	0.73	0.79	254	
160	220	355M/L	2088	6.6	1.6	2.2	16.3286	42/92	1620	70	740	93.3	94.7	94.7	0.64	0.75	0.80	305	
200	270	355M/L	2563	6.8	1.6	2.1	19.4687	37/81	1800	70	740	93.3	94.6	95.2	0.60	0.72	0.79	384	
HIGH-OUTPUT DESIGN																			
7.5	10	160M	96.9	4.9	2.0	2.5	0.16518	15/33	123	51	725	83.5	85.7	85.5	0.51	0.63	0.72	17.6	
37	50	250S/M	481	8.2	2.3	2.8	1.55324	13/29	479	56	730	89.0	91.5	91.5	0.68	0.78	0.84	69.5	
55	75	280S/M	712	6.5	1.9	2.2	3.10263	27/59	696	62	740	91.2	93.1	93.0	0.69	0.78	0.82	104	
110	150	315S/M*	1424	7.0	1.9	2.2	5.63070	14/31	970	62	740	92.5	94.1	94.9	0.61	0.73	0.79	212	

Notes:

*Class "F" insulation with ΔT105K

Standard voltage, connection and frequency: 220-240V Δ 50Hz

380-415V Y 50Hz

380-415V Δ 50Hz

660-690V Y 50Hz

The values shown are subject to change without prior notice. To obtain guaranteed values please access our website.

Smoke Extraction Motors Cast Iron Frame - Single Speed - 300°C/1 hour Improved Efficiency EFF2

Output		380 V								415 V							
		Rated speed (rpm)	% of full load						Full load current I _n (A)	Rated speed (rpm)	% of full load						Full load current I _n (A)
			Efficiency η			Power Factor (Cos φ)					Efficiency η			Power Factor (Cos φ)			
			50	75	100	50	75	100			50	75	100	50	75	100	
VI Pole - 1000 rpm																	
0.25	0.33	945	54.0	62.0	65.0	0.47	0.59	0.68	0.86	955	50.0	58.0	63.0	0.41	0.51	0.62	0.89
0.37	0.5	920	56.0	64.0	66.0	0.49	0.62	0.72	1.18	935	52.0	61.0	64.0	0.42	0.54	0.64	1.26
0.55	0.75	920	62.0	65.8	68.0	0.54	0.67	0.77	1.60	935	58.0	64.0	66.0	0.47	0.59	0.68	1.70
0.75	1	910	71.5	72.8	71.5	0.58	0.71	0.79	2.02	930	68.5	72.4	72.4	0.50	0.64	0.73	1.97
1.1	1.5	915	72.0	75.5	74.8	0.55	0.69	0.78	2.86	935	70.0	75.2	75.2	0.46	0.61	0.72	2.83
1.5	2	930	75.0	77.5	77.0	0.58	0.70	0.76	3.89	950	73.0	77.3	77.6	0.50	0.63	0.71	3.79
2.2	3	930	79.0	80.8	79.7	0.58	0.70	0.76	5.52	950	76.0	80.3	80.5	0.50	0.63	0.72	5.28
3	4	955	81.0	83.0	82.0	0.61	0.72	0.79	7.04	965	79.0	82.5	82.6	0.53	0.66	0.74	6.83
4	5.5	955	84.5	85.7	85.4	0.61	0.72	0.79	9.01	965	82.6	85.3	85.9	0.56	0.67	0.75	8.64
5.5	7.5	955	85.0	86.1	85.6	0.58	0.71	0.77	12.7	965	83.0	85.5	86.0	0.53	0.65	0.74	12.0
7.5	10	965	87.5	88.4	87.5	0.66	0.78	0.83	15.7	970	86.5	88.0	88.0	0.58	0.71	0.79	15.0
11	15	970	88.0	88.5	88.0	0.67	0.78	0.84	22.6	975	86.5	88.0	88.3	0.58	0.72	0.80	21.7
15	20	960	89.0	90.0	89.5	0.84	0.89	0.91	28.0	970	89.0	90.5	90.5	0.80	0.87	0.90	25.6
18.5	25	970	89.7	90.7	89.8	0.74	0.82	0.86	36.4	980	88.9	90.3	91.2	0.66	0.76	0.82	34.4
22	30	970	89.6	91.0	91.2	0.74	0.82	0.85	43.1	980	88.4	90.7	91.3	0.66	0.76	0.82	40.9
30	40	980	91.0	91.8	91.6	0.80	0.86	0.88	56.5	985	90.0	91.8	92.2	0.73	0.81	0.86	52.6
37	50	980	90.5	92.5	92.4	0.80	0.86	0.88	69.1	985	89.5	92.4	92.6	0.73	0.82	0.86	64.6
45	60	985	91.0	92.3	92.6	0.72	0.81	0.85	86.9	990	90.0	92.3	92.7	0.64	0.76	0.82	82.4
55	75	985	92.0	93.2	93.4	0.74	0.84	0.87	103	990	91.2	93.2	93.6	0.68	0.80	0.84	97.3
75	100	985	92.0	93.5	93.5	0.74	0.82	0.86	142	990	91.2	93.5	93.8	0.69	0.80	0.84	132
90	125	985	92.8	93.9	93.6	0.75	0.83	0.86	170	990	92.2	93.9	93.9	0.71	0.79	0.84	159
110	150	985	93.6	94.4	94.4	0.74	0.82	0.85	208	985	93.2	94.5	94.7	0.69	0.79	0.83	195
132	175	990	93.0	94.7	94.5	0.70	0.80	0.82	259	995	92.0	94.7	94.7	0.60	0.70	0.77	252
200	270	990	94.0	94.7	94.8	0.74	0.81	0.83	386	990	93.0	94.3	94.8	0.66	0.75	0.79	372
250	340	995	94.3	95.2	95.5	0.74	0.81	0.83	479	995	93.7	95.0	95.8	0.67	0.77	0.81	448
315	430	985	94.8	96.0	95.8	0.73	0.80	0.82	609	990	93.8	95.6	95.8	0.65	0.76	0.80	572
HIGH-OUTPUT DESIGN																	
3	4	955	80.0	82.0	83.9	0.59	0.70	0.76	7.15	965	76.5	81.4	84	0.48	0.6	0.69	7.20
4	5.5	955	84.5	85.7	85.4	0.61	0.72	0.79	9.01	965	82.6	85.3	85.9	0.56	0.67	0.75	8.64
45	60	980	91.5	92.3	92.5	0.82	0.87	0.89	83.0	985	90.5	92.3	92.7	0.75	0.83	0.87	77.6
75	100	985	92.0	93.5	93.5	0.74	0.82	0.86	142	990	91.2	93.5	93.8	0.69	0.8	0.84	132
132	175	980	93.7	94.5	94.4	0.75	0.83	0.86	247	985	93.3	94.7	94.7	0.70	0.80	0.84	231
VIII Pole - 750 rpm																	
0.18	0.25	690	43.0	52.0	54.5	0.45	0.56	0.65	0.77	710	37.0	46.0	53.0	0.41	0.50	0.59	0.80
0.25	0.33	670	50.5	56.5	56.5	0.48	0.59	0.69	0.97	690	45.0	53.5	56.5	0.42	0.53	0.61	1.01
0.37	0.5	685	54.0	61.0	62.0	0.46	0.56	0.67	1.35	700	48.0	57.0	60.0	0.40	0.50	0.60	1.43
0.55	0.75	680	59.0	64.5	65.5	0.48	0.59	0.69	1.85	700	55.0	61.5	64.5	0.41	0.52	0.61	1.94
0.75	1	695	67.0	71.0	70.5	0.46	0.58	0.66	2.45	710	63.0	69.0	70.5	0.38	0.50	0.60	2.47
1.1	1.5	690	68.0	72.0	72.0	0.47	0.60	0.68	3.41	710	64.0	70.5	72.2	0.40	0.52	0.62	3.42
1.5	2	700	77.5	78.0	77.7	0.52	0.63	0.70	4.19	715	74.5	77.0	78.1	0.46	0.58	0.66	4.05
2.2	3	710	79.5	81.8	82.1	0.56	0.68	0.75	5.43	720	77.5	81.2	82.6	0.50	0.62	0.71	5.22
3	4	705	79.5	83.0	83.0	0.54	0.66	0.74	7.42	715	76.5	82.4	83.5	0.50	0.62	0.70	7.14
4	5.5	725	82.6	84.8	85.9	0.51	0.64	0.72	9.83	730	80.0	83.7	86.0	0.44	0.57	0.66	9.80
5.5	7.5	725	82.5	84.7	85.2	0.50	0.63	0.72	13.6	730	80.5	83.5	85.0	0.42	0.55	0.66	13.6
7.5	10	720	84.5	86.0	85.3	0.54	0.66	0.74	18.1	730	82.5	85.5	85.5	0.48	0.60	0.70	17.4
11	15	720	87.5	88.3	87.8	0.74	0.81	0.85	22.4	730	86.5	88.6	88.5	0.66	0.77	0.83	20.8
15	20	725	87.5	88.9	88.9	0.61	0.72	0.77	33.3	730	85.5	88.3	88.9	0.50	0.64	0.72	32.6
18.5	25	730	88.8	90.0	89.8	0.75	0.83	0.86	36.4	735	88.2	90.3	90.2	0.68	0.78	0.84	34.0
22	30	730	89.4	90.9	90.5	0.76	0.84	0.86	42.9	735	88.6	91.0	91.2	0.71	0.80	0.84	40.0
30	40	730	90.0	91.3	91.3	0.73	0.81	0.85	58.7	735	89.0	91.1	91.8	0.66	0.77	0.83	54.8
37	50	735	91.0	92.2	92.1	0.70	0.79	0.82	74.4	740	90.0	92.2	92.4	0.64	0.75	0.79	70.5
45	60	735	91.0	92.2	92.0	0.70	0.77	0.82	90.6	740	90.0	92.0	92.3	0.60	0.72	0.78	87.0
55	75	735	91.6	93.2	92.8	0.72	0.80	0.83	108	740	90.7	93.0	93.0	0.65	0.76	0.80	103
75	100	735	92.4	93.3	93.3	0.70	0.80	0.83	147	740	91.6	93.4	93.4	0.64	0.78	0.81	138
90	125	735	92.9	93.9	94.0	0.73	0.81	0.84	173	740	92.1	93.7	94.2	0.67	0.75	0.81	164
110	150	740	93.0	94.2	94.5	0.66	0.77	0.82	216	745	92.0	94.1	94.5	0.60	0.71	0.78	208
132	175	740	93.5	94.6	94.8	0.66	0.75	0.81	261	745	92.5	94.4	94.8	0.60	0.71	0.77	252
160	220	740	93.8	94.8	94.8	0.68	0.77	0.81	317	745	92.8	94.7	94.7	0.60	0.72	0.79	298
200	270	740	93.8	94.8	95.1	0.65	0.75	0.81	394	745	92.8	94.4	95.2	0.56	0.69	0.77	380
HIGH-OUTPUT DESIGN																	
7.5	10	720	84.5	86.0	85.3	0.54	0.66	0.74	18.1	730	82.5	85.5	85.5	0.48	0.60	0.70	17.4
37	50	730	89.5	91.5	91.0	0.72	0.82	0.86	71.8	735	88.5	91.5	91.5	0.64	0.76	0.82	68.6
55	75	735	91.6	93.2	92.8	0.72	0.80	0.83	108	740	90.7	93.0	93.0	0.65	0.76	0.80	103
110	150	735	93.0	94.1	94.8	0.66	0.75	0.80	220	740	92.0	94.1	94.8	0.56	0.71	0.77	210

¹⁾For Pad Mounted, please consider frame size 180L.

²⁾Frame size 132M/L is not available for Pad Mounted.
For Pad Mounted version frame sizes up to 250S/M.

Smoke Extraction Motors Cast Iron Frame - Two Speed - 300°C/1 hour Improved Efficiency EFF2 - Variable torque IV/II Pole - Dahlander Winding

Output		IEC Frame	Full load torque C _n (Nm)	Locked rotor current I _L /I _n	Locked rotor torque T _L /T _n	Break-down torque T _B /T _n	Inertia J kgm ²	Allowable locked rotor time Hot/Cold (s)	Weight (kg)	Sound dB (A)	Rated speed (rpm)	400 V						Full load current I _n (A)
												% of full load						
												Efficiency η			Power Factor (Cos φ)			
kW	HP											50	75	100	50	75	100	
50Hz - 400V - IV/II pole (1500/3000 rpm) - Y / YY connection																		
0.2	0.27	80	1.35	4.5	2.0	2.5	0.00242	30/66	14	44	1400	64.0	68.0	68.5	0.48	0.61	0.70	0.60
0.8	1.08		2.69	6.0	2.5	3.2		8/18		59	2820	70.0	72.0	73.0	0.66	0.77	0.83	1.91
0.25	0.33	80	1.67	3.8	2.2	2.5	0.00294	30/66	15	44	1390	66.0	70.0	70.5	0.48	0.60	0.68	0.75
1.1	1.5		3.75	6.0	2.5	2.8		8/18		59	2810	74.0	75.0	75.0	0.71	0.83	0.88	2.41
0.37	0.5	90S	2.45	4.5	2.0	2.1	0.00476	18/40	20	47	1435	62.3	67.4	68.8	0.45	0.54	0.62	1.25
1.5	2		4.84	6.5	2.5	3.0		6/13		68	2900	68.0	75.0	76.4	0.62	0.73	0.80	3.54
0.5	0.68	90L	3.36	3.5	1.8	2.2	0.00616	13/29	22	47	1420	67.0	70.0	71.0	0.47	0.58	0.66	1.54
2.2	3		7.41	6.0	2.2	2.6		6/13		68	2845	75.0	77.8	78.9	0.71	0.80	0.87	4.63
0.65	0.88	100L	4.31	4.5	2.1	2.2	0.00765	22/48	30	51	1435	72.0	76.5	77.5	0.56	0.67	0.73	1.66
2.5	3.4		8.26	6.5	2.3	2.8		6/13		67	2890	78.0	80.0	81.0	0.70	0.81	0.86	5.18
0.8	1.08	100L	5.30	4.6	2.1	2.2	0.00918	18/40	33	51	1430	75.0	77.0	77.5	0.57	0.68	0.75	1.99
3.1	4.2		10.2	7.2	2.3	2.8		6/13		67	2890	80.0	81.5	82.0	0.73	0.83	0.88	6.20
1.1	1.5	112M	7.32	5.0	1.8	2.6	0.01741	22/48	43	55	1440	74.0	78.5	79.0	0.55	0.66	0.72	2.79
4.4	5.9		14.3	7.8	2.4	3.0		7/15		64	2890	82.5	83.5	84.0	0.76	0.84	0.88	8.59
1.5	2	132S	9.62	5.6	2.0	2.4	0.02430	38/84	58	58	1460	77.0	81.5	83.0	0.50	0.62	0.71	3.67
6	8		19.2	8.3	2.5	3.0		6/13		68	2930	83.5	85.0	85.0	0.73	0.84	0.89	11.4
2	2.7	132M	12.9	5.8	1.9	2.0	0.02804	38/84	67	58	1470	80.0	82.0	83.0	0.51	0.63	0.72	4.83
8	10.8		25.9	8.5	2.6	2.7		6/13		68	2930	82.8	84.0	85.0	0.77	0.85	0.89	15.3
3	4	160M	19.1	6.0	2.0	2.4	0.05294	28/62	118	62	1470	80.0	83.0	84.0	0.50	0.63	0.71	7.26
12	16		38.1	8.5	2.5	2.9		6/13		70	2950	83.0	85.0	86.0	0.71	0.81	0.87	23.1
4	5.5	160L	26.3	6.0	2.2	2.4	0.06766	30/66	135	62	1470	83.5	84.5	85.0	0.50	0.63	0.71	9.57
16	21.7		51.7	8.6	2.6	3.0		6/13		70	2950	85.0	86.5	87.0	0.73	0.82	0.87	30.5
5.5	7.5	180M ¹⁾	36.0	4.7	1.6	2.7	0.17939	40/88	160	64	1465	84.5	87.0	87.0	0.54	0.65	0.72	12.7
20	27.2		64.7	9.2	2.7	3.5		6/13		70	2955	87.5	89.5	90.0	0.76	0.84	0.89	36.0
6.3	8.6	180L	41.2	4.7	1.6	2.4	0.21527	35/77	180	64	1465	86.5	88.0	88.5	0.54	0.65	0.72	14.3
25	34		81.0	8.9	2.7	3.4		6/13		70	2950	90.0	90.7	91.0	0.76	0.85	0.89	44.6
8.5	11.5	200L	55.0	4.2	2.0	2.0	0.34474	50/110	242	67	1470	88.5	89.5	90.0	0.58	0.69	0.74	18.4
33	44.8		106	8.2	3.2	2.8		10/22		74	2960	89.5	91.0	91.2	0.80	0.87	0.89	58.7
9	12.2	225S/M	57.71	6.1	2.3	2.6	0.39467	28/62	366	70	1485	85.0	88.0	88.5	0.55	0.65	0.72	20.4
37	50		118.25	8.7	2.6	3.0		6/13		78	2970	88.5	90.0	90.5	0.81	0.87	0.90	65.6
12	16.3	225S/M	77.88	6.3	2.2	2.4	0.76985	23/51	385	70	1470	86.0	87.0	88.2	0.57	0.67	0.73	26.9
46	63		149.5	8.8	2.4	2.8		6/13		78	2960	85.0	88.0	90.6	0.76	0.84	0.90	81.4
15	20	250S/M	94.92	5.2	1.9	2.2	1.08479	32/70	450	70	1480	88.5	89.7	90.5	0.64	0.73	0.76	31.5
55	75		177.37	8.5	2.3	2.7		6/13		78	2970	89.8	90.8	91.0	0.85	0.89	0.91	95.9

Notes:

Standard voltage, connection and frequency: 220-240V Δ 50Hz

380-415V Y 50Hz

380-415V Δ 50Hz

660-690V Y 50Hz

The values shown are subject to change without prior notice. To obtain guaranteed values please access our website.

Smoke Extraction Motors Cast Iron Frame - Two Speed - 300°C/1 hour Improved Efficiency EFF2 - Variable torque VIII/IV Pole - Dahlander Winding

Output		IEC Frame	Full load torque C _n (Nm)	Locked rotor current I _L /I _n	Locked rotor torque T _L /T _n	Break- down torque T _B /T _n	Inertia J kgm ²	Allowable locked rotor time Hot/Cold (s)	Weight (kg)	Sound dB (A)	Rated speed (rpm)	400 V						Full load current I _n (A)
												% of full load						
												Efficiency η			Power Factor (Cos φ)			
kW	HP											50	75	100	50	75	100	
50Hz - 400V - VIII/IV pole (750/1500 rpm) - Y / YY connection																		
0.15	0.2	80	1.98	3.1	2.3	2.5	0.00294	20/44	15	42	710	31.0	39.0	46.0	0.47	0.54	0.62	0.76
0.6	0.8		3.90	5.5	2.2	2.7	6/13	51		1440	57.0	65.0	68.5	0.51	0.64	0.72	1.76	
0.2	0.27	80	2.75	2.7	1.7	2.0	0.00294	18/40	15	42	690	37.0	45.0	49.5	0.50	0.60	0.66	0.88
0.8	1.08		5.36	4.7	1.7	2.1	6/13	51		1415	64.0	69.0	70.0	0.59	0.73	0.83	1.99	
0.3	0.4	90S	3.99	3.1	2.2	2.2	0.00560	28/62	20	43	705	46.0	54.0	57.0	0.42	0.50	0.59	1.29
1.2	1.6		7.86	5.5	2.3	2.7		6/13		53	1430	72.0	75.0	76.0	0.55	0.69	0.78	2.92
0.4	0.55	90L	5.52	3.2	2.2	2.3	0.00672	17/37	23	43	700	49.0	56.0	59.0	0.40	0.50	0.58	1.69
1.6	2.17		10.7	5.7	2.3	2.6		6/13		54	1420	73.0	76.0	77.0	0.57	0.70	0.79	3.80
0.55	0.75	100L	7.53	3.5	2.3	2.5	0.01345	20/44	30	50	700	55.0	63.0	65.0	0.40	0.52	0.61	2.00
2.2	3		14.7	6.9	2.5	2.8		6/13		55	1430	77.0	79.0	80.0	0.62	0.75	0.82	4.84
0.7	0.95	100L	9.67	3.6	2.2	2.4	0.01457	20/44	33	50	690	58.0	64.5	66.5	0.42	0.53	0.63	2.41
2.8	3.8		18.9	6.0	2.4	2.6		6/13		55	1410	77.5	80.0	80.0	0.64	0.77	0.84	6.01
1	1.4	112M	13.9	4.0	2.0	2.1	0.02617	18/40	43	46	710	70.0	73.0	74.0	0.50	0.64	0.71	2.75
3.8	5.2		25.4	7.0	2.6	2.8		6/13		57	1440	76.0	78.5	80.0	0.62	0.76	0.83	8.26
1.3	1.77	132S	17.0	6.2	2.1	2.8	0.07527	20/44	68	48	730	72.0	75.0	76.5	0.48	0.61	0.70	3.50
5	6.8		33.2	8.5	2.7	2.8		6/13		62	1440	77.0	79.0	80.0	0.71	0.82	0.87	10.4
1.8	2.45	132M/L ²⁾	23.7	6.2	2.1	2.5	0.09535	21/46	80	48	725	76.0	79.0	80.0	0.50	0.63	0.70	4.64
7.2	9.8		48.1	8.5	2.7	2.7		6/13		62	1430	79.0	81.0	82.0	0.71	0.82	0.88	14.4
3	4	160M	38.8	4.3	1.7	2.1	0.14364	30/66	119	51	725	81.0	82.0	82.5	0.54	0.67	0.75	7.00
11	15		72.4	7.0	2.4	2.7		6/13		64	1455	84.0	85.5	86.0	0.71	0.83	0.88	21.0
3.5	4.8	160L	46.5	4.2	1.9	2.2	0.18673	30/66	135	51	725	81.0	83.0	83.0	0.51	0.64	0.72	8.45
14	19		91.7	7.2	2.6	2.9		6/13		64	1455	84.0	86.0	86.5	0.71	0.83	0.88	26.5
4.3	5.8	180M ¹⁾	55.8	4.0	1.7	2.0	0.19734	20/44	162	51	730	80.0	83.0	84.2	0.39	0.50	0.58	12.7
17	23		110	8.0	2.4	2.8		7/15		69	1475	88.6	89.5	89.5	0.62	0.75	0.82	33.4
5	6.8	180L	65.4	5.1	2.0	2.0	0.33095	20/44	177	51	730	79.0	82.7	82.7	0.40	0.54	0.62	14.1
20	27		129	8.8	2.5	2.6		7/15		69	1470	85.0	88.0	89.0	0.65	0.77	0.84	38.6
6.5	8.8	200L	84.1	3.6	1.9	2.0	0.38609	20/44	235	53	735	83.5	86.5	87.0	0.43	0.54	0.60	18.0
28	38		180	7.4	2.6	2.8		8/18		70	1480	90.5	91.5	91.5	0.71	0.81	0.85	52.0
8	10.8	200L*	104	4.0	1.8	2.0	0.41370	20/44	255	53	730	82.5	86.0	87.0	0.41	0.53	0.61	21.8
35	47		225	7.8	2.4	2.8		6/13		70	1470	89.0	90.0	90.5	0.66	0.78	0.83	67.3
9.2	12.5	225S/M	119	5.5	2.8	3.1	0.75686	18/40	360	56	740	81.0	85.0	87.0	0.43	0.53	0.60	25.4
37	50		237	9.5	3.1	4.2		6/13		70	1485	86.5	89.0	90.0	0.62	0.74	0.80	74.2
11	15	225S/M	142	5.0	2.2	2.2	1.12963	20/44	425	56	740	83.0	86.0	87.0	0.47	0.58	0.67	27.2
44	59.7		283	8.0	2.4	3.0		8/18		74	1480	89.0	90.5	91.0	0.73	0.83	0.87	80.2
14.7	19.9	250S/M	190	4.6	1.8	2.0	1.55324	18/40	450	56	735	86.0	87.5	88.0	0.45	0.58	0.66	36.5
55	75		356	9.0	2.6	3.0		6/13		74	1480	89.0	90.5	91.0	0.71	0.82	0.87	100
17	23	280S/M	218	4.2	1.5	1.6	3.33245	20/44	650	59	740	83.2	86.4	88.6	0.47	0.57	0.63	44.0
68	92.3		437	8.0	2.5	2.5		10/22		74	1485	85.1	89.0	90.0	0.76	0.83	0.86	127
20	27	280S/M	256	4.2	1.6	1.6	3.67719	20/44	690	59	740	83.9	87.3	89.0	0.46	0.57	0.61	53.2
80	109		516	8.6	2.7	2.8		10/22		78	1485	86.5	89.0	90.3	0.76	0.81	0.84	152
27	37	315S/M	351	4.0	1.7	1.7	4.82631	20/44	890	62	740	81.9	86.8	88.5	0.40	0.50	0.56	78.6
110	150		709	8.5	2.6	2.7		10/22		78	1485	88.0	90.2	91.3	0.69	0.72	0.82	212
33	44.8	315S/M	425	4.0	1.7	1.8	5.40087	20/44	990	62	740	83.5	87.8	89.4	0.40	0.51	0.58	91.9
130	177		837	8.4	2.6	2.7		10/22		78	1485	87.3	90.0	91.3	0.65	0.76	0.82	251
40	55	315S/M*	522	4.0	1.6	1.6	5.40087	20/44	1000	62		89.2	91.0	91.3	0.43	0.59	0.59	107
160	217		1026	8.0	2.3	2.5		10/22		78	1485	91.3	92.8	93.9	0.74	0.84	0.84	293

*Class "H" insulation ΔT105K

¹⁾For Pad Mounted, please consider frame size 180L.

²⁾Frame size 132M/L is not available for Pad Mounted.

For Pad Mounted version frame sizes up to 250S/M.

Smoke Extraction Motors Cast Iron Frame - Two Speed - 300°C/1 hour Improved Efficiency EFF2 - Variable torque VI/IV Pole - Independent Winding

Output		IEC Frame	Full load torque C _n (Nm)	Locked rotor current I _L /I _n	Locked rotor torque T _L /T _n	Break-down torque T _b /T _n	Inertia J kgm ²	Allowable locked rotor time Hot/Cold (s)	Weight (kg)	Sound dB (A)	Rated speed (rpm)	400 V						Full load current I _n (A)
												% of full load						
Efficiency η												Power Factor (Cos φ)						
50	75											100	50	75	100			
kW	HP																	
50Hz - 400V - VI/IV pole (1000/1500 rpm) - Y / Y connection																		
0.2	0.27	80	1.96	3.7	1.9	2.7	0.00328	9/20	11	48	970	31.0	40.0	46.0	0.44	0.52	0.60	1.05
0.55	0.75		3.63	5.0	1.9	2.7		6/13		54	1450	52.0	60.0	65.7	0.48	0.61	0.69	1.75
0.25	0.33	80	2.39	3.9	2.5	3.4	0.00346	7/15	12	48	970	33.0	41.5	48.0	0.42	0.50	0.57	1.32
0.75	1		4.91	4.7	1.4	2.1		6/13		54	1430	62.0	67.0	68.0	0.59	0.72	0.82	1.94
0.3	0.4	90S	2.90	5.1	2.6	3.2	0.00560	9/20	16	45	970	38.0	48.0	53.0	0.39	0.46	0.54	1.51
1.1	1.5		7.32	5.4	2.0	2.6		6/13		57	1440	65.0	71.0	72.5	0.51	0.65	0.75	2.92
0.37	0.5	90L	3.62	4.5	2.1	2.6	0.00672	8/18	20	45	970	40.0	50.0	55.0	0.43	0.50	0.60	1.62
1.5	2		9.76	5.5	1.9	2.4		6/13		57	1440	70.0	74.0	75.0	0.55	0.69	0.79	3.65
0.6	0.82	100L	5.94	5.0	2.2	3.1	0.01345	9/20	25	44	970	51.0	59.0	63.0	0.41	0.50	0.59	2.33
1.7	2.3		11.1	6.5	2.1	2.7		6/13		59	1450	68.0	73.0	75.0	0.52	0.65	0.74	4.42
0.7	0.95	100L	6.88	5.5	2.8	3.5	0.01000	10/22	27	44	970	57.0	64.0	68.0	0.40	0.50	0.60	2.48
2.2	3		14.7	6.0	1.7	2.2		6/13		59	1430	76.0	77.0	77.0	0.64	0.77	0.84	4.91
1	1.36	112M	9.70	6.2	3.0	3.5	0.02617	7/15	36	48	985	54.0	63.0	68.0	0.37	0.46	0.55	3.86
3	4		19.2	7.6	2.6	3.0		6/13		61	1460	76.0	80.0	81.0	0.58	0.70	0.78	6.85
1.5	2	132S	14.2	7.0	3.0	3.8	0.05071	8/18	68	52	990	64.0	71.0	76.0	0.35	0.45	0.53	5.38
4.5	6		28.8	7.5	2.8	3.1		8/18		65	1465	76.0	80.0	82.0	0.58	0.70	0.78	10.2
2.2	3	132M	21.3	7.4	2.8	3.2	0.06242	7/15	79	52	990	72.0	78.0	80.0	0.37	0.48	0.57	6.96
6	8.1		38.8	7.8	2.5	3.1		6/13		65	1465	75.0	80.0	82.0	0.57	0.70	0.78	13.7
2.5	3.4	160M	24.4	7.0	2.5	3.6	0.11491	12/26	96	56	980	74.5	79.0	81.0	0.49	0.64	0.74	6.02
5.5	7.5		35.7	7.5	2.0	3.3		6/13		68	1475	75.5	80.0	81.5	0.60	0.74	0.83	11.7
3.3	4.5	160M	32.4	4.0	2.0	2.3	0.10610	18/40	120	56	975	75.5	78.5	79.0	0.48	0.61	0.69	8.74
10	13.6		64.8	7.0	3.0	3.2		7/15		68	1475	83.0	86.0	87.0	0.56	0.69	0.76	22.0
3.5	4.8	160M	34.4	6.6	2.3	3.2	0.14364	9/20	118	56	980	77.0	81.0	82.0	0.53	0.68	0.78	7.90
7.5	10		47.6	8.0	2.2	3.5		6/13		68	1475	78.0	82.0	83.5	0.60	0.75	0.83	15.6
4.5	6	160L	43.2	4.5	1.9	2.0	0.13131	8/18	135	56	975	77.0	79.0	79.0	0.56	0.68	0.75	11.0
14	19		90.8	7.0	3.0	3.0		8/18		68	1470	84.5	87.0	88.0	0.66	0.77	0.82	28.0
5	6.8	180M ¹⁾	48.5	8.0	2.2	2.7	0.27579	6/13	163	56	985	85.0	86.0	86.0	0.73	0.83	0.87	9.65
11	15		71.7	10.0	2.6	3.3		5/11		71	1470	86.5	88.0	88.5	0.85	0.90	0.92	19.5
6.5	8.8	180M ¹⁾	63.1	7.6	2.1	2.9	0.33308	5/11	195	56	980	85.5	86.0	86.3	0.73	0.83	0.87	12.5
16	21.7		104.0	8.5	2.4	2.9		5/11		71	1465	88.0	88.5	88.5	0.89	0.91	0.92	28.4
8.5	11.5	180L	82.0	8.7	2.5	3.5	0.37922	5/11	230	56	985	86.5	87.5	87.5	0.68	0.80	0.86	16.3
20	27.2		130.4	9.0	2.4	3.3		5/11		71	1465	88.5	89.0	89.0	0.86	0.91	0.93	34.9
9	12.2	200L	86.6	8.1	3.0	3.2	0.50550	7/15	280	58	990	84.5	87.5	88.5	0.58	0.70	0.79	18.6
26	35.5		168.5	7.5	2.5	3.1		13/29		74	1480	88.5	90.5	90.5	0.74	0.83	0.87	47.7
12	16	225S/M	113.5	8.3	3.5	3.5	0.77479	9/20	379	61	990	82.0	85.5	87.0	0.50	0.62	0.71	28.0
34	46.2		218.5	8.5	2.5	3.2		6/13		76	1485	87.0	89.0	89.0	0.72	0.82	0.87	63.4
14	19	225S/M	134.8	8.0	3.2	3.3	0.84523	5/11	433	61	990	81.5	85.5	87.0	0.48	0.61	0.71	32.7
40	55		260.2	9.0	2.9	3.5		5/11		76	1485	88.5	90.5	91.0	0.71	0.81	0.87	72.9
18	24.4	250S/M	173.1	8.1	3.3	3.6	1.16219	9/20	520	61	990	86.0	88.0	89.0	0.51	0.65	0.73	40.0
50	68		321.6	8.6	2.6	3.4		5/11		76	1485	90.0	91.5	92.0	0.73	0.83	0.87	90.2
25	34	280S/M	241.2	8.0	3.6	3.2	2.58594	11/24	685	66	990	84.0	87.5	89.0	0.50	0.61	0.69	58.8
70	95		449.3	7.5	2.3	2.8		20/44		81	1485	90.5	92.0	93.0	0.78	0.85	0.87	125
28	38	280S/M	269.6	7.1	3.1	2.7	2.82838	24/53	748	66	990	86.0	89.0	90.5	0.55	0.66	0.73	61.2
80	109		513.8	9.0	2.7	3.4		12/26		81	1490	89.0	91.5	92.6	0.71	0.80	0.85	147
34	46	315S/M	324.7	8.8	3.7	3.4	3.39405	8/18	898	69	995	85.0	88.0	90.0	0.49	0.61	0.69	79.0
95	129		610.2	8.1	2.9	2.9		15/33		81	1485	91.0	92.7	93.5	0.79	0.85	0.88	167
40	54.3	315S/M	385.3	7.0	3.3	3.3	3.79810	15/33	1005	69	990	88.5	90.5	91.5	0.50	0.62	0.70	90.1
115	156		735.4	9.0	3.0	3.8		11/24		81	1490	91.4	93.2	93.9	0.62	0.73	0.80	221
45	60	315S/M	425.7	6.5	2.7	2.5	3.79810	8/18	1005	69	990	90.0	91.0	91.5	0.60	0.71	0.77	92.2
125	170		801.4	9.0	2.9	3.5		13/29		81	1490	93.0	94.0	94.5	0.70	0.80	0.83	230
55	75	315S/M	532.1	7.2	3.2	2.9	3.79810	5/11	1005	69	990	90	91	91.6	0.56	0.68	0.75	116
145	197		931.8	8.0	2.5	3.0		9/20		81	1485	93.5	94.5	94.5	0.73	0.83	0.84	264

Notes:

Standard voltage, connection and frequency: 220-240V Δ 50Hz

380-415V Y 50Hz

380-415V Y 50Hz

The values shown are subject to change without prior notice. To obtain guaranteed values please access our website.

Smoke Extraction Motors Cast Iron Frame - Two Speed - 300°C/1 hour Improved Efficiency EFF2 - Constant torque IV/II Pole - Dahlander Winding

Output		IEC Frame	Full load torque C _n (Nm)	Locked rotor current I _l /I _n	Locked rotor torque T _l /T _n	Break- down torque T _b /T _n	Inertia J kgm ²	Allowable locked rotor time Hot/Cold (s)	Weight (kg)	Sound dB (A)	Rated speed (rpm)	400 V						Full load current I _n (A)
												% of full load						
												Efficiency η			Power Factor (Cos φ)			
kW	HP											50	75	100	50	75	100	
50Hz - 400V - IV/II pole (1500/3000 rpm) - Δ / YY connection																		
0.48	0.65	80	3.31	4.0	2.3	2.3	0.00079	20/44	14	44	1380	61.0	67.0	68.1	0.50	0.62	0.72	1.41
0.6	0.82		2.04	6.1	2.5	2.8		12/26		59	2830	69.0	72.0	73.0	0.72	0.82	0.87	1.36
0.7	0.95	80	4.91	4.0	2.2	2.2	0.00096	18/40	15	44	1360	65.0	68.0	68.4	0.50	0.62	0.71	2.08
0.85	1.15		2.86	6.2	2.5	2.8		10/22		59	2820	72.0	75.5	76.5	0.73	0.82	0.88	1.82
1.1	1.5	90S	7.53	5.0	2.1	2.2	0.00504	7/15	20	47	1400	71.0	73.5	74.0	0.66	0.78	0.84	2.55
1.4	1.9		4.85	6.0	2.2	2.2		6/13		68	2750	68.0	72.0	73.0	0.70	0.81	0.90	3.08
1.5	2	90L	9.96	5.2	2.3	2.4	0.00616	8/18	22	47	1410	73.0	75.3	76.0	0.61	0.76	0.83	3.43
1.9	2.6		6.50	5.5	2.3	2.5		6/13		68	2810	68.0	72.0	72.5	0.74	0.84	0.90	4.20
2	2.7	100L	13.5	6.0	2.4	2.4	0.00918	12/26	34	51	1410	72.4	75.5	76.2	0.62	0.74	0.83	4.56
2.4	3.3		8.08	6.7	2.4	2.5		8/18		67	2870	72.0	74.0	76.0	0.75	0.85	0.89	5.12
2.6	3.5	100L	17.4	5.5	2.4	2.5	0.00918	8/18	34	51	1410	74.0	77.3	78.0	0.62	0.74	0.83	5.8
3.1	4.2		10.3	6.8	2.5	2.8		6/13		67	2870	74.0	77.0	77.5	0.67	0.80	0.87	6.64
3.7	5	112M	24.6	6.0	2.3	2.3	0.01607	8/18	45	55	1430	79.5	80.0	80.0	0.68	0.80	0.86	7.76
4.4	5.9		14.4	7.3	2.4	2.7		6/13		64	2885	79.0	80.0	80.5	0.77	0.86	0.91	8.67
4.9	6.6	132S	32.0	6.5	1.7	2.0	0.04264	6/18	62	58	1450	82.0	83.0	83.0	0.78	0.86	0.89	9.57
5.9	7.9		19.2	6.5	2.0	2.3		6/13		68	2890	77.5	78.5	79.0	0.82	0.89	0.92	11.7
6.8	9.2	132M	44.6	6.4	1.6	2.0	0.05427	7/15	68	58	1450	83.0	84.0	84.0	0.75	0.84	0.88	13.3
8	10.9		26.3	6.5	2.0	2.3		6/13		68	2910	79.0	81.0	82.0	0.75	0.87	0.91	15.5
9.5	12.9	160M	62.5	5.0	2.0	2.1	0.09535	20/44	110	62	1450	83.5	84.2	85.0	0.77	0.84	0.86	18.8
11	15		35.8	8.0	2.8	2.8		10/22		70	2940	80.0	82.1	83.0	0.78	0.86	0.87	22.0
12	16.3	160L*	79.0	5.0	1.9	2.0	0.11542	20/44	126	62	1450	83.9	85.5	86.0	0.78	0.85	0.87	23.1
15	20		48.3	7.0	2.1	2.6		8/18		70	2910	82.5	85.0	85.4	0.85	0.90	0.92	27.6
15	20	180M ¹⁾	96.2	6.3	2.2	2.3	0.19733	17/37	170	64	1460	86.5	87.7	88.0	0.72	0.81	0.86	28.6
18	24.5		58.3	7.5	2.3	2.8		10/22		70	2950	86.5	87.5	88.0	0.84	0.89	0.92	32.1
18	24.5	180L	117	6.7	2.2	2.4	0.22424	15/33	190	64	1465	87.5	88.7	89.0	0.71	0.81	0.85	34.3
21.5	29.2		69.5	8.5	2.5	2.9		9/20		70	2950	86.5	88.0	88.7	0.79	0.87	0.90	38.9
26	35	200L	167	6.2	2.0	2.2	0.35853	22/48	250	67	1475	89.0	90.0	90.5	0.69	0.79	0.84	49.4
33	45		107	8.0	2.2	2.5		8/18		74	2950	85.5	88.0	88.8	0.83	0.89	0.91	58.9
32	43.5	225S/M	206	8.1	2.6	3.3	0.69987	11/24	350	70	1480	89.0	90.1	90.6	0.76	0.83	0.88	57.9
38	52		123	8.7	2.6	3.3		8/18		78	2960	84.6	87.3	88.5	0.83	0.87	0.89	69.6
38	52	225S/M	247	7.8	2.3	2.6	0.76985	12/26	380	70	1480	89.0	90.4	91.0	0.75	0.83	0.88	68.5
45	60		142	8.3	2.5	2.8		7/15		78	2960	85.0	87.9	89.0	0.77	0.84	0.87	83.9
46	63	250S/M	301	8.0	2.3	2.6	0.97981	7/15	440	70	1470	89.2	90.8	91.4	0.76	0.83	0.88	82.5
55	75		179	8.6	2.2	2.8		6/13		78	2940	85.5	88.4	89.5	0.82	0.87	0.90	98.6

*Class "H" insulation ΔT_{105K}

¹⁾For Pad Mounted, please consider frame size 180L.

²⁾Frame size 132M/L is not available for Pad Mounted.

For Pad Mounted version frame sizes up to 250S/M.

Smoke Extraction Motors Cast Iron Frame - Two Speed - 300°C/1 hour Improved Efficiency EFF2 - Constant torque VIII/IV Pole - Dahlander Winding

Output		IEC Frame	Full load torque C _n (Nm)	Locked rotor current I _L /I _n	Locked rotor torque T _L /T _n	Break-down torque T _B /T _n	Inertia J kgm ²	Allowable locked rotor time Hot/Cold (s)	Weight (kg)	Sound dB (A)	Rated speed (rpm)	400 V						Full load current I _n (A)
												% of full load						
												Efficiency η			Power Factor (Cos φ)			
kW	HP											50	75	100	50	75	100	
50Hz - 400V - VIII/IV pole (750/1500 rpm) - Δ / YY connection																		
0.27	0.37	80	3.79	2.5	1.8	1.8	0.00294	10/22	15	42	685	35.0	41.0	48.0	0.46	0.55	0.64	1.27
0.4	0.55		2.72	4.2	1.6	1.8		9/20		51	1420	65.0	68.0	69.1	0.60	0.71	0.81	1.03
0.4	0.54	90S	5.42	3.2	2.0	2.0	0.00504	13/29	19	43	700	40.0	50.0	53.0	0.42	0.52	0.60	1.82
0.7	0.95		4.77	5.0	1.8	2.0		8/18		53	1400	71.5	73.0	73.0	0.68	0.80	0.86	1.61
0.52	0.71	90L	7.12	3.3	2.0	2.0	0.00672	8/18	29	43	700	45.0	53.0	57.0	0.42	0.53	0.63	2.09
0.9	1.22		6.16	5.2	1.8	2.0		7/15		54	1390	73.5	75.0	75.0	0.70	0.81	0.86	2.01
0.7	0.95	100L	9.40	4.2	1.9	2.2	0.01121	13/29	31	50	710	60.0	66.0	68.0	0.42	0.53	0.64	2.32
1.1	1.5		7.32	5.8	2.0	2.4		6/13		55	1440	71.0	75.0	75.0	0.61	0.74	0.82	2.58
1.1	1.5	100L	15.1	4.2	1.9	2.3	0.01289	12/26	45	50	700	62.0	67.0	68.5	0.44	0.56	0.66	3.51
1.8	2.45		12.0	5.5	2.1	2.4		6/13		55	1430	70.0	75.0	75.0	0.64	0.75	0.82	4.22
1.5	2	112M	19.5	5.0	2.5	2.5	0.02617	8/18	68	46	720	66.0	71.0	75.0	0.43	0.53	0.64	4.51
2.5	3.4		16.6	7.0	2.5	2.7		6/13		57	1440	78.0	80.0	80.5	0.72	0.82	0.88	5.09
1.9	2.58	132S	25.2	6.3	2.6	2.6	0.07527	7/15	80	48	720	70.0	74.5	76.0	0.44	0.57	0.67	5.39
3.7	5		24.6	7.0	2.4	2.4		6/13		62	1430	79.2	80.1	82.0	0.78	0.87	0.90	7.24
3.3	4.5	132M/L ²⁾	43.9	6.3	2.6	2.8	0.09535	10/22	119	48	720	74.0	77.0	78.0	0.47	0.60	0.70	8.72
5.5	7.5		36.8	7.5	2.7	2.7		6/13		62	1430	79.6	80.6	82.5	0.78	0.87	0.90	10.7
3.7	5	160M	48.1	5.4	2.3	2.8	0.12927	10/22	119	51	730	72.5	77.5	79.5	0.43	0.55	0.65	10.3
7	9.5		46.0	6.5	2.2	2.6		6/13		64	1450	83.5	84.2	84.5	0.79	0.87	0.90	13.3
5.5	7.5	160M	73.2	5.0	2.1	2.4	0.14364	15/33	127	51	720	74.0	77.5	79.6	0.48	0.60	0.70	14.2
8.8	12		58.1	6.5	2.1	2.4		7/15		64	1450	83.2	84.3	84.5	0.79	0.86	0.88	17.1
7	9.5	160L	92.0	5.0	2.3	2.4	0.16518	12/26	177	51	725	75.0	79.5	80.5	0.46	0.58	0.68	18.5
11	15		72.4	6.5	2.2	2.6		6/13		64	1455	84.0	85.0	85.0	0.77	0.86	0.89	21.0
11	15	180L	144	7.3	2.3	2.5	0.30337	6/13	255	51	730	82.0	82.6	84.0	0.50	0.63	0.70	27.0
18	24.5		118	8.5	2.2	2.4		6/13		69	1460	85.8	86.3	87.0	0.81	0.88	0.90	33.2
17	23	200L	220	4.5	2.0	2.2	0.50227	26/57	360	53	735	84.5	86.5	87.2	0.54	0.67	0.74	38.0
27	37		177	6.0	2.0	2.4		10/22		67	1465	88.0	89.0	89.5	0.85	0.89	0.91	47.8
22	30	225S/M	289	7.5	2.0	2.3	1.22377	9/20	425	56	730	86.5	87.5	88.0	0.65	0.76	0.82	44.0
32	43.5		209	8.5	2.0	2.5		6/13		70	1465	87.5	88.5	89.0	0.89	0.93	0.94	55.2
26	35	225S/M	339	7.5	2.0	2.3	1.36497	7/15	450	56	725	86.2	87.3	88.0	0.67	0.78	0.82	52.0
37	50		242	8.8	2.0	2.3		6/13		70	1450	87.2	88.1	88.7	0.85	0.89	0.91	66.2
33	45	250S/M	433	7.2	1.9	2.2	1.55324	6/13	650	56	730	87.0	88.3	89.0	0.67	0.78	0.82	65.3
47	64		308	9.0	2.2	2.4		6/13		70	1460	87.5	88.4	90.0	0.86	0.90	0.92	81.9
38	52	280S/M	494	5.0	1.8	2.2	3.33245	25/55	690	59	740	87.8	89.5	90.5	0.53	0.63	0.69	87.8
56	76		359	7.0	1.8	2.2		12/26		77	1485	89.5	90.5	91.0	0.83	0.86	0.88	101
46	63	280S/M	602	4.5	1.7	2.0	2.56920	30/66	890	59	735	89.0	90.0	90.2	0.53	0.63	0.70	105
67	91		430	7.0	2.0	2.2		15/33		77	1485	90.5	91.4	91.8	0.84	0.88	0.89	118
56	76	315S/M	726	4.5	1.8	2.0	3.21158	30/66	990	62	735	89.5	90.5	91.0	0.53	0.64	0.70	127
83	113		536	7.0	2.0	2.2		15/33		77	1480	90.5	91.5	92.0	0.84	0.88	0.90	145
78	106	315S/M	1006	7.0	1.8	2.2	5.28596	10/22		62	740	88.6	90.6	91.1	0.65	0.76	0.80	154
115	156		738	8.4	2.0	2.3		6/13		77	1485	88.0	90.0	91.2	0.88	0.90	0.92	198

Notes:

Standard voltage, connection and frequency: 220-240V Δ 50Hz

380-415V Y 50Hz

380-415V Δ 50Hz

660-690V Y 50Hz

The values shown are subject to change without prior notice. To obtain guaranteed values please access our website.

Smoke Extraction Motors Cast Iron Frame - Two Speed - 300°C/1 hour Improved Efficiency EFF2 - Constant torque VI/IV Pole - Independent Winding

Output		IEC Frame	Full load torque C _n (Nm)	Locked rotor current I _L /I _n	Locked rotor torque T _L /T _n	Break- down torque T _B /T _n	Inertia J kgm ²	Allowable locked rotor time Hot/Cold (s)	Weight (kg)	Sound dB (A)	Rated speed (rpm)	400 V						Full load current I _n (A)
												% of full load						
												Efficiency η			Power Factor (Cos φ)			
kW	HP											50	75	100	50	75	100	
50Hz - 400V - VI/IV pole (1000/1500 rpm) - Y / Y connection																		
0.22	0.3	80	2.19	4.0	2.3	2.8	0.00346	11/24	12	48	960	37.0	46.0	52.0	0.41	0.50	0.56	1.09
0.32	0.43		2.07	5.2	2.1	2.6		6/13		54	1460	48.0	55.0	61.0	0.40	0.51	0.59	1.28
0.26	0.36	80	2.63	3.5	2.1	2.7	0.00346	12/26	12	48	960	37.0	46.0	52.0	0.43	0.52	0.60	1.20
0.4	0.54		2.60	5.0	1.8	2.9		8/18		54	1460	50.0	58.0	62.0	0.49	0.60	0.69	1.35
0.38	0.52	90S	3.77	6.2	2.4	3.3	0.00560	6/13	16	45	970	48.0	58.0	63.7	0.40	0.50	0.59	1.46
0.65	0.88		4.23	6.4	2.0	2.9		5/11		57	1460	61.5	68.0	72.3	0.52	0.64	0.74	1.75
0.55	0.75	90L	5.49	4.0	2.2	2.9	0.00672	12/26	20	45	960	52.0	60.0	65.0	0.41	0.52	0.61	2.00
0.9	1.22		5.95	5.6	2.0	2.8		5/11		57	1440	67.0	72.0	73.0	0.54	0.67	0.77	2.31
0.9	1.22	100L	9.07	4.7	2.2	2.4	0.01121	9/20	21	44	945	59.0	65.0	67.7	0.51	0.62	0.71	2.70
1.3	1.77		8.63	5.8	1.8	2.4		8/18		59	1440	69.5	72.0	72.4	0.61	0.72	0.81	3.20
1.1	1.5	100L	11.2	4.5	2.1	2.3	0.00925	9/20	25	44	940	65.0	69.0	69.2	0.48	0.61	0.74	3.10
1.7	2.3		11.2	6.0	2.0	2.7		5/11		59	1440	73.5	76.5	76.7	0.56	0.70	0.80	4.00
1.5	2	112M	14.5	5.8	2.6	3.0	0.01889	10/22	36	48	970	70.0	74.0	77.0	0.51	0.62	0.69	4.08
2.3	3.1		14.9	6.6	1.8	2.6		5/11		61	1460	73.0	76.0	78.0	0.63	0.75	0.81	5.25
2	2.7	132S	19.3	6.2	2.8	3.2	0.05072	9/20	68	52	985	63.0	70.0	73.0	0.45	0.57	0.66	5.99
3.1	4.2		20.2	7.8	2.2	2.9		12/26		65	1460	82.0	84.0	84.2	0.64	0.75	0.83	6.40
2.8	3.8	132M	27.1	7.9	2.5	2.9	0.06242	9/20	79	52	985	77.0	81.0	82.0	0.48	0.60	0.69	7.14
4.3	5.8		27.8	7.2	2.2	2.5		8/18		65	1465	80.0	81.0	82.0	0.70	0.80	0.85	8.90
4.3	5.8	160M	41.8	5.5	2.0	2.6	0.11565	8/18	96	56	975	79.0	80.0	81.0	0.59	0.74	0.82	9.34
6.6	8.97		42.7	6.9	2.0	3.0		5/11		68	1475	76.0	80.0	82.0	0.60	0.75	0.84	13.8
5.7	7.7	160L	55.5	5.7	2.0	2.6	0.14456	7/15	127	56	975	80.5	81.5	82.6	0.60	0.75	0.83	12.0
8.7	11.8		56.4	6.0	1.9	3.0		6/13		68	1470	79.2	82.5	83.4	0.67	0.80	0.87	17.3
9.5	12.9	180M ¹⁾	92.5	8.4	2.5	2.9	0.30532	5/11	179	56	980	86.0	86.5	87.0	0.78	0.86	0.87	18.1
14	19		90.8	8.6	2.1	3.0		5/11		71	1470	86.5	87.0	87.2	0.88	0.91	0.92	25.2
11	15	180L	108	6.5	2.0	2.2	0.33308	5/11	200	56	975	84.0	85.0	85.5	0.80	0.86	0.88	21.1
16.5	22.4		107	9.6	2.4	2.9		5/11		71	1470	86.5	87.5	88.0	0.85	0.90	0.93	29.1
16	21.7	200L	155	7.0	2.7	2.8	0.46939	8/18	280	58	985	88.0	89.5	90.0	0.64	0.75	0.81	31.7
24	32.6		155	7.0	2.3	2.6		10/22		74	1475	88.5	90.0	90.0	0.80	0.87	0.89	43.2
21	28.5	225S/M	202	7.0	2.8	3.0	0.77479	7/15	379	61	990	84.0	87.0	88.3	0.55	0.68	0.78	44.0
31	42		198	7.7	2.5	3.3		7/15		76	1490	85.0	87.5	88.5	0.70	0.80	0.86	58.8
25	34	225S/M	241	7.0	2.9	3.2	0.91566	7/15	469	61	990	85.0	87.0	88.0	0.52	0.66	0.74	55.4
37	50		237	8.1	2.4	3.2		7/15		76	1480	90.5	91.0	91.5	0.76	0.85	0.88	66.3
32	43.5	250S/M	309	6.8	2.7	3.4	1.16219	6/13	520	61	990	86.3	88.0	89.0	0.57	0.69	0.77	67.4
47	64		303	8.6	2.6	3.4		7/15		76	1485	90.0	91.5	92.0	0.76	0.85	0.88	83.8
45	60	280S/M	424	7.1	2.9	2.4	2.58594	11/24	685	66	995	87.0	89.0	90.0	0.60	0.70	0.75	96.2
66	90		426	8.5	2.5	3.0		11/24		81	1485	89.0	91.0	92.0	0.72	0.82	0.86	120
54	73	280S/M	518	7.1	3.0	2.5	3.07081	14/31	810	66	990	87.5	90.0	91.0	0.60	0.70	0.75	114
80	109		516	8.4	2.6	3.1		10/22		81	1485	89.5	91.5	92.5	0.75	0.83	0.86	145
62	84	315S/M	596	7.7	3.0	3.3	3.39405	11/24	898	69	990	85.0	88.5	90.0	0.56	0.67	0.72	138
92	126		596	8.5	2.8	2.9		9/20		81	1485	88.0	90.5	91.5	0.80	0.86	0.87	169
75	100	315S/M*	709	7.0	2.9	2.8	3.79811	5/11	1005	69	990	86.0	89.0	90.0	0.60	0.69	0.75	160
110	150		712	6.6	2.2	2.4		5/11		81	1480	89.0	91.0	92.0	0.81	0.86	0.88	196

*Class "H" insulation ΔT105K

¹⁾For Pad Mounted, please consider frame size 180L.

²⁾Frame size 132M/L is not available for Pad Mounted.

For Pad Mounted version frame sizes up to 250S/M.



Smoke Extraction Motors Cast Iron Frame - Single Speed - 400°C/2 hours Improved Efficiency EFF2

Output		IEC Frame	Full load torque C _n (Nm)	Locked rotor current I _L /I _n	Locked rotor torque T _L /T _n	Break- down torque T _b /T _n	Inertia J kgm ²	Allowable locked rotor time Hot/Cold (s)	Weight (kg)	Sound dB (A)	Rated speed (rpm)	400 V						Full load current I _n (A)
												% of full load						
Efficiency η												Power Factor (Cos φ)						
50	75											100	50	75	100			
kW	HP																	
II Pole - 3000 rpm																		
0.75	1	80	2.52	5.8	2.9	3.1	0.00079	25/55	14	59	2790	76.0	80.0	79.5	0.76	0.84	0.87	1.57
1.1	1.5	80	3.75	6.0	3.0	2.9	0.00090	13/29	15	59	2810	77.1	80.2	79.7	0.69	0.80	0.86	2.32
1.5	2	90S	4.89	6.8	2.8	3.0	0.00205	14/31	19	68	2870	81.4	83.7	83.6	0.71	0.81	0.86	3.01
2.2	3	90L	7.42	6.6	2.8	3.0	0.00242	9/20	21	68	2840	82.2	83.7	83.4	0.69	0.80	0.85	4.48
4	5.5	112M	13.4	7.6	2.7	3.1	0.00842	15/33	44	64	2890	85.0	87.5	87.5	0.76	0.84	0.88	7.50
5.5	7.5	132S	18.0	8.0	2.7	3.2	0.02056	18/40	60	68	2935	84.0	87.1	88.3	0.73	0.82	0.87	10.3
7.5	10	132S	24.0	7.3	2.5	2.9	0.02430	10/22	64	68	2925	86.5	88.9	89.2	0.77	0.86	0.89	13.6
11	15	132M	36.0	7.0	2.4	3.2	0.03178	13/29	78	68	2925	90.0	90.6	90.2	0.76	0.84	0.88	20.0
15	20	160M	47.7	7.8	2.5	3.2	0.05295	10/22	114	70	2945	89.6	91.1	91.2	0.76	0.84	0.88	27.0
18.5	25	160L	59.6	8.2	2.6	3.3	0.06471	10/22	128	70	2945	90.4	91.9	91.7	0.77	0.85	0.88	33.1
22	30	180L	71.4	8.2	2.8	3.1	0.11351	13/29	175	70	2950	90.5	92.1	92.1	0.78	0.78	0.89	38.7
30	40	200L	94.8	7.5	2.8	2.8	0.20630	19/42	239	74	2965	90.0	92.0	92.7	0.77	0.85	0.88	53.1
37	50	200L	118	7.6	2.9	2.9	0.22424	19/42	253	74	2965	91.3	92.8	93.0	0.75	0.84	0.88	65.3
45	60	225S/M	142	7.9	2.6	3.5	0.44846	24/53	414	78	2965	91.6	93.3	93.6	0.85	0.89	0.91	76.3
55	75	250S/M	178	8.5	2.8	3.0	0.50227	15/33	454	78	2960	91.8	93.5	93.8	0.85	0.89	0.91	93.0
IV Pole - 1500 rpm																		
0.55	0.75	80	3.71	6.0	2.3	2.5	0.00242	17/37	14	44	1430	69.0	73.0	75.0	0.56	0.69	0.78	1.36
0.75	1	90S	4.91	7.5	2.6	2.6	0.00504	8/18	21	47	1435	73.0	76.0	77.0	0.57	0.67	0.76	1.85
1.1	1.5	90S	7.47	7.2	2.6	2.4	0.00560	8/18	22	47	1420	77.5	78.6	79.5	0.64	0.75	0.82	2.44
1.5	2	90L	9.96	7.6	2.6	2.5	0.00672	7/15	24	47	1420	78.0	79.0	80.2	0.63	0.76	0.82	3.29
2.2	3	100L	15.1	7.1	2.2	2.4	0.00918	8/18	32	51	1410	81.8	82.5	81.5	0.67	0.78	0.84	4.64
3	4	100L	20.1	7.5	2.6	2.5	0.00995	7/15	34	51	1410	81.9	82.6	82.6	0.62	0.75	0.81	6.47
4	5.5	112M	27.2	7.5	2.5	2.6	0.01875	12/26	47	55	1430	86.0	87.4	87.1	0.70	0.81	0.87	7.62
5.5	7.5	132S	36.1	8.0	2.2	2.7	0.04652	11/24	63	58	1465	85.4	87.7	88.5	0.68	0.79	0.85	10.6
7.5	10	132M	48.0	8.0	2.3	2.6	0.05427	8/18	70	58	1470	86.4	88.4	88.6	0.70	0.80	0.86	14.2
11	15	160M	72.4	6.0	2.0	2.3	0.09535	16/35	115	62	1460	87.6	89.4	89.9	0.68	0.77	0.82	21.5
15	20	160L	96.9	6.0	2.0	2.2	0.11542	13/29	122	62	1455	89.0	90.4	90.0	0.68	0.79	0.83	29.0
18.5	25	180M ¹⁾	120	7.3	2.3	2.6	0.17939	18/40	180	64	1470	89.8	91.5	91.5	0.68	0.79	0.84	34.7
22	30	180L	144	7.5	2.5	2.5	0.19733	14/31	185	64	1470	90.0	91.2	91.7	0.67	0.78	0.83	41.7
30	40	200L	191	6.5	2.0	2.2	0.33095	17/37	248	67	1475	91.8	93.0	93.0	0.75	0.82	0.85	54.8
37	50	225S/M	238	7.2	2.1	2.4	0.62988	20/44	356	70	1480	91.2	92.2	92.8	0.76	0.85	0.88	65.4
45	60	225S/M	286	7.0	2.1	2.5	0.76985	16/35	377	70	1475	91.0	92.9	93.5	0.76	0.85	0.88	78.9
55	75	250S/M	357	7.5	2.1	2.4	0.97981	16/35	446	70	1475	92.7	93.1	93.4	0.80	0.87	0.90	94.4
75	100	280S/M	475	6.7	1.9	2.2	2.32858	44/97	719	74	1485	92.4	93.8	94.3	0.83	0.88	0.90	128
90	125	280S/M	593	7.1	2.2	2.3	2.56947	31/68	754	74	1485	92.3	93.9	94.2	0.82	0.87	0.89	155
110	150	315S/M	709	7.1	2.3	2.6	2.81036	27/59	857	77	1485	92.8	94.4	94.4	0.78	0.85	0.88	191
132	175	315S/M	828	7.3	2.5	2.6	3.77391	31/68	1007	77	1485	93.3	94.7	95.1	0.78	0.85	0.88	228
160	220	315S/M	1044	7.0	2.4	2.7	3.77391	22/48	994	77	1480	93.3	95.1	95.5	0.78	0.85	0.87	278
200	270	355M/L	1273	6.6	2.3	2.2	7.45663	44/97	1525	79	1490	94.0	95.0	95.2	0.82	0.86	0.88	345
250	340	355M/L	1603	6.9	2.2	2.5	8.38871	36/79	1651	79	1490	94.3	95.2	95.8	0.80	0.86	0.88	428
315	430	355M/L	2027	6.7	2.2	2.4	10.2529	42/92	1835	79	1490	94.8	95.9	96.2	0.79	0.86	0.89	531
330	450	355M/L	2121	6.5	2.3	2.3	11.1850	32/70	1865	79	1490	95.0	96.0	96.2	0.83	0.88	0.90	550
HIGH-OUTPUT DESIGN																		
0.75	1	80	5.02	5.5	2.2	2.3	0.00294	14/31	15	44	1415	73.5	76.2	76.2	0.62	0.74	0.83	1.71

Notes:*Class "F" insulation with ΔT_{105K} Standard voltage, connection and frequency: 220-240V Δ 50Hz

380-415V Y 50Hz

380-415V Δ 50Hz

660-690V Y 50Hz

The values shown are subject to change without prior notice. To obtain guaranteed values please access our website.

Smoke Extraction Motors Cast Iron Frame - Single Speed - 400°C/2 hours Improved Efficiency EFF2

Output		380 V								415 V							
		Rated speed (rpm)	% of full load						Full load current I _n (A)	Rated speed (rpm)	% of full load						Full load current I _n (A)
			Efficiency η			Power Factor (Cos φ)					Efficiency η			Power Factor (Cos φ)			
kW	HP		50	75	100	50	75	100			50	75	100	50	75	100	
II Pole - 3000 rpm																	
0.75	1	2770	76.5	79.7	78.5	0.79	0.86	0.89	1.63	2810	75.5	80.1	80.0	0.73	0.82	0.86	1.52
1.1	1.5	2790	78.2	80.4	79.3	0.74	0.84	0.88	2.39	2825	76.0	79.8	79.8	0.64	0.76	0.84	2.28
1.5	2	2855	81.8	83.8	83.0	0.75	0.84	0.88	3.12	2880	80.0	83.7	83.8	0.67	0.78	0.84	2.96
2.2	3	2820	82.8	83.6	83.3	0.75	0.84	0.87	4.61	2850	81.5	83.6	84.3	0.64	0.76	0.83	4.37
4	5.5	2880	85.5	87.5	87.2	0.80	0.86	0.89	7.83	2900	84.5	87.4	88.2	0.72	0.82	0.87	7.25
5.5	7.5	2930	84.5	87.5	88.2	0.77	0.85	0.89	10.6	2940	83.5	86.8	88.2	0.69	0.80	0.85	10.2
7.5	10	2915	87.0	89.0	88.8	0.81	0.87	0.90	14.3	2930	86.0	88.8	89.3	0.73	0.83	0.87	13.4
11	15	2920	89.5	90.8	90.2	0.80	0.87	0.90	20.6	2930	89.3	90.5	90.2	0.72	0.82	0.86	19.7
15	20	2935	90.1	91.2	91.0	0.81	0.87	0.89	28.1	2950	89.1	91.0	91.2	0.72	0.81	0.87	26.3
18.5	25	2940	90.7	92.0	91.5	0.81	0.87	0.89	34.5	2950	90.1	91.8	92.0	0.73	0.83	0.86	32.5
22	30	2945	91.0	92.1	92.0	0.82	0.82	0.90	40.4	2955	90.0	92.0	92.1	0.75	0.75	0.87	38.2
30	40	2960	90.5	92.1	92.6	0.80	0.87	0.89	55.3	2970	89.5	91.8	92.7	0.73	0.83	0.87	51.8
37	50	2960	91.7	93.0	93.0	0.80	0.87	0.89	67.9	2965	90.8	92.6	93.0	0.70	0.81	0.86	64.4
45	60	2960	91.9	93.4	93.5	0.86	0.9	0.92	79.5	2970	91.5	93.3	93.9	0.84	0.88	0.9	74.1
55	75	2960	91.8	93.2	93.5	0.87	0.91	0.92	97.1	2965	91.6	93.5	94	0.83	0.88	0.91	89.5
IV Pole - 1500 rpm																	
0.55	0.75	1420	70.0	73.5	75.0	0.61	0.73	0.81	1.38	1440	67.0	72.5	74.6	0.53	0.66	0.75	1.37
0.75	1	1430	73.0	75.0	77.0	0.60	0.70	0.78	1.90	1440	72.0	76.0	77.0	0.55	0.67	0.74	1.83
1.1	1.5	1410	77.0	78.4	79.0	0.67	0.77	0.84	2.52	1425	76.0	78.3	79.5	0.61	0.73	0.80	2.41
1.5	2	1410	78.0	79.0	79.8	0.68	0.78	0.84	3.40	1430	77.8	78.8	80.2	0.60	0.72	0.80	3.25
2.2	3	1400	80.0	81.0	80.5	0.71	0.80	0.85	4.88	1415	81.5	82.0	82.0	0.65	0.76	0.82	4.55
3	4	1400	81.0	82.0	81.3	0.68	0.78	0.83	6.75	1415	81.0	82.6	82.3	0.60	0.71	0.78	6.50
4	5.5	1420	86.5	87.5	86.7	0.74	0.84	0.89	7.88	1440	85.2	87.2	86.7	0.67	0.78	0.84	7.64
5.5	7.5	1460	86.7	88.3	88.3	0.73	0.82	0.87	10.9	1470	84.2	87.0	88.4	0.64	0.75	0.83	10.4
7.5	10	1465	87.0	88.6	88.4	0.75	0.84	0.88	14.6	1470	85.6	88.0	88.6	0.65	0.77	0.83	14.2
11	15	1455	88.3	89.6	89.2	0.71	0.80	0.83	22.6	1465	86.8	89.0	89.8	0.65	0.74	0.80	21.3
15	20	1450	89.5	90.5	89.5	0.73	0.81	0.84	30.3	1460	88.4	90.3	90.0	0.66	0.76	0.81	28.6
18.5	25	1465	90.3	91.3	91.3	0.72	0.81	0.85	36.2	1470	89.3	91.3	91.5	0.65	0.76	0.82	34.3
22	30	1465	90.0	91.0	91.3	0.72	0.81	0.85	43.1	1475	90.0	91.0	91.5	0.63	0.75	0.81	41.3
30	40	1470	92.2	93.0	92.6	0.78	0.84	0.86	57.2	1480	91.5	93.0	93.2	0.72	0.80	0.84	53.3
37	50	1475	91.6	92.4	92.5	0.79	0.86	0.89	68.3	1480	90.8	92.1	92.9	0.72	0.83	0.87	63.7
45	60	1475	91.3	92.8	93.5	0.80	0.87	0.89	82.2	1480	91.0	92.9	93.5	0.72	0.83	0.87	77.0
55	75	1475	92.8	93.5	93.4	0.83	0.88	0.91	98.3	1480	92.5	93.4	93.6	0.77	0.85	0.89	91.9
75	100	1480	92.8	93.9	94.2	0.85	0.89	0.90	134	1485	92.2	93.8	94.3	0.81	0.87	0.89	124
90	125	1480	92.6	94.1	94.2	0.84	0.88	0.90	161	1485	92.0	93.9	94.2	0.80	0.86	0.89	149
110	150	1480	92.8	93.6	94.2	0.80	0.86	0.88	202	1485	92.8	94.4	94.5	0.76	0.83	0.87	186
132	175	1480	93.5	94.9	95.1	0.81	0.86	0.89	237	1485	93.3	94.7	95.1	0.76	0.84	0.87	222
160	220	1480	93.0	95.0	95.4	0.81	0.86	0.88	290	1485	94.2	95.1	95.5	0.77	0.84	0.87	268
200	270	1485	94.2	95.0	95.1	0.84	0.87	0.89	359	1490	93.8	94.9	95.1	0.80	0.85	0.87	336
250	340	1485	94.5	95.2	95.7	0.82	0.87	0.89	446	1490	94.1	95.0	95.7	0.77	0.85	0.87	418
315	430	1485	95.0	95.8	96.1	0.83	0.87	0.89	560	1490	94.5	95.8	96.2	0.76	0.84	0.88	518
330	450	1485	95.2	96.0	96.1	0.85	0.89	0.90	580	1490	94.8	95.8	96.2	0.81	0.87	0.89	536
HIGH-OUTPUT DESIGN																	
0.75	1	1400	75.0	76.5	76.0	0.66	0.78	0.85	1.76	1430	72.0	76.0	76.2	0.59	0.71	0.81	1.69

¹⁾For Pad Mounted, please consider frame size 180L.

²⁾Frame size 132M/L is not available for Pad Mounted.

For Pad Mounted version frame sizes up to 250S/M.



Smoke Extraction Motors Cast Iron Frame - Single Speed - 400°C/2 hours Improved Efficiency EFF2

Output		IEC Frame	Full load torque C _n (Nm)	Locked rotor current I _L /I _n	Locked rotor torque T _L /T _n	Break- down torque T _B /T _n	Inertia J kgm ²	Allowable locked rotor time Hot/Cold (s)	Weight (kg)	Sound dB (A)	Rated speed (rpm)	400 V						Full load current I _n (A)
												% of full load						
												Efficiency η			Power Factor (Cos φ)			
kW	HP											50	75	100	50	75	100	
VI Pole - 1000 rpm																		
0.37	0.5	80	3.78	4.5	2.5	2.5	0.00242	12/26	14	43	930	54.0	62.5	65.0	0.45	0.57	0.67	1.23
0.55	0.75	90S	5.73	5.5	2.1	2.4	0.00448	10/22	20	45	920	65.0	68.5	69.6	0.50	0.62	0.71	1.61
0.75	1	90S	7.68	5.5	2.2	2.3	0.00504	8/18	21	45	915	69.0	70.3	71.2	0.51	0.63	0.73	2.08
1.1	1.5	90L	11.4	5.2	2.3	2.4	0.00672	10/22	24	45	925	69.0	74.0	75.2	0.48	0.63	0.72	2.93
1.5	2	100L	14.9	4.8	2.2	2.5	0.01121	18/40	29	44	940	74.0	77.3	77.5	0.53	0.65	0.74	3.78
2.2	3	112M	22.4	5.0	2.2	2.3	0.01682	14/31	38	48	940	77.0	80.5	80.1	0.53	0.66	0.74	5.36
3	4	132S	29.6	5.3	1.9	2.2	0.03489	20/44	54	52	950	80.5	83.0	82.5	0.58	0.70	0.77	6.82
4	5.5	132M	41.1	6.0	2.1	2.2	0.05039	18/40	66	52	940	82.2	85.5	86.0	0.60	0.70	0.77	8.72
5.5	7.5	132M	54.9	6.4	2.2	2.4	0.06202	14/31	74	52	960	84.0	85.8	85.8	0.56	0.68	0.76	12.2
7.5	10	160M	72.4	6.1	2.3	2.5	0.12209	17/37	107	56	970	85.0	87.0	87.0	0.60	0.72	0.80	15.6
11	15	160L	109	6.6	2.4	2.9	0.17595	13/29	130	56	970	85.0	87.0	87.5	0.59	0.70	0.78	23.3
15	20	180L	145	8.5	2.5	2.3	0.33095	10/22	182	56	970	89.1	90.1	89.8	0.78	0.85	0.88	27.4
18.5	25	200L	180	6.0	2.3	2.3	0.37670	33/73	232	58	975	89.3	90.5	89.9	0.70	0.79	0.83	35.8
22	30	200L	216	6.0	2.2	2.3	0.41258	33/73	241	58	975	89.0	90.5	91.0	0.68	0.78	0.82	42.6
30	40	225S/M	285	7.2	2.6	2.7	0.98842	20/44	367	61	985	90.5	91.8	91.8	0.77	0.84	0.87	54.2
37	50	250S/M	358	7.5	2.7	2.6	1.22377	18/40	428	61	980	90.0	92.4	92.5	0.76	0.84	0.87	66.4
45	60	280S/M	428	6.8	2.0	2.6	2.29824	24/53	621	66	985	90.5	92.3	92.6	0.68	0.78	0.83	84.5
55	75	280S/M	535	7.0	2.0	2.5	2.64298	23/51	636	66	985	91.6	93.2	93.5	0.71	0.81	0.84	101
75	100	315S/M	713	6.7	2.3	2.5	3.44737	20/44	788	69	985	91.6	93.5	93.7	0.71	0.81	0.85	136
90	125	315S/M	891	6.3	2.1	2.3	3.67719	18/40	813	69	985	92.5	94.0	93.9	0.73	0.81	0.85	163
110	150	315S/M	1070	6.4	2.3	2.4	5.28596	18/40	988	69	985	93.4	94.5	94.6	0.71	0.80	0.84	200
132	175	355M/L	1242	6.1	2.0	2.3	8.10159	90/198	1100	73	990	92.5	94.7	94.7	0.65	0.75	0.80	251
160	220	355M/L	1561	6.2	1.9	2.1	9.53128	72/158	1526	73	990	93.0	95.0	95.4	0.67	0.77	0.82	295
200	270	355M/L	1916	6.3	2.1	2.3	12.3907	85/187	1754	73	990	93.5	94.5	94.8	0.70	0.78	0.81	376
250	340	355M/L	2400	6.1	2.2	2.2	14.7735	64/141	1916	73	995	94.0	95.1	95.6	0.70	0.79	0.82	460
315	430	355M/L*	3051	6.0	1.9	1.9	15.4883	38/84	1979	73	990	94.3	95.8	95.9	0.69	0.78	0.81	585
HIGH-OUTPUT DESIGN																		
0.55	0.75	80	5.66	4.5	2.3	2.3	0.00311	10/22	15	43	930	60.0	65.0	67.0	0.50	0.63	0.73	1.62
VIII Pole - 750 rpm																		
0.18	0.25	80	2.51	3.1	1.9	2.1	0.00242	16/35	14	42	700	40.0	49.0	54.2	0.43	0.53	0.62	0.77
0.25	0.33	80	3.41	3.0	1.8	1.8	0.00294	21/46	15	42	680	47.5	55.0	57.0	0.45	0.56	0.65	0.97
0.37	0.5	90S	5.16	4.0	1.9	1.9	0.00504	12/26	19	43	690	50.0	57.5	61.0	0.40	0.50	0.58	1.51
0.55	0.75	90L	7.75	4.0	1.8	1.8	0.00616	11/24	22	43	690	53.0	61.5	63.0	0.37	0.48	0.58	2.17
0.75	1	100L	10.2	4.2	2.0	2.1	0.00952	30/66	27	50	705	65.0	70.0	71.0	0.42	0.54	0.63	2.42
1.1	1.5	100L	15.3	4.1	1.5	1.9	0.01289	23/51	30	50	700	66.0	71.5	72.2	0.43	0.56	0.65	3.38
1.5	2	112M	20.1	4.6	2.3	2.5	0.02430	32/70	44	46	710	76.5	81.3	81.6	0.45	0.57	0.66	4.02
2.2	3	132S	29.7	6.2	2.2	2.5	0.07527	23/51	67	48	715	78.5	81.5	82.5	0.53	0.65	0.73	5.27
3	4	132M	39.9	5.8	2.1	2.4	0.08531	22/48	53	48	710	78.0	82.7	83.5	0.52	0.64	0.72	7.20
4	5.5	160M	53.3	5.4	2.0	2.4	0.12209	32/70	105	51	730	79.0	83.0	84.0	0.44	0.57	0.66	10.4
5.5	7.5	160M	72.7	5.4	1.9	2.2	0.14364	23/51	114	51	730	82.0	84.0	84.5	0.46	0.60	0.68	13.8
7.5	10	160L	97.6	4.9	1.7	2.0	0.16518	15/33	125	51	725	83.0	84.5	84.5	0.51	0.63	0.72	17.8
11	15	180L	146	7.3	2.0	2.2	0.30337	12/26	181	51	725	87.0	88.5	88.0	0.67	0.78	0.83	21.7
15	20	200L	194	5.0	1.7	1.8	0.41258	36/79	229	53	725	87.0	88.5	88.9	0.55	0.67	0.74	32.9
18.5	25	225S/M	241	6.9	1.9	2.5	0.84722	17/37	339	56	730	88.5	90.1	90.0	0.72	0.80	0.85	34.9
22	30	225S/M	289	7.5	2.0	2.4	0.98842	19/42	364	56	730	89.0	91.0	91.0	0.73	0.82	0.85	41.1
30	40	250S/M	385	7.9	2.0	2.6	1.22377	17/37	425	56	730	89.5	91.2	91.6	0.70	0.79	0.84	56.3
37	50	280S/M	478	6.5	1.8	2.1	2.29824	29/64	589	59	740	90.5	92.2	92.3	0.68	0.78	0.82	70.6
45	60	280S/M	573	6.9	1.8	1.9	2.64298	26/57	626	59	740	90.0	92.0	92.0	0.70	0.76	0.80	88.2
55	75	315S/M	712	6.5	1.9	2.2	3.10263	27/59	732	62	740	91.2	93.1	93.0	0.69	0.78	0.82	104
75	100	315S/M	949	6.6	1.9	2.2	4.36666	20/44	872	62	740	92.0	93.4	93.5	0.67	0.79	0.82	141
90	125	315S/M	1186	6.8	2.1	2.4	5.28596	23/51	1021	62	740	92.5	93.8	94.2	0.70	0.78	0.83	166
110	150	355M/L	1424	6.4	1.5	2.2	11.9324	41/90	1390	70	740	92.5	94.1	94.5	0.63	0.74	0.80	210
132	175	355M/L	1661	6.5	1.6	2.2	13.1885	47/103	1445	70	740	93.0	94.5	94.8	0.63	0.73	0.79	254
160	220	355M/L	2088	6.6	1.6	2.2	16.3286	42/92	1620	70	740	93.3	94.7	94.7	0.64	0.75	0.80	305
200	270	355M/L	2563	6.8	1.6	2.1	19.4687	37/81	1800	70	740	93.3	94.6	95.2	0.60	0.72	0.79	384
HIGH-OUTPUT DESIGN																		
55	75	280S/M	717	6.5	1.8	1.9	3.10263	27/59	696	59	735	90.9	93.1	93.3	0.69	0.78	0.82	104

Notes:

*Class "F" insulation with ΔT_{105K} Standard voltage, connection and frequency: 220-240V Δ 50Hz

380-415V Y 50Hz

380-415V Δ 50Hz

660-690V Y 50Hz

The values shown are subject to change without prior notice. To obtain guaranteed values please access our website.

Smoke Extraction Motors Cast Iron Frame - Single Speed - 400°C/2 hours Improved Efficiency EFF2

Output		380 V								415 V							
		Rated speed (rpm)	% of full load						Full load current I _n (A)	Rated speed (rpm)	% of full load						Full load current I _n (A)
			Efficiency η			Power Factor (Cos φ)					Efficiency η			Power Factor (Cos φ)			
			50	75	100	50	75	100			50	75	100	50	75	100	
kW	HP																
VI Pole - 1000 rpm																	
0.37	0.5	920	56.0	64.0	66.0	0.49	0.62	0.72	1.18	935	52.0	61.0	64.0	0.42	0.54	0.64	1.26
0.55	0.75	915	67.0	69.0	69.6	0.52	0.66	0.75	1.6	925	62.0	67.2	68.7	0.46	0.58	0.68	1.64
0.75	1	910	69.0	71.6	71.0	0.52	0.66	0.75	2.14	920	66.0	69.2	70.5	0.46	0.60	0.69	2.14
1.1	1.5	915	70.0	73.0	74.0	0.54	0.68	0.77	2.93	930	66.0	72.0	74.0	0.44	0.58	0.69	3.00
1.5	2	930	75.0	77.5	77.3	0.56	0.69	0.77	3.83	950	72.0	77.3	77.6	0.50	0.63	0.71	3.79
2.2	3	930	78.0	80.0	80.0	0.55	0.68	0.76	5.5	950	76.0	80.3	80.5	0.50	0.63	0.72	5.28
3	4	940	80.0	83.0	82.0	0.60	0.72	0.79	7.04	960	80.0	83.0	82.6	0.53	0.66	0.74	6.83
4	5.5	930	83.4	85.4	85.6	0.61	0.72	0.79	8.99	945	82.0	85.3	85.9	0.58	0.68	0.75	8.64
5.5	7.5	955	85.0	86.1	85.6	0.58	0.71	0.77	12.7	965	83.0	85.5	86.0	0.53	0.65	0.74	12.0
7.5	10	965	85.0	86.0	86.0	0.66	0.76	0.81	16.4	970	85.0	86.5	86.5	0.58	0.70	0.78	15.5
11	15	970	86.0	88.0	87.5	0.63	0.75	0.81	23.6	975	85.0	87.0	87.5	0.52	0.66	0.75	23.3
15	20	970	89.0	90.0	89.5	0.80	0.86	0.89	28.6	975	89.0	90.5	90.5	0.74	0.83	0.87	26.5
18.5	25	975	89.7	90.7	89.8	0.73	0.82	0.84	37.3	980	88.9	90.3	91.2	0.66	0.76	0.81	34.8
22	30	970	89.6	90.5	91.0	0.73	0.81	0.84	43.7	980	88.4	90.5	91.0	0.64	0.74	0.80	42.0
30	40	980	91.0	91.8	91.6	0.80	0.86	0.88	56.5	985	90.0	91.8	92.2	0.73	0.81	0.86	52.6
37	50	980	90.5	92.5	92.4	0.80	0.86	0.88	69.1	985	89.5	92.4	92.6	0.73	0.82	0.86	64.6
45	60	985	91.0	92.3	92.6	0.72	0.81	0.85	86.9	990	90.0	92.3	92.7	0.64	0.76	0.82	82.4
55	75	985	92.0	93.2	93.4	0.74	0.82	0.85	105	990	91.2	93.2	93.6	0.68	0.78	0.83	98.5
75	100	985	92.0	93.5	93.5	0.74	0.82	0.86	142	990	91.2	93.5	93.8	0.69	0.80	0.84	132
90	125	985	92.8	93.9	93.6	0.75	0.83	0.86	170	990	92.2	93.9	93.9	0.71	0.79	0.84	159
110	150	985	93.6	94.4	94.4	0.74	0.82	0.85	208	985	93.2	94.5	94.7	0.69	0.79	0.83	195
132	175	990	93.0	94.7	94.5	0.70	0.80	0.82	259	995	92.0	94.7	94.7	0.60	0.70	0.77	252
160	220	990	93.5	95.2	95.2	0.73	0.80	0.84	304	990	92.5	94.9	95.4	0.63	0.74	0.80	292
200	270	990	94.0	94.7	94.8	0.74	0.81	0.83	386	990	93.0	94.3	94.8	0.66	0.75	0.79	372
250	340	995	94.3	95.2	95.5	0.74	0.81	0.83	479	995	93.7	95.0	95.8	0.67	0.77	0.81	448
315	430	985	94.8	96.0	95.8	0.73	0.80	0.82	609	990	93.8	95.6	95.8	0.65	0.76	0.80	572
HIGH OUTPUT DESIGN																	
0.55	0.75	920	62.0	65.8	68.0	0.54	0.67	0.77	1.60	935	58.0	64.0	66.0	0.47	0.59	0.68	1.70
VIII Pole - 750 rpm																	
0.18	0.25	690	43.0	52.0	54.5	0.45	0.56	0.65	0.77	710	37.0	46.0	53.0	0.41	0.50	0.59	0.80
0.25	0.33	670	50.5	56.5	56.5	0.48	0.59	0.69	0.97	690	45.0	53.5	56.5	0.42	0.53	0.61	1.01
0.37	0.5	680	52.3	60.0	62.0	0.42	0.53	0.62	1.46	700	47.0	56.0	60.0	0.36	0.47	0.55	1.56
0.55	0.75	680	57.0	62.0	64.0	0.43	0.53	0.62	2.11	700	51.0	60.0	61.0	0.35	0.45	0.55	2.28
0.75	1	695	67.0	71.0	70.5	0.46	0.58	0.66	2.45	710	63.0	69.0	70.5	0.38	0.50	0.60	2.47
1.1	1.5	690	68.0	72.0	72.0	0.47	0.60	0.68	3.41	710	64.0	70.5	72.2	0.40	0.52	0.62	3.42
1.5	2	700	77.5	81.5	81.3	0.49	0.60	0.68	4.12	715	75.5	81.1	81.5	0.41	0.54	0.64	4.00
2.2	3	710	79.5	81.8	82.1	0.56	0.68	0.75	5.43	720	77.5	81.2	82.6	0.50	0.62	0.71	5.22
3	4	705	79.5	83.0	83.0	0.54	0.66	0.74	7.42	715	76.5	82.4	83.5	0.50	0.62	0.70	7.14
4	5.5	725	80.0	83.0	84.0	0.48	0.61	0.70	10.3	730	78.0	81.0	83.0	0.41	0.54	0.63	10.6
5.5	7.5	725	82.5	84.5	84.5	0.50	0.64	0.70	14.1	730	80.0	83.0	84.0	0.43	0.55	0.67	13.6
7.5	10	720	84.0	84.5	84.0	0.55	0.68	0.75	18.1	730	82.5	84.5	84.5	0.48	0.60	0.70	17.6
11	15	720	87.0	88.0	87.5	0.72	0.80	0.84	22.7	730	86.0	88.6	88.0	0.63	0.75	0.81	21.5
15	20	725	87.0	88.0	88.0	0.60	0.70	0.76	34.1	730	87.0	88.5	88.9	0.50	0.64	0.72	32.6
18.5	25	730	88.8	90.0	89.8	0.75	0.83	0.86	36.4	735	88.2	90.3	90.2	0.68	0.78	0.84	34.0
22	30	730	89.4	90.9	90.5	0.76	0.84	0.86	42.9	735	88.6	91.0	91.2	0.71	0.80	0.84	40.0
30	40	730	90.0	91.3	91.3	0.73	0.81	0.85	58.7	735	89.0	91.1	91.8	0.66	0.77	0.83	54.8
37	50	735	91.0	92.2	92.1	0.71	0.80	0.83	73.5	740	90.0	92.2	92.4	0.65	0.76	0.80	69.6
45	60	735	90.0	92.0	92.0	0.71	0.77	0.81	91.7	740	90.0	92.0	92.0	0.69	0.75	0.79	86.1
55	75	735	91.6	93.2	92.8	0.72	0.80	0.83	108	740	90.7	93.0	93.0	0.65	0.76	0.80	103
75	100	735	92.4	93.3	93.3	0.70	0.80	0.83	147	740	91.6	93.4	93.4	0.64	0.78	0.81	138
90	125	735	92.9	93.9	94.0	0.73	0.81	0.84	173	740	92.1	93.7	94.2	0.67	0.75	0.81	164
110	150	740	93.0	94.2	94.5	0.66	0.77	0.82	216	745	92.0	94.1	94.5	0.60	0.71	0.78	208
132	175	740	93.5	94.6	94.8	0.66	0.75	0.81	261	745	92.5	94.4	94.8	0.60	0.71	0.77	252
160	220	740	93.8	94.8	94.8	0.68	0.77	0.81	317	745	92.8	94.7	94.7	0.60	0.72	0.79	298
200	270	740	93.8	94.8	95.1	0.65	0.75	0.81	394	745	92.8	94.4	95.2	0.56	0.69	0.77	380
HIGH OUTPUT DESIGN																	
55	75	735	91.2	93.0	93.1	0.71	0.80	0.83	108	740	90.6	93.1	93.4	0.65	0.76	0.81	101

¹⁾For Pad Mounted, please consider frame size 180L.

²⁾Frame size 132M/L is not available for Pad Mounted.

For Pad Mounted version frame sizes up to 250S/M.

Smoke Extraction Motors Cast Iron Frame - Two Speed - 400°C/2 hours Improved Efficiency EFF2 - Variable torque IV/II Pole - Dahlander Winding

Output		IEC Frame	Full load torque C _n (Nm)	Locked rotor current I _L /I _n	Locked rotor torque T _L /T _n	Break-down torque T _B /T _n	Inertia J kgm ²	Allowable locked rotor time Hot/Cold (s)	Weight (kg)	Sound dB (A)	Rated speed (rpm)	400 V						Full load current I _n (A)
												% of full load						
kW	HP											Efficiency η			Power Factor (Cos φ)			
		50	75	100	50	75	100											
50HZ - 400V - IV/II POLE (1500/3000 RPM) - Y / YY CONNECTION																		
0.2	0.27	80	1.35	4.5	2.0	2.5	0.00242	30/66	14	44	1400	64.0	68.0	68.5	0.48	0.61	0.70	0.60
0.8	1.08		2.69	6.0	2.5	3.2		8/18		59	2820	70.0	72.0	73.0	0.66	0.77	0.83	1.91
0.25	0.33	80	1.67	3.8	2.2	2.5	0.00294	30/66	15	44	1390	66.0	70.0	70.5	0.48	0.60	0.68	0.75
1.1	1.5		3.75	6.0	2.5	2.8		8/18		59	2810	74.0	75.0	75.0	0.71	0.83	0.88	2.41
0.37	0.5	90S	2.45	4.5	2.0	2.1	0.00476	18/40	20	47	1435	62.3	67.4	68.8	0.45	0.54	0.62	1.25
1.5	2		4.84	6.5	2.5	3.0		6/13		68	2900	68.0	75.0	76.4	0.62	0.73	0.80	3.54
0.5	0.68	90L	3.36	3.5	1.8	2.2	0.00616	13/29	22	47	1420	67.0	70.0	71.0	0.47	0.58	0.66	1.54
2.2	3		7.41	6.0	2.2	2.6		6/13		68	2845	75.0	77.8	78.9	0.71	0.80	0.87	4.63
0.65	0.88	100L	4.31	4.5	2.1	2.2	0.00765	22/48	30	51	1435	72.0	76.5	77.5	0.56	0.67	0.73	1.66
2.5	3.4		8.26	6.5	2.3	2.8		6/13		67	2890	78.0	80.0	81.0	0.70	0.81	0.86	5.18
0.8	1.08	100L	5.30	4.6	2.1	2.2	0.00918	18/40	33	51	1430	75.0	77.0	77.5	0.57	0.68	0.75	1.99
3.1	4.2		10.2	7.2	2.3	2.8		6/13		67	2890	80.0	81.5	82.0	0.73	0.83	0.88	6.20
1.1	1.5	112M	7.32	5.0	1.8	2.6	0.01741	22/48	43	55	1440	74.0	78.5	79.0	0.55	0.66	0.72	2.79
4.4	5.9		14.3	7.8	2.4	3.0		7/15		64	2890	82.5	83.5	84.0	0.76	0.84	0.88	8.59
1.5	2	132S	9.62	5.6	2.0	2.4	0.02430	38/84	58	58	1460	77.0	81.5	83.0	0.50	0.62	0.71	3.67
6	8		19.2	8.3	2.5	3.0		6/13		68	2930	83.5	85.0	85.0	0.73	0.84	0.89	11.4
2	2.7	132M	12.9	5.8	1.9	2.0	0.02804	38/84	67	58	1470	80.0	82.0	83.0	0.51	0.63	0.72	4.83
8	10.8		25.9	8.5	2.6	2.7		6/13		68	2930	82.8	84.0	85.0	0.77	0.85	0.89	15.3
3	4	160M	19.1	6.0	2.0	2.4	0.05294	28/62	118	62	1470	80.0	83.0	84.0	0.50	0.63	0.71	7.26
12	16		38.1	8.5	2.5	2.9		6/13		70	2950	83.0	85.0	86.0	0.71	0.81	0.87	23.1
4	5.5	160L	26.3	6.0	2.2	2.4	0.06766	30/66	135	62	1470	83.5	84.5	85.0	0.50	0.63	0.71	9.57
16	21.7		51.7	8.6	2.6	3.0		6/13		70	2950	85.0	86.5	87.0	0.73	0.82	0.87	30.5
5.5	7.5	180M ¹⁾	36.0	4.7	1.6	2.7	0.17939	40/88	160	64	1465	84.5	87.0	87.0	0.54	0.65	0.72	12.7
20	27.2		64.7	9.2	2.7	3.5		6/13		70	2955	87.5	89.5	90.0	0.76	0.84	0.89	36.0
6.3	8.6	180L	41.2	4.7	1.6	2.4	0.21527	35/77	180	64	1465	86.5	88.0	88.5	0.54	0.65	0.72	14.3
25	34		81.0	8.9	2.7	3.4		6/13		70	2950	90.0	90.7	91.0	0.76	0.85	0.89	44.6
8.5	11.5	200L	55.0	4.2	2.0	2.0	0.34474	50/110	242	67	1470	88.5	89.5	90.0	0.58	0.69	0.74	18.4
33	44.8		106	8.2	3.2	2.8		10/22		74	2960	89.5	91.0	91.2	0.80	0.87	0.89	58.7
9	12.2	225S/M	57.71	6.1	2.3	2.6	0.39467	28/62	366	70	1485	85.0	88.0	88.5	0.55	0.65	0.72	20.4
37	50		118.25	8.7	2.6	3.0		6/13		78	2970	88.5	90.0	90.5	0.81	0.87	0.90	65.6
12	16.3	225S/M	77.88	6.3	2.2	2.4	0.76985	23/51	385	70	1470	86.0	87.0	88.2	0.57	0.67	0.73	26.9
46	63		149.5	8.8	2.4	2.8		6/13		78	2960	85.0	88.0	90.6	0.76	0.84	0.90	81.4
15	20	250S/M	94.92	5.2	1.9	2.2	1.08479	32/70	450	70	1480	88.5	89.7	90.5	0.64	0.73	0.76	31.5
55	75		177.37	8.5	2.3	2.7		6/13		78	2970	89.8	90.8	91.0	0.85	0.89	0.91	95.9

Notes:

*Class "F" insulation with ΔT105K

Standard voltage, connection and frequency: 220-240V Δ 50Hz

380-415V Y 50Hz

380-415V Δ 50Hz

660-690V Y 50Hz

The values shown are subject to change without prior notice. To obtain guaranteed values please access our website.

Smoke Extraction Motors Cast Iron Frame - Two Speed - 400°C/2 hours Improved Efficiency EFF2 - Variable torque VIII/IV Pole - Dahlander Winding

Output		IEC Frame	Full load torque C _n (Nm)	Locked rotor current I _L /I _n	Locked rotor torque T _L /T _n	Break- down torque T _B /T _n	Inertia J kgm ²	Allowable locked rotor time Hot/Cold (s)	Weight (kg)	Sound dB (A)	Rated speed (rpm)	400 V						Full load current I _n (A)
												% of full load						
												Efficiency η			Power Factor (Cos φ)			
kW	HP											50	75	100	50	75	100	
50Hz - 400V - VIII/IV pole (750/1500 rpm) - Y / YY connection																		
0.15	0.2	80	1.98	3.1	2.3	2.5	0.00294	20/44	15	42	710	31.0	39.0	46.0	0.47	0.54	0.62	0.76
0.6	0.8		3.90	5.5	2.2	2.7		6/13		51	1440	57.0	65.0	68.5	0.51	0.64	0.72	1.76
0.2	0.27	80	2.75	2.7	1.7	2.0	0.00294	18/40	15	42	690	37.0	45.0	49.5	0.50	0.60	0.66	0.88
0.8	1.08		5.36	4.7	1.7	2.1		6/13		51	1415	64.0	69.0	70.0	0.59	0.73	0.83	1.99
0.3	0.4	90S	3.99	3.1	2.2	2.2	0.00560	28/62	20	43	705	46.0	54.0	57.0	0.42	0.50	0.59	1.29
1.2	1.6		7.86	5.5	2.3	2.7		6/13		53	1430	72.0	75.0	76.0	0.55	0.69	0.78	2.92
0.4	0.55	90L	5.52	3.2	2.2	2.3	0.00672	17/37	23	43	700	49.0	56.0	59.0	0.40	0.50	0.58	1.69
1.6	2.17		10.7	5.7	2.3	2.6		6/13		54	1420	73.0	76.0	77.0	0.57	0.70	0.79	3.80
0.55	0.75	100L	7.53	3.5	2.3	2.5	0.01345	20/44	30	50	700	55.0	63.0	65.0	0.40	0.52	0.61	2.00
2.2	3		14.7	6.9	2.5	2.8		6/13		55	1430	77.0	79.0	80.0	0.62	0.75	0.82	4.84
0.7	0.95	100L	9.67	3.6	2.2	2.4	0.01457	20/44	33	50	690	58.0	64.5	66.5	0.42	0.53	0.63	2.41
2.8	3.8		18.9	6.0	2.4	2.6		6/13		55	1410	77.5	80.0	80.0	0.64	0.77	0.84	6.01
1	1.4	112M	13.9	4.0	2.0	2.1	0.02617	18/40	43	46	710	70.0	73.0	74.0	0.50	0.64	0.71	2.75
3.8	5.2		25.4	7.0	2.6	2.8		6/13		57	1440	76.0	78.5	80.0	0.62	0.76	0.83	8.26
1.3	1.77	132S	17.0	6.2	2.1	2.8	0.07527	20/44	68	48	730	72.0	75.0	76.5	0.48	0.61	0.70	3.50
5	6.8		33.2	8.5	2.7	2.8		6/13		62	1440	77.0	79.0	80.0	0.71	0.82	0.87	10.4
1.8	2.45	132M/L ²⁾	23.7	6.2	2.1	2.5	0.09535	21/46	80	48	725	76.0	79.0	80.0	0.50	0.63	0.70	4.64
7.2	9.8		48.1	8.5	2.7	2.7		6/13		62	1430	79.0	81.0	82.0	0.71	0.82	0.88	14.4
3	4	160M	38.8	4.3	1.7	2.1	0.14364	30/66	119	51	725	81.0	82.0	82.5	0.54	0.67	0.75	7.00
11	15		72.4	7.0	2.4	2.7		6/13		64	1455	84.0	85.5	86.0	0.71	0.83	0.88	21.0
3.5	4.8	160L	46.5	4.2	1.9	2.2	0.18673	30/66	135	51	725	81.0	83.0	83.0	0.51	0.64	0.72	8.45
14	19		91.7	7.2	2.6	2.9		6/13		64	1455	84.0	86.0	86.5	0.71	0.83	0.88	26.5
4.3	5.8	180M ¹⁾	55.8	4.0	1.7	2.0	0.19734	20/44	162	51	730	80.0	83.0	84.2	0.39	0.50	0.58	12.7
17	23		110	8.0	2.4	2.8		7/15		69	1475	88.6	89.5	89.5	0.62	0.75	0.82	33.4
5	6.8	180L	65.4	5.1	2.0	2.0	0.33095	20/44	177	51	730	79.0	82.7	82.7	0.40	0.54	0.62	14.1
20	27		129	8.8	2.5	2.6		7/15		69	1470	85.0	88.0	89.0	0.65	0.77	0.84	38.6
6.5	8.8	200L	84.1	3.6	1.9	2.0	0.38609	20/44	235	53	735	83.5	86.5	87.0	0.43	0.54	0.60	18.0
28	38		180	7.4	2.6	2.8		8/18		70	1480	90.5	91.5	91.5	0.71	0.81	0.85	52.0
8	10.8	200L*	104	4.0	1.8	2.0	0.41370	20/44	255	53	730	82.5	86.0	87.0	0.41	0.53	0.61	21.8
35	47		225	7.8	2.4	2.8		6/13		70	1470	89.0	90.0	90.5	0.66	0.78	0.83	67.3
9.2	12.5	225S/M	119	5.5	2.8	3.1	0.75686	18/40	360	56	740	81.0	85.0	87.0	0.43	0.53	0.60	25.4
37	50		237	9.5	3.1	4.2		6/13		70	1485	86.5	89.0	90.0	0.62	0.74	0.80	74.2
11	15	225S/M	142	5.0	2.2	2.2	1.12963	20/44	425	56	740	83.0	86.0	87.0	0.47	0.58	0.67	27.2
44	59.7		283	8.0	2.4	3.0		8/18		74	1480	89.0	90.5	91.0	0.73	0.83	0.87	80.2
14.7	19.9	250S/M	190	4.6	1.8	2.0	1.55324	18/40	450	56	735	86.0	87.5	88.0	0.45	0.58	0.66	36.5
55	75		356	9.0	2.6	3.0		6/13		74	1480	89.0	90.5	91.0	0.71	0.82	0.87	100
17	23	280S/M	218	4.2	1.5	1.6	3.33245	20/44	650	59	740	83.2	86.4	88.6	0.47	0.57	0.63	44.0
68	92.3		437	8.0	2.5	2.5		10/22		74	1485	85.1	89.0	90.0	0.76	0.83	0.86	127
20	27	280S/M	256	4.2	1.6	1.6	3.67719	20/44	690	59	740	83.9	87.3	89.0	0.46	0.57	0.61	53.2
80	109		516	8.6	2.7	2.8		10/22		78	1485	86.5	89.0	90.3	0.76	0.81	0.84	152
27	37	315S/M	351	4.0	1.7	1.7	4.82631	20/44	890	62	740	81.9	86.8	88.5	0.40	0.50	0.56	78.6
110	150		709	8.5	2.6	2.7		10/22		78	1485	88.0	90.2	91.3	0.69	0.72	0.82	212
33	44.8	315S/M	425	4.0	1.7	1.8	5.40087	20/44	990	62	740	83.5	87.8	89.4	0.40	0.51	0.58	91.9
130	177		837	8.4	2.6	2.7		10/22		78	1485	87.3	90.0	91.3	0.65	0.76	0.82	251
40	55	315S/M*	522	4.0	1.6	1.6	5.40087	20/44	1000	62	740	89.2	91.0	91.3	0.43	0.59	0.59	107
160	217		1026	8.0	2.3	2.5		10/22		78	1485	91.3	92.8	93.9	0.74	0.84	0.84	293

¹⁾For Pad Mounted, please consider frame size 180L.

²⁾Frame size 132M/L is not available for Pad Mounted.
For Pad Mounted version frame sizes up to 250S/M.

Smoke Extraction Motors Cast Iron Frame - Two Speed - 400°C/2 hours Improved Efficiency EFF2 - Variable torque VI/IV Pole - Independent Winding

Output		IEC Frame	Full load torque C _n (Nm)	Locked rotor current I _L /I _n	Locked rotor torque T _L /T _n	Break-down torque T _B /T _n	Inertia J kgm ²	Allowable locked rotor time Hot/Cold (s)	Weight (kg)	Sound dB (A)	Rated speed (rpm)	400 V						Full load current I _n (A)
												% of full load						
												Efficiency η			Power Factor (Cos φ)			
kW	HP											50	75	100	50	75	100	
50Hz - 400V - VI/IV pole (1000/1500 rpm) - Y / Y connection																		
0.2	0.27	80	1.96	3.7	1.9	2.7	0.00328	9/20	11	48	970	31.0	40.0	46.0	0.44	0.52	0.60	1.05
0.55	0.75		3.63	5.0	1.9	2.7		6/13		54	1450	52.0	60.0	65.7	0.48	0.61	0.69	1.75
0.25	0.33	80	2.39	3.9	2.5	3.4	0.00346	7/15	12	48	970	33.0	41.5	48.0	0.42	0.50	0.57	1.32
0.75	1		4.91	4.7	1.4	2.1		6/13		54	1430	62.0	67.0	68.0	0.59	0.72	0.82	1.94
0.3	0.4	90S	2.90	5.1	2.6	3.2	0.00560	9/20	16	45	970	38.0	48.0	53.0	0.39	0.46	0.54	1.51
1.1	1.5		7.32	5.4	2.0	2.6		6/13		57	1440	65.0	71.0	72.5	0.51	0.65	0.75	2.92
0.37	0.5	90L	3.62	4.5	2.1	2.6	0.00672	8/18	20	45	970	40.0	50.0	55.0	0.43	0.50	0.60	1.62
1.5	2		9.76	5.5	1.9	2.4		6/13		57	1440	70.0	74.0	75.0	0.55	0.69	0.79	3.65
0.6	0.82	100L	5.94	5.0	2.2	3.1	0.01345	9/20	25	44	970	51.0	59.0	63.0	0.41	0.50	0.59	2.33
1.7	2.3		11.1	6.5	2.1	2.7		6/13		59	1450	68.0	73.0	75.0	0.52	0.65	0.74	4.42
0.7	0.95	100L	6.88	5.5	2.8	3.5	0.01000	10/22	27	44	970	57.0	64.0	68.0	0.40	0.50	0.60	2.48
2.2	3		14.7	6.0	1.7	2.2		6/13		59	1430	76.0	77.0	77.0	0.64	0.77	0.84	4.91
1	1.36	112M	9.70	6.2	3.0	3.5	0.02617	7/15	36	48	985	54.0	63.0	68.0	0.37	0.46	0.55	3.86
3	4		19.2	7.6	2.6	3.0		6/13		61	1460	76.0	80.0	81.0	0.58	0.70	0.78	6.85
1.5	2	132S	14.2	7.0	3.0	3.8	0.05071	8/18	68	52	990	64.0	71.0	76.0	0.35	0.45	0.53	5.38
4.5	6		28.8	7.5	2.8	3.1		8/18		65	1465	76.0	80.0	82.0	0.58	0.70	0.78	10.2
2.2	3	132M	21.3	7.4	2.8	3.2	0.06242	7/15	79	52	990	72.0	78.0	80.0	0.37	0.48	0.57	6.96
6	8.1		38.8	7.8	2.5	3.1		6/13		65	1465	75.0	80.0	82.0	0.57	0.70	0.78	13.7
2.5	3.4	160M	24.4	7.0	2.5	3.6	0.11491	12/26	96	56	980	74.5	79.0	81.0	0.49	0.64	0.74	6.02
5.5	7.5		35.7	7.5	2.0	3.3		6/13		68	1475	75.5	80.0	81.5	0.60	0.74	0.83	11.7
3.3	4.5	160M	32.4	4.0	2.0	2.3	0.10610	18/40	120	56	975	75.5	78.5	79.0	0.48	0.61	0.69	8.74
10	13.6		64.8	7.0	3.0	3.2		7/15		68	1475	83.0	86.0	87.0	0.56	0.69	0.76	22.0
3.5	4.8	160M	34.4	6.6	2.3	3.2	0.14364	9/20	118	56	980	77.0	81.0	82.0	0.53	0.68	0.78	7.90
7.5	10		47.6	8.0	2.2	3.5		6/13		68	1475	78.0	82.0	83.5	0.60	0.75	0.83	15.6
4.5	6	160L	43.2	4.5	1.9	2.0	0.13131	8/18	135	56	975	77.0	79.0	79.0	0.56	0.68	0.75	11.0
14	19		90.8	7.0	3.0	3.0		8/18		68	1470	84.5	87.0	88.0	0.66	0.77	0.82	28.0
5	6.8	180M ¹⁾	48.5	8.0	2.2	2.7	0.27579	6/13	163	56	985	85.0	86.0	86.0	0.73	0.83	0.87	9.65
11	15		71.7	10.0	2.6	3.3		5/11		71	1470	86.5	88.0	88.5	0.85	0.90	0.92	19.5
6.5	8.8	180M ¹⁾	63.1	7.6	2.1	2.9	0.33308	5/11	195	56	980	85.5	86.0	86.3	0.73	0.83	0.87	12.5
16	21.7		104.0	8.5	2.4	2.9		5/11		71	1465	88.0	88.5	88.5	0.89	0.91	0.92	28.4
8.5	11.5	180L	82.0	8.7	2.5	3.5	0.37922	5/11	230	56	985	86.5	87.5	87.5	0.68	0.80	0.86	16.3
20	27.2		130.4	9.0	2.4	3.3		5/11		71	1465	88.5	89.0	89.0	0.86	0.91	0.93	34.9
9	12.2	200L	86.6	8.1	3.0	3.2	0.50550	7/15	280	58	990	84.5	87.5	88.5	0.58	0.70	0.79	18.6
26	35.5		168.5	7.5	2.5	3.1		13/29		74	1480	88.5	90.5	90.5	0.74	0.83	0.87	47.7
12	16	225S/M	113.5	8.3	3.5	3.5	0.77479	9/20	379	61	990	82.0	85.5	87.0	0.50	0.62	0.71	28.0
34	46.2		218.5	8.5	2.5	3.2		6/13		76	1485	87.0	89.0	89.0	0.72	0.82	0.87	63.4
14	19	225S/M	134.8	8.0	3.2	3.3	0.84523	5/11	433	61	990	81.5	85.5	87.0	0.48	0.61	0.71	32.7
40	55		260.2	9.0	2.9	3.5		5/11		76	1485	88.5	90.5	91.0	0.71	0.81	0.87	72.9
18	24.4	250S/M	173.1	8.1	3.3	3.6	1.16219	9/20	520	61	990	86.0	88.0	89.0	0.51	0.65	0.73	40.0
50	68		321.6	8.6	2.6	3.4		5/11		76	1485	90.0	91.5	92.0	0.73	0.83	0.87	90.2
25	34	280S/M	241.2	8.0	3.6	3.2	2.58594	11/24	685	66	990	84.0	87.5	89.0	0.50	0.61	0.69	58.8
70	95		449.3	7.5	2.3	2.8		20/44		81	1485	90.5	92.0	93.0	0.78	0.85	0.87	125
28	38	280S/M	269.6	7.1	3.1	2.7	2.82838	24/53	748	66	990	86.0	89.0	90.5	0.55	0.66	0.73	61.2
80	109		513.8	9.0	2.7	3.4		12/26		81	1490	89.0	91.5	92.6	0.71	0.80	0.85	147
34	46	315S/M	324.7	8.8	3.7	3.4	3.39405	8/18	898	69	995	85.0	88.0	90.0	0.49	0.61	0.69	79.0
95	129		610.2	8.1	2.9	2.9		15/33		81	1485	91.0	92.7	93.5	0.79	0.85	0.88	167
40	54.3	315S/M	385.3	7.0	3.3	3.3	3.79810	15/33	1005	69	990	88.5	90.5	91.5	0.50	0.62	0.70	90.1
115	156		735.4	9.0	3.0	3.8		11/24		81	1490	91.4	93.2	93.9	0.62	0.73	0.80	221
45	60	315S/M	425.7	6.5	2.7	2.5	3.79810	8/18	1005	69	990	90.0	91.0	91.5	0.60	0.71	0.77	92.2
125	170		801.4	9.0	2.9	3.5		13/29		81	1490	93.0	94.0	94.5	0.70	0.80	0.83	230
55	75	315S/M	532.1	7.2	3.2	2.9	3.79810	5/11	1005	69	990	90.0	91.0	91.6	0.56	0.68	0.75	116
145	197		931.8	8.0	2.5	3.0		9/20		81	1485	93.5	94.5	94.5	0.73	0.83	0.84	264

Notes:

*Class "F" insulation with ΔT105K

Standard voltage, connection and frequency: 220-240V Δ 50Hz

380-415V Y 50Hz

380-415V Δ 50Hz

660-690V Y 50Hz

The values shown are subject to change without prior notice. To obtain guaranteed values please access our website.

Smoke Extraction Motors Cast Iron Frame - Two Speed - 400°C/2 hours Improved Efficiency EFF2 - Constant torque IV/II Pole - Dahlander Winding

Output		IEC Frame	Full load torque C _n (Nm)	Locked rotor current I _l /I _n	Locked rotor torque T _l /T _n	Break-down torque T _b /T _n	Inertia J kgm ²	Allowable locked rotor time Hot/Cold (s)	Weight (kg)	Sound dB (A)	Rated speed (rpm)	400 V						Full load current I _n (A)
												% of full load						
												Efficiency η			Power Factor (Cos φ)			
kW	HP											50	75	100	50	75	100	
50Hz - 400V - IV/II pole (1500/3000 rpm) - Δ / YY connection																		
0.48	0.65	80	3.31	4.0	2.3	2.3	0.00079	20/44	14	44	1380	61.0	67.0	68.1	0.50	0.62	0.72	1.41
0.60	0.82		2.04	6.1	2.5	2.8		12/26		59	2830	69.0	72.0	73.0	0.72	0.82	0.87	1.36
0.70	0.95	80	4.91	4.0	2.2	2.2	0.00096	18/40	15	44	1360	65.0	68.0	68.4	0.50	0.62	0.71	2.08
0.85	1.15		2.86	6.2	2.5	2.8		10/22		59	2820	72.0	75.5	76.5	0.73	0.82	0.88	1.82
1.1	1.5	90S	7.53	5.0	2.1	2.2	0.00504	7/15	20	47	1400	71.0	73.5	74.0	0.66	0.78	0.84	2.55
1.4	1.9		4.85	6.0	2.2	2.2		6/13		68	2750	68.0	72.0	73.0	0.70	0.81	0.90	3.08
1.5	2	90L	9.96	5.2	2.3	2.4	0.00616	8/18	22	47	1410	73.0	75.3	76.0	0.61	0.76	0.83	3.43
1.9	2.6		6.50	5.5	2.3	2.5		6/13		68	2810	68.0	72.0	72.5	0.74	0.84	0.90	4.20
2	2.7	100L	13.5	6.0	2.4	2.4	0.00918	12/26	34	51	1410	72.4	75.5	76.2	0.62	0.74	0.83	4.56
2.4	3.3		8.08	6.7	2.4	2.5		8/18		67	2870	72.0	74.0	76.0	0.75	0.85	0.89	5.12
2.6	3.5	100L	17.4	5.5	2.4	2.5	0.00918	8/18	34	51	1410	74.0	77.3	78.0	0.62	0.74	0.83	5.80
3.1	4.2		10.3	6.8	2.5	2.8		6/13		67	2870	74.0	77.0	77.5	0.67	0.80	0.87	6.64
3.7	5	112M	24.6	6.0	2.3	2.3	0.01607	8/18	45	55	1430	79.5	80.0	80.0	0.68	0.80	0.86	7.76
4.4	5.9		14.4	7.3	2.4	2.7		6/13		64	2885	79.0	80.0	80.5	0.77	0.86	0.91	8.67
4.9	6.6	132S	32.0	6.5	1.7	2.0	0.04264	8/18	62	58	1450	82.0	83.0	83.0	0.78	0.86	0.89	9.57
5.9	7.9		19.2	6.5	2.0	2.3		6/13		68	2890	77.5	78.5	79.0	0.82	0.89	0.92	11.7
6.8	9.2	132M	44.6	6.4	1.6	2.0	0.05427	7/15	68	58	1450	83.0	84.0	84.0	0.75	0.84	0.88	13.3
8	10.9		26.3	6.5	2.0	2.3		6/13		68	2910	79.0	81.0	82.0	0.75	0.87	0.91	15.5
9.5	12.9	160M	62.5	5.0	2.0	2.1	0.09535	20/44	110	62	1450	83.5	84.2	85.0	0.77	0.84	0.86	18.8
11	15		35.8	8.0	2.8	2.8		10/22		70	2940	80.0	82.1	83.0	0.78	0.86	0.87	22.0
12	16.3	160L*	79.0	5.0	1.9	2.0	0.11542	20/44	126	62	1450	83.9	85.5	86.0	0.78	0.85	0.87	23.1
15	20		48.3	7.0	2.1	2.6		8/18		70	2910	82.5	85.0	85.4	0.85	0.90	0.92	27.6
15	20	180M ¹⁾	96.2	6.3	2.2	2.3	0.19733	17/37	170	64	1460	86.5	87.7	88.0	0.72	0.81	0.86	28.6
18	24.5		58.3	7.5	2.3	2.8		10/22		70	2950	86.5	87.5	88.0	0.84	0.89	0.92	32.1
18	24.5	180L	117	6.7	2.2	2.4	0.22424	15/33	190	64	1465	87.5	88.7	89.0	0.71	0.81	0.85	34.3
21.5	29.2		69.5	8.5	2.5	2.9		9/20		70	2950	86.5	88.0	88.7	0.79	0.87	0.90	38.9
26	35	200L	167	6.2	2.0	2.2	0.35853	22/48	250	67	1475	89.0	90.0	90.5	0.69	0.79	0.84	49.4
33	45		107	8.0	2.2	2.5		8/18		74	2950	85.5	88.0	88.8	0.83	0.89	0.91	58.9
32	43.5	225S/M	206	8.1	2.6	3.3	0.69987	11/24	350	70	1480	89.0	90.1	90.6	0.76	0.83	0.88	57.9
38	52		123	8.7	2.6	3.3		8/18		78	2960	84.6	87.3	88.5	0.83	0.87	0.89	69.6
38	52	225S/M	247	7.8	2.3	2.6	0.76985	12/26	380	70	1480	89.0	90.4	91.0	0.75	0.83	0.88	68.5
45	60		142	8.3	2.5	2.8		7/15		78	2960	85.0	87.9	89.0	0.77	0.84	0.87	83.9
46	63	250S/M	301	8.0	2.3	2.6	0.97981	7/15	440	70	1470	89.2	90.8	91.4	0.76	0.83	0.88	82.5
55	75		179	8.6	2.2	2.8		6/13		78	2940	85.5	88.4	89.5	0.82	0.87	0.90	98.6

¹⁾For Pad Mounted, please consider frame size 180L.

²⁾Frame size 132M/L is not available for Pad Mounted.
For Pad Mounted version frame sizes up to 250S/M.

Smoke Extraction Motors Cast Iron Frame - Two Speed - 400°C/2 hours Improved Efficiency EFF2 - Constant torque VIII/IV Pole - Dahlander Winding

Output		IEC Frame	Full load torque C _n (Nm)	Locked rotor current I _L /I _n	Locked rotor torque T _L /T _n	Break-down torque T _B /T _n	Inertia J kgm ²	Allowable locked rotor time Hot/Cold (s)	Weight (kg)	Sound dB (A)	Rated speed (rpm)	400 V						Full load current I _n (A)
												% of full load						
												Efficiency η			Power Factor (Cos φ)			
kW	HP											50	75	100	50	75	100	
50Hz - 400V - VIII/IV pole (750/1500 rpm) - Δ / YY connection																		
0.27	0.37	80	3.79	2.5	1.8	1.8	0.00294	10/22	15	42	685	35.0	41.0	48.0	0.46	0.55	0.64	1.27
0.4	0.55		2.72	4.2	1.6	1.8		9/20		51	1420	65.0	68.0	69.1	0.60	0.71	0.81	1.03
0.4	0.54	90S	5.42	3.2	2.0	2.0	0.00504	13/29	19	43	700	40.0	50.0	53.0	0.42	0.52	0.60	1.82
0.7	0.95		4.77	5.0	1.8	2.0		8/18		53	1400	71.5	73.0	73.0	0.68	0.80	0.86	1.61
0.52	0.71	90L	7.12	3.3	2.0	2.0	0.00672	8/18	23	43	700	45.0	53.0	57.0	0.42	0.53	0.63	2.09
0.9	1.22		6.16	5.2	1.8	2.0		7/15		54	1390	73.5	75.0	75.0	0.70	0.81	0.86	2.01
0.7	0.95	100L	9.40	4.2	1.9	2.2	0.01121	13/29	29	50	710	60.0	66.0	68.0	0.42	0.53	0.64	2.32
1.1	1.5		7.32	5.8	2.0	2.4		6/13		55	1440	71.0	75.0	75.0	0.61	0.74	0.82	2.58
1.1	1.5	100L	15.1	4.2	1.9	2.3	0.01289	12/26	31	50	700	62.0	67.0	68.5	0.44	0.56	0.66	3.51
1.8	2.45		12.0	5.5	2.1	2.4		6/13		55	1430	70.0	75.0	75.0	0.64	0.75	0.82	4.22
1.5	2	112M	19.5	5.0	2.5	2.5	0.02617	8/18	45	46	720	66.0	71.0	75.0	0.43	0.53	0.64	4.51
2.5	3.4		16.6	7.0	2.5	2.7		6/13		57	1440	78.0	80.0	80.5	0.72	0.82	0.88	5.09
1.9	2.58	132S	25.2	6.3	2.6	2.6	0.07527	7/15	68	48	720	70.0	74.5	76.0	0.44	0.57	0.67	5.39
3.7	5		24.6	7.0	2.4	2.4		6/13		62	1430	79.2	80.1	82.0	0.78	0.87	0.90	7.24
3.3	4.5	132M/L ²⁾	43.9	6.3	2.6	2.8	0.09535	10/22	80	48	720	74.0	77.0	78.0	0.47	0.60	0.70	8.72
5.5	7.5		36.8	7.5	2.7	2.7		6/13		62	1430	79.6	80.6	82.5	0.78	0.87	0.90	10.7
3.7	5	160M	48.1	5.4	2.3	2.8	0.12927	10/22	119	51	730	72.5	77.5	79.5	0.43	0.55	0.65	10.3
7	9.5		46.0	6.5	2.2	2.6		6/13		64	1450	83.5	84.2	84.5	0.79	0.87	0.90	13.3
5.5	7.5	160M	73.2	5.0	2.1	2.4	0.14364	15/33	119	51	720	74.0	77.5	79.6	0.48	0.60	0.70	14.2
8.8	12		58.1	6.5	2.1	2.4		7/15		64	1450	83.2	84.3	84.5	0.79	0.86	0.88	17.1
7	9.5	160L	92.0	5.0	2.3	2.4	0.16518	12/26	127	51	725	75.0	79.5	80.5	0.46	0.58	0.68	18.5
11	15		72.4	6.5	2.2	2.6		6/13		64	1455	84.0	85.0	85.0	0.77	0.86	0.89	21.0
11	15	180L	144	7.3	2.3	2.5	0.30337	6/13	177	51	730	82.0	82.6	84.0	0.50	0.63	0.70	27.0
18	24.5		118	8.5	2.2	2.4		6/13		69	1460	85.8	86.3	87.0	0.81	0.88	0.90	33.2
17	23	200L	220	4.5	2.0	2.2	0.50227	26/57	255	53	735	84.5	86.5	87.2	0.54	0.67	0.74	38.0
27	37		177	6.0	2.0	2.4		10/22		67	1465	88.0	89.0	89.5	0.85	0.89	0.91	47.8
22	30	225S/M	289	7.5	2.0	2.3	1.22377	9/20	360	56	730	86.5	87.5	88.0	0.65	0.76	0.82	44.0
32	43.5		209	8.5	2.0	2.5		6/13		70	1465	87.5	88.5	89.0	0.89	0.93	0.94	55.2
26	35	225S/M	339	7.5	2.0	2.3	1.36497	7/15	425	56	725	86.2	87.3	88.0	0.67	0.78	0.82	52.0
37	50		242	8.8	2.0	2.3		6/13		70	1450	87.2	88.1	88.7	0.85	0.89	0.91	66.2
33	45	250S/M	433	7.2	1.9	2.2	1.55324	6/13	450	56	730	87.0	88.3	89.0	0.67	0.78	0.82	65.3
47	64		308	9.0	2.2	2.4		6/13		70	1460	87.5	88.4	90.0	0.86	0.90	0.92	81.9
38	52	280S/M	494	5.0	1.8	2.2	3.33245	25/55	650	59	740	87.8	89.5	90.5	0.53	0.63	0.69	87.8
56	76		359	7.0	1.8	2.2		12/26		77	1485	89.5	90.5	91.0	0.83	0.86	0.88	101
46	63	280S/M	602	4.5	1.7	2.0	2.5692	30/66	690	59	735	89.0	90.0	90.2	0.53	0.63	0.70	105
67	91		430	7.0	2.0	2.2		15/33		77	1485	90.5	91.4	91.8	0.84	0.88	0.89	118
56	76	315S/M	726	4.5	1.8	2.0	3.21158	30/66	890	62	735	89.5	90.5	91.0	0.53	0.64	0.70	127
83	113		536	7.0	2.0	2.2		15/33		77	1480	90.5	91.5	92.0	0.84	0.88	0.90	145
78	106	315S/M	1006	7.0	1.8	2.2	5.28596	10/22	990	62	740	88.6	90.6	91.1	0.65	0.76	0.80	154
115	156		738	8.4	2.0	2.3		6/13		77	1485	88.0	90.0	91.2	0.88	0.90	0.92	198

Notes:

*Class "F" insulation with ΔT105K

Standard voltage, connection and frequency: 220-240V Δ 50Hz

380-415V Y 50Hz

380-415V Δ 50Hz

660-690V Y 50Hz

The values shown are subject to change without prior notice. To obtain guaranteed values please access our website.

Smoke Extraction Motors Cast Iron Frame - Two Speed - 400°C/2 hours Improved Efficiency EFF2 - Constant torque VI/IV Pole - Independent Winding

Output		IEC Frame	Full load torque C _n (Nm)	Locked rotor current I _L /I _n	Locked rotor torque T _L /T _n	Break-down torque T _B /T _n	Inertia J kgm ²	Allowable locked rotor time Hot/Cold (s)	Weight (kg)	Sound dB (A)	Rated speed (rpm)	400 V						Full load current I _n (A)
												% of full load						
												Efficiency η			Power Factor (Cos φ)			
kW	HP											50	75	100	50	75	100	
50Hz - 400V - VI/IV pole (1000/1500 rpm) - Y / Y connection																		
0.22	0.3	80	2.19	4.0	2.3	2.8	0.00346	11/24	12	48	960	37.0	46.0	52.0	0.41	0.50	0.56	1.09
0.32	0.43		2.07	5.2	2.1	2.6		6/13		54	1460	48.0	55.0	61.0	0.40	0.51	0.59	1.28
0.26	0.36	80	2.63	3.5	2.1	2.7	0.00346	12/26	12	48	960	37.0	46.0	52.0	0.43	0.52	0.60	1.20
0.4	0.54		2.60	5.0	1.8	2.9		8/18		54	1460	50.0	58.0	62.0	0.49	0.60	0.69	1.35
0.38	0.52	90S	3.77	6.2	2.4	3.3	0.00560	6/13	16	45	970	48.0	58.0	63.7	0.40	0.50	0.59	1.46
0.65	0.88		4.23	6.4	2.0	2.9		5/11		57	1460	61.5	68.0	72.3	0.52	0.64	0.74	1.75
0.55	0.75	90L	5.49	4.0	2.2	2.9	0.00672	12/26	20	45	960	52.0	60.0	65.0	0.41	0.52	0.61	2.00
0.9	1.22		5.95	5.6	2.0	2.8		5/11		57	1440	67.0	72.0	73.0	0.54	0.67	0.77	2.31
0.9	1.22	100L	9.07	4.7	2.2	2.4	0.01121	9/20	21	44	945	59.0	65.0	67.7	0.51	0.62	0.71	2.70
1.3	1.77		8.63	5.8	1.8	2.4		8/18		59	1440	69.5	72.0	72.4	0.61	0.72	0.81	3.20
1.1	1.5	100L	11.2	4.5	2.1	2.3	0.00925	9/20	25	44	940	65.0	69.0	69.2	0.48	0.61	0.74	3.10
1.7	2.3		11.2	6.0	2.0	2.7		5/11		59	1440	73.5	76.5	76.7	0.56	0.70	0.80	4.00
1.5	2	112M	14.5	5.8	2.6	3.0	0.01889	10/22	36	48	970	70.0	74.0	77.0	0.51	0.62	0.69	4.08
2.3	3.1		14.9	6.6	1.8	2.6		5/11		61	1460	73.0	76.0	78.0	0.63	0.75	0.81	5.25
2	2.7	132S	19.3	6.2	2.8	3.2	0.05072	9/20	68	52	985	63.0	70.0	73.0	0.45	0.57	0.66	5.99
3.1	4.2		20.2	7.8	2.2	2.9		12/26		65	1460	82.0	84.0	84.2	0.64	0.75	0.83	6.40
2.8	3.8	132M	27.1	7.9	2.5	2.9	0.06242	9/20	79	52	985	77.0	81.0	82.0	0.48	0.60	0.69	7.14
4.3	5.8		27.8	7.2	2.2	2.5		8/18		65	1465	80.0	81.0	82.0	0.70	0.80	0.85	8.90
4.3	5.8	160M	41.8	5.5	2.0	2.6	0.11565	8/18	96	56	975	79.0	80.0	81.0	0.59	0.74	0.82	9.34
6.6	8.97		42.7	6.9	2.0	3.0		5/11		68	1475	76.0	80.0	82.0	0.60	0.75	0.84	13.8
5.7	7.7	160L	55.5	5.7	2.0	2.6	0.14456	7/15	127	56	975	80.5	81.5	82.6	0.60	0.75	0.83	12.0
8.7	11.8		56.4	6.0	1.9	3.0		6/13		68	1470	79.2	82.5	83.4	0.67	0.80	0.87	17.3
9.5	12.9	180M ¹⁾	92.5	8.4	2.5	2.9	0.30532	5/11	179	56	980	86.0	86.5	87.0	0.78	0.86	0.87	18.1
14	19		90.8	8.6	2.1	3.0		5/11		71	1470	86.5	87.0	87.2	0.88	0.91	0.92	25.2
11	15	180L	108	6.5	2.0	2.2	0.33308	5/11	200	56	975	84.0	85.0	85.5	0.80	0.86	0.88	21.1
16.5	22.4		107	9.6	2.4	2.9		5/11		71	1470	86.5	87.5	88.0	0.85	0.90	0.93	29.1
16	21.7	200L	155	7.0	2.7	2.8	0.46939	8/18	280	58	985	88.0	89.5	90.0	0.64	0.75	0.81	31.7
24	32.6		155	7.0	2.3	2.6		10/22		74	1475	88.5	90.0	90.0	0.80	0.87	0.89	43.2
21	28.5	225S/M	202	7.0	2.8	3.0	0.77479	7/15	379	61	990	84.0	87.0	88.3	0.55	0.68	0.78	44.0
31	42		198	7.7	2.5	3.3		7/15		76	1490	85.0	87.5	88.5	0.70	0.80	0.86	58.8
25	34	225S/M	241	7.0	2.9	3.2	0.91566	7/15	469	61	990	85.0	87.0	88.0	0.52	0.66	0.74	55.4
37	50		237	8.1	2.4	3.2		7/15		76	1480	90.5	91.0	91.5	0.76	0.85	0.88	66.3
32	43.5	250S/M	309	6.8	2.7	3.4	1.16219	6/13	520	61	990	86.3	88.0	89.0	0.57	0.69	0.77	67.4
47	64		303	8.6	2.6	3.4		7/15		76	1485	90.0	91.5	92.0	0.76	0.85	0.88	83.8
45	60	280S/M	424	7.1	2.9	2.4	2.58594	11/24	685	66	995	87.0	89.0	90.0	0.60	0.70	0.75	96.2
66	90		426	8.5	2.5	3.0		11/24		81	1485	89.0	91.0	92.0	0.72	0.82	0.86	120
54	73	280S/M	518	7.1	3.0	2.5	3.07081	14/31	810	66	990	87.5	90.0	91.0	0.60	0.70	0.75	114
80	109		516	8.4	2.6	3.1		10/22		81	1485	89.5	91.5	92.5	0.75	0.83	0.86	145
60	80	315S/M	568	6.0	2.2	2.2	4.82631	11/24	898	69	990	86.0	89.0	90.0	0.60	0.70	0.75	128
90	125		591	8.0	2.7	2.9		9/20		81	1485	89.0	91.0	91.5	0.71	0.80	0.85	167
62	84	315S/M	596	7.7	3.0	3.3	3.39405	11/24	898	69	990	85.0	88.5	90.0	0.56	0.67	0.72	138
92	126		596	8.5	2.8	2.9		9/20		81	1485	88.0	90.5	91.5	0.80	0.86	0.87	169
75	100	315S/M*	709	7.0	2.9	2.8	3.79811	5/11	1005	69	990	86.0	89.0	90.0	0.60	0.69	0.75	160
110	150		712	6.6	2.2	2.4		5/11		81	1480	89.0	91.0	92.0	0.81	0.86	0.88	196

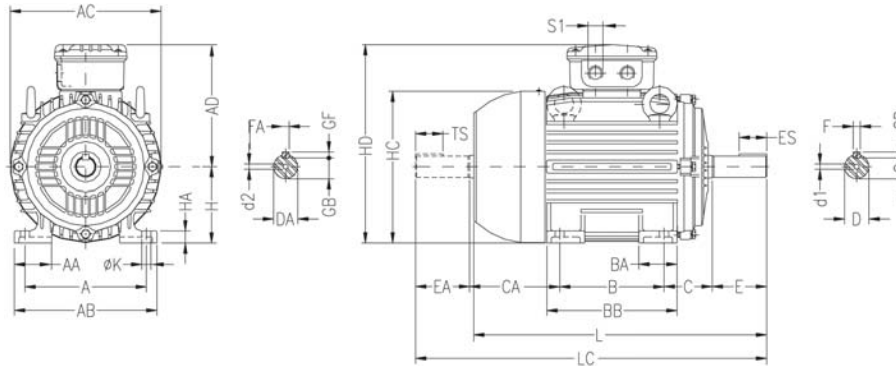
¹⁾For Pad Mounted, please consider frame size 180L.

²⁾Frame size 132M/L is not available for Pad Mounted.

For Pad Mounted version frame sizes up to 250S/M.

Smoke Extraction Motors Cast Iron Frame

Mechanical Data



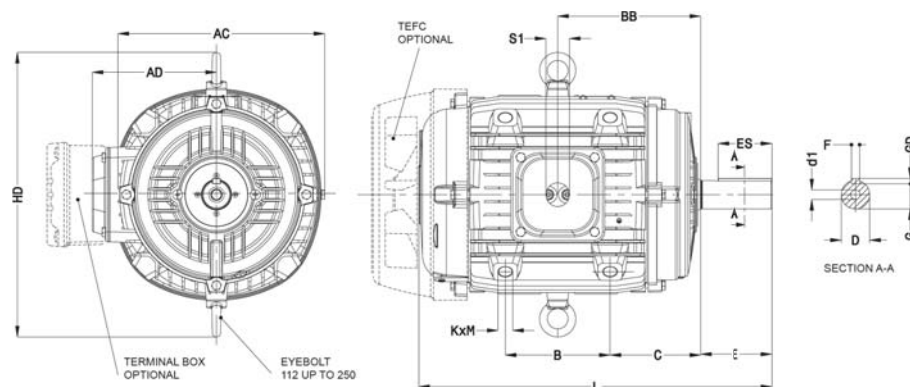
IEC FRAME	A	AA	AB	AC	AD	B	BA	BB	C	CA	SHAFT DIMENSIONS										H	HA	HC	HD	K	L'	L	LC	S1	d1	d2
											D	E	ES	F	G	GD	DA	EA	TS	FA	GB	GF									
80	125	35	149	159	130	100	40	125.5	50	93	19/6	40	28	6	15.5	6	14/6	30	18	11	5	80	13	157	210	237	276	313	2xM20x1.5	DM6	DM4
90S	140	38	164	179	150	125	42	131	56	104	24/6	50	36	8	20	7	16/6	40	28	5	13	90	15	177	240	259	304	350	2xM25x1.5	DM8	DM6
90L	140	38	164	179	150	125	42	131	56	104	24/6	50	36	8	20	7	16/6	40	28	5	13	90	15	177	240	259	304	350	2xM25x1.5	DM8	DM6
100L	160	49	188	199	160	140	50	173	63	118	28/6	60	45	10	24	8	22/6	50	36	6	18.5	100	16	193	260	322	376	431	2xM32x1.5	DM10	DM8
112M	190	48	220	222	180	178	55	177	70	128	28/6	60	45	10	24	8	22/6	50	36	6	18.5	100	16	193	260	322	376	431	2xM32x1.5	DM10	DM8
132S	216	51	248	270	207	178	55	187	89	150	38/6	80	63	10	33	8	28/6	60	45	8	24	132	20	274	339	393	452	519	2xM32x1.5	DM12	DM10
132M	216	51	248	270	207	178	55	187	89	150	38/6	80	63	10	33	8	28/6	60	45	8	24	132	20	274	339	393	452	519	2xM32x1.5	DM12	DM10
160M	254	64	308	312	250	210	65	254	108	174	42/6	110	80	12	37	9	42/6	80	60	12	37	160	22	317	410	530	598	712	2xM40x1.5	DM16	DM12
160L	254	64	308	312	250	210	65	254	108	174	42/6	110	80	12	37	9	42/6	80	60	12	37	160	22	317	410	530	598	712	2xM40x1.5	DM16	DM12
180M	279	80	350	358	270	241	75	294	121	200	48/6	110	80	14	42.5	9	48/6	110	80	14	42.5	180	28	360	450	574	642	756	2xM40x1.5	DM16	DM12
180L	279	80	350	358	270	241	75	294	121	200	48/6	110	80	14	42.5	9	48/6	110	80	14	42.5	180	28	360	450	574	642	756	2xM40x1.5	DM16	DM12
200M	318	82	385	396	294	267	85	332	133	222	55/6	140	125	16	49	10	55/6*	140	125	16	49	200	30	402	494	624	702	820	2xM50x1.5	DM20	DM16
200L	318	82	385	396	294	267	85	332	133	222	55/6	140	125	16	49	10	55/6*	140	125	16	49	200	30	402	494	624	702	820	2xM50x1.5	DM20	DM16
225S/M	356	80	436	476	368	286	105	391	149	280	55/6*	140	125	18	53	11	60/6*	140	125	18	53	225	34	463	593	718	817	935	2xM50x1.5	DM20	DM16
225M	356	80	436	476	368	286	105	391	149	280	55/6*	140	125	18	53	11	60/6*	140	125	18	53	225	34	463	593	718	817	935	2xM50x1.5	DM20	DM16
250S/M	406	100	506	546	419	349	138	449	168	312	60/6*	140	125	20	58	12	65/6*	140	125	20	58	250	42	491	618	748	847	995	2xM50x1.5	DM20	DM16
250M	406	100	506	546	419	349	138	449	168	312	60/6*	140	125	20	58	12	65/6*	140	125	20	58	250	42	491	618	748	847	995	2xM50x1.5	DM20	DM16
280S/M	457	110	557	600	463	368	142	510	190	350	65/6*	140	125	20	67.5	12	65/6*	140	125	20	67.5	280	52	573	743	937	1036	1188	2xM63x1.5	DM24	DM20
280M	457	110	557	600	463	368	142	510	190	350	65/6*	140	125	20	67.5	12	65/6*	140	125	20	67.5	280	52	573	743	937	1036	1188	2xM63x1.5	DM24	DM20
315S/M	508	182	630	698	590	406	152	558	216	376	65/6*	170	160	22	71	14	65/6*	170	160	22	71	315	52	613	807	1027	1126	1278	2xM63x1.5	DM28	DM24
315M	508	182	630	698	590	406	152	558	216	376	65/6*	170	160	22	71	14	65/6*	170	160	22	71	315	52	613	807	1027	1126	1278	2xM63x1.5	DM28	DM24
355M/L	610	140	750	816	680	560	200	760	254	458	75/6*	210	200	28	90	16	80/6	210	200	28	90	355	50	725	1035	1248	1396	1561	2xM80x1.5	M24	M20
355M	610	140	750	816	680	560	200	760	254	458	75/6*	210	200	28	90	16	80/6	210	200	28	90	355	50	725	1035	1248	1396	1561	2xM80x1.5	M24	M20

IEC FRAME	BEARINGS 200°C		BEARINGS 300°C et 400°C	
	D E	N.D.E.	D E	N.D.E.
80	6204-ZZ	6203-ZZ	6204-Z-C3	6203-Z-C3
90S	6205-ZZ	6204-ZZ	6205-Z-C3	6204-Z-C3
90L	6206-ZZ	6205-ZZ	6206-Z-C3	6205-Z-C3
100L	6206-ZZ	6205-ZZ	6206-Z-C3	6205-Z-C3
112M	6307-ZZ	6206-ZZ	6307-Z-C3	6206-Z-C3
132S	6308-ZZ	6207-ZZ	6308-Z-C3	6207-Z-C3
132M	6308-ZZ	6207-ZZ	6308-Z-C3	6207-Z-C3
160M	6309-C3	6209-Z-C3	6309-C3	6209-C3
160L	6309-C3	6209-Z-C3	6309-C3	6209-C3
180M	6311-C3	6211-Z-C3	6311-C3	6211-C3
180L	6311-C3	6211-Z-C3	6311-C3	6211-C3
200M	6312-C3	6212-Z-C3	6312-C3	6212-C3
200L	6312-C3	6212-Z-C3	6312-C3	6212-C3
225S/M	6314-C3		6314-C3	
250S/M	6314-C3		6314-C3	
280S/M	6316-C3		6316-C3	
315S/M	6314-C3		6314-C3	
355M/L	6319-C3	6319-C3	6319-C3	6319-C3
	6316-C3	6314-C3	6316-C3	6314-C3
	NU-322-C3	6319-C3	NU-322-C3	6319-C3

*Shaft dimension for 11 pole motors, only for direct coupling.
 All dimensions are given in millimeters.
 Larger and smaller flanges, on request.
 The values shown are subject to change without prior notice.

Smoke Extraction Motors Cast Iron Frame

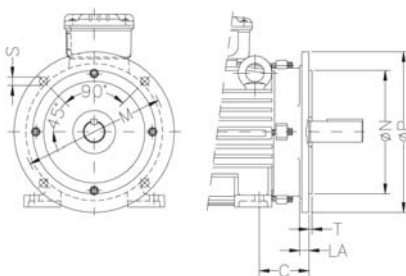
Mechanical Data



IEC FRAME	AC	AD	B	BB	C	SHAFT DIMENSIONS						H	HC	HD	L	d1	S1	KxM
						D	E	ES	F	G	GD							
80	196	100	80	100	60	196	40	28	6	15.5	6	85	170		238	DM6	NPT1/2"	M12x1.75x18
90S	174	110	65	106	73.5	246	50	36		20		95	190		258	DM8	NPT3/4"	
90L			90	118.5					8			105	210		283			
100L	196	122	100	133	83	286	60	45		24		117	234	316	336	DM10		
112M	222	137	100	140	90													M16x2x24
132S	260	165	125	159	96.5	386	80	63	10	33		145	290	354	393	DM12	NPT1"	
132M			140	178	108										430			
160M	300	185	156	213	135	426			12	37		161	322	410	530	DM16	NPT1.1/4"	
160L				235											574			M20x2.5x30
180L	345	205	200	260.5	160.5	486			14	42.5	9	184.5	369	455	624		NPT1.1/2"	
200M	380	218	186	270.5	173.5	556			16	49	10	215.5	431	610	638	DM20	NPT2"	
200L			224	289.5											676			
225S/M	476	274	224	305	192.5	*55m6			100			255	510	624	748		M50X1.5	M24x3x45
						60m6												
250S/M				343	230.5	*60m6	140	125	18	53	11				824		NPT3"	
						65m6												

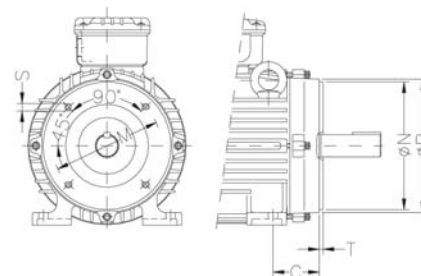
IEC FRAME	BEARINGS 200°C		BEARINGS 300°C et 400°C	
	D.E	N.D.E.	D.E	N.D.E.
80	6204-ZZ	6203-ZZ	6204-Z-C3	6203-Z-C3
90S	6205-ZZ	6204-ZZ	6205-Z-C3	6204-Z-C3
90L	6206-ZZ	6205-ZZ	6206-Z-C3	6205-Z-C3
100L	6307-ZZ	6206-ZZ	6307-Z-C3	6206-Z-C3
112M	6308-ZZ	6207-ZZ	6308-Z-C3	6207-Z-C3
132S	6309-ZZ	6208-ZZ	6309-Z-C3	6208-Z-C3
132M	6310-ZZ	6209-ZZ	6310-Z-C3	6209-Z-C3
160M	6311-ZZ	6210-ZZ	6311-Z-C3	6210-Z-C3
160L	6312-ZZ	6211-ZZ	6312-Z-C3	6211-Z-C3
180L	6313-ZZ	6212-ZZ	6313-Z-C3	6212-Z-C3
200M	6314-ZZ	6213-ZZ	6314-Z-C3	6213-Z-C3
200L	6315-ZZ	6214-ZZ	6315-Z-C3	6214-Z-C3
225S/M	6316-ZZ	6215-ZZ	6316-Z-C3	6215-Z-C3
250S/M	6317-ZZ	6216-ZZ	6317-Z-C3	6216-Z-C3

"FF" Flange



IEC FRAME	"FF" FLANGE									N° OF HOLES
	FLANGE	C	LA	M	N	P	T	S	α	
80	FF-165	50	10	165	130	200	3.5	12	45°	4
90S/L		56								
100L	FF-215	63	11	215	180	250				
112M		70					4	15		
132S/M	FF-265	89	12	265	230	300			22°30'	8
160M/L	FF-300	108		300	250	350				
180M/L		121								
200M/L	FF-350	133	18	350	300	400	5	19		
225S/M	FF-400	149		400	350	450			22°30'	8
250S/M	FF-500	168		500	450	550				
280S/M		190								
315S/M	FF-600	216	22	600	550	660	6	24		
355M/L	FF-740	254		740	680	800				

"C" Din Flange



IEC FRAME	"C" DIN FLANGE							N° OF HOLES
	FLANGE	C	M	N	P	S	T	
80	C-120	50	100	80	120	M6	3	4
90S/L	C-140	56	115	95	140	M8	3.5	
100L	C-160	63	130	110	160			
112M		70						
132S/M	C-200	89	165	130	200	M10		

* II Pole

All dimensions are given in millimeters.

The values shown are subject to change without prior notice.