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POWTECH PRODUCT CATALOG

Powtech--Professional inverter manufacturer based
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Honor & Certificate



PT500 soft starter

Soft starter

Reducing the starting current of the motor effectively.

Six unique start mode.

Comprehensive and reliable protection.



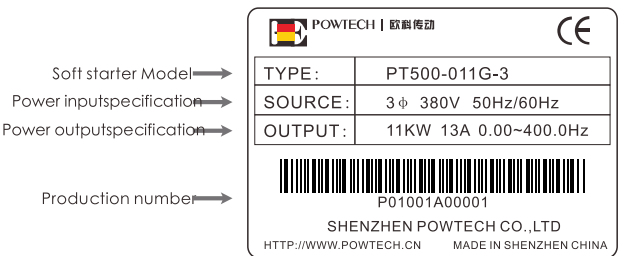
Product Introduction

Pt500 Series intelligent motor soft starters is the integration of the latest theories of motor control motor protection technology and proprietary software technology and advanced new equipment for the motor to start early , triangle conversion, auto buck, buck , such as magnetron ideal alternative boot device .

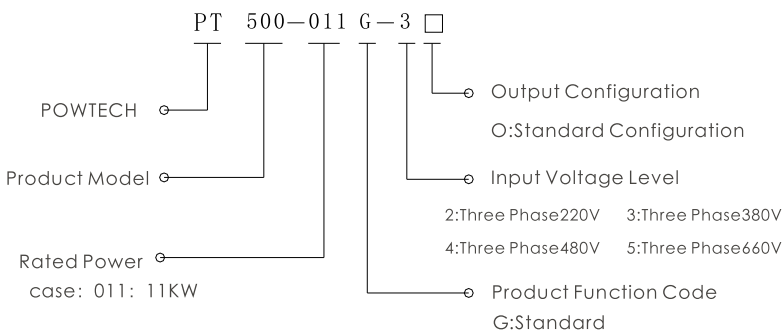
Technical features

- Reducing the starting current of the motor effectively
- Reducing the start stress of motor and load device
- Six unique start mode
- Comprehensive and reliable protection
- Intelligent motor soft starters , the application of network technology makes motor control technology to adapt to the rapid development of higher power requirements of automation technology

Nameplate instructions



Model specification



Installation requirements

To ensure the soft starter with good ventilation and cooling conditions in use, the soft starter should be mounted vertically , and leave enough space for heat dissipation around the equipment, shown in Figure 3.1 , Figure 3.2 , the figure is the minimum distance allowed.

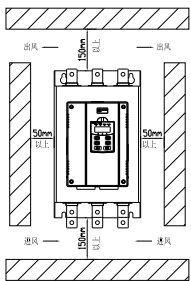


Figure 3.1

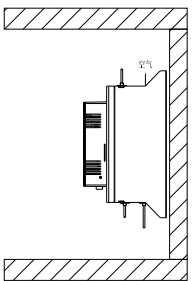


Figure 3.2

Appearance and installation dimension

5R1 (5.5kW-55kW)Soft starter appearance and installation dimension 3. 3 5R2(75kW-115kW)Soft starter appearance and installation dimension 3. 4

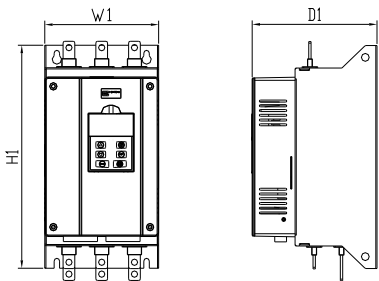


Figure 3.3

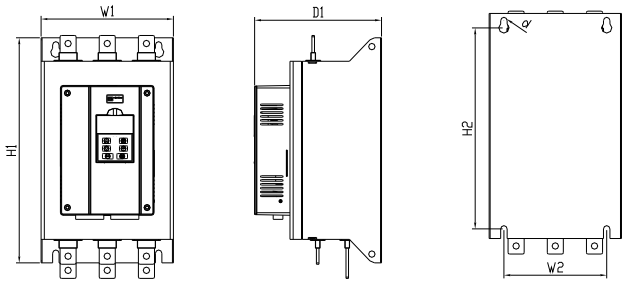


Figure 3.4

5R1 (5.5kW-55kW)Installation Dimension

Specification Model	Rated Power (KW)	Rated Current (A)	Appearance Dimension			Installation Dimension			Net Weight (kg)
			H1	W1	D	H2	W2	d	
Pt500- 5R5G-3	5.5	11	282	146	162	247	129	M6	<3.5
Pt500- 7R5G-3	7.5	15	282	146	162	247	129	M6	<3.5
Pt500- 011G-3	11	22	282	146	160	255	115	M6	<3.5
Pt500- 015G-3	15	30	282	146	160	255	115	M6	<3.5
Pt500- 018G-3	18.5	37	282	146	160	255	115	M6	<3.5
Pt500- 022G-3	22	44	282	146	160	255	115	M6	<3.5
Pt500- 030G-3	30	60	282	146	160	255	115	M6	<3.5
Pt500- 037G-3	37	74	282	146	160	255	115	M6	<3.5
Pt500- 045G-3	45	90	282	146	160	255	115	M6	<3.5
Pt500- 055G-3	55	110	282	146	160	255	115	M6	<3.5

5R2(75kW-115kW)Installation Dimension

Specification Model	Rated Power (KW)	Rated Current (A)	Appearance Dimension			Installation Dimension			Net Weight (kg)
			H1	W1	D	H2	W2	d	
Pt500- 075G-3	75	150	350	206	198	313	160	M8	<20
Pt500- 090G-3	90	180	350	206	198	313	160	M8	<20
Pt500- 115G-3	115	230	350	206	198	313	160	M8	<20

5R3(132kW-200kW)appearance and installation dimension3.5

5R4(250kW-400kW)appearance and installation dimension3.6

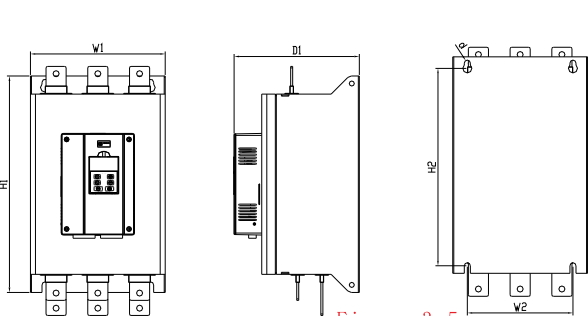


Figure 3.5

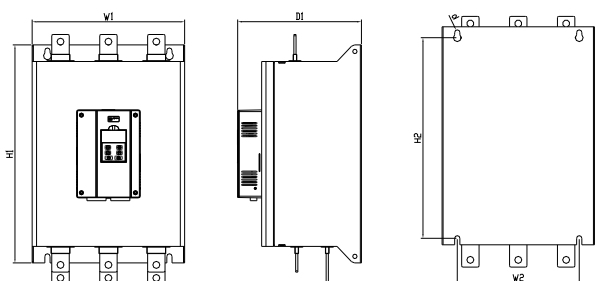


Figure 3.6

Installation dimension

5R3(132kW-200kW)Soft starter appearance and installation dimension 3.5

Specification Model	Rated Power (KW)	Rated Current (A)	Appearance Dimension			Installation Dimension			Net Weight (kg)
			H1	W1	D	H2	W2	d	
PT500-132G-3	132	264	430	268	249	392	210	M9	<23
PT500-160G-3	160	320	430	268	249	392	210	M9	<23
PT500-185G-3	185	370	430	268	249	392	210	M9	<23
PT500-200G-3	200	400	430	268	249	392	210	M9	<23

5R4(250kW-400kW)Soft starter appearance and installation dimension 3.6

Specification Model	Rated Power (KW)	Rated Current (A)	Appearance Dimension			Installation Dimension			Net Weight (kg)
			H1	W1	D	H2	W2	d	
PT500-250G-3	250	500	500	350	284	460	280	M9	<31
PT500-280G-3	280	560	500	350	284	460	280	M9	<31
PT500-320G-3	320	640	500	350	284	460	280	M9	<31
PT500-400G-3	400	800	500	350	284	460	280	M9	<31

Connection method and the external terminals

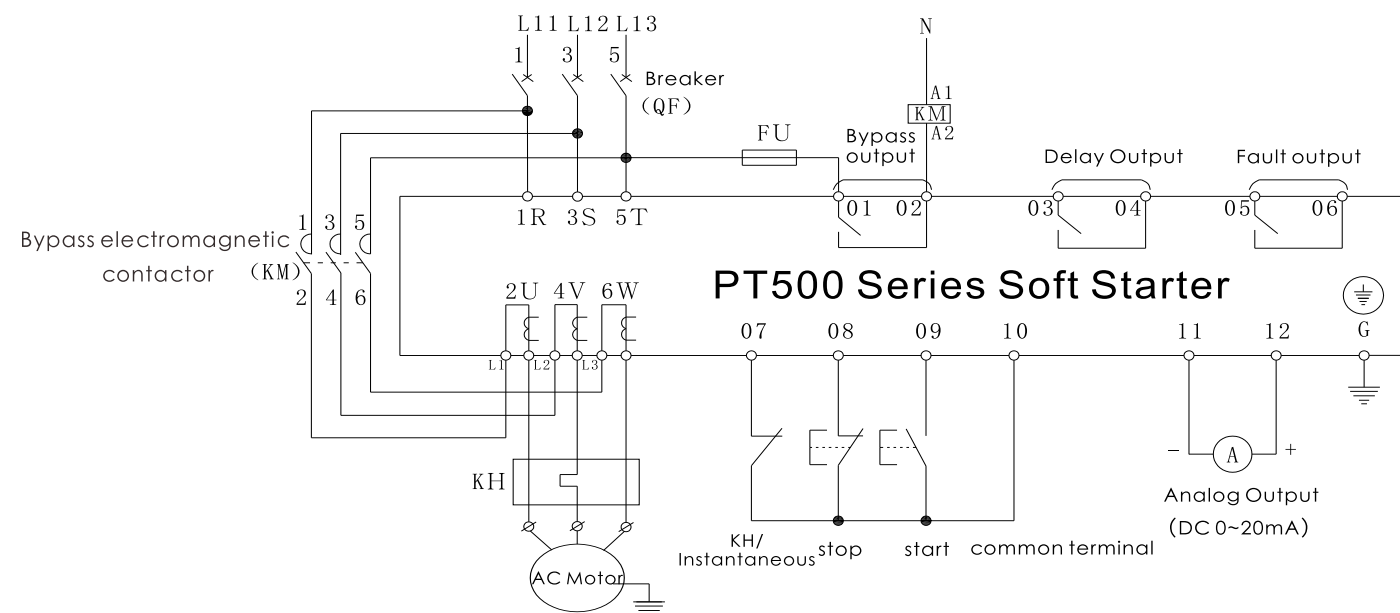
PT500 Series soft starter 3 kinds of wiring categories:

Main circuit wiring: Including three-phase power input and output to the motor wiring and line circuit breakers, bypass contactor wiring.

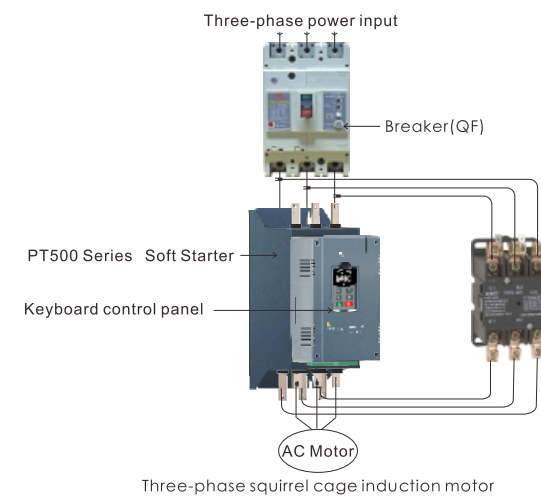
External Terminals wiring: By the 12 small terminals leads, including input and output control lines and analogue output signal line

Communications Wiring: A standard RJ-45 Network Cable socket and a DB9 socket Used to connect a computer or computer network	Weight
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Main circuit wiring diagram

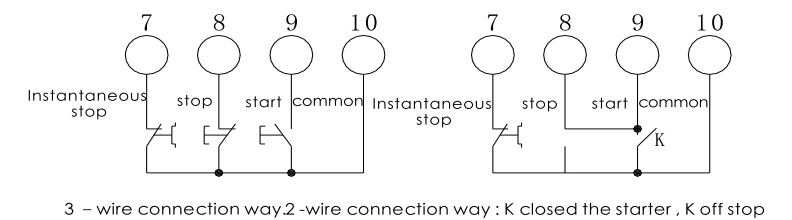


Wiring diagram

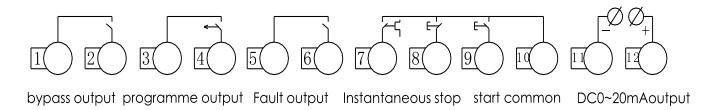


Note: The six copper output in the front of three to motor, then followed to three bypass contactor

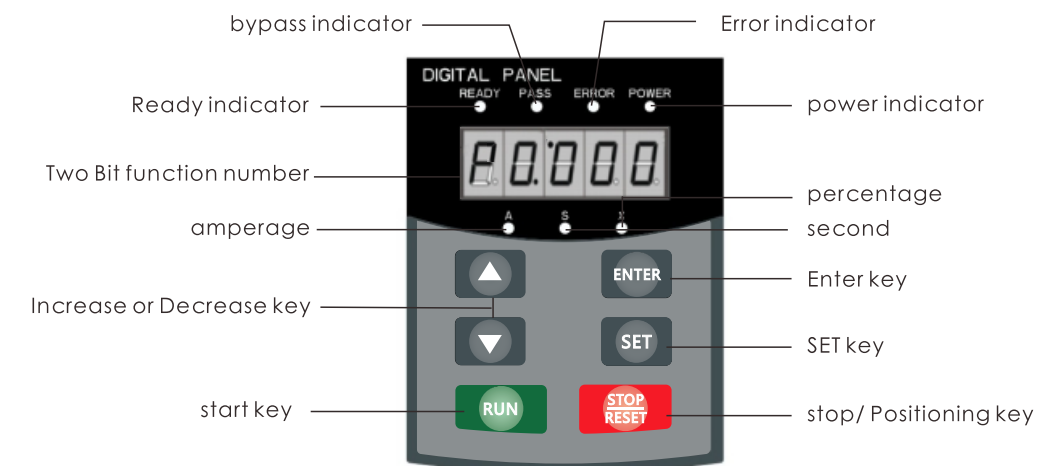
Terminal connection method



External terminal instructions



Keyboard operation method



Power status : Only in ready indicator light and showing PT500 or READY, when press start key to start the motor. When you first power on display showing PT500, it means that POWTECH Co.,Ltd PT500 series soft starter, or showing READY means ready.

Delay Status : when Ready or Error indicator light flash means interval delay, showing dExxx and Countdown means start delay.

Start and stop key: when in soft starting, display showing xxxx, means start current value, Stop key works only at this moment, Can not enter the SET and the HELP menu, meantime, the Ready, Run, Error indicator not light. When in soft stopping, display showing xxxx, means motor current value, Start key works only at this moment, Can not enter the SET and the HELP menu, meantime, the Ready, Run, Error indicator not light, Stop key also has a function to reset the fault state.

Set key: In the condition of Non-Help, press the SET key enter the Setting manual, showing PX:XXX; press SET key again, the " : " flash, means that can Can modify the parameters after the colon, press SET key when the " : " flashing, If the data has been modified, showing "good" and twice beep, means the new data have been saved, and then exit. If don't want to save the data, press SET key, " : " stop flash meantime restore the original data, press Enter key again exit it. You can press Stop key exit directly.

Enter key: in non-Help State, press the Enter key to access the Help menu, Display HX:XXX, and then press ENTER to quit. You can also press stop key exit. When in setting Mode, press the Confirm button to save the new data and exit the setting State.

Increase or decrease-key: in the Setup menu, When colon does not flash, pressing the increase or decrease-key to change Feature number; When colon flashing, pressing increase or decrease-key keys to change the data; When pressing the plus/minus keys ultra 1 seconds, the data will increase or decrease in rapid succession.

In Help menu change Functions and corresponding hint information by pressing the increase or decrease in key. In bypass operation when the indicator light is on and does not enter setup and help menus, AXXXX displays motor current, At this time pressing the button increases or decreases-key, you can select PXXXX or HXXXX displaying. PXXXX shows the power of motor; HXXXX shows coefficient of thermal equilibrium of motor overload; when HXXXX indicates that the value is greater than 100%, overload protection works displaying Err08.

Keyboard digital display area

According to the letter	Corresponding to the letter	According to the letter	Corresponding to the letter	According to the letter	Corresponding to the letter
0	0	1	1	2	2
3	3	4	4	5	5
6	6	7	7	8	8
9	9 or g	A	A or R	b	B
C	C	d	d or D	E	E
F	F	H	H	J	J
L	L	N	N	U	U or V
o	o	P	P	r	r
Y	Y	RUN	RUN	VER	Ver
READY	READY	GOOD	good	ERR	Err

Function parameter Settings and instructions

Description of setting code				
Code	Name	Setting rang	Default	Description
P0	Start voltage	30-70%	30%	Voltage Ramp mode is active; Starting voltage is 40% in current mode.
P1	Time for soft start	2-60S	16S	Limiting mode is invalid.
P2	Time for soft stop	0-60S	0S	Set 0 for free stop time; Set 0 for one with two wiring
P3	Start delay	0-999S	0S	When in a countdown delay, it does not delay if set 0 but start at once.
P4	Programming delay	0-999S	0S	For programmable relay outputs.
P5	Interval delay	0-999S	0S	Desuperheating also delay; delay During the status led flashing prompt.
P6	Starting current limitation	50-500%	280%	Limiting mode is active; voltage ramp The maximum current limit mode is 400%.
P7	Max current	50-200%	100%	Input parameter of P6 and P7 are determined by P8.
P8	Enter display method	0-3	1	Check Chart 5.5 for other setting description
P9	Undervoltage protection	40-90%	80%	Protection works when it is lower than the set value
PA	Overvoltage protection	100-140%	120%	Protection works when it is higher than the set value
PB	Start mode	0-5	1	0 limiting 1 voltage; 2 jumps + limiting; 3 sudden Jump + voltage; 4 current ramp; 5 double of closed loop.

Specifications and options

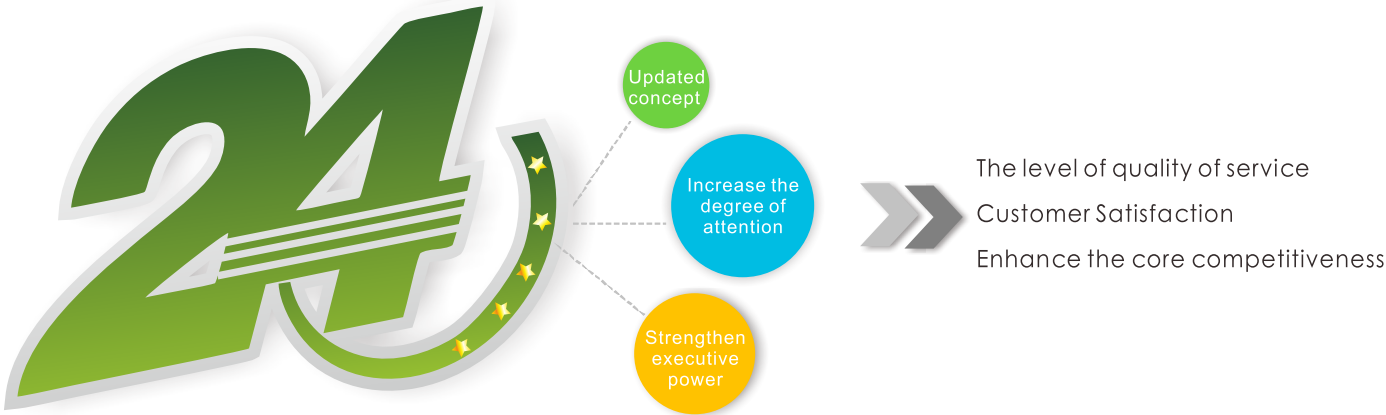
(5.5KW-55KW) Of the specifications of the peripheral accessories
reference list:

soft starter Model	rated power(KW)	rated current(A)	suit circuit breaker model(QF)	suit bypass contactor(KM)	primary line specifications
PT500-5R5G-3	5.5	11	CM1-63L/16	CJ20-25	2.5mm2cable
PT500-7R5G-3	7.5	15	CM1-63L/20	CJ20-25	4mm2cable
PT500-011G-3	11	22	CM1-63L/32	CJ20-40	6mm2cable
PT500-015G-3	15	30	CM1-63L/40	CJ20-63	10mm2cable
PT500-018G-3	18.5	37	CM1-63L/50	CJ20-63	10mm2cable
PT500-022G-3	22	44	CM1-63L/63	CJ20-63	16mm2cable
PT500-030G-3	30	60	CM1-63L/80	CJ20-100	25mm2cable
PT500-037G-3	37	74	CM1-63L/100	CJ20-160	35mm2cable
PT500-045G-3	45	90	CM1-63L/125	CJ20-160	35mm2cable
PT500-055G-3	55	110	CM1-63L/160	CJ20-160	35mm2cable
Note: rated power and rated current is the maximum rating of the soft starter					

(75KW-400KW) Of the specifications of the peripheral accessories
reference list:

soft starter Model	rated power(KW)	rated current(A)	suit circuit breaker model(QF)	suit bypass contactor(KM)	primary line specifications
PT500-075G-3	075	150	CM1-225L/180	CJ20-250	25*4mm2Copper
PT500-090G-3	090	180	CM1-225L/225	CJ20-250	25*4mm2Copper
PT500-115G-3	115	230	CM1-225L/315	CJ20-400	25*4mm2Copper
PT500-132G-3	132	260	CM1-400L/315	CJ20-400	40*4mm2Copper
PT500-160G-3	160	320	CM1-400L/350	CJ20-630	40*4mm2Copper
PT500-185G-3	185	370	CM1-400L/400	CJ20-630	40*4mm2Copper
PT500-200G-3	200	400	CM1-400L/500	CJ20-630	40*4mm2Copper
PT500-250G-3	250	500	CM1-630L/630	CJ20-630	40*5mm2Copper
PT500-280G-3	280	560	CM1-630L/630	CJ29-1000A	40*5mm2Copper
PT500-320G-3	320	640	CM1-630L/700	CJ29-1000A	40*5mm2Copper
PT500-400G-3	400	800	CW1-1000/3	CJ29-1000A	40*5mm2Copper
Note: rated power and rated current is the maximum rating of the soft starter, Matching circuit and bypass contactors and motor should match the specification specification phase.					

Quality Service



- 24 months warranty**
 Powtech inverter promise to return , replacement , repair kits within a month after shipment . Within three months after shipment to replacement, repair and 24 months warranty since the date of manufacture.
- 24 - hour aging products**
 Powtech inverter in order to improve product stability , reliability , passed electronic aging test before shipment --- up to 24 hours of high-temperature aging , loaded aging, etc.



- 24 hours technical support**
 Powtech inverter makes full use of modern communication technology and Internet technology, combining trinity customers technical support mode(online, offline, the scene) to provide users with a full range of business consulting and technical support. 24 hours every day from Monday to Saturday, our sales managers, technicians, and engineers are ready to answer your call, together with you to discuss technical problems associated with our products.

Technical hotline +86-755-29960582

Listen to the voice of the first on-site customer
 Provide fast , professional , one-stop technical support
 Customer satisfaction , we make best

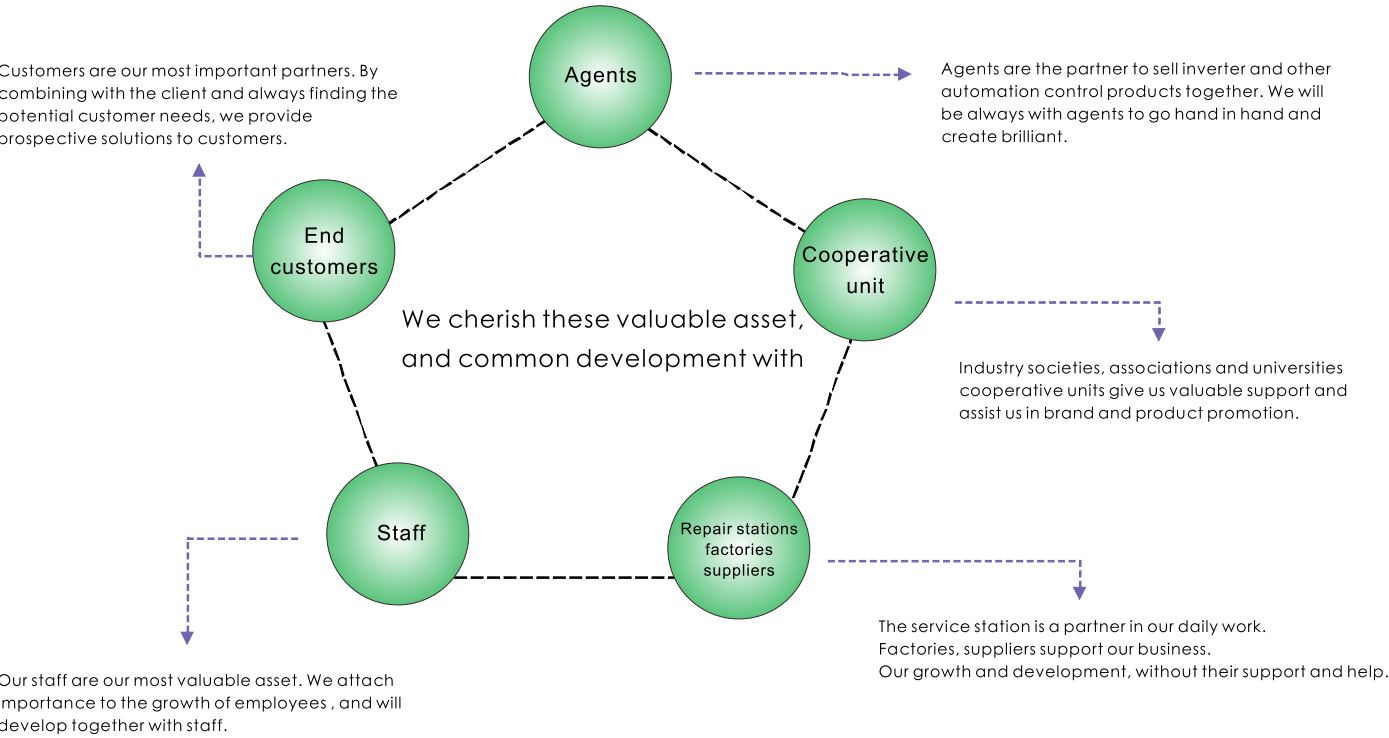
Hours: Monday to Saturday 9:00-22:00
 Website: www.powtech.cn

Customer first
 Comprehensive services



Industry association

Powtech, the enterprises within upstream and downstream industry and the various components of the same industrial chain , formed a Industry Alliance with mutual collaboration and integration of resources . We value a good relationship with the agents, customers, end users , employees , suppliers and cooperative unit, and regard it as the Powtech valuable wealth of its joint development.



Product series

PT200 series high performance vector inverter

	2S1 Frame size : 150*220*184mm	0.4~1.5	Single phase 220V	2.3~7
		0.4~1.5	Three phase 220V	2.5~7
		0.75~2.2	Three phase 220V	2'5~5
	2S2 Frame size : 150*220*184mm	2.2~4	Single phase 220V	10~16
		2.2~4	Three phase 220V	10~16
		4~5.5	Three phase 380V	9~13
	2S3 Frame size : 180*285*209mm	5.5	Three phase 220V	13
		7.5	Three phase 380V	17
	2N1 Frame size : 203*345*230mm	11~15	Three phase 380V	25~32
	2N2 Frame size : 263*430*255mm	18.5~22	Three phase 380V	37~45
	2N3 Frame size : 310*490*274mm	30~37	Three phase 380V	60~75
	2N4 Frame size : 360*600*300mm	45~55	Three phase 380V	90~110
	2N5 Frame size : 400*686*330mm	75~93	Three phase 380V	150~176
	2N6 Frame size : 500*786*353mm	110~132	Three phase 380V	210~250
	2N7 Frame size : 600*1000*400mm Wall hanging 600*1300*400mm Standing	160~220	Three phase 380V	300~415
	2N8 Frame size : 850*1700*473mm	250~280	Three phase 380V	470~520
	2N9 Frame size : 830*1650*460mm	315~400	Three phase 380V	600~690
	2N10 Frame size : 950*1700*460mm	450~630	Three phase 380V	790~860

Product series

PT100 Series mini vector VFD



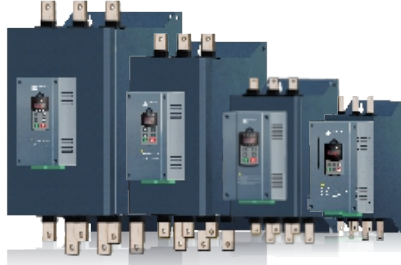
PT200 Series 660V VFD



PT200 Series special VFD



PT500 Series Soft Starter



Micro constantly pressure Water supply controller



PT200 Series general high performance Vector VFD



PT200 series low voltage high power inverter



Brake Unit & Brake Resistor Series



HMI



Filter & Reactor

