SPECIFICATION

MODEL
K-EC630-S380-12

Model:K-EC630-S380-12

1.Technical conditions

1-1 Requirement of production standard and safety regulations:GB/T 12350,JB/T 10562。
1-2 All material accord with RoHS。
1-3 At 1200±10%r/min running speed，the residual unbalance of the fan not less than G6.3(-balancing precision grade) in each plane,according with JB/T9101.
1-4 Vibration speed virtual value of fans accord with JB/T 8689.
1-5 Life time
Fan life expectance 30000 hours, determined when at nominal supply voltage,running at full speed,environment temperature of 40℃.
1-6 Outlet conditions: recommended lead wire specifications, not less than 0.75mm^2，Cable diameter Φ6-10mm.

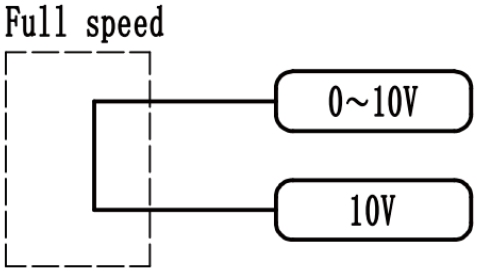
2.Rated data

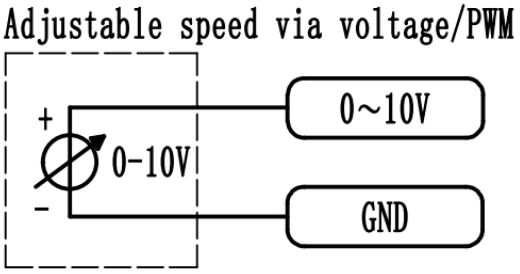
Phase		3~
Rated voltage	VAC	400
Rated voltage range	VAC	380~480
Frequency	Hz	50/60
ERP2020 Standard	N	40
ERP2020 Measured	N	44.9 (A,static)
Speed	r/min	1205
Power input	W	970
Static pressure	Pa	143
Static pressure EFF	%	38.3

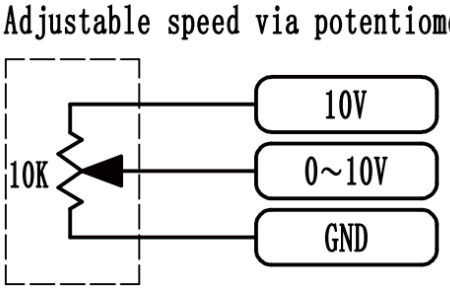
3.Technical data

Net weight	15.5kg
Size	Φ630
Surface of motor	Coated in black
Material of electroncs housing	SPHC
Material of impeller	Plastic
Number of blades	5
Direction of rotation	Clockwise,see on the leads
Insulation class	F
Humidity range	5% ~ 95%RH
Operating temperatures	-25℃~+65℃
Storaging temperatures	-35℃ ~ +75℃
Installation position	Shaft horizontal or rotor on the bottom
Operation mode	S1
Type of protection	IP54
Type protection of the fan	Current limitation,Stall protection, Soft start protection,Open phase protection,0verheating protection, Over/Under voltage protection

3-1 Input voltage for regulating speed 0-lOVDC（±0.2V） or PWM Control，PWM Frequency 0.1k-1kHz,amplitude 10-12V,duty cycle 0%-100%(±2%);

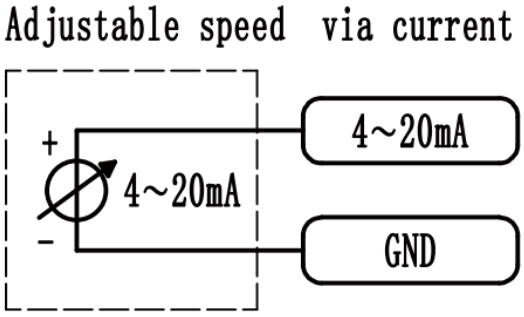






≥9.5V---n=max	frequence 0.1-1kHz	≥95%PWM---n=max
1.2V---n=min	abplitude 10-12V	12%PWM---n=min
≤0.8V---n=0	duty cycle 0-100%	≤8%PWM---n=0

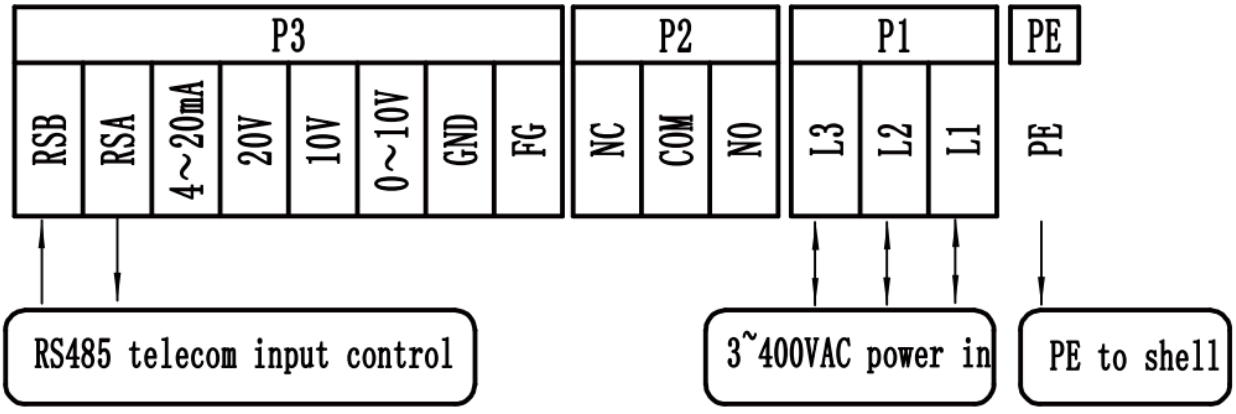
3-2 Input current for regulating speed 4-20mA（±0.2mA）/DC Control:



≥20mA---n=max
4.5mA---n=min
≤3.2mA---n=0

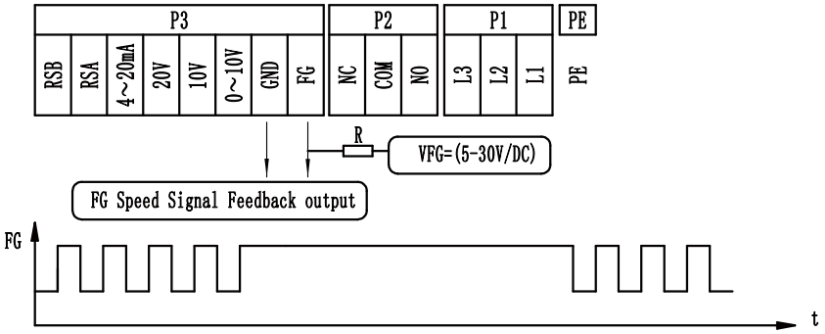
3-3 RS485 telecommunication input control:

Through RS485 communication and using MODBUS protocol,one host computer can control multiple fans at the same time,the hostcomputer can control the start and stop of the fans and set the fan speed; at the same time, the fan feedbacks status information to the host computer; speed or fault status.



3-4 FG Speed Signal Feedback output:

Mark: Needs to increasing resistance to +10V/DC(External power Max. 30V/DC),VFG=(5-30)VDC, R≥1000*(VFG)Q.



When the fan stand by, the Tacho signal outputs low voltage; when the fan fault, the Tech signal outputs high voltage;when the fan is in normal operation, the Tacho signal generates square waves of 50% duty cycle. The motor has 5 polar couples,the fan outputs 5 pulses per revolution.

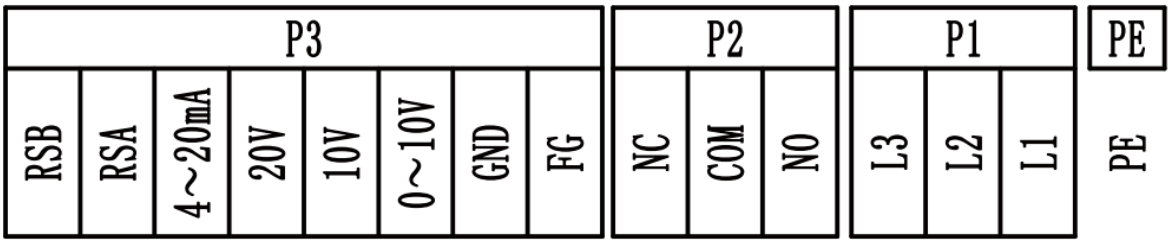
3-5 Soft start

The motor start at low speed, to reduce current surges being drawn to the power supply.

3-6 The fan is designed with a rated operating voltage of 3~400 VAC, a voltage range of 3 ~380-480VAC, undervoltage protection 320V, and overvoltage protection 520V.

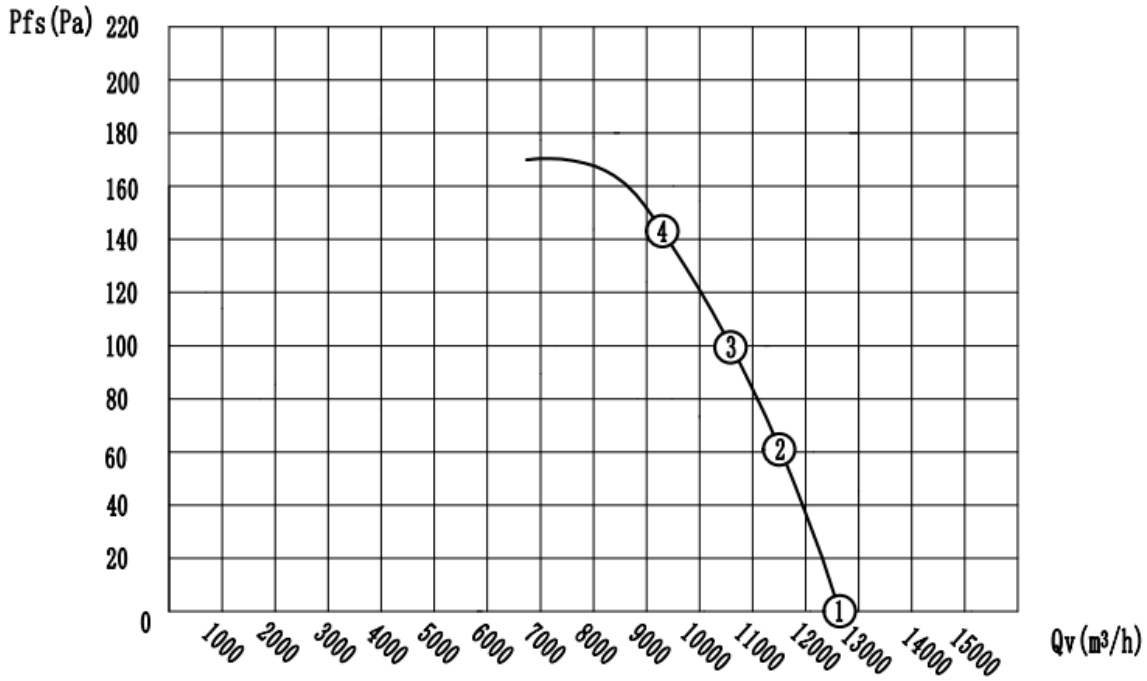
3-7 When the temperature of the motor IPM module exceeds 105 ° C, the motor will stop after p rotection. When the temperature drops to 85° C, the motor automatically resumes running.

4.Wiring schematic diagram and port description



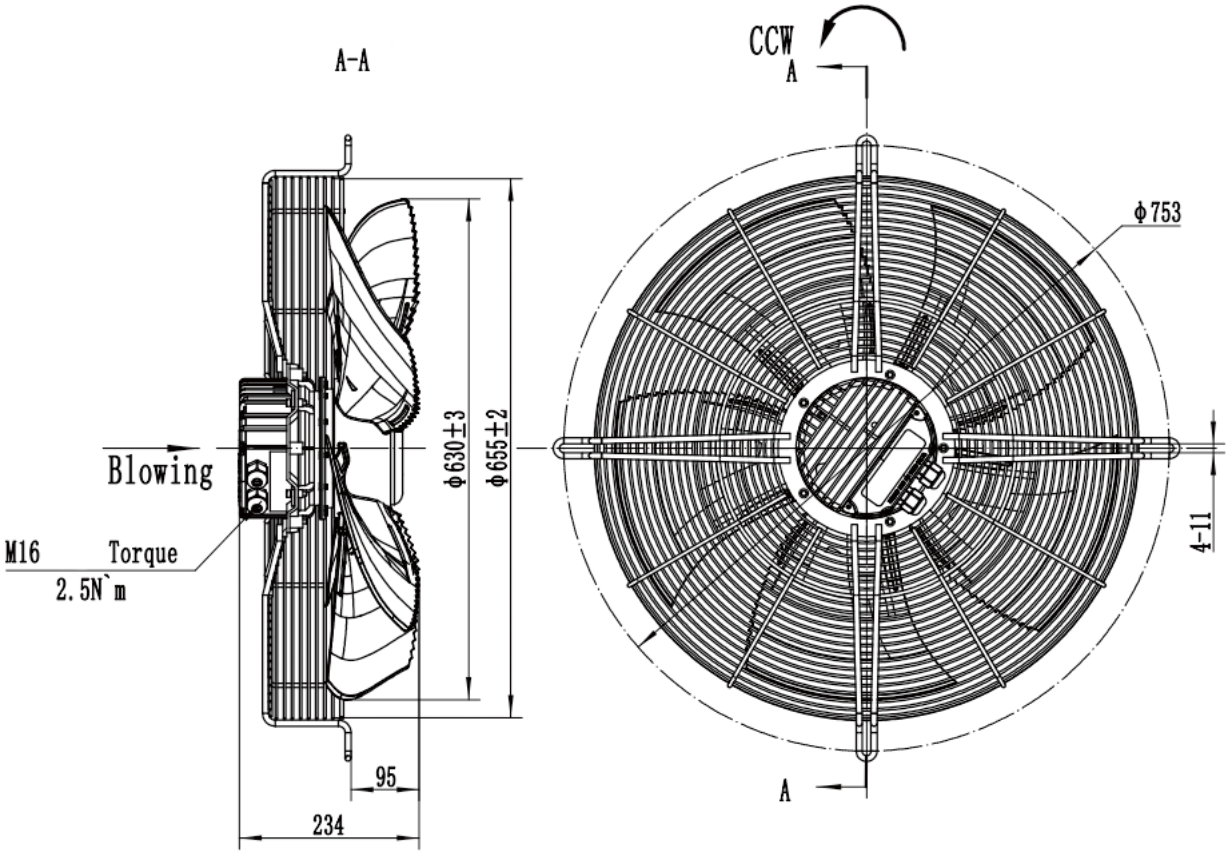
NO.	Signal	Assignment/Function	NO.	Signal	Assignment/Function
PE	PE	Protect earthing,ground	P3	RSA	Bus RS485;RSA;MODBUS RTU
P1	L3	AC power in,voltage input 3~380-480V;50/60Hz		RSB	Bus RS485;RSB;MODBUS RTU
	L2	AC power in,voltage input 3~380-480V;50/60Hz		GND	interface P3 for signal control,ground
	L1	AC power in,voltage input 3~380-480V;50/60Hz		0~10V /PWM	Controler input0~10VDC/PWM
P2	NO	State relay,alterable state contact; normally turn-on;turn-off when error		4~20mA	Analogue Control input 4.5~20mA
	COM	State relay,universal connectivity; contact rating 250VAC/2A		20V	Rated voltage output 20VDC (±10% max.50mA)
	NC	State relay,normally turn-off;turn-on when error;		10V	Rated voltage output 10VDC (±10% max.10mA)
				FG	Speed Signal Feedfack

5.Performance curve



	Pfs	Current input	Power input	Speed	Air flow	Note
	Pa	A	W	r/min	m³/h	
①	0	1.31	703	1205	12643	
②	61	1.50	818	1205	11522	
③	100	1.64	896	1205	10590	
④	143	1.77	969	1205	9304	MAX.EFF

6.Product drawing



7.Other requirements on accessory

7-1 Inlet cones

■ Yes，□ No.

7-2 Scroll housing

（□Yes、■No），Material：/

7-3 Annectent parts

linker（□Yes、■No），model：/

terminal（□Yes、■No)，model：/

7-4 Leads

Lead wire：/

Control wire：/

Length：/