FanGrid

Stackable cube design - 450, 500, 560mm

ebmpapst

the engineer's choice

Highlights:

- Control input: 0-10VDC/PWM
- Output: 10 VDC, max.10mA
- Integrated PID controller;
- RS485 MODBUS RTU tech
- Over-temperature protected motor/electronics
- Soft start, motor current limit
- Locked motor protection
- Line undervoltage/phase failure detection
- UL/CSA approval rating
- IP55 ingress protection rating
- -25...40 temperature range (1)

Material:

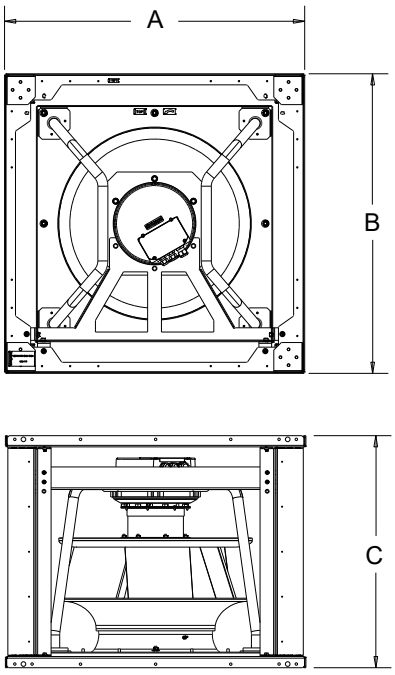
- Blade: Corrosion-resistant aluminum; airfoil construction
  Inlet plate: Sheet steel galvanized
  Bracket: Steel, painted black
- **Mounting position:** Shaft horizontal or rotor down; rotor on top per request
- **Condensate discharge holes:** Rotor-side
- **Direction of rotation:** Clockwise, viewed toward rotor
- **Accessories:** Side wall panels available per request

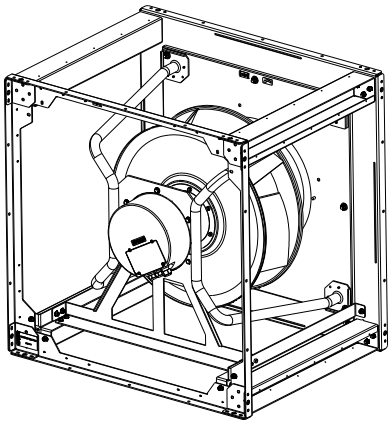
Nominal data

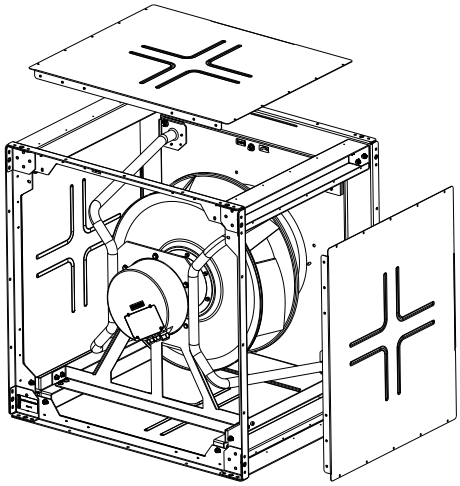
			Air flow	Phase	Voltage	Nominal voltage range	Frequency	Power input (1)	Speed (1)	Current draw (1)	Mass	Dimensional data (in)		
Part number	Type	Motor	CFM		VAC	VAC	Hz	Watts	RPM	A	lbs	A	B	C
EG1R240-450-56A	K3G450-PB35-19	M3G150-IF	9,157	3~	230V	200...240	50/60	6,018	2,600	16.4	103	35	35	31
EG1R480-450-56A	K3G450-PB30-09	M3G150-IF	9,188	3~	460V	380...480	50/60	5,960	2,600	7.90	103	35	35	31
EG1R240-500-56A	K3G500-PB38-19	M3G150-IF	10,993	3~	230V	200...240	50/60	6,337	2,250	16.85	106	35	35	31
EG1R480-500-56A	K3G500-PB24-09	M3G150-IF	10,582	3~	460V	380...480	50/60	5,958	2,250	7.91	106	35	35	31
EG1R240-560-56A	K3G560-PC11-19	M3G150-NA	11,864	3~	230V	200...240	50/60	5,356	1,760	14.25	150	40	40	31
EG1R480-560-56A	K3G560-PC04-09	M3G150-NA	11,836	3~	460V	380...480	50/60	5,313	1,760	7.07	150	40	40	31

(1) Nominal data at maximum load.

Technical drawings







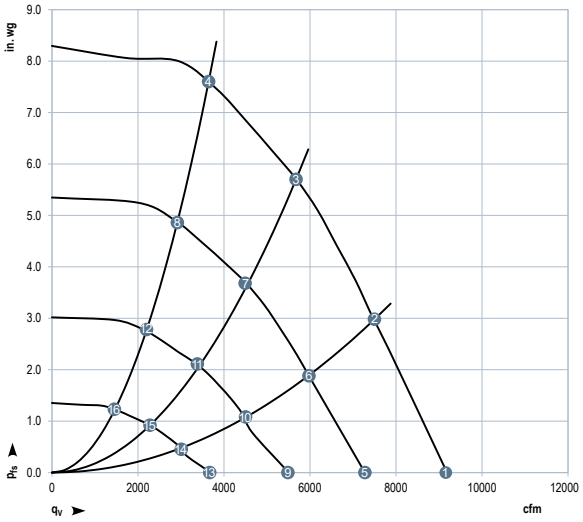
Side panels sold separately.
450mm + 500mm: 118-00-14477
560mm: 118-00-14487

FanGrid – Sizes 450-560mm

Performance curves

460V data

Note: 230V performance curves & data available upon request.

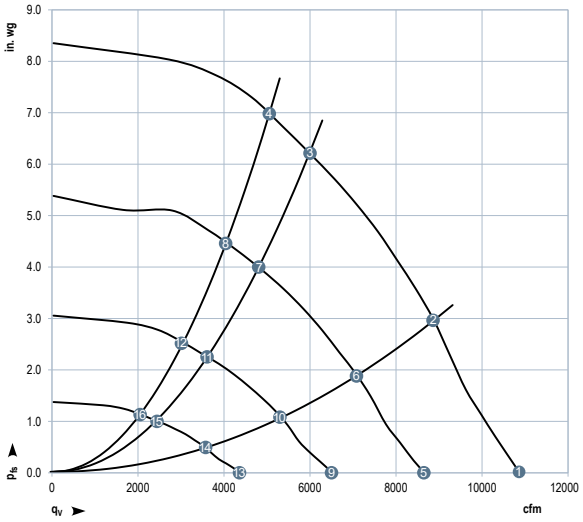


450mm 6kW

	n	Pe	I	LpAin	LwAin
	rpm	W	A	dB(A)	dB(A)
1	2600	3372	4.54	94	101
2	2600	4979	6.63	86	94
3	2600	5960	7.90	80	87
4	2600	5486	7.28	84	90
5	2085	1837	2.56	89	96
6	2085	2602	3.52	82	89
7	2085	3087	4.14	75	82
8	2085	2870	3.86	79	86
9	1565	889	1.40	82	89
10	1565	1173	1.73	74	81
11	1565	1402	2.01	68	75
12	1565	1300	1.89	72	78
13	1045	320	0.62	73	80
14	1045	411	0.75	65	72
15	1045	473	0.85	58	65
16	1045	443	0.80	62	69

Operating points

	qv	psf
	cfm	in.wg
1	9188	0.00
2	7501	2.98
3	5684	5.70
4	3644	7.60
5	7279	0.00
6	5977	1.88
7	4493	3.68
8	2918	4.86
9	5487	0.00
10	4503	1.08
11	3382	2.11
12	2201	2.78
13	3670	0.00
14	3008	0.45
15	2281	0.92
16	1453	1.23

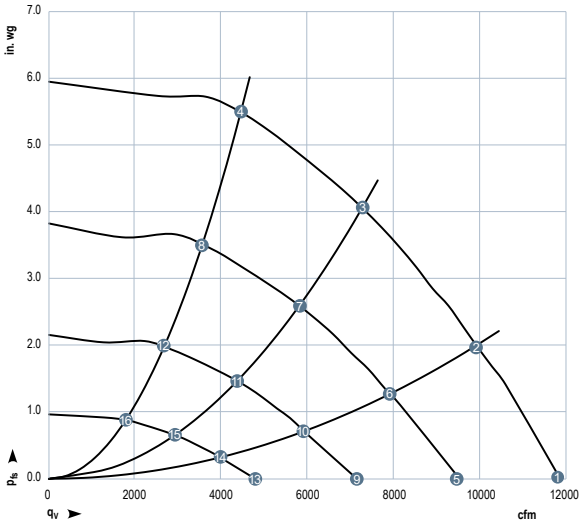


500mm 6kW

	n	Pe	I	LpAin	LwAin
	rpm	W	A	dB(A)	dB(A)
1	2250	3226	4.33	99	106
2	2250	4971	6.62	91	98
3	2250	5958	7.91	81	88
4	2250	5819	7.73	82	89
5	1800	1737	2.46	94	100
6	1800	2588	3.52	85	92
7	1800	3062	4.13	75	82
8	1800	2998	4.08	76	83
9	1350	826	1.33	87	93
10	1350	1157	1.72	77	85
11	1350	1367	2.04	68	75
12	1350	1351	2.05	69	75
13	900	297	0.59	77	83
14	900	389	0.72	67	74
15	900	455	0.82	58	65
16	900	447	0.81	59	66

Operating points

	qv	psf
	cfm	in.wg
1	10582	0.00
2	8640	2.62
3	5819	5.52
4	4897	6.18
5	8418	0.00
6	6874	1.68
7	4672	3.55
8	3902	3.97
9	6319	0.00
10	5181	0.94
11	3502	1.98
12	2942	2.23
13	4225	0.00
14	3466	0.41
15	2333	0.86
16	1961	1.00



560mm 6kW

	n	Pe	I	LpAin	LwAin
	rpm	W	A	dB(A)	dB(A)
1	1760	2768	3.73	95	102
2	1760	4358	5.81	85	93
3	1760	5313	7.07	77	84
4	1760	4926	6.55	82	88
5	1410	1590	2.25	89	96
6	1410	2220	3.04	80	87
7	1410	2727	3.69	71	78
8	1410	2520	3.41	76	83
9	1060	728	1.20	82	89
10	1060	1021	1.54	72	80
11	1060	1238	1.83	64	71
12	1060	1147	1.70	69	76
13	705	271	0.55	72	79
14	705	351	0.67	62	69
15	705	412	0.76	54	61
16	705	388	0.72	58	65

Operating points

	qv	psf
	cfm	in.wg
1	11836	0.00
2	9920	2.01
3	7249	4.06
4	4427	5.46
5	9500	0.00
6	7950	1.25
7	5800	2.60
8	3543	3.48
9	7125	0.00
10	5944	0.70
11	4300	1.46
12	2669	1.98
13	4777	0.00
14	3958	0.32
15	2900	0.65
16	1795	0.90

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