



EC Fan Product Catalog

ATB
a **WOLONG** company

CONTENT

01

Company Profile 01

02

Product type
Description 04

03

EC Forward
Centrifugal Fan 06

04

EC Backward
Centrifugal Fan 15

05

EC Axial Fan 31

06

Connection Diagram and
Terminal Function Description 42

07

Fan Check List 48

ABOUT ATB

Founded in 1919 by Mr. Gottlob Bauknecht near Stuttgart, Germany, ATB is a combination of the German drive technology (Antriebstechnik) and the initials of the founder's surname (Bauknecht). At the beginning of the 21st century, ATB had grown into the third largest motor manufacturing and sales group in Europe and it is one of the world's leading suppliers of industrial and household electric drive systems. ATB's product range is very wide, both motor and fan are involved, motors from 25W to 25MW products are all available, including standard solutions, ODM solutions, and design-to-order solutions (including complete drive systems for a wide range of applications).

ATB, which joined in Wolong Group in 2011, has nine manufacturing sites worldwide, including Norwich, Nordenham, Mönchengladbach, Welzheim, Serbia, tarn ó w of Poland, Shangyu District of Zhejiang Province, Wuhan of Hubei Province and Nanyang of Henan province of China, with a total of more than 3,500 employees.

Wolong as the parent company holds most of the shares of ATB, ATB affiliated factories and brands have been fully integrated into the Wolong Group. Wolong Holding Group Co., Ltd., as a global leader in the field of motor and drive control enterprises, in line with the trend of green development, to build an intelligent manufacturing, solutions-based, covers Industrial Internet, industrial automation, energy management, real estate, mining, trade and other multi-plate business.

The EC fan consists of a high performance aerodynamics impeller, a high efficiency permanent magnet synchronous motor and a drive controller, it can realize intelligent control, Group Control Interconnection, life cycle management and so on through digital technology, and has long life and high reliability, help "Carbon peak" and "Carbon neutrality" to create greater social benefits, in line with the trend of development of the times.

WOLONG GROUP

- ▼ 1984
Founded
- ▼ 18000
Employees
- ▼ 35.8 Billion RMB
Total assets
- ▼ 5
R & D Center
- ▼ 43 Billion RMB
2021 sales
- ▼ 39
Global Manufacturing Facility



COMPANY INTRODUCTION



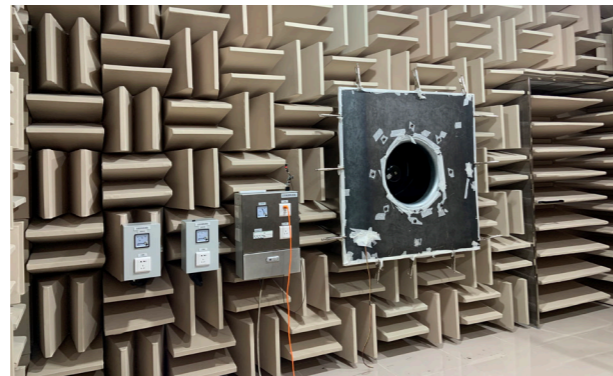
Company panorama



Production line



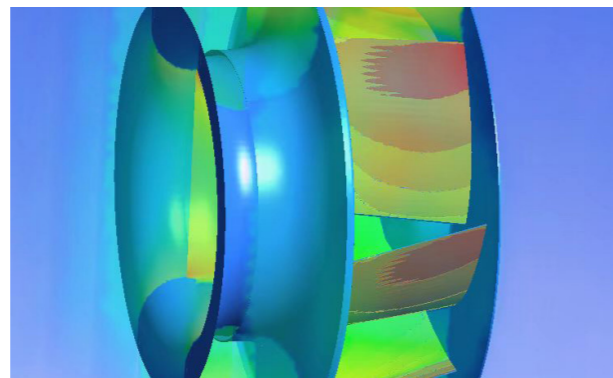
Fan performance test data acquisition system



Fan noise test anechoic chamber



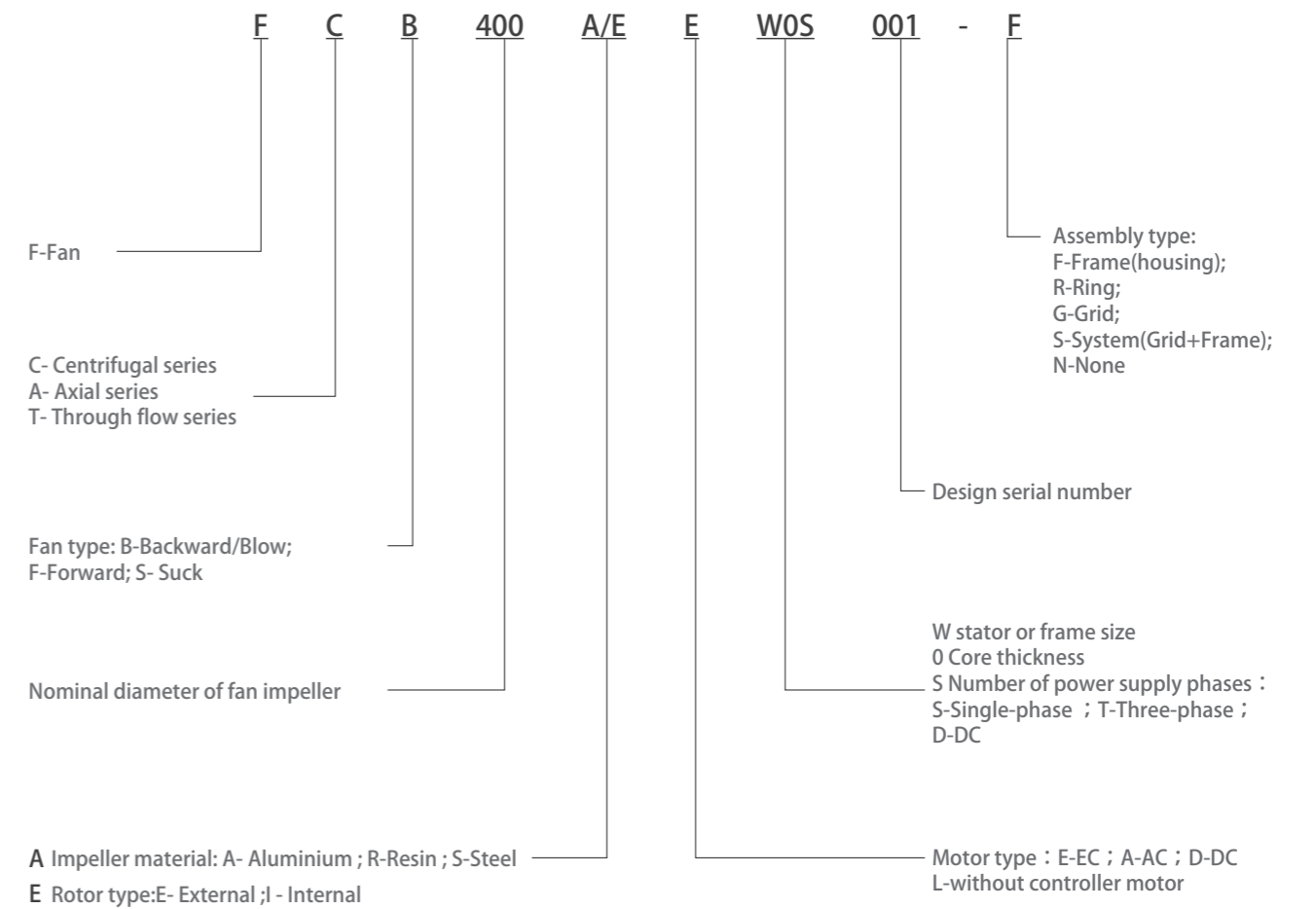
3D printer



Fluid Simulation Analysis

PRODUCT TYPE DESCRIPTION

EC fan Naming Rules



W stator or frame size						
External rotor	U	V	W	X	Y	Z
	059	074	084	114	156	200
Internal rotor	A	B	C	D	E	F
	EM42	EM48	EM56	EM112	EM132	EM160

EC FORWARD CENTRIFUGAL FAN



EC EXTERNAL ROTOR CENTRIFUGAL FAN FORWARD 133 SINGLE INLET

Impeller Material: Galvanized sheet

Protection class: IP44

Approvals: CCC CE

Insulation class: F

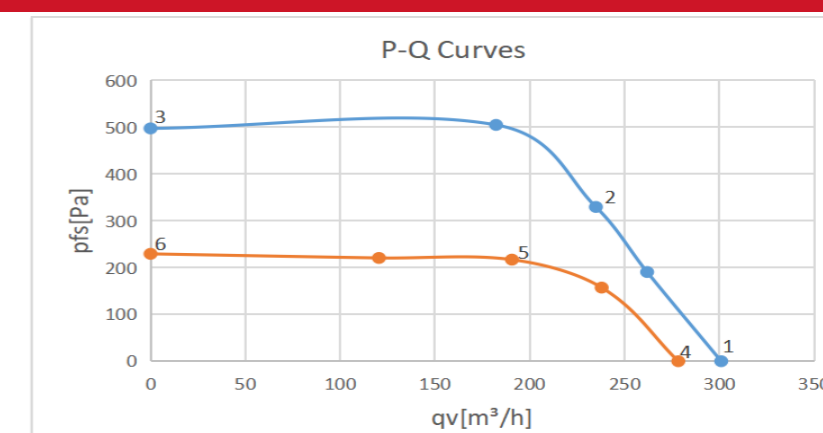
Speed regulation mode : Vsp/PWM

Specification

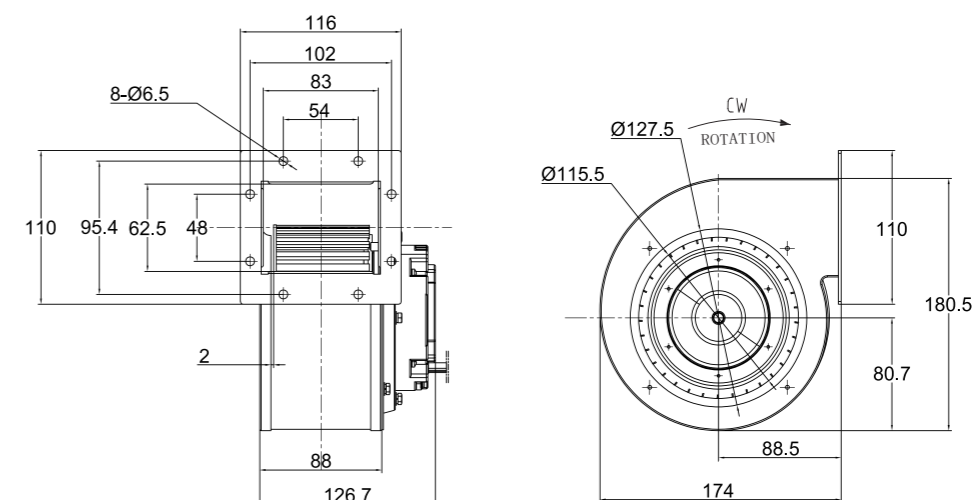
Type	Nominal voltage	Frequency	Speed	Rated Power	Current	LpA	Perm.amb.temp.
FCF133S/ EEU05***-F	[VAC]	[Hz]	[rpm]	[W]	[A]	[dB(A)]	[°C]
	1~ 200-240	50/60	3200	70	0.55	63	-25°C ~+60°C

P-Q Curves

转速 Speed	功率 Power	风量 Air flow	静压 Static pressure
r/min	W	m ³ /h	Pa
1 1826	40	300	0
2 2580	55	235	330
3 3220	27	0	498
4 1650	30	278	0
5 2110	31	191	217
6 2110	11	0	229



Dimensions





EC EXTERNAL ROTOR CENTRIFUGAL FAN FORWARD 140 SINGLE INLET

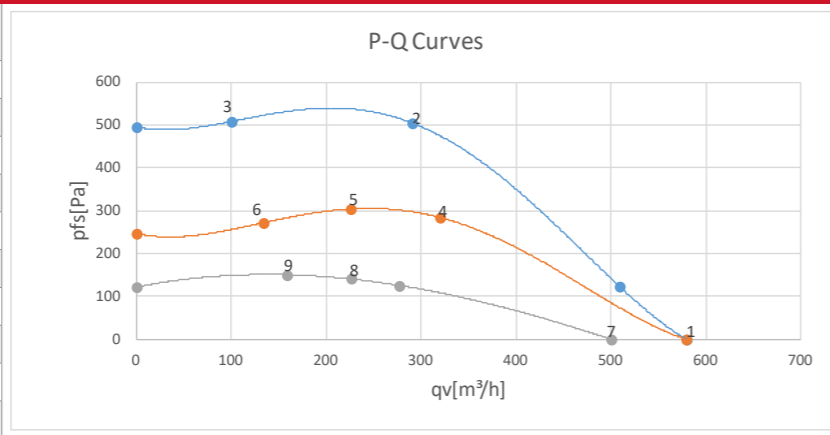
Impeller Material: Galvanized sheet
Protection class: IP44
Approvals: CCC CE
Insulation class: F
Speed regulation mode : Vsp/PWM

Specification

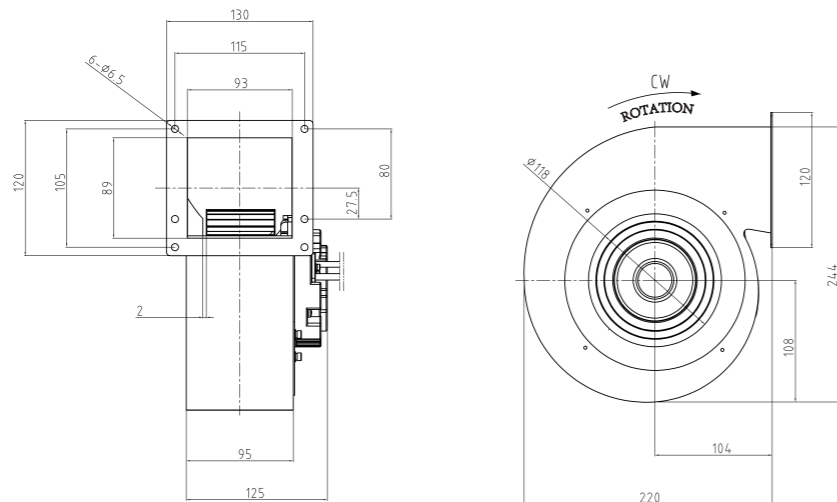
Type	Nominal voltage	Frequency	Speed	Rated Power	Current	LpA	Perm.amb.temp.
FCF140S/ EEU05***-F	[VAC]	[Hz]	[rpm]	[W]	[A]	[dB(A)]	[°C]
	1~ 200-240	50/60	1800	100	0.8	60	-25°C ~+60°C

P-Q Curves

	Speed	Power	Air flow	Static pressure
	r/min	W	m ³ /h	Pa
1	3000	49	100	508
2		87	290	504
3		105	579	0
4	2100	63	320	284
5		43	226	304
6		28	134	272
7	1520	64	500	0
8		23	226	142
9		17	158	150



Dimensions



EC EXTERNAL ROTOR CENTRIFUGAL FAN FORWARD 160 SINGLE INLET

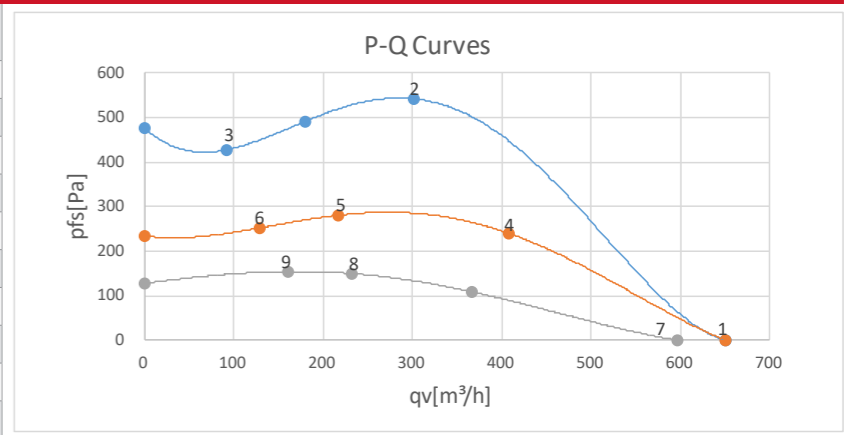
Impeller Material: Galvanized sheet
Protection class: IP44
Approvals: CCC CE
Insulation class: F
Speed regulation mode : Vsp/PWM

Specification

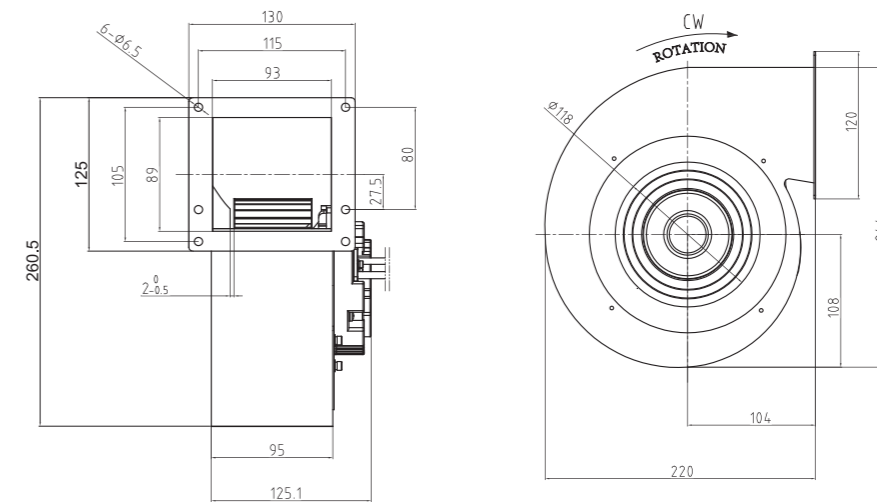
Type	Nominal voltage	Frequency	Speed	Rated Power	Current	LpA	Perm.amb.temp.
FCF160S/ EEU05***-F	[VAC]	[Hz]	[rpm]	[W]	[A]	[dB(A)]	[°C]
	1~ 200-240	50/60	1700	130	1.0	62	-25°C ~+60°C

P-Q Curves

	Speed	Power	Air flow	Static pressure
	r/min	W	m ³ /h	Pa
1	2500	135	650	0
2		98	301	542
3		42	92	427
4	1820	81	407	240
5		38	217	281
6		24	129	252
7	1320	89	596	0
8		24	232	149
9		18	160	154



Dimensions





EC EXTERNAL ROTOR CENTRIFUGAL FAN FORWARD 180 SINGLE INLET

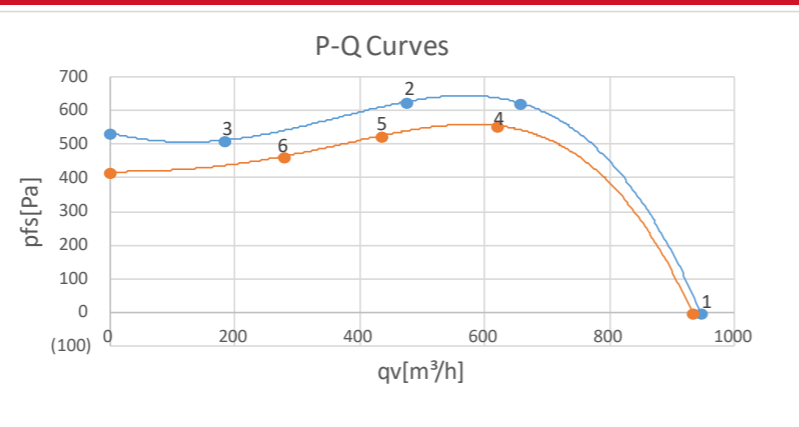
Impeller Material: Galvanized sheet
Protection class: IP44
Approvals: CCC CE
Insulation class: F
Speed regulation mode : Vsp/PWM

Specification

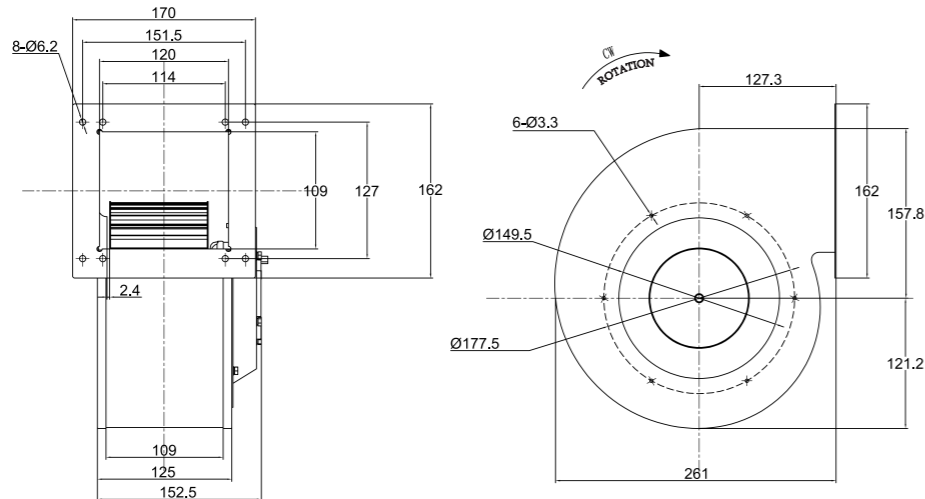
Type	Nominal voltage	Frequency	Speed	Rated Power	Current	LpA	Perm.amb.temp.
FCF180S/ EEV05***-F	[VAC]	[Hz]	[rpm]	[W]	[A]	[dB(A)]	[°C]
	1~200-240	50/60	1600	180	1.7	69	-25°C ~+60°C

P-Q Curves

Speed	Power	Air flow	Static pressure
r/min	W	m ³ /h	Pa
1	152	946	0
2	188	474	626
3	96	183	512
4	211	620	555
5	146	435	525
6	95	279	464



Dimensions



EC INTERNAL ROTOR CENTRIFUGAL FAN FORWARD 8-8 DOUBLE INLET

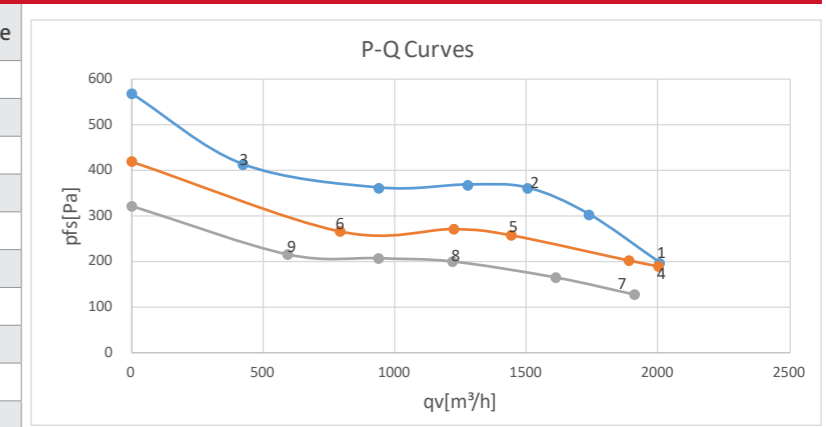
Impeller Material: Galvanized sheet
Protection class: IP44
Approvals: CCC CE
Insulation class: F
Speed regulation mode : Vsp/PWM/RS485

Specification

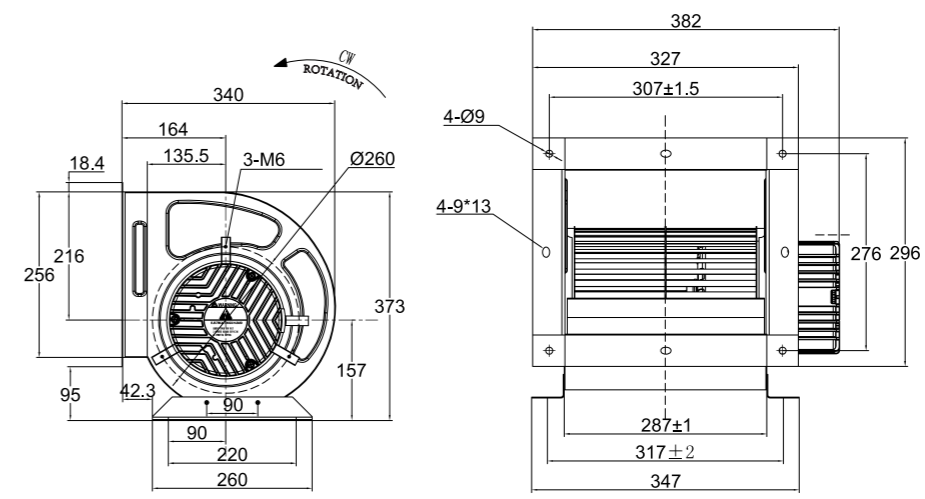
Type	Nominal voltage	Frequency	Speed	Rated Power	Current	LpA	Perm.amb.temp.
FCF8-8S/ IEB05***-F	[VAC]	[Hz]	[rpm]	[W]	[A]	[dB(A)]	[°C]
	1~115\200-277V	50/60	1400	440	3.4	65	-25°C ~+60°C

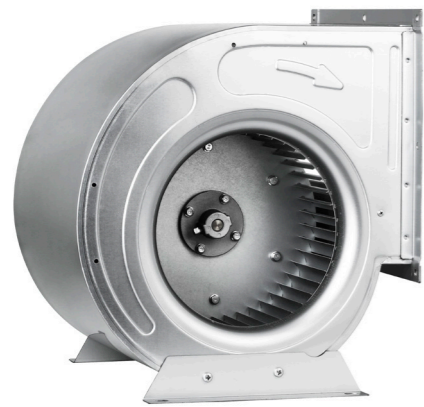
P-Q Curves

Speed	Power	Air flow	Static pressure
r/min	W	m ³ /h	Pa
1	424	2005	197
2	387	1505	361
3	197	425	413
4	392	2000	196
5	270	1440	258
6	176	790	267
7	294	1910	128
8	184	1220	200
9	112	590	216



Dimensions





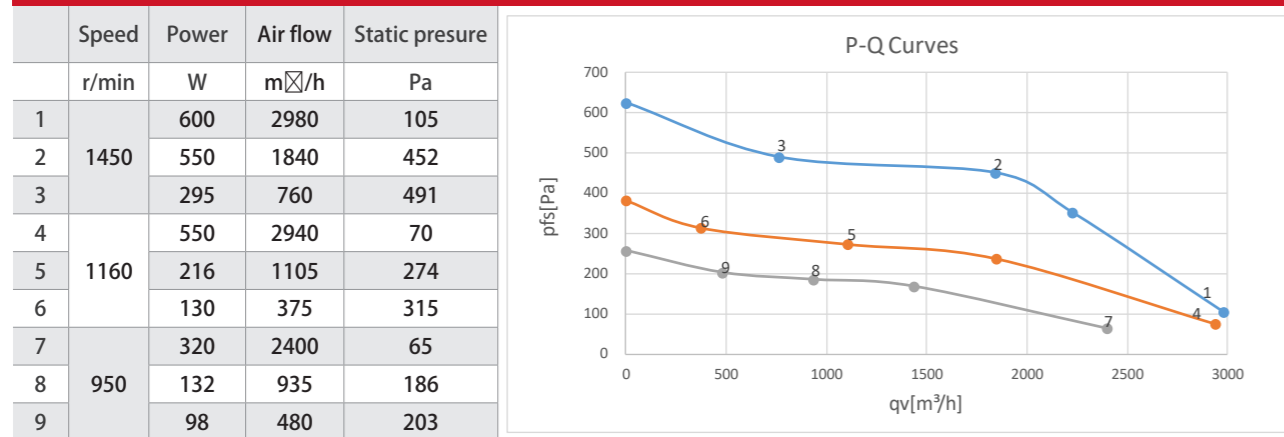
EC INTERNAL ROTOR CENTRIFUGAL FAN FORWARD 9-9 DOUBLE INLET

Impeller Material: Galvanized sheet
Protection class: IP44
Approvals: CCC CE
Insulation class: F
Speed regulation mode : Vsp/PWM/RS485

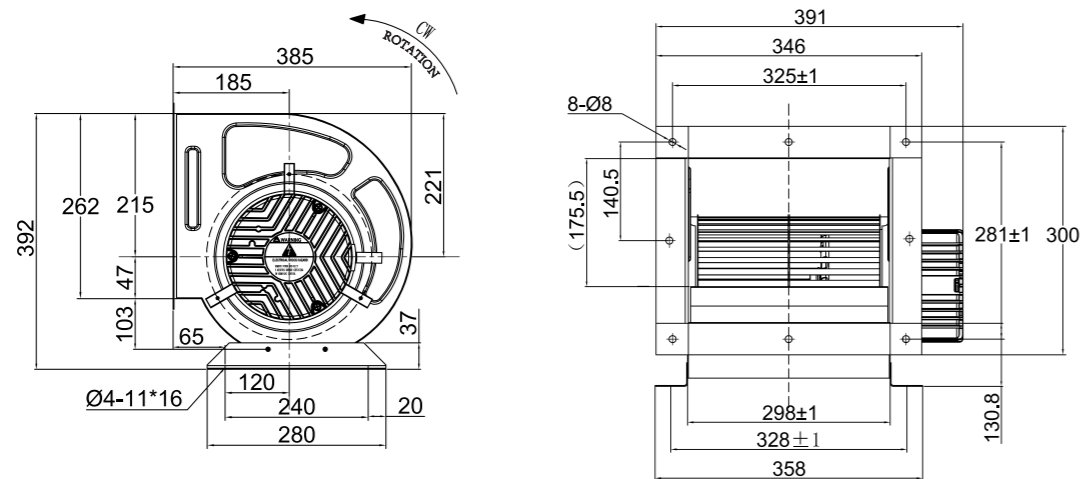
Specification

Type	Nominal voltage	Frequency	Speed	Rated Power	Current	LpA	Perm.amb.temp.
FCF9-9S/ IEB1S***-F	[VAC]	[Hz]	[rpm]	[W]	[A]	[dB(A)]	[°C]
	1~115\200-277V	50/60	1400	620	4.6	65	-25°C ~+60°C

P-Q Curves



Dimensions



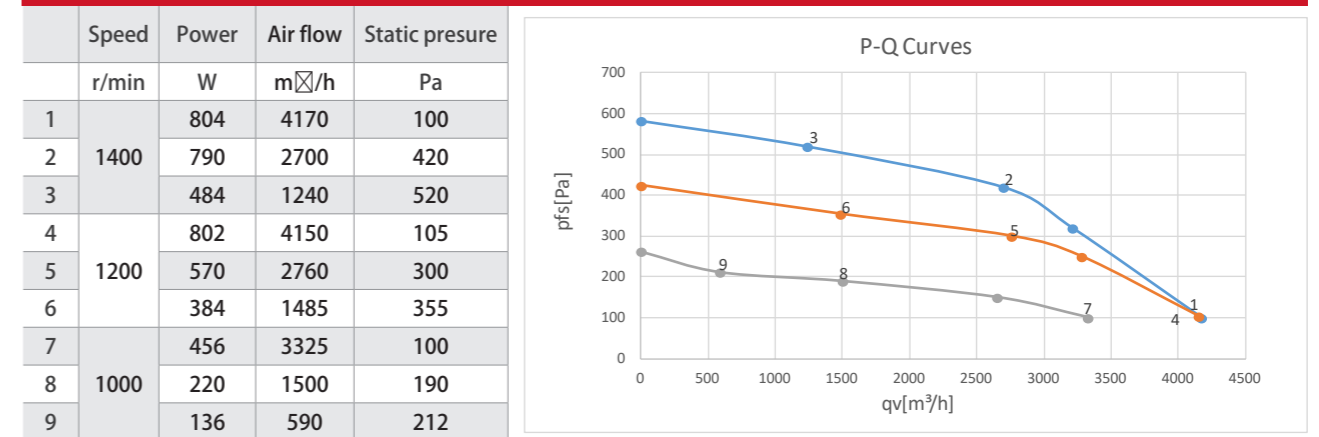
EC INTERNAL ROTOR CENTRIFUGAL FAN FORWARD 10-10 DOUBLE INLET

Impeller Material: Galvanized sheet
Protection class: IP44
Approvals: CCC CE
Insulation class: F
Speed regulation mode : Vsp/PWM

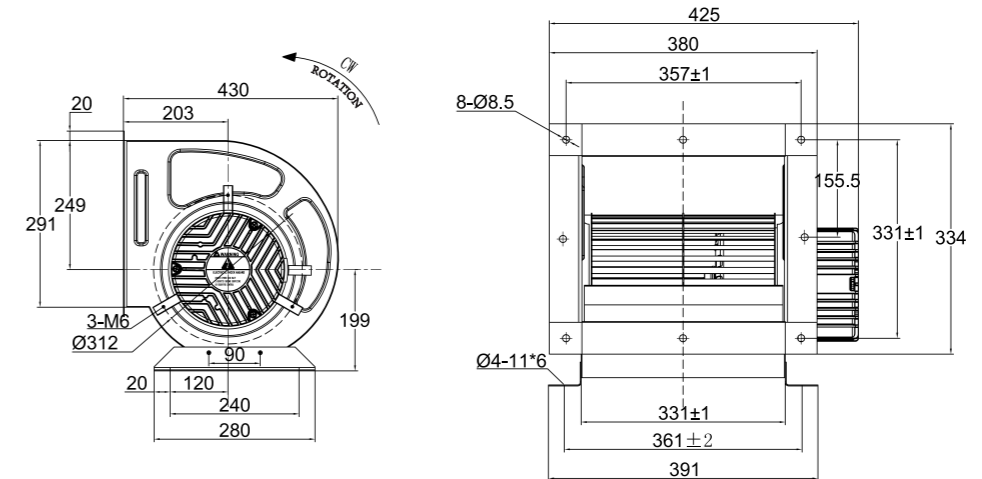
Specification

Type	Nominal voltage	Frequency	Speed	Rated Power	Current	LpA	Perm.amb.temp.
FCF10-10S/ IEB2S***-F	[VAC]	[Hz]	[rpm]	[W]	[A]	[dB(A)]	[°C]
	1~115\200-277V	50/60	1400	820	6	65	-25°C ~+60°C

P-Q Curves



Dimensions





EC EXTERNAL ROTOR CENTRIFUGAL FAN

FORWARD 146 DOUBLE INLET

Impeller Material: Galvanized sheet

Protection class: IP44

Approvals: CCC CE

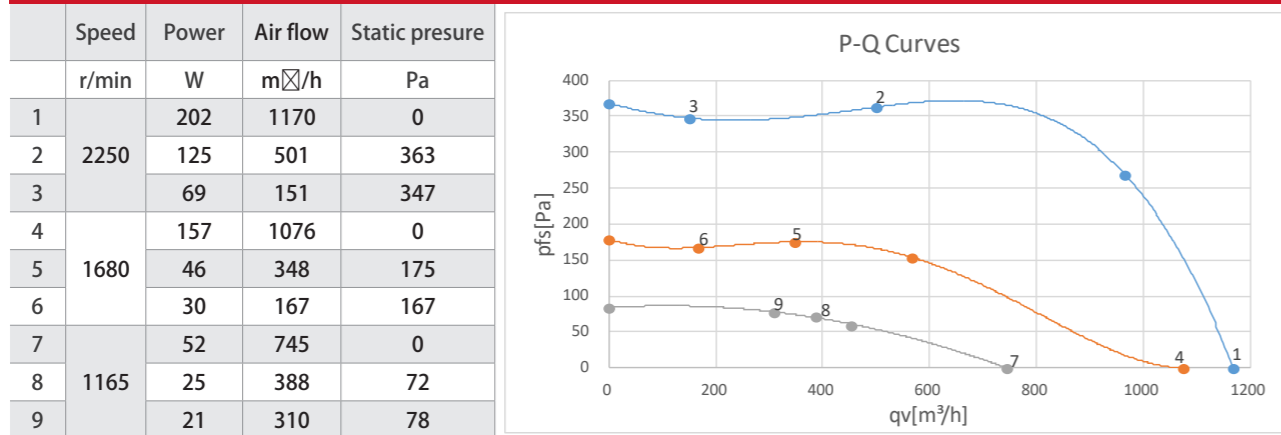
Insulation class: F

Speed regulation mode : Vsp/PWM

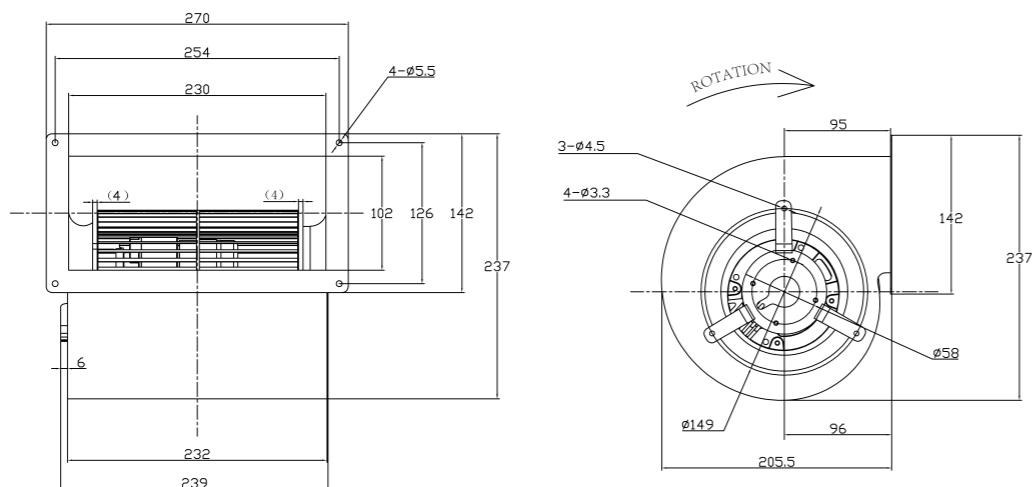
Specification

Type	Nominal voltage	Frequency	Speed	Rated Power	Current	LpA	Perm.amb.temp.
FCF146S/ EEV05***-F	[VAC]	[Hz]	[rpm]	[W]	[A]	[dB(A)]	[°C]
	1~200-240	50/60	2250	240	1.6	65	-25°C ~+60°C

P-Q Curves



Dimensions



EC BACKWARD CENTRIFUGAL FAN





EC EXTERNAL ROTOR CENTRIFUGAL FAN

BACKWARD 133

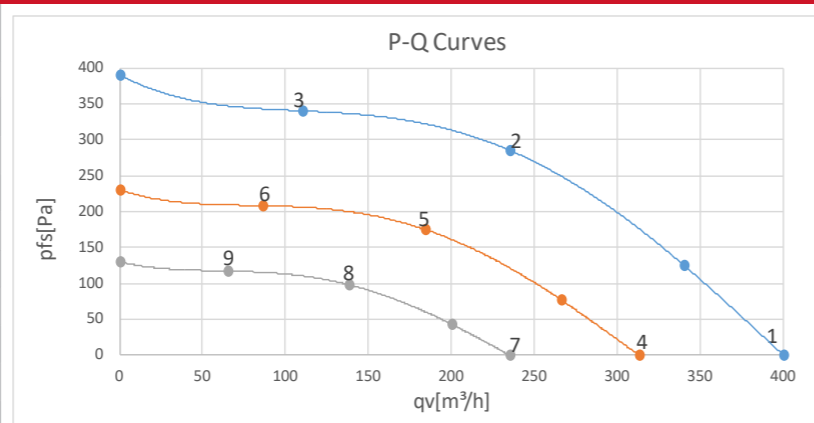
Impeller Material: PA6+25%GF
Protection class: IP44
Approvals: CCC CE
Insulation class: F
Speed regulation mode : Vsp/PWM

Specification

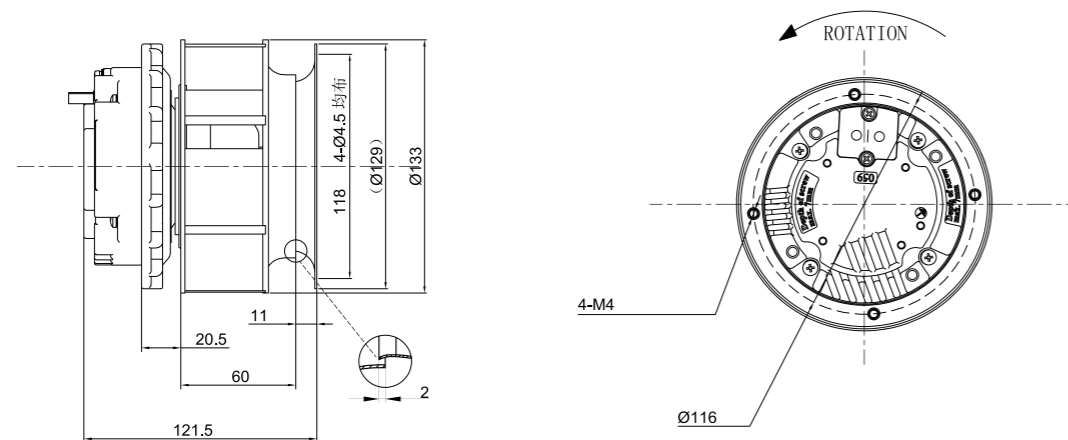
Type	Nominal voltage	Frequency	Speed	Rated Power	Current	LpA	Perm.amb.temp.
FCB133R/ EEU05***-R	[VAC]	[Hz]	[rpm]	[W]	[A]	[dB(A)]	[°C]
	1~ 200-240	50/60	4600	50	0.48	64	-25°C ~+60°C

P-Q Curves

	Speed	Power	Air flow	Static pressure
	r/min	W	m ³ /h	Pa
1	4600	37	400	0
2		50	235	285
3		32	110	340
4	3600	18	313	0
5		24	184	175
6		15	86	208
7	2700	7	235	0
8		10	138	98
9		6	65	117



Dimensions



EC EXTERNAL ROTOR CENTRIFUGAL FAN

BACKWARD 175

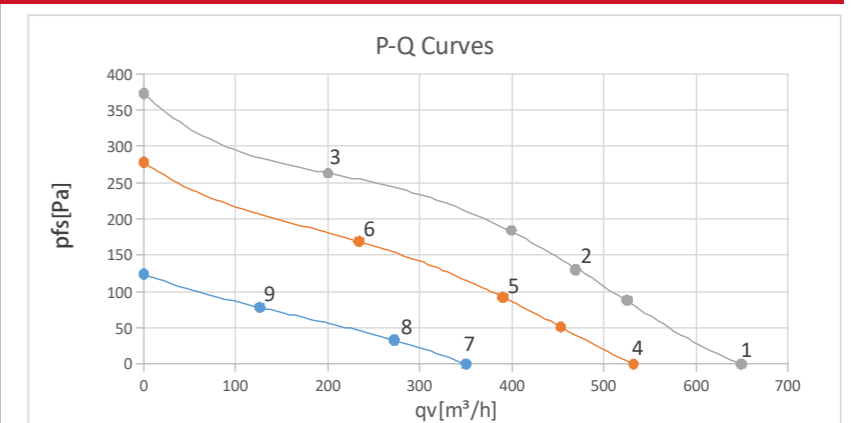
Impeller Material: PA6+25%GF
Protection class: IP44
Approvals: CCC CE
Insulation class: F
Speed regulation mode : Vsp/PWM

Specification

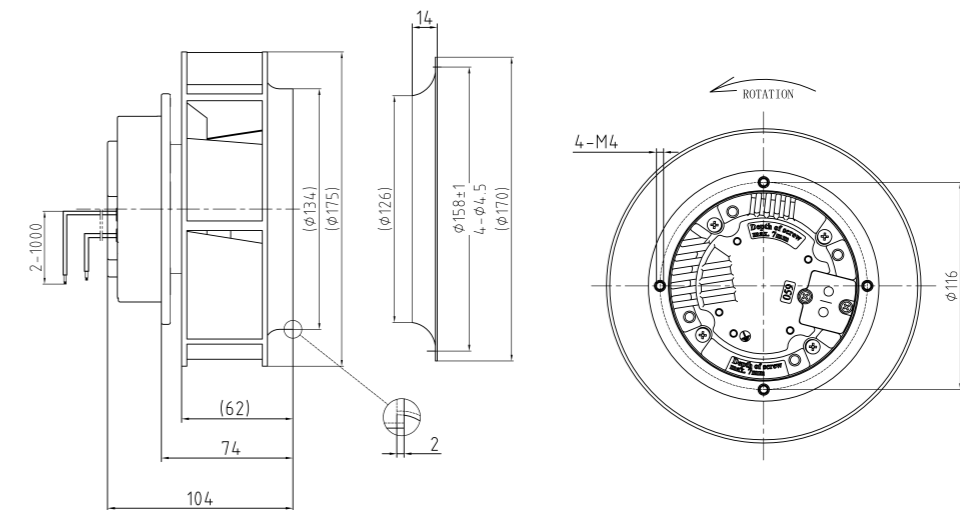
Type	Nominal voltage	Frequency	Speed	Rated Power	Current	LpA	Perm.amb.temp.
FCB175R/ EEU05***-R	[VAC]	[Hz]	[rpm]	[W]	[A]	[dB(A)]	[°C]
	1~ 200-240	50/60	3240	70	0.6	75	-25°C ~+60°C

P-Q Curves

	Speed	Power	Air flow	Static pressure
	r/min	W	m ³ /h	Pa
1	3240	54	649	0
2		62	469	130
3		63	200	263
4	2700	33	532	0
5		39	390	92
6		42	234	169
7	1800	11	350	0
8		13	272	33
9		14	126	78



Dimensions





EC EXTERNAL ROTOR CENTRIFUGAL FAN

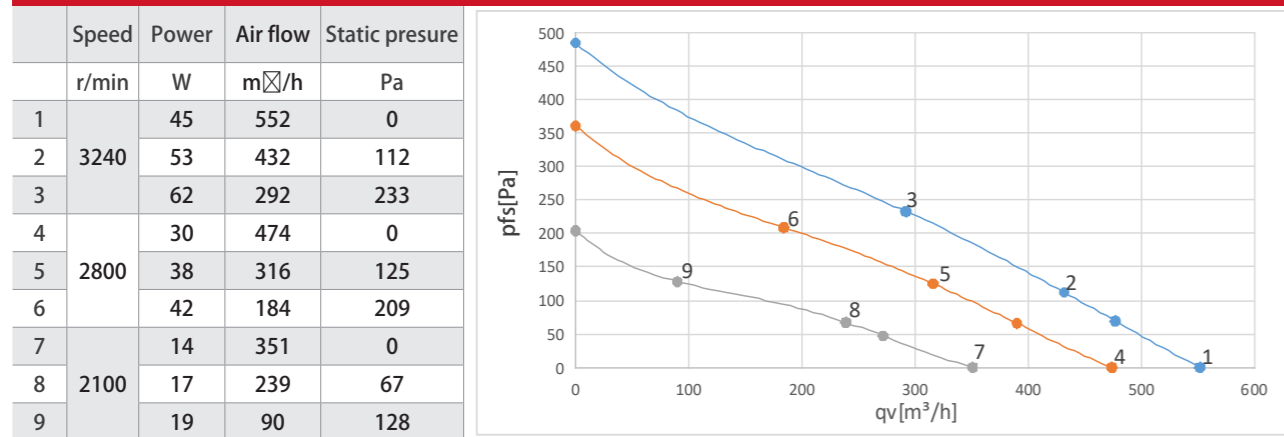
BACKWARD 190

Impeller Material: PA6+25%GF
 Protection class: IP44
 Approvals: CCC CE
 Insulation class: F
 Speed regulation mode : Vsp/PWM

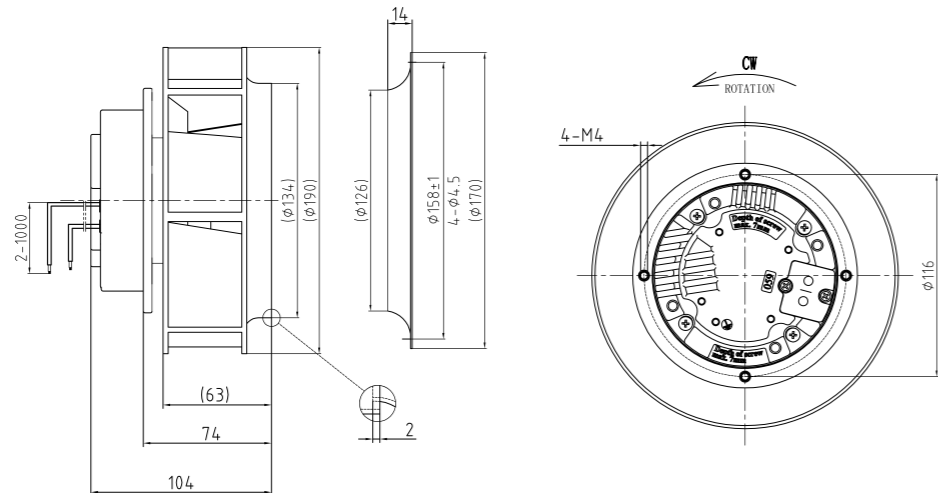
Specification

Type	Nominal voltage	Frequency	Speed	Rated Power	Current	LpA	Perm.amb.temp.
FCB190R/EEU05***-R	[VAC]	[Hz]	[rpm]	[W]	[A]	[dB(A)]	[°C]
	1~ 200-240	50/60	3240	60	0.5	79	-25°C ~+60°C

P-Q Curves



Dimensions



EC EXTERNAL ROTOR CENTRIFUGAL FAN

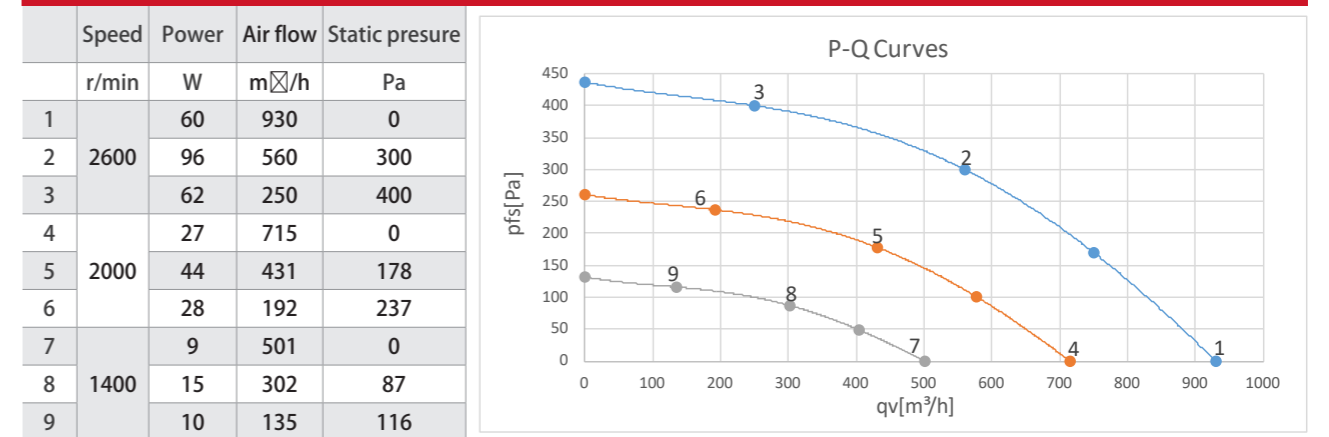
BACKWARD 220

Impeller Material: PA6+25%GF
 Protection class: IP44
 Approvals: CCC CE
 Insulation class: F
 Speed regulation mode : Vsp/PWM

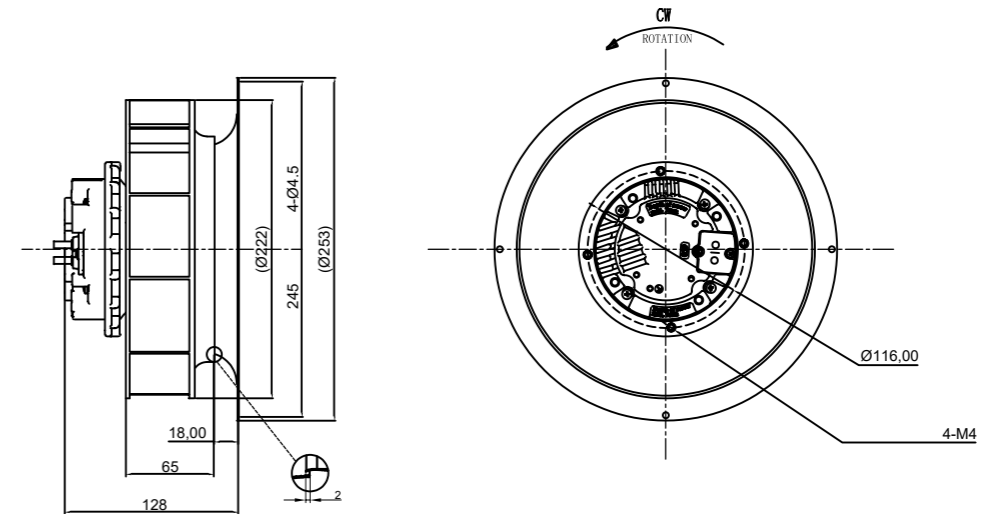
Specification

Type	Nominal voltage	Frequency	Speed	Rated Power	Current	LpA	Perm.amb.temp.
FCB220R/EEU05***-R	[VAC]	[Hz]	[rpm]	[W]	[A]	[dB(A)]	[°C]
	1~ 200-240	50/60	2600	100	0.6	72	-25°C ~+60°C

P-Q Curves



Dimensions





EC EXTERNAL ROTOR CENTRIFUGAL FAN

BACKWARD 225

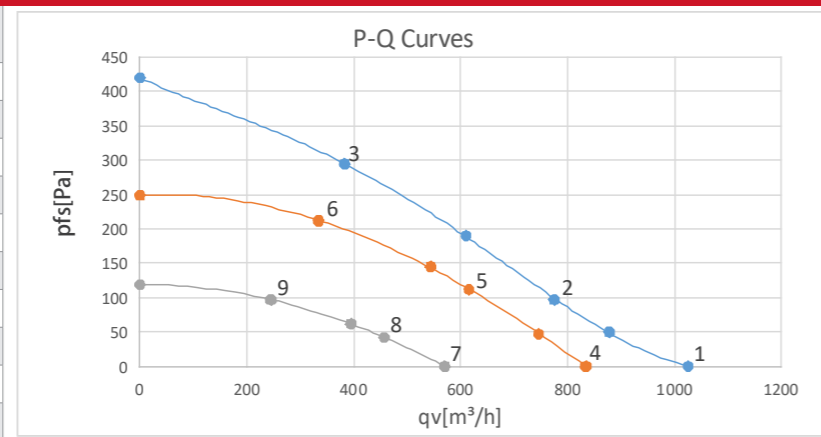
Impeller Material: PA6+25%GF
Protection class: IP44
Approvals: CCC CE
Insulation class: F
Speed regulation mode : Vsp/PWM

Specification

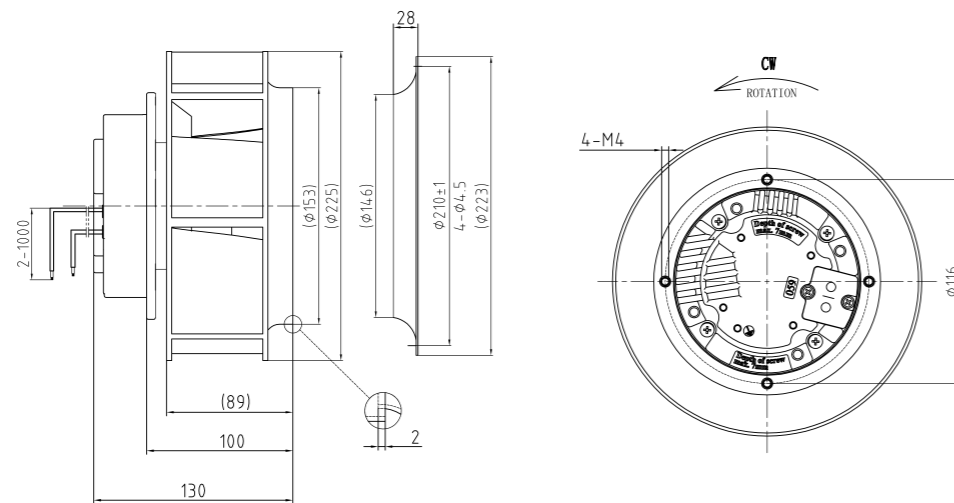
Type	Nominal voltage	Frequency	Speed	Rated Power	Current	LpA	Perm.amb.temp.
FCB225R/ EEU05***-R	[VAC]	[Hz]	[rpm]	[W]	[A]	[dB(A)]	[°C]
	1~ 200-240	50/60	2350	100	0.8	69	-25°C ~+60°C

P-Q Curves

	Speed	Power	Air flow	Static pressure
	r/min	W	m ³ /h	Pa
1	2350	96	1025	0
2		98	775	97
3		99	383	285
4	1900	52	834	0
5		63	615	112
6	1300	63	334	212
7		18	570	0
8		21	457	42
9		21	245	97



Dimensions



EC EXTERNAL ROTOR CENTRIFUGAL FAN

BACKWARD 250

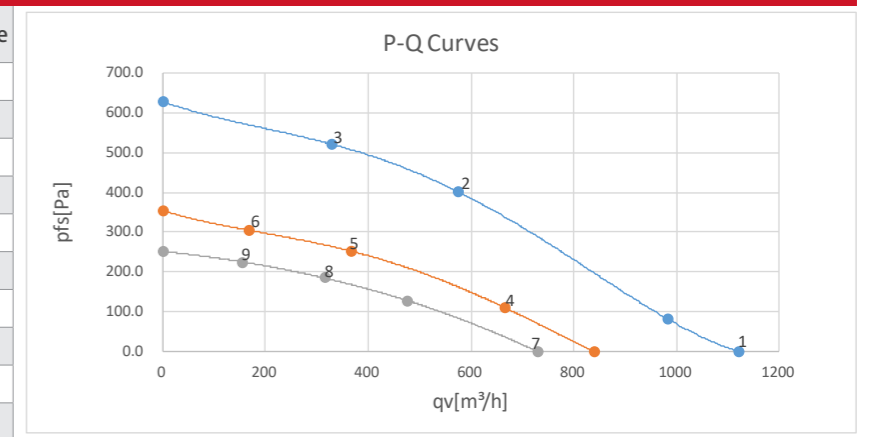
Impeller Material: PA6+25%GF
Protection class: IP44
Approvals: CCC CE
Insulation class: F
Speed regulation mode : Vsp/PWM

Specification

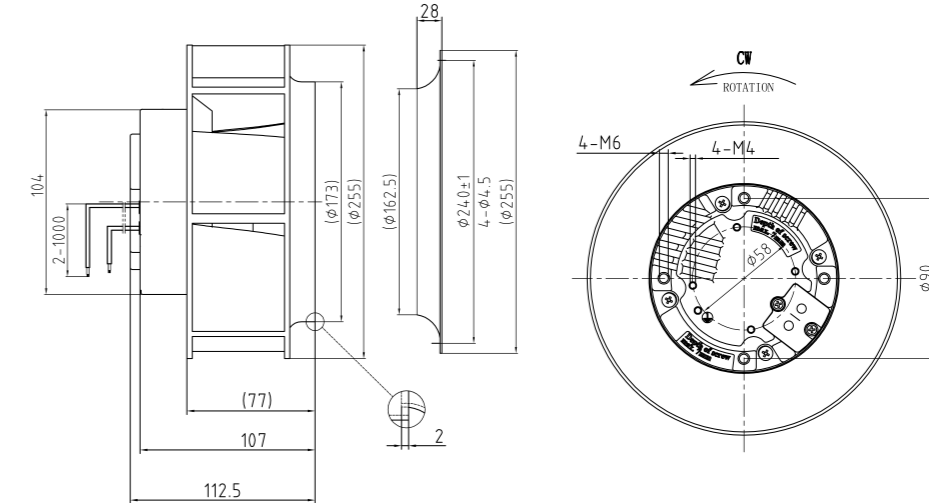
Type	Nominal voltage	Frequency	Speed	Rated Power	Current	LpA	Perm.amb.temp.
ECB250R/ EEV05***-R	[VAC]	[Hz]	[rpm]	[W]	[A]	[dB(A)]	[°C]
	1~ 200-240	50/60	3000	250	1.6	69	-25°C ~+60°C

P-Q Curves

	Speed	Power	Air flow	Static pressure
	r/min	W	m ³ /h	Pa
1	2700	155	1120	0
2		188	574	402
3		180	328	521
4	2040	78	665	111
5		83	366	252
6	1740	77	167	305
7		45	729	0
8		53	315	187
9		50	154	224



Dimensions





EC EXTERNAL ROTOR CENTRIFUGAL FAN

BACKWARD 280

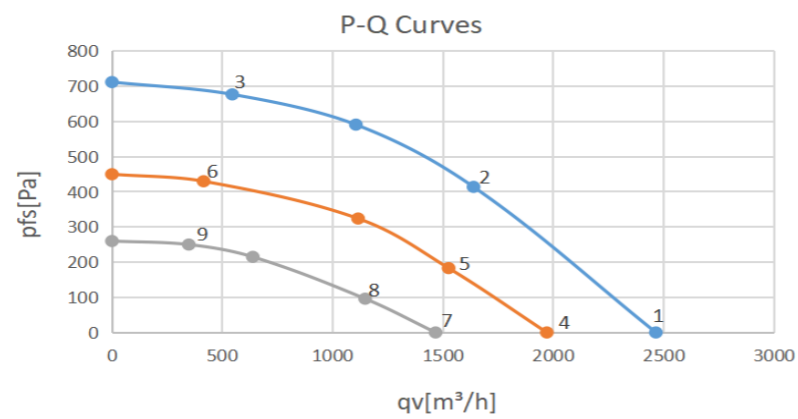
Impeller Material: Sheet aluminium
Protection class: IP44
Approvals: CCC CE
Insulation class: F
Speed regulation mode : Vsp/RS485

Specification

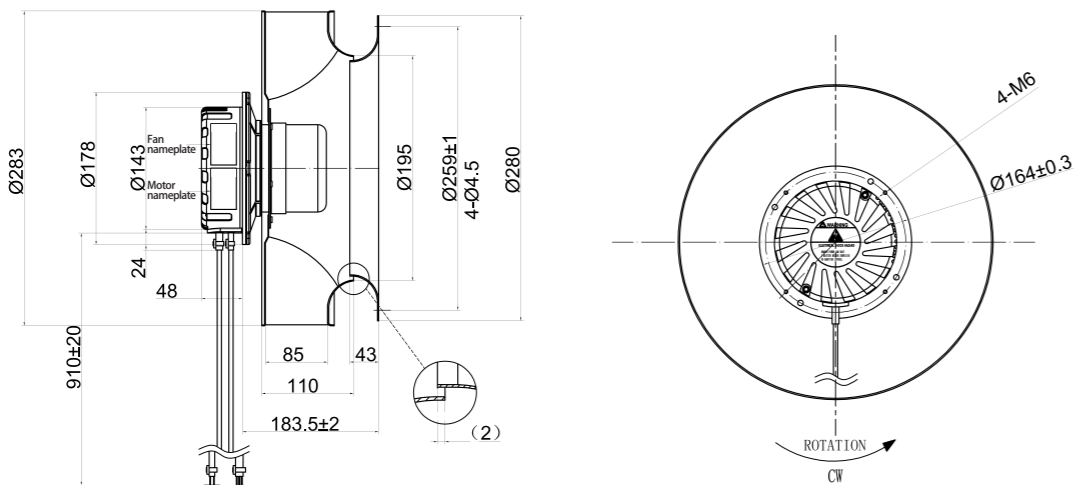
Type	Nominal voltage	Frequency	Speed	Rated Power	Current	LpA	Perm.amb.temp.
FCB280A/ EEW0S***-R	[VAC]	[Hz]	[rpm]	[W]	[A]	[dB(A)]	[°C]
	1~ 200-277	50/60	2500	450	2.0	68	-25°C ~+60°C

P-Q Curves

转速 Speed	功率 Power	风量 Air flow	静压 Static pressure
r/min	W	m ³ /h	Pa
1	325	2464	0
2	433	1638	414
3	334	545	677
4	171	1970	0
5	216	1525	183
6	177	415	430
7	81	1466	0
8	95	1147	96
9	85	348	242



Dimensions



EC EXTERNAL ROTOR CENTRIFUGAL FAN

BACKWARD 310

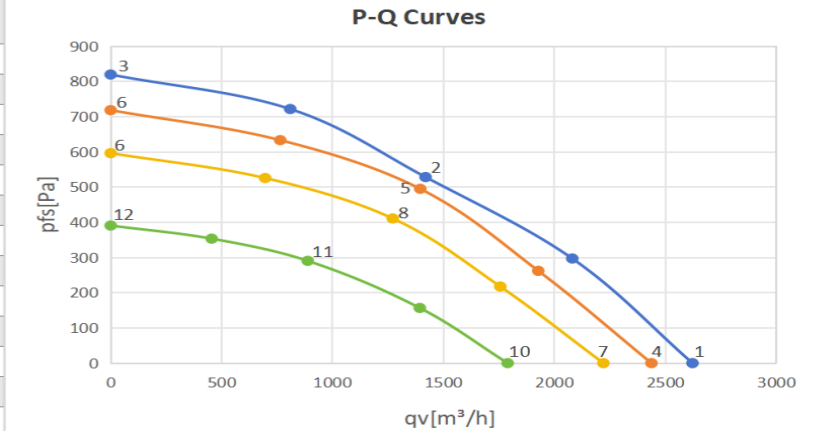
Impeller Material: Sheet aluminium
Protection class: IP44
Approvals: CCC CE
Insulation class: F
Speed regulation mode :Vsp/RS485

Specification

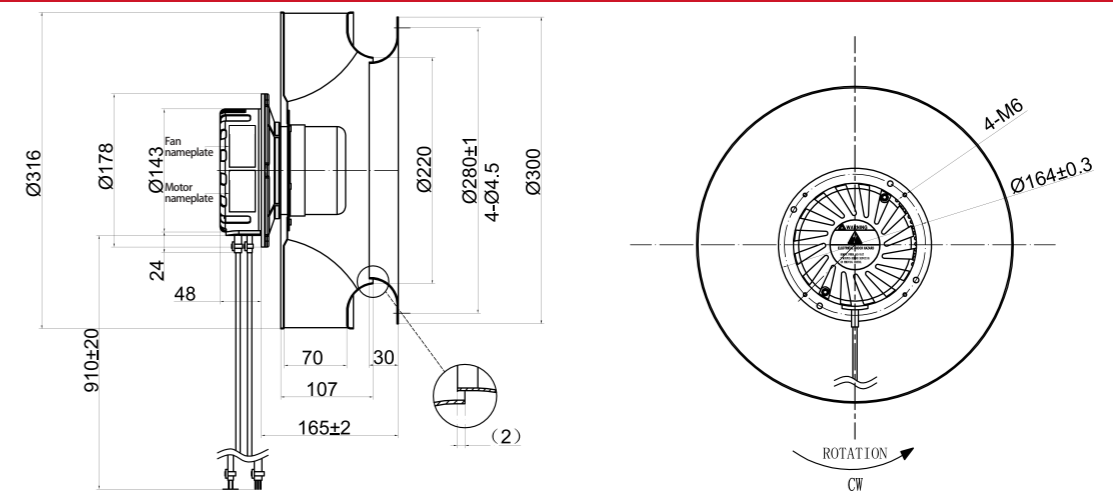
Type	Nominal voltage	Frequency	Speed	Rated Power	Current	LpA	Perm.amb.temp.
FCB310A/ EEW0S***-R	[VAC]	[Hz]	[rpm]	[W]	[A]	[dB(A)]	[°C]
	1~ 200-277	50/60	2500	400	2.1~1.4	68	0°C ~+40°C

P-Q Curves

Speed	Power	Air flow	Static pressure	
r/min	W	m ³ /h	Pa	
1	2400	312	2622	0
2	2299	432	1419	528
3	2400	258	0	820
4	266	2437	0	
5	2250	403	1395	495
6	216	0	718	
7	201	2220	0	
8	2050	305	1271	411
9	163	0	596	
10	118	1798	0	
11	163	888	291	
12	96	0	391	



Dimensions





EC EXTERNAL ROTOR CENTRIFUGAL FAN

BACKWARD 355

Impeller Material: Sheet aluminium

Protection class: IP44

Approvals: CCC CE

Insulation class: F

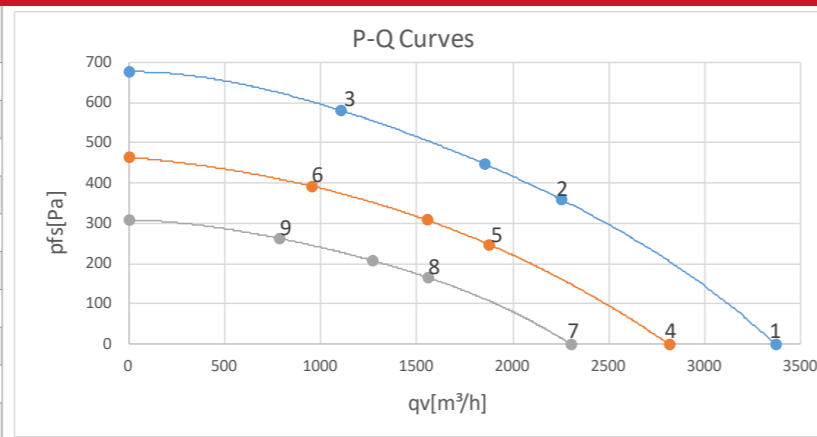
Speed regulation mode : Vsp/RS485

Specification

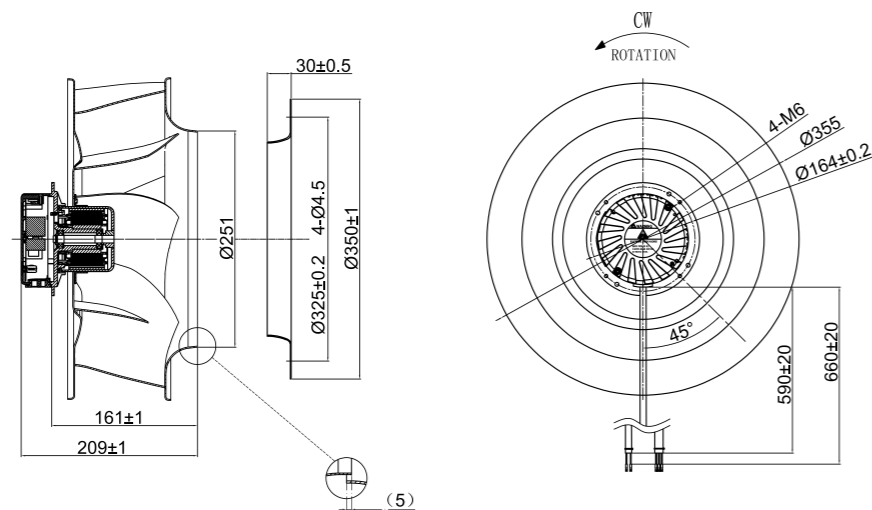
Type	Nominal voltage	Frequency	Speed	Rated Power	Current	LpA	Perm.amb.temp.
FCB355A/ EEW0S***-R	[VAC]	[Hz]	[rpm]	[W]	[A]	[dB(A)]	[°C]
	1~200-277	50/60	1930	330	1.44	75	-25°C ~+60°C

P-Q Curves

	Speed	Power	Air flow	Static pressure
	r/min	W	m ³ /h	Pa
1		309	3367	0
2	1930	461	2250	360
3		439	1102	581
4		180	2813	0
5	1600	264	1873	247
6		252	951	392
7		100	2301	0
8	1300	145	1556	166
9		134	782	263



Dimensions



EC EXTERNAL ROTOR CENTRIFUGAL FAN

BACKWARD 355

Impeller Material: Sheet aluminium

Protection class: IP44

Approvals: CCC CE

Insulation class: F

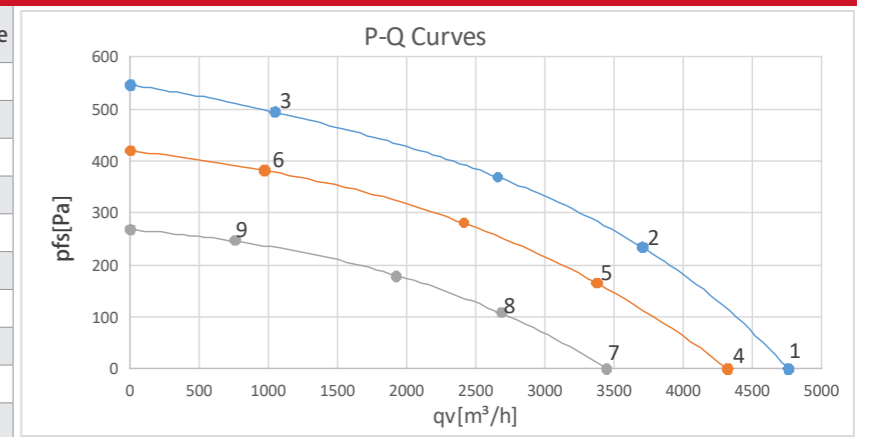
Speed regulation mode : Vsp/RS485

Specification

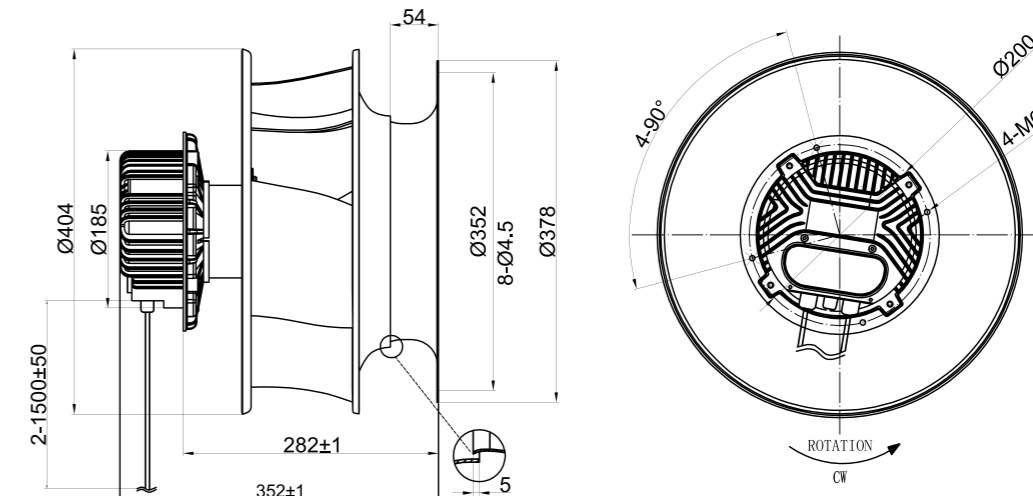
Type	Nominal voltage	Frequency	Speed	Rated Power	Current	LpA	Perm.amb.temp.
FCB355A/ EEW0T***-R	[VAC]	[Hz]	[rpm]	[W]	[A]	[dB(A)]	[°C]
	3~380-480	50/60	1700	480	1	75	-25°C ~+60°C

P-Q Curves

	Speed	Power	Air flow	Static pressure
	r/min	W	m ³ /h	Pa
1		316	4762	0
2	1700	469	3705	234
3		409	1046	494
4		225	4321	0
5	1500	316	3375	165
6		292	971	382
7		125	3446	0
8	1200	173	2686	109
9		154	757	247



Dimensions





EC EXTERNAL ROTOR CENTRIFUGAL FAN

BACKWARD 400

Impeller Material: PP+40%GF

Protection class: IP44

Approvals: CCC CE

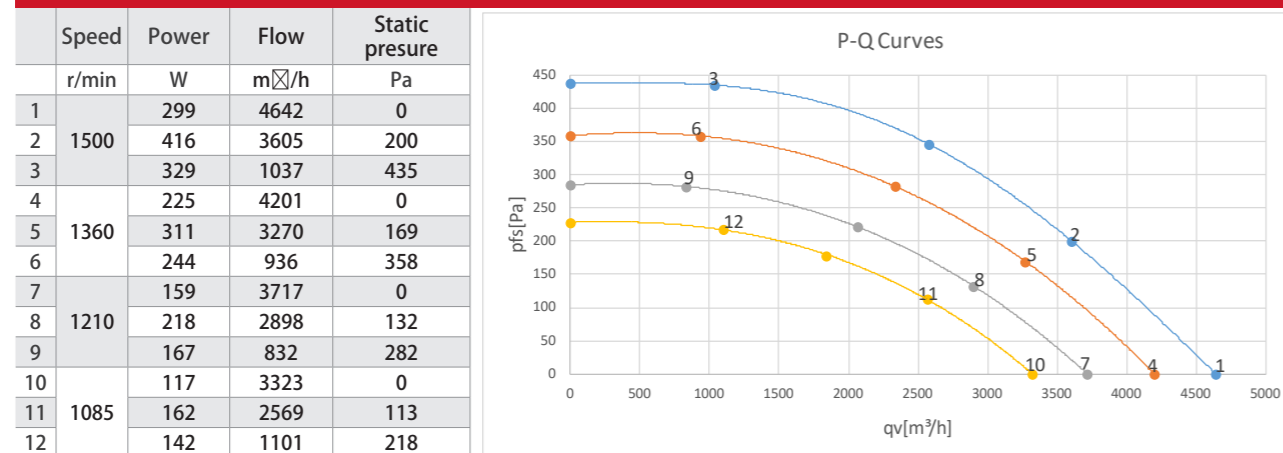
Insulation class: F

Speed regulation mode : Vsp/RS485

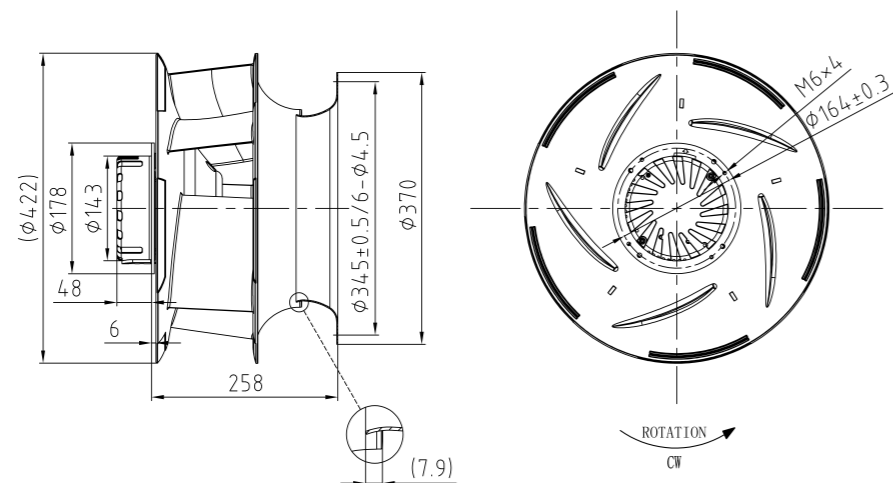
Specification

Type	Nominal voltage	Frequency	Speed	Rated Power	Current	LpA	Perm.amb.temp.
FCB400R/ EEW0S***-R	[VAC]	[Hz]	[rpm]	[W]	[A]	[dB(A)]	[°C]
	1~ 200-277	50/60	1500	400	2.1~1.4	72	0°C ~+40°C

P-Q Curves



Dimensions



EC EXTERNAL ROTOR CENTRIFUGAL FAN

BACKWARD 400

Impeller Material: Sheet aluminium

Protection class: IP44

Approvals: CCC CE

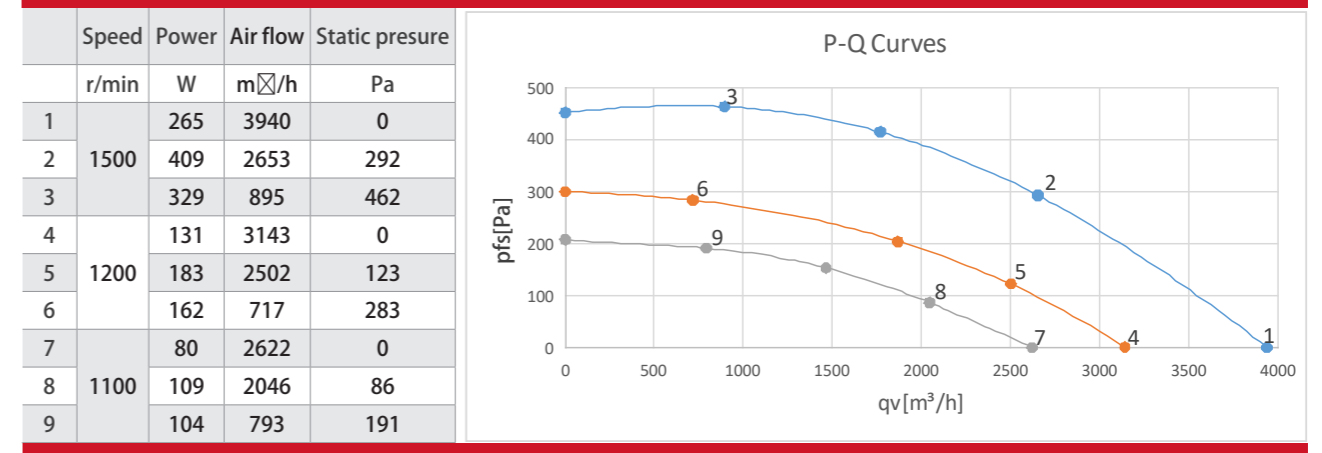
Insulation class: F

Speed regulation mode : Vsp/RS485

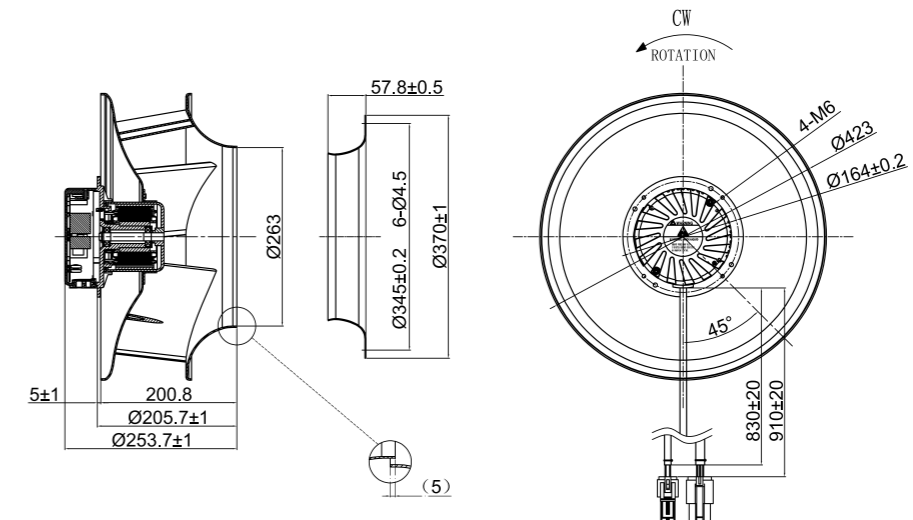
Specification

Type	Nominal voltage	Frequency	Speed	Rated Power	Current	LpA	Perm.amb.temp.
FCB400A/ EEW0S***-R	[VAC]	[Hz]	[rpm]	[W]	[A]	[dB(A)]	[°C]
	1~ 200-277	50/60	1500	390	1.7	72	-25°C ~+60°C

P-Q Curves



Dimensions





EC EXTERNAL ROTOR CENTRIFUGAL FAN

BACKWARD 400

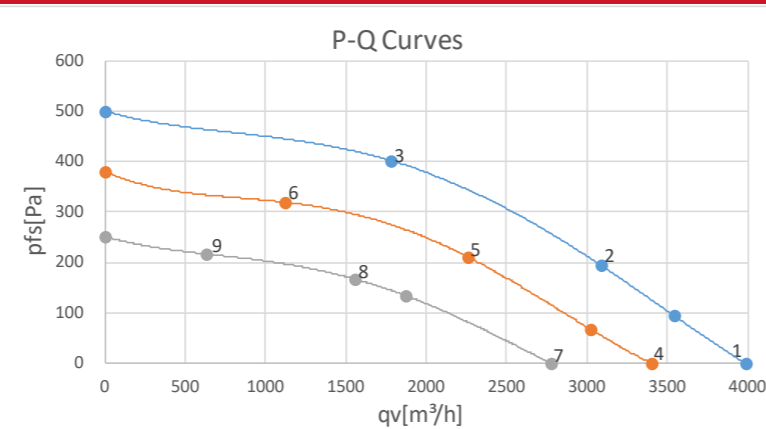
Impeller Material: Sheet aluminium
 Protection class: IP44
 Approvals: CCC CE
 Insulation class: F
 Speed regulation mode : Vsp/RS485

Specification

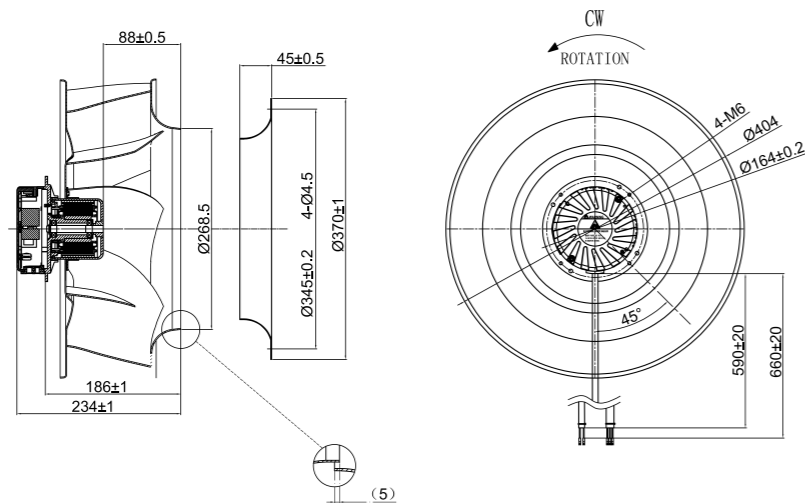
Type	Nominal voltage	Frequency	Speed	Rated Power	Current	LpA	Perm.amb.temp.
FCB400A/ EEW0S***-R	[VAC]	[Hz]	[rpm]	[W]	[A]	[dB(A)]	[°C]
	1~200-277	50/60	1450	390	1.7	68	-25°C ~+60°C

P-Q Curves

Speed	Power	Air flow	Static pressure
r/min	W	m³/h	Pa
1	241	3990	0
2	422	3088	195
3	431	1780	402
4	205	3402	0
5	275	2260	211
6	238	1120	320
7	110	2776	0
8	148	1555	167
9	118	630	217



Dimensions



EC EXTERNAL ROTOR CENTRIFUGAL FAN

BACKWARD 450

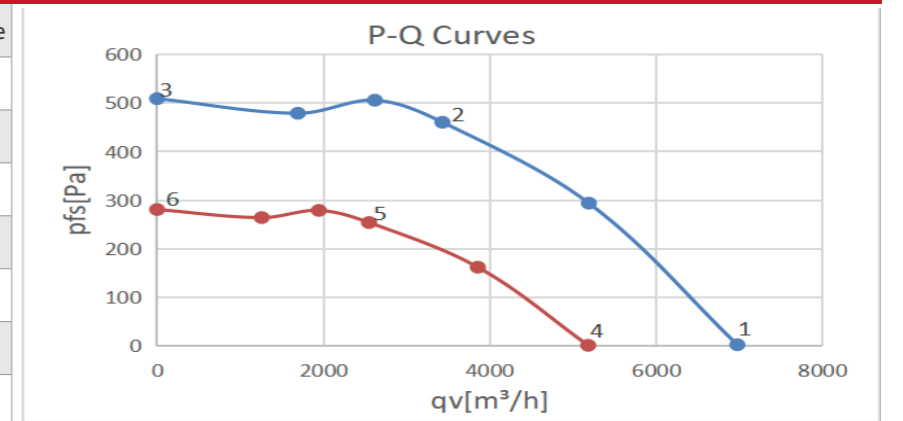
Impeller Material: Sheet aluminium
 Protection class: IP44
 Approvals: CCC CE
 Insulation class: F
 Speed regulation mode : Vsp/RS485

Specification

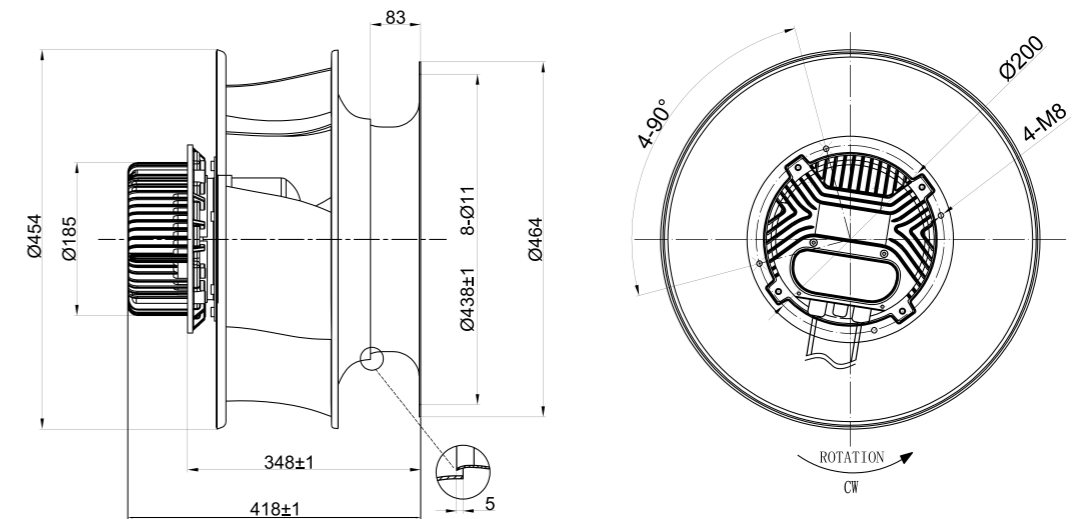
Type	Nominal voltage	Frequency	Speed	Rated Power	Current	LpA	Perm.amb.temp.
FCB450A/ EEX0T***-R	[VAC]	[Hz]	[rpm]	[W]	[A]	[dB(A)]	[°C]
	3~380-480	50/60	1400	950	1.6	72	-25°C ~+60°C

P-Q Curves

Speed	Power	Air flow	Static pressure
r/min	W	m³/h	Pa
1	750	6970	0
2	930	3429	460
3	346	0	509
4	308	5180	0
5	381	2547	253
6	142	0	280



Dimensions





EC EXTERNAL ROTOR CENTRIFUGAL FAN

BACKWARD 630

Impeller Material: PP+40%GF

Protection class: IP44

Approvals: CCC CE

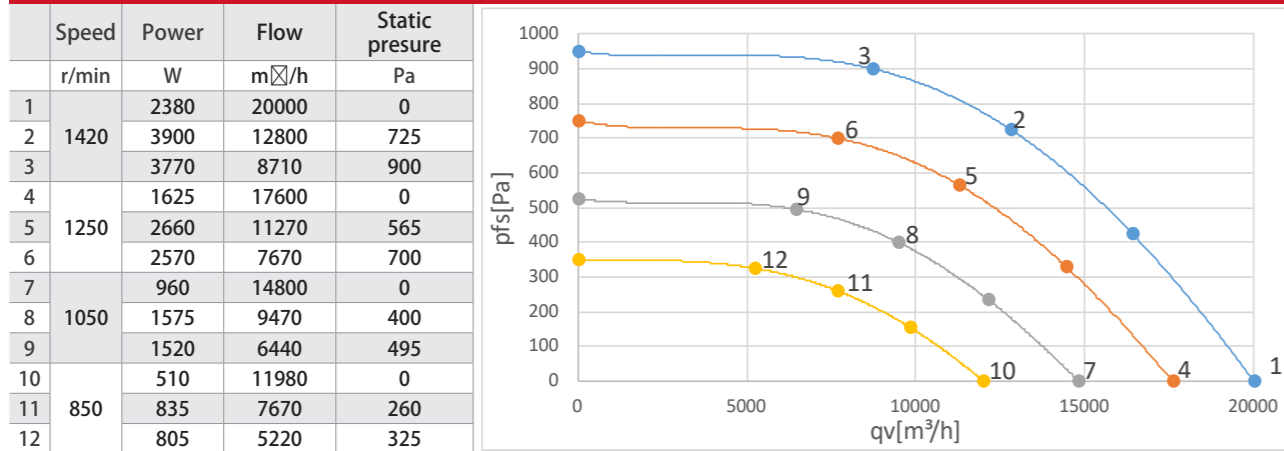
Insulation class: F

Speed regulation mode : Vsp/RS485

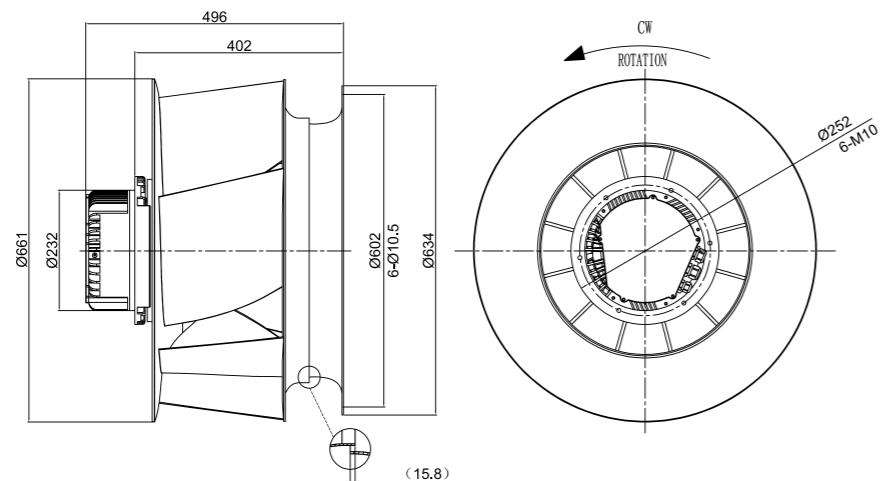
Specification

Type	Nominal voltage	Frequency	Speed	Rated Power	Current	LpA	Perm.amb.temp.
FCB630R/ EEY0T***-R	[VAC]	[Hz]	[rpm]	[W]	[A]	[dB(A)]	[°C]
	3~ 380-480	50/60	1420	3900	6.4	68	0°C ~+40°C

P-Q Curves



Dimensions



EC Axial Fan





EC INTERNAL ROTOR AXIAL FAN 450

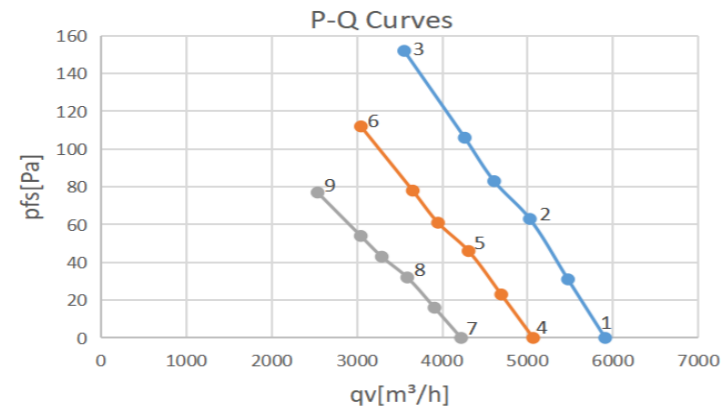
Impeller Material: Sheet aluminium
 Protection class: IP55
 Approvals: CCC CE
 Insulation class: F
 Speed regulation mode : Vsp/PWM/RS485

Specification

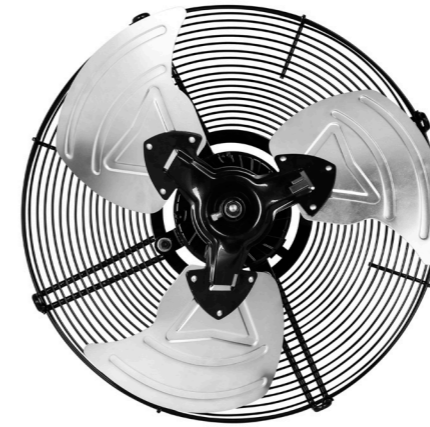
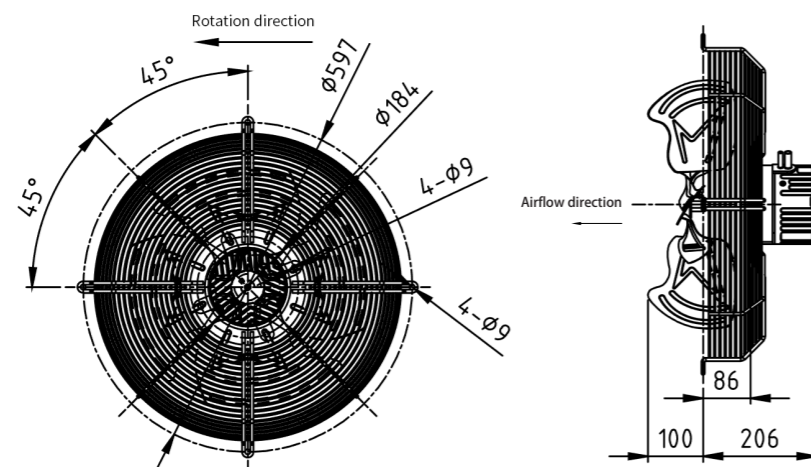
Type	Nominal voltage	Frequency	Speed	Rated Power	Current	LpA	Perm.amb.temp.
FAS450A/ IEB2S***-S	[VAC]	[Hz]	[rpm]	[W]	[A]	[dB(A)]	[°C]
	1~115\200-277V	50/60	200-1400	409	1.9	72	-25°C ~+60°C

P-Q Curves

	Speed	Power	Air flow	Static pressure
	r/min	W	m ³ /h	Pa
1	1400	214	5909	0
2		272	5026	63
3		409	3554	152
4	1200	135	5065	0
5		171	4308	46
6		257	3047	112
7	1100	78	4221	0
8		99	3590	32
9		149	2539	77



Dimensions



EC INTERNAL ROTOR AXIAL FAN 500

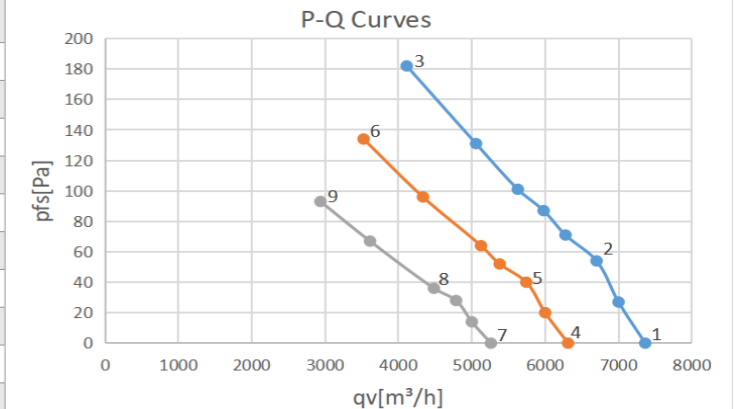
Impeller Material: Sheet aluminium
 Protection class: IP55
 Approvals: CCC CE
 Insulation class: F
 Speed regulation mode : Vsp/PWM/RS485

Specification

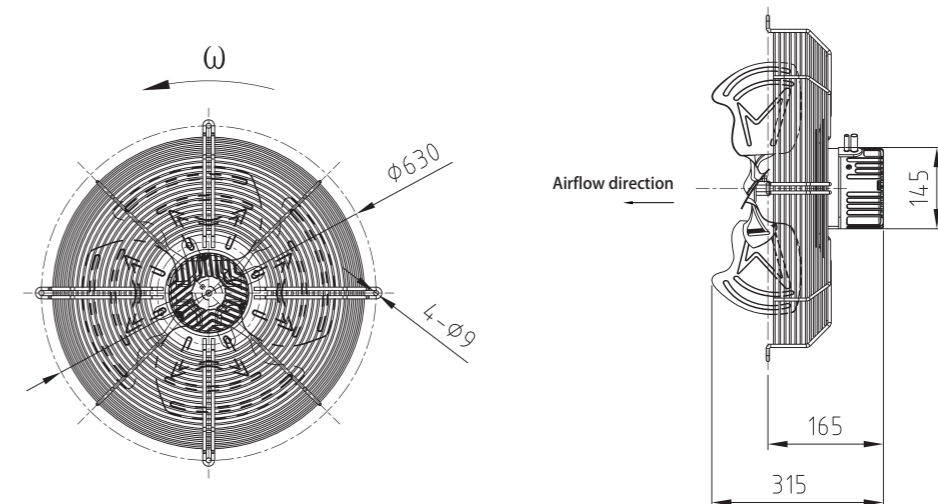
Type	Nominal voltage	Frequency	Speed	Rated Power	Current	LpA	Perm.amb.temp.
FAS500A/ IEB2S***-S	[VAC]	[Hz]	[rpm]	[W]	[A]	[dB(A)]	[°C]
	1~115\200-277V	50/60	200-1400	548	2.5	73	-25°C ~+60°C

P-Q Curves

	Speed	Power	Air flow	Static pressure
	r/min	W	m ³ /h	Pa
1	1400	303	7365	0
2		354	6701	54
3		548	4113	182
4	1200	191	6313	0
5		223	5744	40
6		345	3525	134
7	1000	110	5261	0
8		146	4484	36
9		200	2938	93



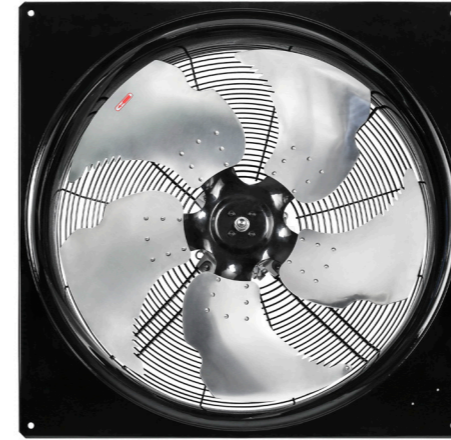
Dimensions





EC INTERNAL ROTOR AXIAL FAN 560

Impeller Material: Sheet aluminium
Protection class: IP55
Approvals: CCC CE
Insulation class: F
Speed regulation mode : Vsp/PWM/RS485



EC INTERNAL ROTOR AXIAL FAN 630

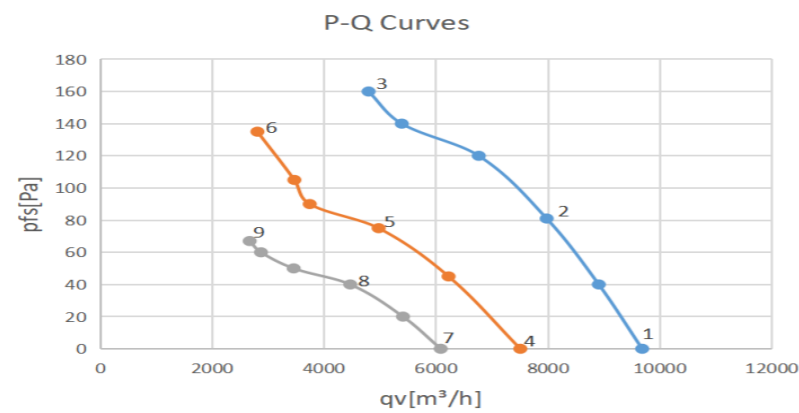
Impeller Material: Sheet aluminium
Protection class: IP55
Approvals: CCC CE
Insulation class: F
Speed regulation mode : Vsp/PWM/RS485

Specification

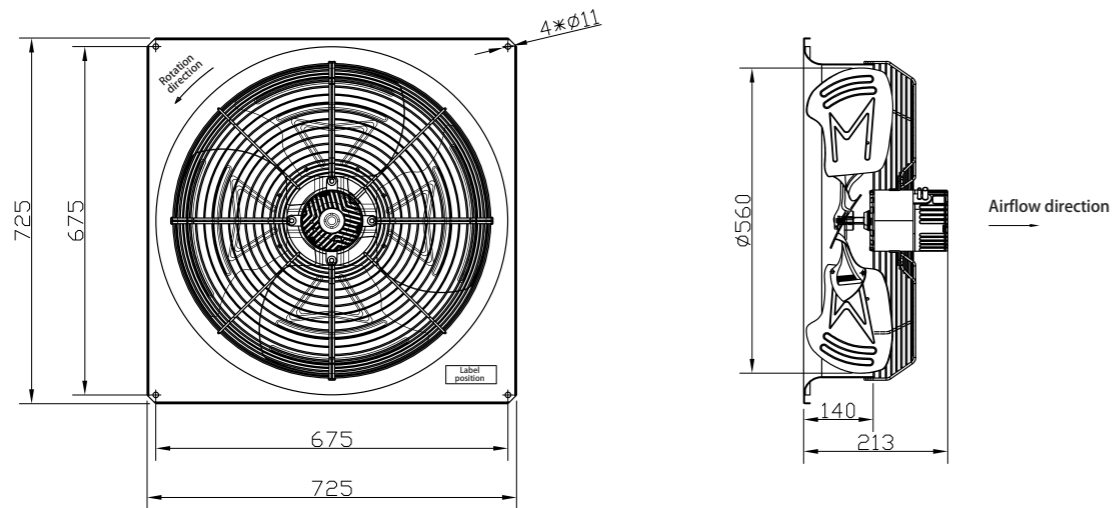
Type	Nominal voltage	Frequency	Speed	Rated Power	Current	LpA	Perm.amb.temp.
FAS560A/ IEB2S***-S	[VAC]	[Hz]	[rpm]	[W]	[A]	[dB(A)]	[°C]
	1~115\200-277V	50/60	200-1200	731	5.5	76	-25°C ~+60°C

P-Q Curves

	Speed	Power	Air flow	Static pressure
	r/min	W	m ³ /h	Pa
1		468	9683	0
2	1200	574	7977	81
3		731	4795	160
4		223	7506	0
5	900	294	4975	75
6		403	2809	135
7		118	6084	0
8	700	143	4468	40
9		180	2671	67



Dimensions

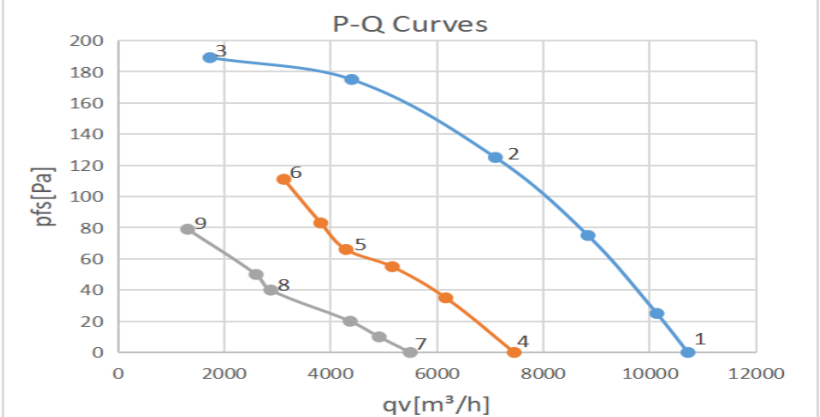


Specification

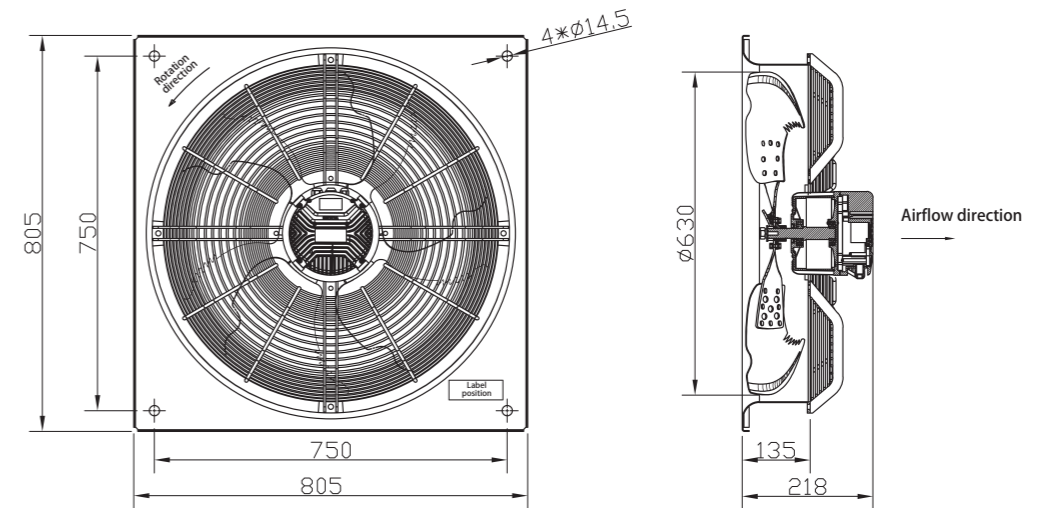
Type	Nominal voltage	Frequency	Speed	Rated Power	Current	LpA	Perm.amb.temp.
FAS630A/ IEB2S***-S	[VAC]	[Hz]	[rpm]	[W]	[A]	[dB(A)]	[°C]
	1~115\200-277V	50/60	200-1020	929	4.0	75	-25°C ~+60°C

P-Q Curves

	Speed	Power	Air flow	Static pressure
	r/min	W	m ³ /h	Pa
1		446	10717	0
2	1020	787	7097	125
3		813	1730	189
4		146	7451	0
5	700	260	4289	66
6		369	3120	111
7		40	5496	0
8	500	116	2874	40
9		170	1311	79



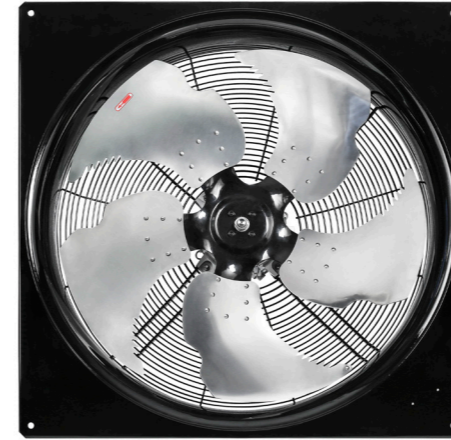
Dimensions





EC INTERNAL ROTOR AXIAL FAN 710

Impeller Material: Sheet aluminium
 Protection class: IP55
 Approvals: CCC CE
 Insulation class: F
 Speed regulation mode : Vsp/PWM/RS485



EC INTERNAL ROTOR AXIAL FAN 760

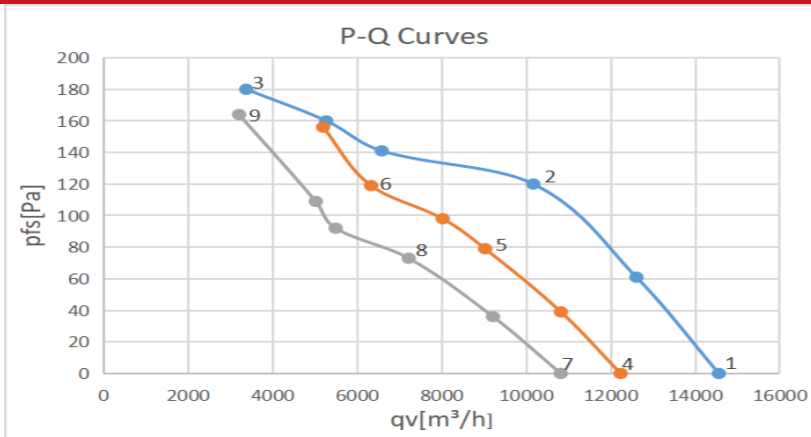
Impeller Material: Sheet aluminium
 Protection class: IP55
 Approvals: CCC CE
 Insulation class: F
 Speed regulation mode : Vsp/PWM/RS485

Specification

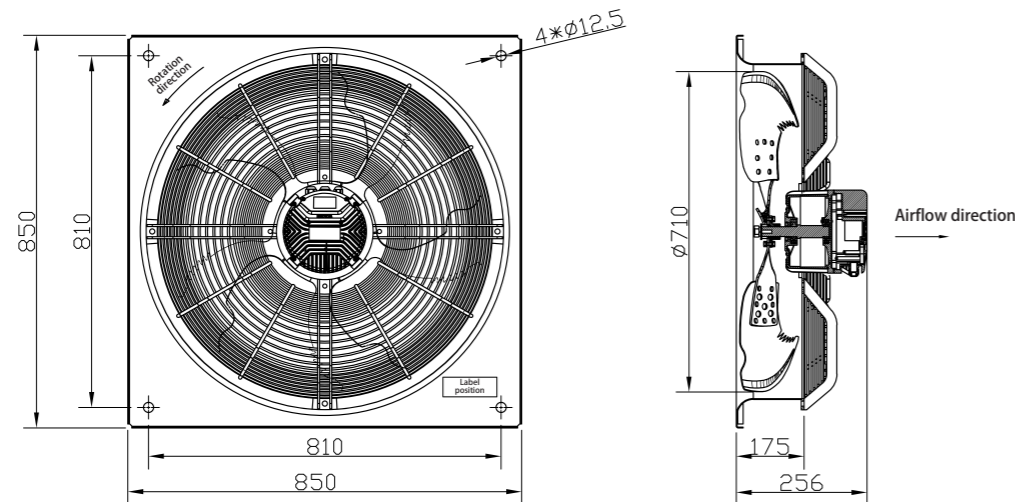
Type	Nominal voltage	Frequency	Speed	Rated Power	Current	LpA	Perm.amb.temp.
FAS710A/ IEB2S***-S	[VAC]	[Hz]	[rpm]	[W]	[A]	[dB(A)]	[°C]
	1~115\200-277V	50/60	200-960	976	4.4	73	-25°C ~+60°C

P-Q Curves

	Speed	Power	Air flow	Static pressure
	r/min	W	m ³ /h	Pa
1		579	14557	0
2	960	976	10164	120
3		822	3367	180
4		345	12231	0
5	800	549	9023	79
6		692	6323	119
7		237	10815	0
8	700	408	7213	73
9		688	3198	164



Dimensions

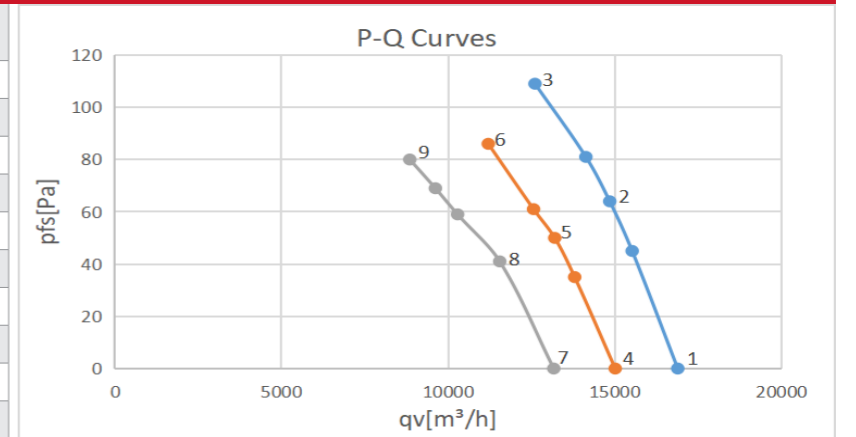


Specification

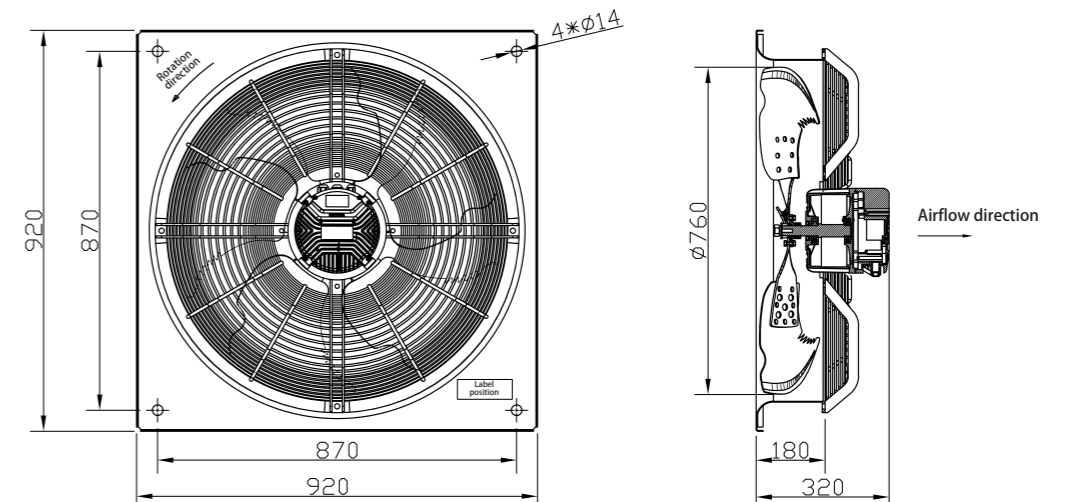
Type	Nominal voltage	Frequency	Speed	Rated Power	Current	LpA	Perm.amb.temp.
FAS760A/ IEB2S***-S	[VAC]	[Hz]	[rpm]	[W]	[A]	[dB(A)]	[°C]
	3~380-480	50/60	200-900	878	4.0	71	-25°C ~+60°C

P-Q Curves

	Speed	Power	Air flow	Static pressure
	r/min	W	m ³ /h	Pa
1		563	16890	0
2	900	736	14849	64
3		878	12606	109
4		395	15013	0
5	800	517	13199	50
6		617	11205	86
7		300	13169	0
8	700	385	11548	41
9		484	8849	80



Dimensions



EC INTERNAL ROTOR AXIAL FAN 800



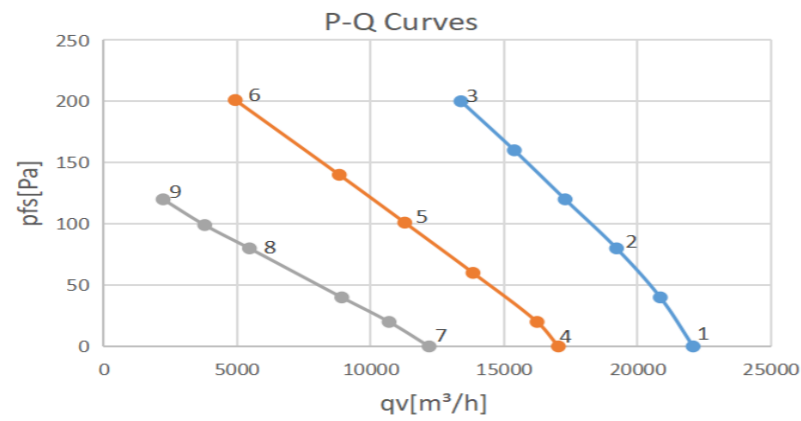
Impeller Material: Sheet aluminium
Protection class: IP55
Approvals: CCC CE
Insulation class: F
Speed regulation mode : Vsp/RS485

Specification

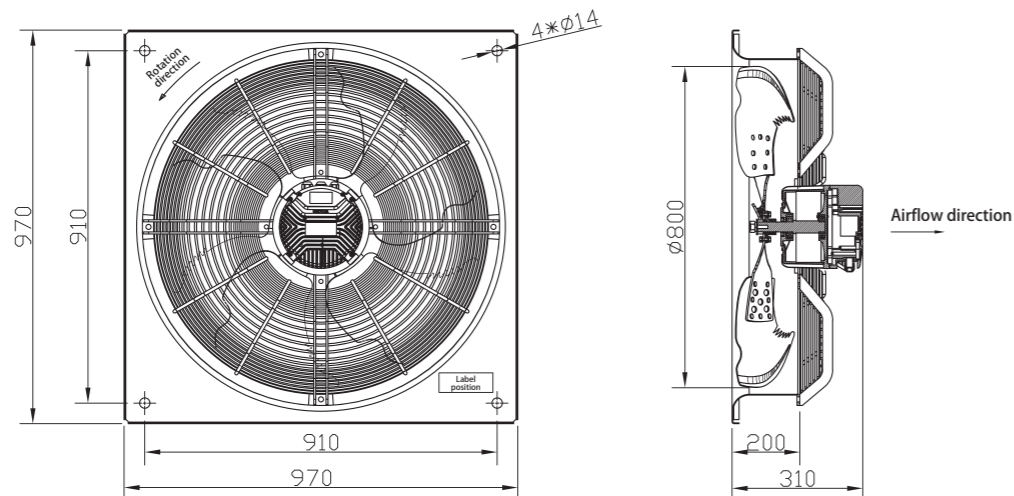
Type	Nominal voltage	Frequency	Speed	Rated Power	Current	LpA	Perm.amb.temp.
FAS800A/ IED1T***-S	[VAC]	[Hz]	[rpm]	[W]	[A]	[dB(A)]	[°C]
	3~380-480	50/60	200-950	1540	2	75	-25°C ~+60°C

P-Q Curves

	Speed	Power	Air flow	Static pressure
	r/min	W	m ³ /h	Pa
1	900	1093	22084	0
2		1403	19215	80
3		1857	13385	200
4	700	510	17037	0
5		791	11280	101
6		1149	4929	201
7	500	196	12193	0
8		367	5462	80
9		486	2226	120



Dimensions



EC INTERNAL ROTOR AXIAL FAN 800



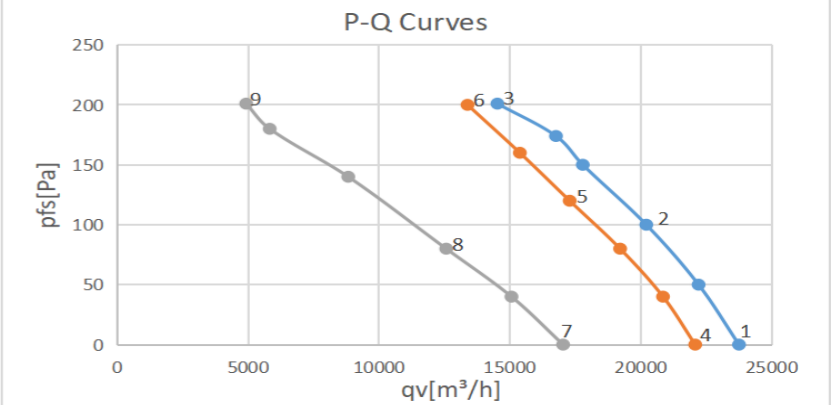
Impeller Material: Sheet aluminium
Protection class: IP55
Approvals: CCC CE
Insulation class: F
Speed regulation mode : Vsp/RS485

Specification

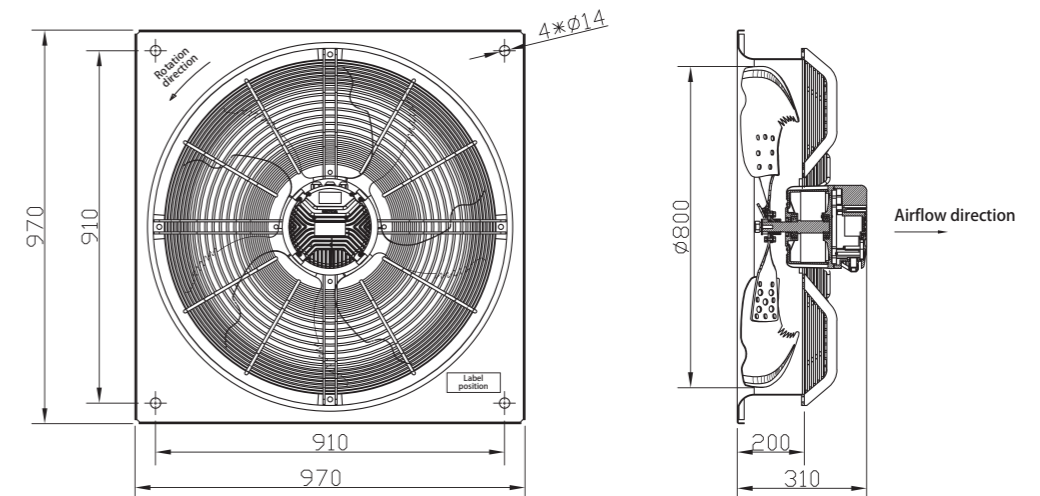
Type	Nominal voltage	Frequency	Speed	Rated Power	Current	LpA	Perm.amb.temp.
FAS800A/ IEE2T***-S	[VAC]	[Hz]	[rpm]	[W]	[A]	[dB(A)]	[°C]
	3~380-480	50/60	200-960	2040	3.5	79	-25°C ~+60°C

P-Q Curves

	Speed	Power	Air flow	Static pressure
	r/min	W	m ³ /h	Pa
1	960	1312	23757	0
2		1744	20215	100
3		2040	14527	201
4	700	1093	22084	0
5		1552	17288	120
6		1857	13385	200
7	500	510	17037	0
8		737	12571	80
9		1149	4929	201



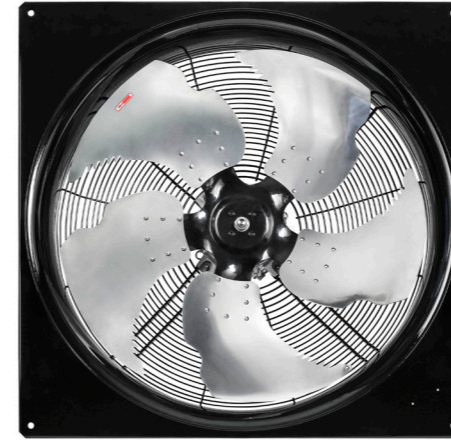
Dimensions





EC INTERNAL ROTOR AXIAL FAN 850

Impeller Material: Sheet aluminium
Protection class: IP55
Approvals: CCC CE
Insulation class: F
Speed regulation mode : Vsp/RS485



EC INTERNAL ROTOR AXIAL FAN 900

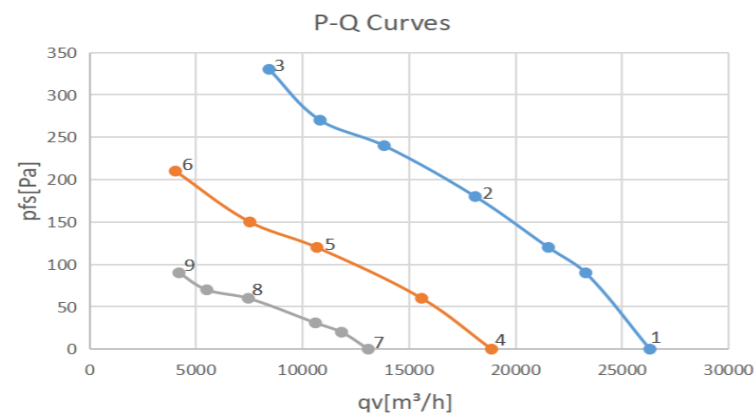
Impeller Material: Sheet aluminium
Protection class: IP55
Approvals: CCC CE
Insulation class: F
Speed regulation mode : Vsp/RS485

Specification

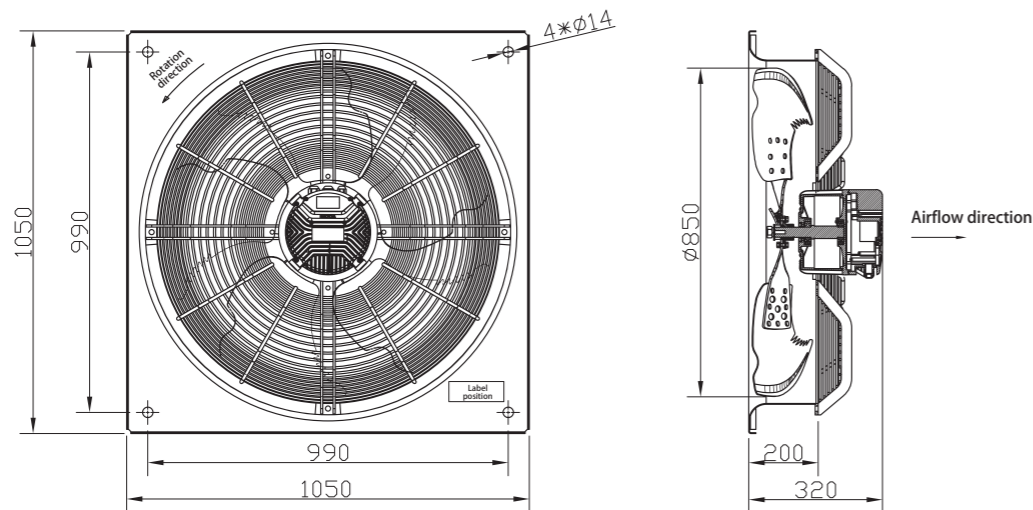
Type	Nominal voltage	Frequency	Speed	Rated Power	Current	LpA	Perm.amb.temp.
FAS850A/ IEE2T***-S	[VAC]	[Hz]	[rpm]	[W]	[A]	[dB(A)]	[°C]
	3~380-480	50/60	200-960	2756	7.2	82	-25°C ~+60°C

P-Q Curves

	Speed	Power	Air flow	Static pressure
	r/min	W	m³/h	Pa
1		1284	26306	0
2	960	2116	18104	180
3		2756	8424	330
4		509	18872	0
5	700	901	10670	120
6		1259	4025	210
7		210	13081	0
8	500	351	7451	60
9		426	4193	90



Dimensions

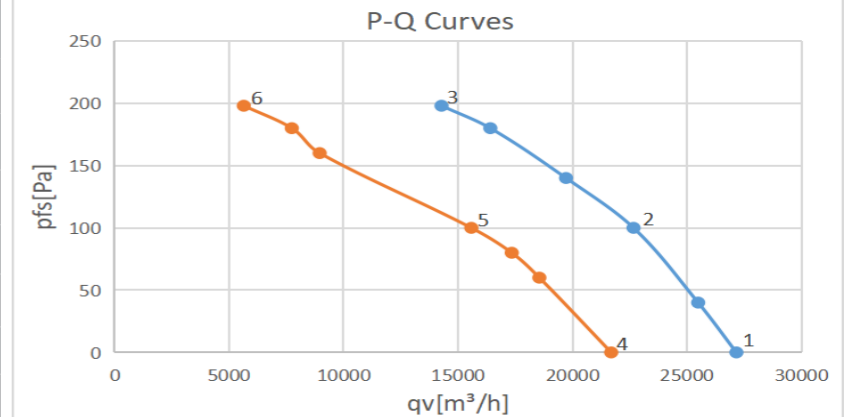


Specification

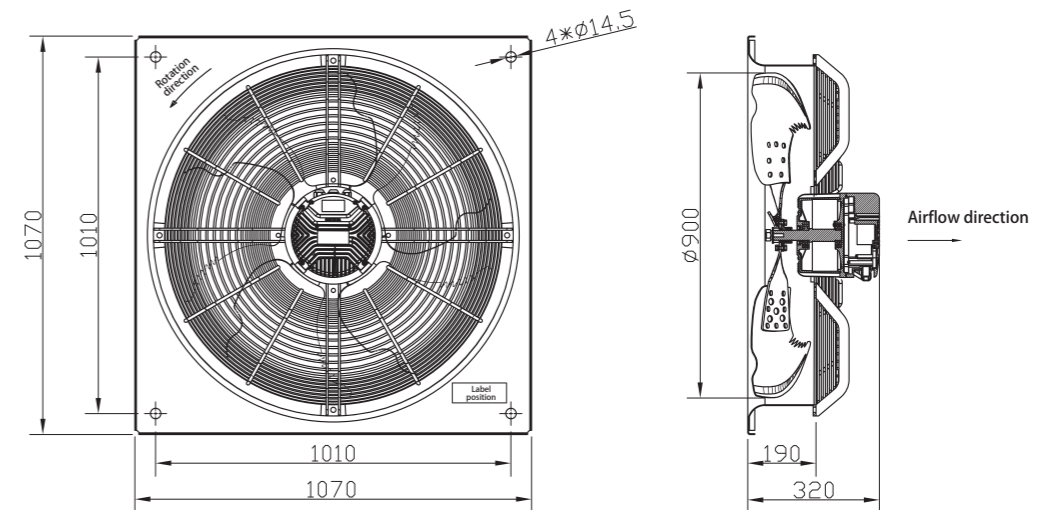
Type	Nominal voltage	Frequency	Speed	Rated Power	Current	LpA	Perm.amb.temp.
FAS900A/ IED1T***-S	[VAC]	[Hz]	[rpm]	[W]	[A]	[dB(A)]	[°C]
	3~380-480	50/60	200-960	1930	3.6	79	-25°C ~+60°C

P-Q Curves

	转速	功率	风量	静压
	r/min	W	m³/h	Pa
1		1046	27160	0
2	850	1459	22667	100
3		1929	14281	198
4		607	21692	0
5	700	1003	15583	100
6		1385	5646	198



Dimensions





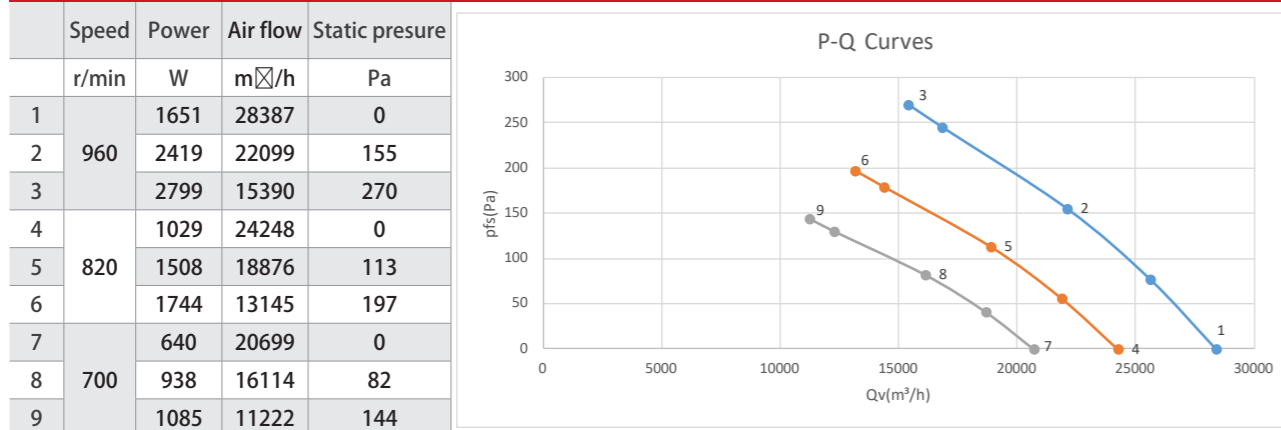
EC INTERNAL ROTOR AXIAL FAN 900

Impeller Material: Sheet aluminium
Protection class: IP55
Approvals: CCC CE
Insulation class: F
Speed regulation mode : Vsp/RS485

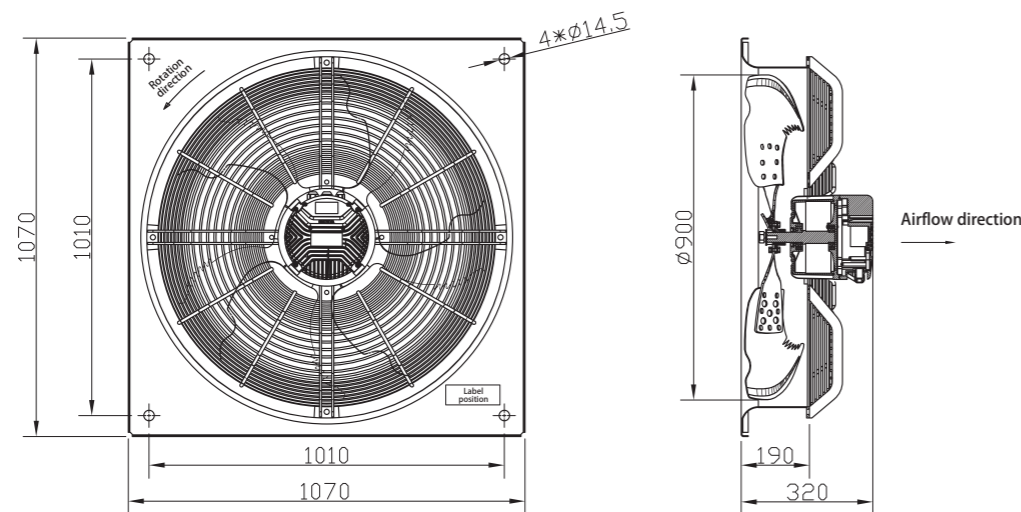
Specification

Type	Nominal voltage	Frequency	Speed	Rated Power	Current	LpA	Perm.amb.temp.
FAS900A/ IEE2T***-S	[VAC]	[Hz]	[rpm]	[W]	[A]	[dB(A)]	[°C]
	3~380-480	50/60	200-960	2800	5.5	79	-25°C ~+60°C

P-Q Curves



Dimensions



CENTRIFUGAL FAN TERMINAL FUNCTION DESCRIPTION AND CONNECTION DIAGRAM

EC059&074 single phase

EC059&074 single phase			0-10V Function of Terminal		
SIGNAL	COLOR	SPEC	SIGNAL	COLOR	SPEC
L	RED	AC230V 50/60Hz	FG	WHITE	12 Pulse/R
N	BLUE	AC230V 50/60Hz	Vsp	YELLOW	0-10V DC/PWM
PE	GREEN/YELLOW	GND	+10V	RED	DC10V
			GND	BLUE	GND

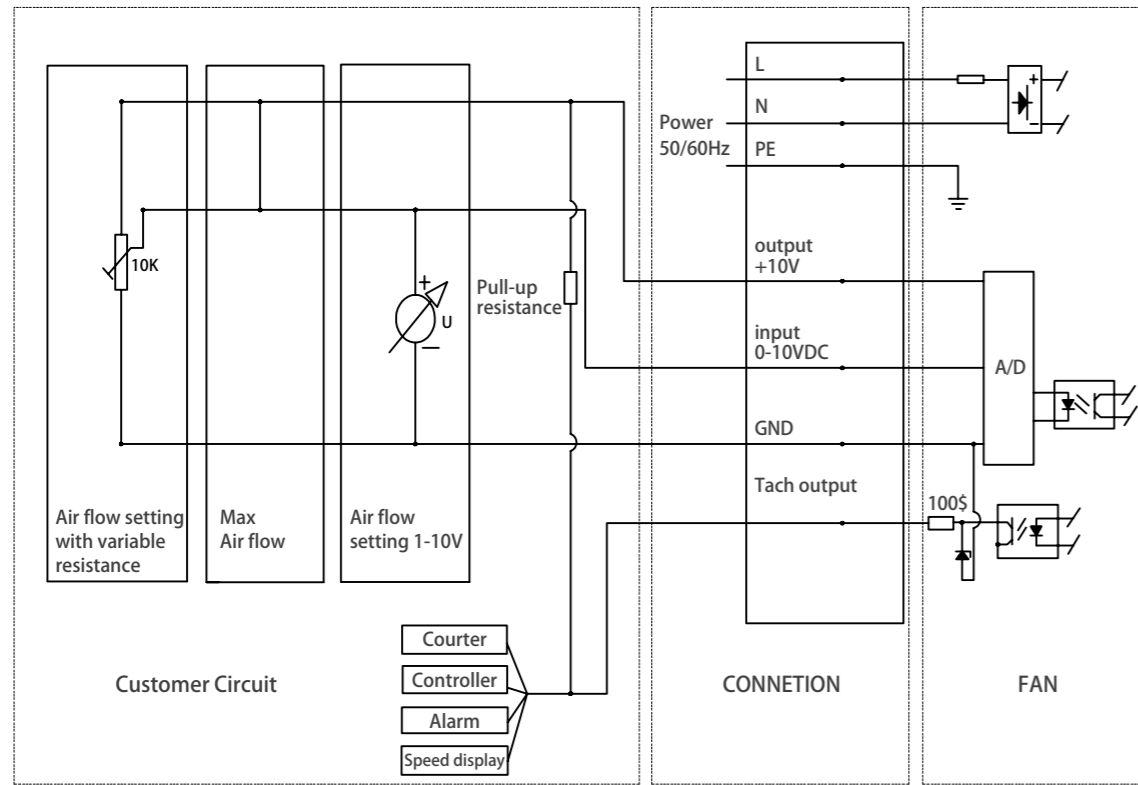
EC084 single phase

EC084 single phase			0-10V Function of Terminal		
SIGNAL	COLOR	SPEC	SIGNAL	COLOR	SPEC
L	RED	AC230V50/60Hz	FG	WHITE	1 Pulse/R
N	BLACK	AC230V50/60Hz	Vsp	RED	0-10VDC/PWM
PE	GREEN/YELLOW	EARTH	+10V	YELLOW	DC10V
			GND	BLUE	GND

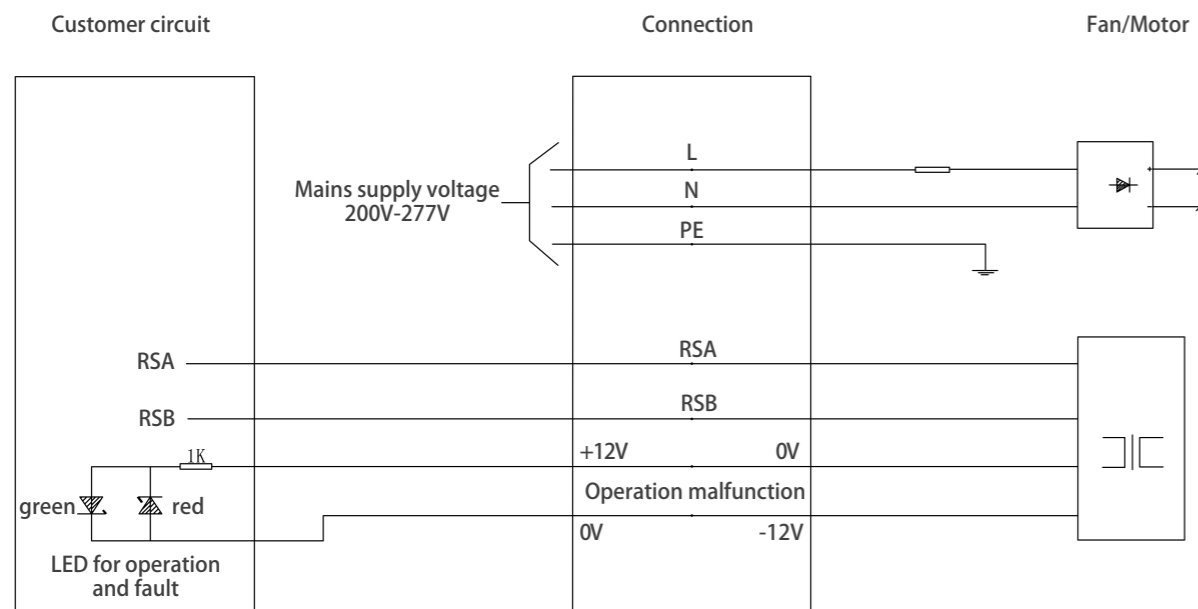
EC084 single phase

EC084 single phase			RS485 Function of Terminal		
SIGNAL	COLOR	SPEC	SIGNAL	COLOR	SPEC
L	RED	AC230V50/60Hz	RS485-	WHITE	RS485-
N	BLACK	AC230V50/60Hz	RS485+	YELLOW	RS485+
PE	GREEN/YELLOW	EARTH	LED1	RED	LED1
			LED2	BLUE	LED2

EC059&074&084 Single-phase 0-10V speed regulation connection diagrammode



EC084 Single-phase RS485 speed control connection diagram

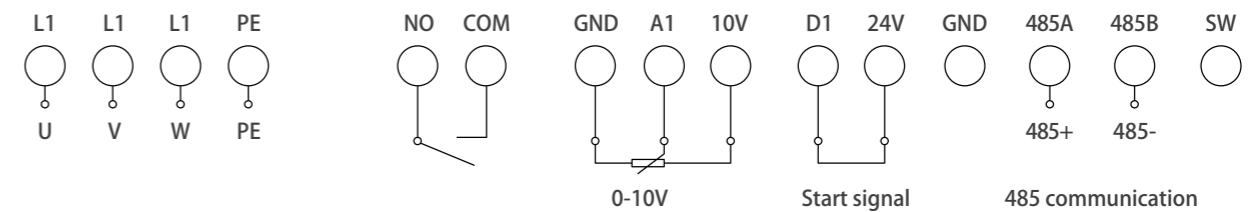


EC084 Three phase

Function of Terminal

Name	Function
L1	Input phase 1
L2	Input phase 2
L3	Input phase 3
PE	Protective earth
COM	Failure output interface, always open contacts
NO	
GND	Reference place
A1	0-10V speed control input interface
10V	Internal 10V DC voltage
D1	Motor start enable interface, high level start
24V	Internal 24V DC voltage
485A	485 communication interface
485B	
SW	485 Communication Terminal Resistance interface

EC084 three-phase connection diagram



EC156 Three phase		Function of Terminal
Name	Function	
L1	Three-phase power input 1	
L2	Three-phase power input 2	
L3	Three-phase power input 3	
PE	Protective earth	
GND	signal ground	
A1	Analog input 1 (0-10V speed regulation)	
10V	10V power output	
D1	digital input 1 Motor start enable signal (valid when using 0-10V speed regulation)	
D2	digital input 2 Motor steering control signal (valid when using 0-10V speed regulation)	
24V	24V	
GND	signal ground	
485A	RS485B communication input	
485B	RS485B communication input	
SW	120 Ohm Resistor Termination by Shorting 485B and SW Terminal Blocks	
NO	Relay normally open contact, closed after fault	
NC	Relay normally closed contact, disconnected after failure	
COM	public terminal	
LED	signal lights	Blinking green light: the motor is normal
		Flashing red light: motor failure

EC156 three-phase connection diagram



AXIAL FAN TERMINAL FUNCTION DESCRIPTION AND CONNECTION DIAGRAM

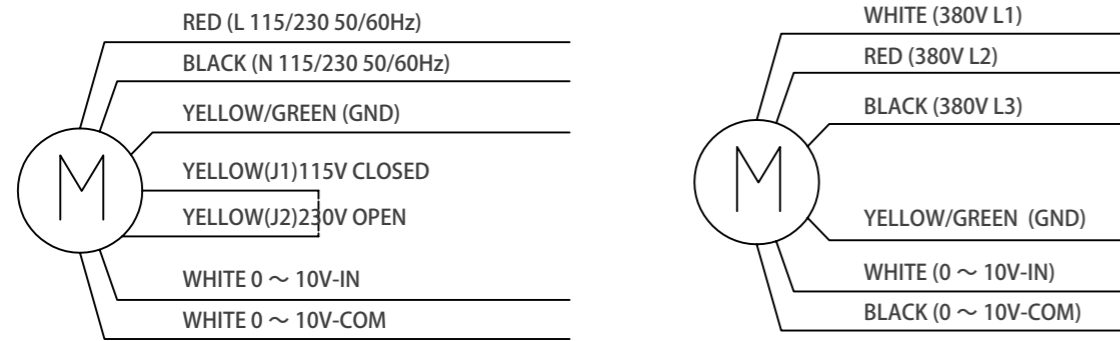
EC112 terminal function description

Name	Function	
L1	Input phase 1	112
L2	Input phase 2	
L3	Input phase 3	
PE	Protective earth	
COM	Output Relay common contact	
NO	Output relay N.O. contact	
NC	Output relay N.C. contact	
GND1	Signal ground	
+10V	Internal 10V DC voltage	
GND1	Signal ground	
A1	0-10V speed control input interface	
A2	Analog Input 2	485 communication interface
AOut	Analog Output	
D1	Motor start enable interface, high level start	
D2	Steering conversion interface, high/low level switching	
GND1	Signal ground	
485A	RS 485 data +	
485B	RS 485 data -	
GND1	RS 485 ground	

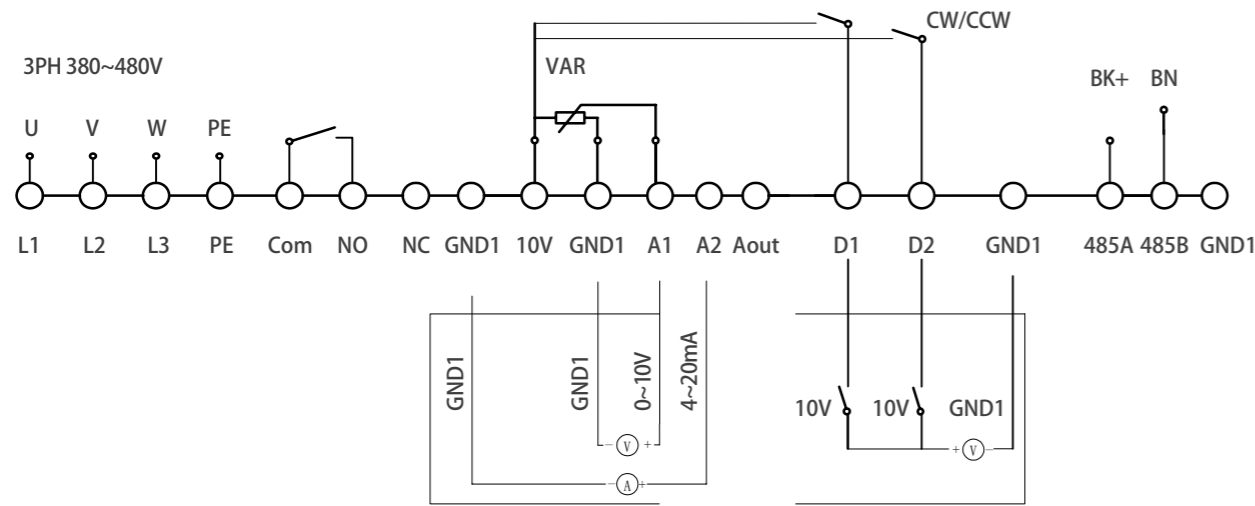
EC112 terminal function description

Name	Function	
L1	Input phase 1	132
L2	Input phase 2	
L3	Input phase 3	
PE	Protective earth	
COM	Fault output interface, normally open contact	
NO	Output relay N.C. contact	
NC	Output relay N.C. contact	
+10V	Internal 10V DC voltage	
A1	0-10V speed control input interface	
A2	Analog Input 2	
AOut	Analog Output	
D1	Motor start enable interface, high level start	485 communication interface
D2	Steering conversion interface, high/low level switching	
485A		
485B	485 communication interface	
485G		
U、V、W	Connect to the motor	
GND	Reference place	

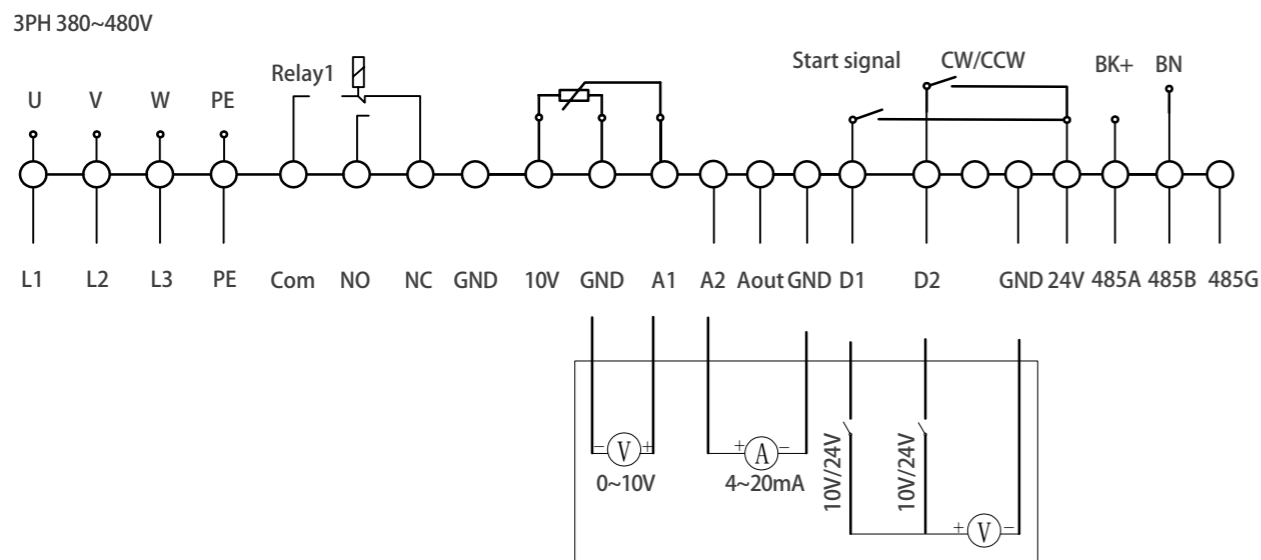
EC48 single-phase & three-phase connection diagram



EC112 connection diagram



EC132 connection diagram



FAN CHECK LIST

Client name	
Project name	
Project duration	
Estimated annual usage	
Desired price	
Project timeline	
Referenced product description	
Fan type	<input type="checkbox"/> Axial <input type="checkbox"/> Centrifugal <input type="checkbox"/> Other
Motor type	<input type="checkbox"/> External rotor <input type="checkbox"/> Internal rotor
Power type	<input type="checkbox"/> 3-phase, 200-240V, 50/60Hz <input type="checkbox"/> 3-phase, 380-480V, 50/60Hz <input type="checkbox"/> 1-phase, 200-480V, 50/60Hz <input type="checkbox"/> 1-phase, 115V, 50/60Hz <input type="checkbox"/> Other
Performance requirements	
Air volume (m3/h)	
Static pressure (Pa)	
Impeller diameter : (mm)	
Lp(A) (dB(A))	
Speed mode	
Application industry	<input type="checkbox"/> Air conditioning refrigeration <input type="checkbox"/> Power Electronics <input type="checkbox"/> Fresh air purification <input type="checkbox"/> New energy <input type="checkbox"/> Agriculture and livestock <input type="checkbox"/> Rail transit <input type="checkbox"/> Other
Installation method	
Environmental conditions: (Indoor/Outdoor, Temperature, Humidity, Altitude, Dust, Salt Spray, Vibration)	
Protection class	
Fan installation method	
Wind direction (Blowing, Suction)	
Terminal box or cable outlet	
RAL Spray color RAL	
Certification requirements (CE, UL, CCC, GOST...)	
Other special requirements	



a WOLONG company



Wechat officialaccount



Fanproductsample book

WOLONG ELECTRIC GROUP LTD.

Add:No.1801West Renmin RD,Shangyu District,Shaoxing City,
Zhejiang Province,P.R.China

Web:www.wolong.com.cn

If you are interested in any related information,please subscribe Wolong Electric official Wechat account.Please access Customer Service in the WeChat menue.Wolong Experts will provide online consultancy services for you.