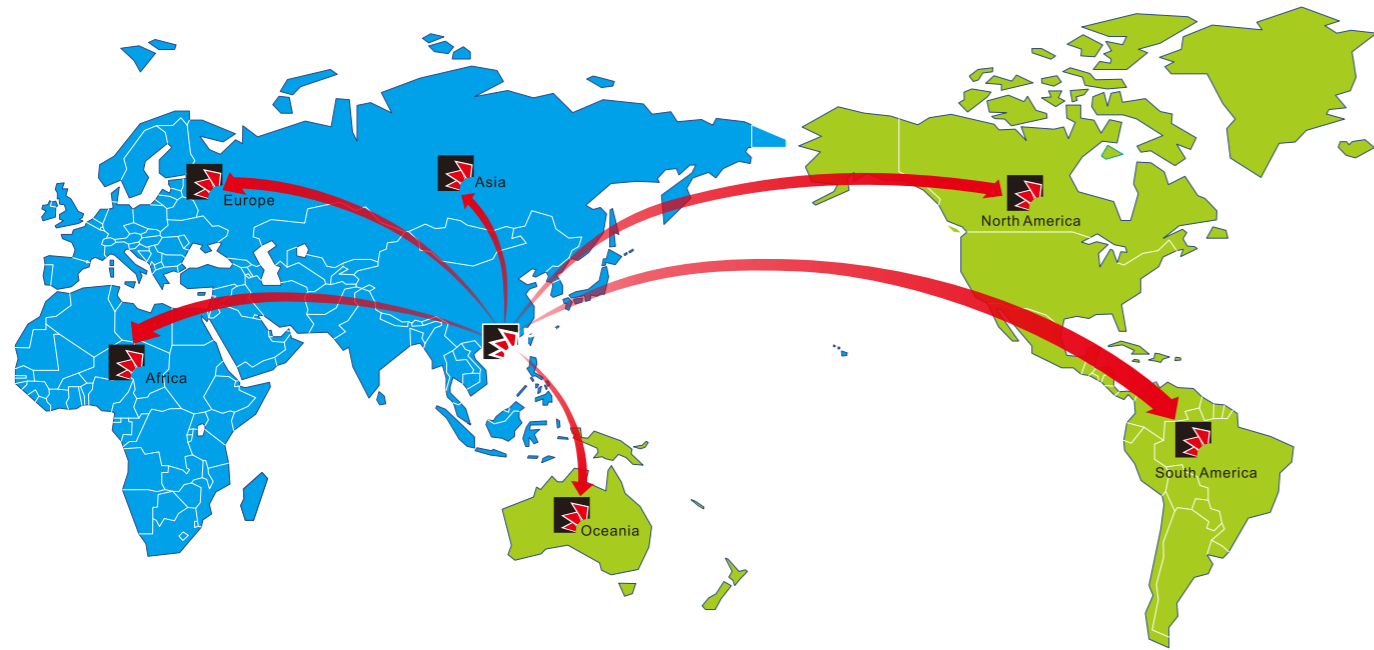


Service Network:

201811ED2.0



# Motor soft starter

Composite samples

Powtran technology

A manufacturer of motor control intelligent products and devices based on motor design.

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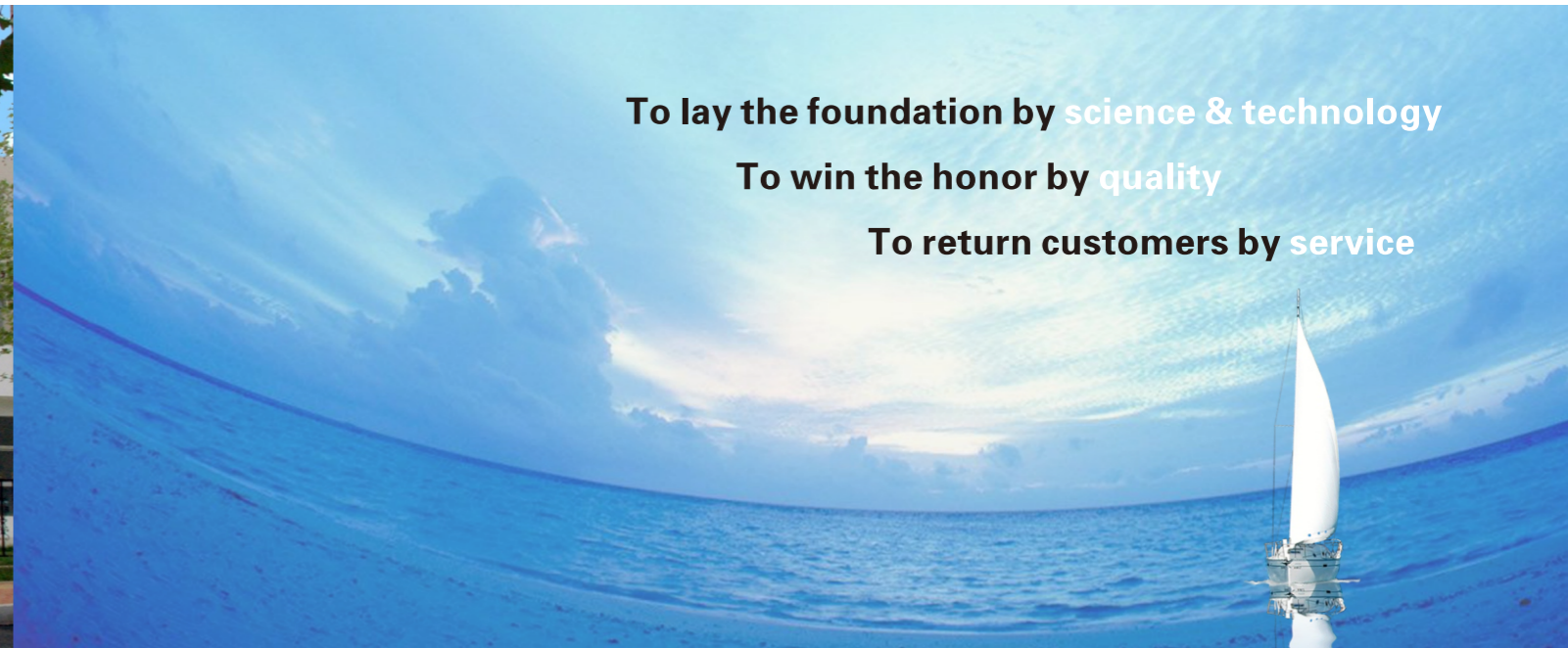


Hotline: 086-755-29630738

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www.powtran.com



To lay the foundation by science & technology  
 To win the honor by quality  
 To return customers by service

## Company Introduction

Powtran Technology as a national high-tech enterprise, set up Wuxi, Guangzhou and more than 30 offices with the center of Shenzhen and Dalian cities and established a worldwide network of R & D, production, logistics and service. Composing the advanced technology from Japan Toshiba and Taiwan brand, Powtran provides a series of energy saving and automatic & drive control products. such as frequency inverters(including special power supply), soft starters, AC servo drive system, energy saver, vehicle motor drive system. Powtran products are verified by international authoritative organizations and now export to more than 100 countries.

## Company History

- 2016 : Won the "2015 ~ 2016 annual inverter innovation award"; as the vice chairman of the China Electrical Equipment Industry Association -inverter branch for three consecutive years , and won the advanced member during 2012-2016
- 2015 : PI500 series of high-performance vector inverter was launched; won the award "the most influential brand in three decades";
- 2014: TÜV factory-examining certification company .The standards that Powtran took part in drafting already implemented.
- 2013: PI9000 series new product has passed the EU CE security certification.
- 2012: Continuous 6 years of holding the "low voltage converter top ten domestic brand"
- 2011: Provincial electric drive engineering research center
- 2010: Ministry of science and technology innovation fund for the project
- 2009: National Top-new technical enterprise
- 2008: "The ten major energy conservation projects"
- 2007: The vice chairman of the association of frequency converter enterprise; PS7000 motor environmental protection energy efficient appliances, PI7900 electromagnetic stirring power be inspected by national authoritative organization
- 2006: Bear "Torch Plan", 863 Plan Projects , PI7000 series inverter passed GB12668 inspection and Provincial scientific and technological achievements appraisal
- 2005: America ABS approve; National authoritative organization verification
- 2004: ISO9001 Quality Certificate

## Certifications



# Intelligent motor soft starter

PR5300<sup>series</sup>

## Product positioning:

PR5300 series soft starter is a new generation on-line motor soft start device. With the new motor intelligent control technology and proprietary motor protection technology, it provides rich parameters and meet different load requirements with variety of starting modes, and the protection function is more perfect. The forced air cooling system ensures the reliable operation of the equipment; the built-in RS485 communication module supports Remote communication, multi language humanized LCD keyboard, easy to monitor and operate, improve the system automation level; high power efficient SCR on line operation saves bypass contactor. Saves the electrical cabinet space, reduces the equipment investment and the labor cost.



## Professional design

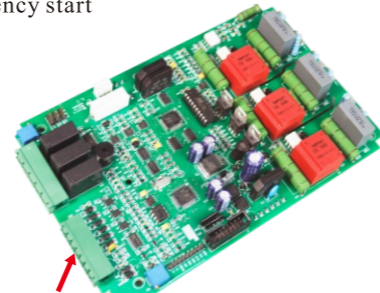
### Protection function

- \*Protect both the motor and soft starter timely while starting, and protect the motor online in operation
- \*Provide 16 protection functions, no need to install any other protectors, which would help you reduce equipment investment cost



### Complete parameter setting, newly updated software

- \*Newly increased current and voltage setting function, displayed value can be calibrated directly
- \*Newly increased interval delay parameter, to avoid the motors being damaged by frequency start



- Pluggable second terminal, make the wiring and maintenance easier for users.

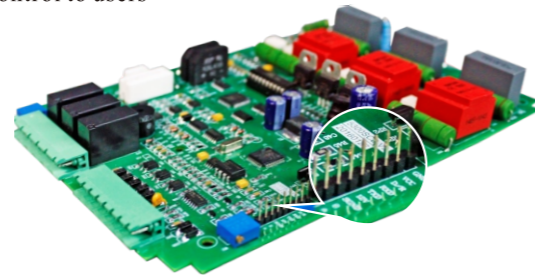
### Multinational language humanized keyboard display

- \*Multinational language display available, to show the parameters, state of the product, easy to operate, debug and service for users;
- \*Customized display interface attainable according to the special need of customers
- \*External keyboard can be used outside to facilitate the use of the cabinet.

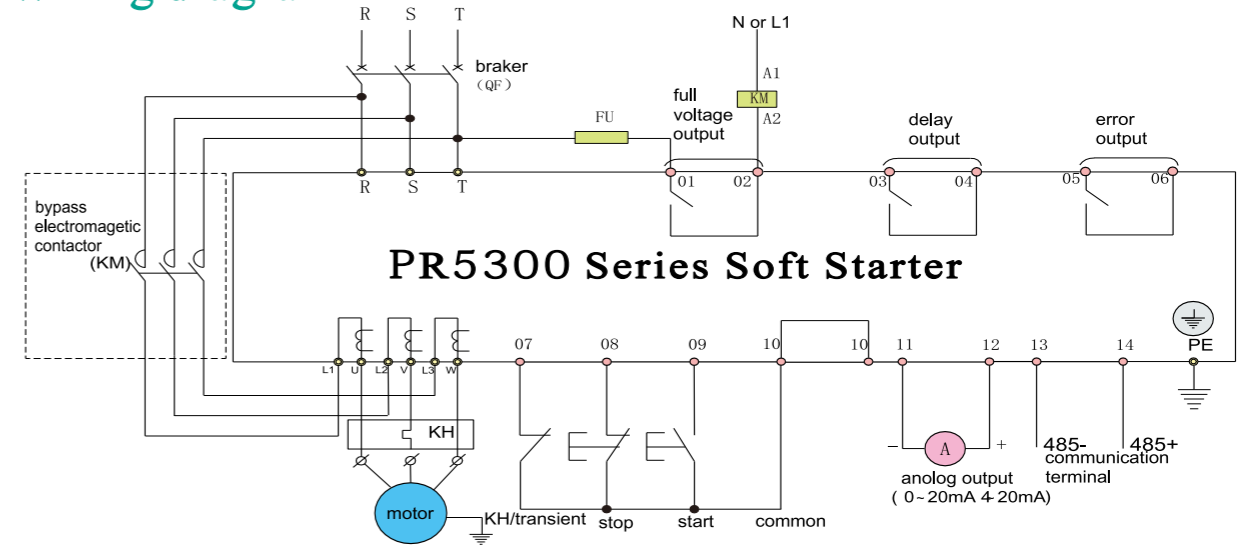


### Communication function

- \*Built-in RS485 communication module, to realize the combined network communication
- \*Convenient for remote debug and control to users



## Wiring diagram



\* After running of the soft starter, it can choose SCR work online, do not need to add the bypass contactor, greatly reduce the user's cost

## Working conditions

**Mains power supply** : self-provided power plant, diesel generating sets three-phase ac 380V±10%, 50Hz or 60Hz, the power supply capacity must meet with the requirements of soft starter on motor starting.

**For motor**: squirrel-cage three-phase asynchronous motor, the motor rated power should be matched with soft starter rated power.

**Starting frequency** : there is no requirement, depending on the load

**Cooling**: forced air cooling

Protection degree: IP20

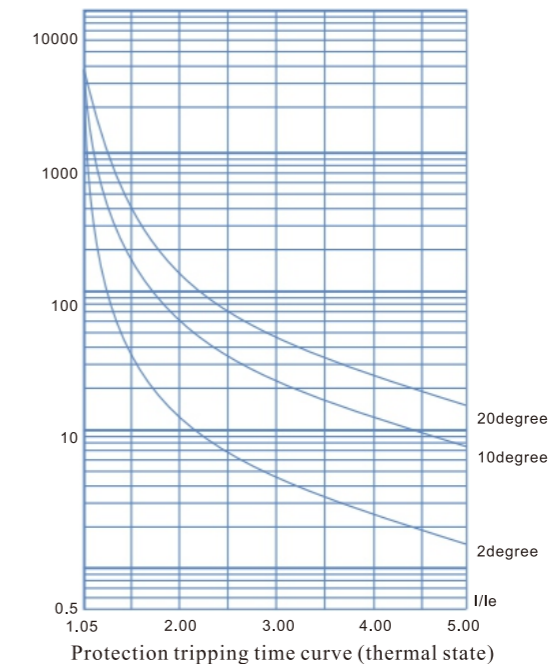
**Environmental conditions**: when select on-line operation, it won't reduce capacity when under 1000m altitude, each additional 100m will reduce 0.5% capacity according to the rated current.

**Ambient temperature**: storage, -25°C to 70°C; Run, up to 60°C; 0~40°C won't reduce the capacity, when rising above 40°C, each degree rise in temperature will reduce 2% capacity according to the rated current.

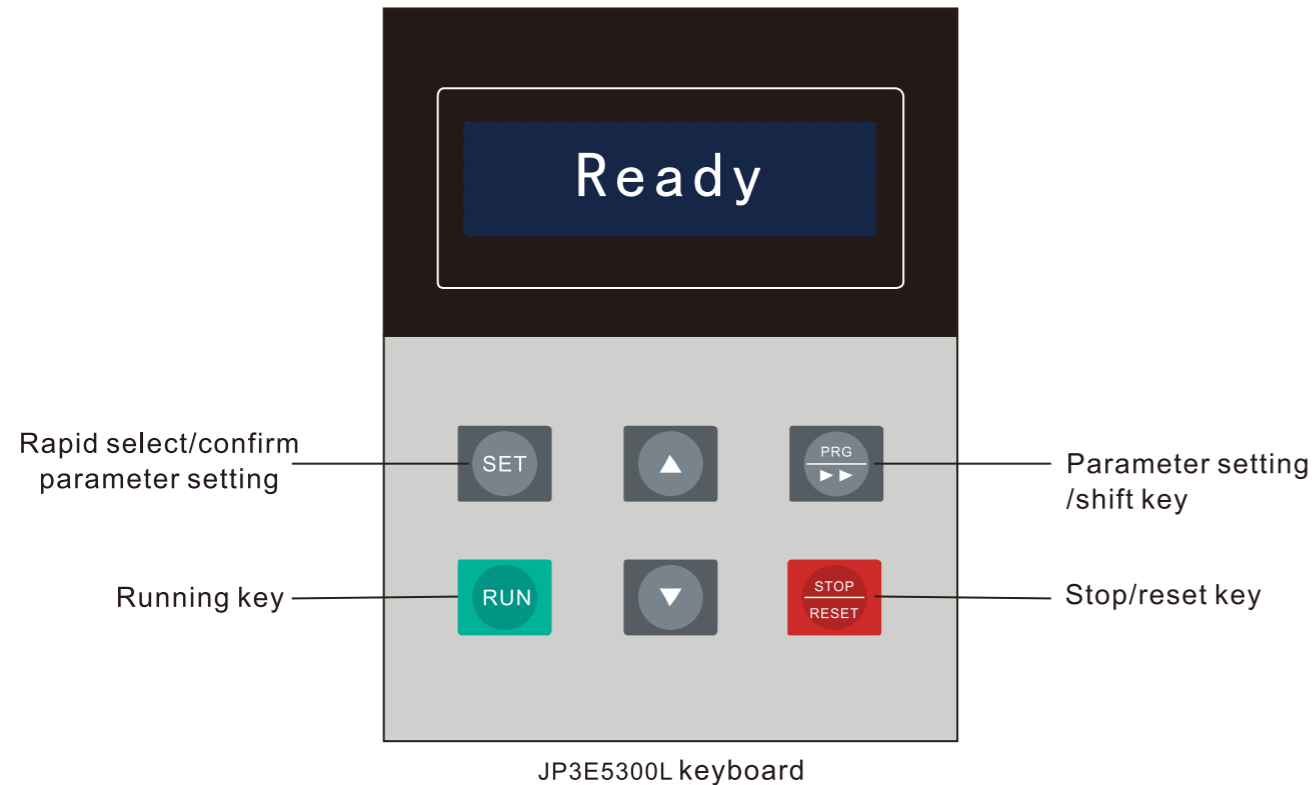
★ Note: we can provide users with products which used under special conditions, such as explosion-proof soft starter, cryogenic soft starter, high voltage soft starter, etc. And the use condition is explained separately.

## The motor thermal protection tripping time curve

According to standard IEC60947-4-s motor thermal protection tripping time curve is as follows



## Keyboard instruction



PR5300series soft starter has total 5 working conditions: respectively ready/running/trouble/start and stop.  
Keyboard display: Double LED(Chinese and English)

## Nameplate instruction

soft starter model → MODEL: PR5300 132G3

output power spec → POWER: 132kW

input source spec → INPUT: AC 3PH 380V ±10% 50Hz/60Hz

output spec → OUTPUT: AC 3PH 0-380V 260A 50Hz/60Hz

Bar code →

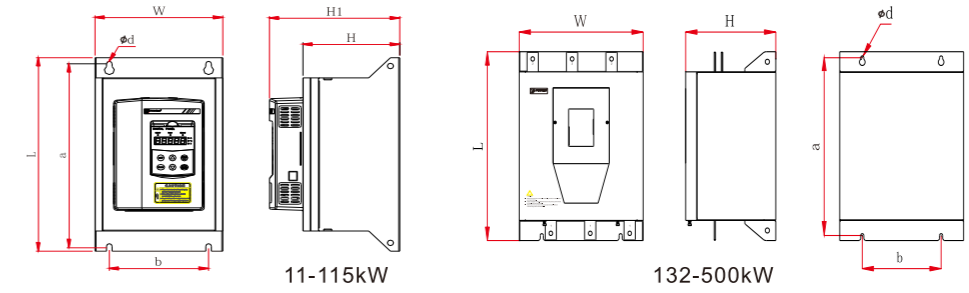
Production sequence number → ZPB1A0100001

Production address → DALIAN POWTRAN TECHNOLOGY CO.,LTD.

PR 530 0 a 132 G 3 □

- Powtran soft starter
- Series code
- Class code:
  - 0:standard configuration
  - 1:special 1 configuration
  - 2:special 2 configuration
- Type code:
  - a:General(omit)
  - C:Integrative machine
- Output configuration
  - 0:General configuration(omit)
- Input Voltage Level:
  - 2:Three-phase 220V-240V
  - 3:Three-phase 380V-415V
  - 4:Three-phase440V-460V
  - 6:Three-phase660V-690V
- Function code
  - G:General
- Rated Power:
  - Example:5R5: 5.5kW
  - 132:132kW

## Installation size



| Model        | Voltage (V) | Rated power (kW) | Rated current (A)       | Dimension (mm) |     |       |       | Installation Dimension (mm) |     |     | Net (KG) |
|--------------|-------------|------------------|-------------------------|----------------|-----|-------|-------|-----------------------------|-----|-----|----------|
|              |             |                  |                         | L              | W   | H1    | H     | a                           | b   | d   |          |
| PR5300 011G3 | 11          | 23               | 3 phase<br>380V<br>±10% | 344            | 156 | 242.5 | 188.5 | 324                         | 125 | 9   | <7.8     |
| PR5300 015G3 | 15          | 30               |                         |                |     |       |       |                             |     |     |          |
| PR5300 018G3 | 18.5        | 37               |                         |                |     |       |       |                             |     |     |          |
| PR5300 022G3 | 22          | 45               |                         |                |     |       |       |                             |     |     |          |
| PR5300 030G3 | 30          | 60               |                         |                |     |       |       |                             |     |     |          |
| PR5300 037G3 | 37          | 75               |                         |                |     |       |       |                             |     |     |          |
| PR5300 045G3 | 45          | 90               |                         | 405            | 206 | 223   | 169   | 385                         | 160 | 9   | <12.8    |
| PR5300 055G3 | 55          | 110              |                         |                |     |       |       |                             |     |     |          |
| PR5300 075G3 | 75          | 150              |                         |                |     |       |       |                             |     |     |          |
| PR5300 090G3 | 90          | 180              |                         |                |     |       |       |                             |     |     |          |
| PR5300 115G3 | 115         | 230              |                         |                |     |       |       |                             |     |     |          |
| PR5300 132G3 | 132         | 260              |                         |                |     |       |       |                             |     |     |          |
| PR5300 160G3 | 160         | 320              |                         | 563            | 440 | 290   | /     | 526                         | 280 | 11  | <40      |
| PR5300 185G3 | 185         | 370              |                         |                |     |       |       |                             |     |     |          |
| PR5300 200G3 | 200         | 400              |                         |                |     |       |       |                             |     |     |          |
| PR5300 250G3 | 250         | 500              |                         |                |     |       |       |                             |     |     |          |
| PR5300 280G3 | 280         | 560              |                         |                |     |       |       |                             |     |     |          |
| PR5300 320G3 | 320         | 630              |                         |                |     |       |       |                             |     |     |          |
| PR5300 400G3 | 400         | 800              | 563                     | 440            | 290 | /     | 526   | 280                         | 11  | <49 |          |
| PR5300 450G3 | 450         | 900              |                         |                |     |       |       |                             |     |     |          |
| PR5300 500G3 | 500         | 998              |                         |                |     |       |       |                             |     |     |          |
| PR5300 500G3 | 500         | 998              |                         |                |     |       |       |                             |     |     |          |
| PR5300 450G3 | 450         | 900              | 670                     | 500            | 320 | /     | 640   | 350                         | 11  | <80 |          |
| PR5300 500G3 | 500         | 998              |                         |                |     |       |       |                             |     |     |          |

## Application industry



Application: ball mill, blower, centrifugal pump, piston compressor, hoister, agitator, crusher, screw compressor, conveyor, heat pump.

# High quality motor soft starter

PR5200+ series

## Product positioning:

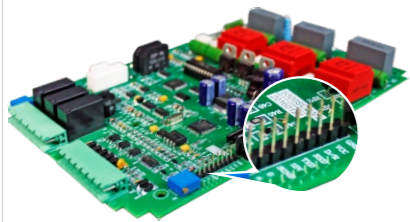
PR5200+ series soft starter is the upgrade of PR5200 high quality motor soft starter. Application of advanced control software, integration of the latest motor control theory and proprietary motor protection. The new microprocessor control and RS485 communication module are used to enhance the function and performance of the system, not only can guarantee the safe and reliable operation of the motor, but also can realize remote monitoring and operation. This product is a new generation of soft starter superior to star / triangle conversion, self coupling depressurization, magnetic controlled depressurization and other traditional motor starting equipment.



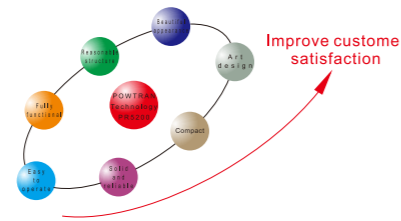
## Products Features

- Communication function
- Perfect user-friendly design
- Reliable quality assurance

\*Built-in RS485 communication module, to realize the combine network communication  
 \*Convenient for user to use remote debugging and control  
 \*The keyboard can be external connection, and used with cabinet



\*Beautiful appearance and reasonable structure  
 \*Perfect function and simple operation  
 \*Reliable and compact design  
 \*Industrial products' excellent artistic design



\*Adopting computer simulation design  
 \*SMT production process  
 \*Excellent electromagnetic compatibility  
 \*High-temperature aging, vibration test, before delivery



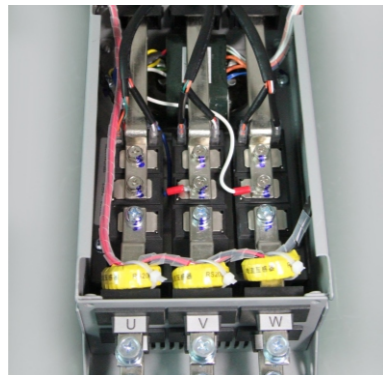
- Perfect and reliable protection function

\*Losing voltage, under voltage, over voltage protection  
 \*Soft starter over-heating, motor under-load, long start time protection  
 \*Input phase loss, output phase loss, three-phase unbalance protection  
 \*Start over-current, running over-load, load short circuit protection



- Thyristor module

\*Small size, light-weight, compact in size, high reliability, simple external wiring. Good exchangeability, convenient to maintain and install, good structural repeatability, the configuration mechanical design can be simplified

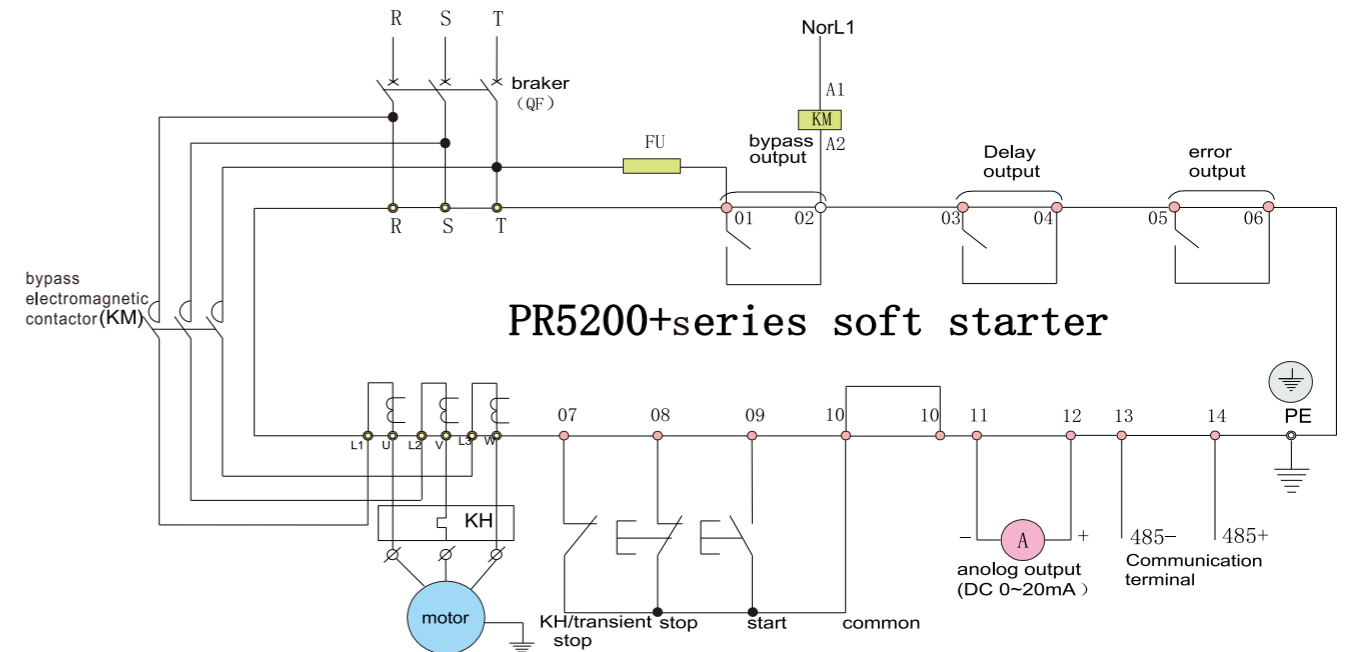


- Cake type thyristor (PR5200+)

\*The thyristor has the characteristics of the silicon rectify device, it can work under the condition of high voltage and large current, and even can control when working. It is widely used in electronic circuits such as controlled rectifier, AC Voltage regulation, Non-contact electronic switch, inverter and variable frequency



## Wiring diagram



## Working conditions

**Mains power supply :** self-provided power plant, diesel generating sets three-phase ac 380V±10%, 50hz or 60hz, the power supply capacity must meet with the requirements of soft starter on motor starting.

**For motor:** squirrel-cage three-phase asynchronous motor, the motor rated power should be matched with soft starter rated power .

**Starting frequency :** ≤10 times/hour

**Cooling:** natural air cooling

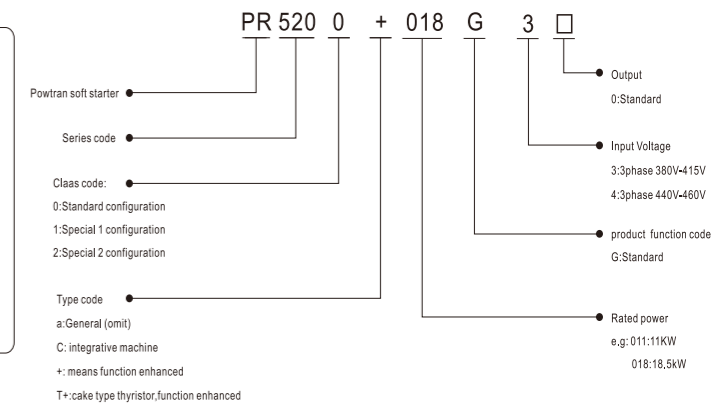
**Protection degree:** IP20

**Environmental conditions:** The environment temperature is from -25℃-40℃ when the altitude is under 3000m, the related humidity is under 90%RH, no condensation, no inflammable, explosive, corrosive gas, or conductive dust, good indoor ventilation ,vibration less than 0.5G

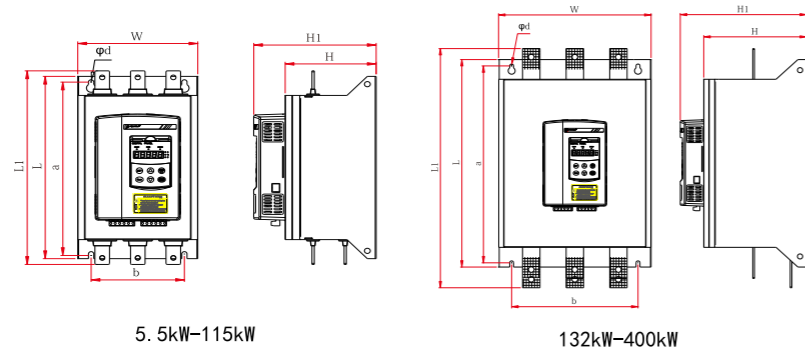
★ Note: we can provide users with products which used under special conditions , such as explosion-proof soft starter, cryogenic soft starter, high voltage soft starter, etc. And the use condition is explained separately .

## Nameplate instruction

|                            |   |                                      |
|----------------------------|---|--------------------------------------|
| Soft starter model         | → | MODEL : PR5200+ 018G3                |
| Output power spec          | → | POWER : 18.5kW                       |
| Input source spec          | → | INPUT : AC 3PH 380V±10% 50Hz/60Hz    |
| Output spec                | → | OUTPUT : AC 3PH 0-380V 37A 50Hz/60Hz |
| Bar Code                   | → |                                      |
| Production sequence number | → | ZPB1A0100001                         |
| Production address         | → | DALIAN POWTRAN TECHNOLOGY CO.,LTD.   |



## ● Installation size

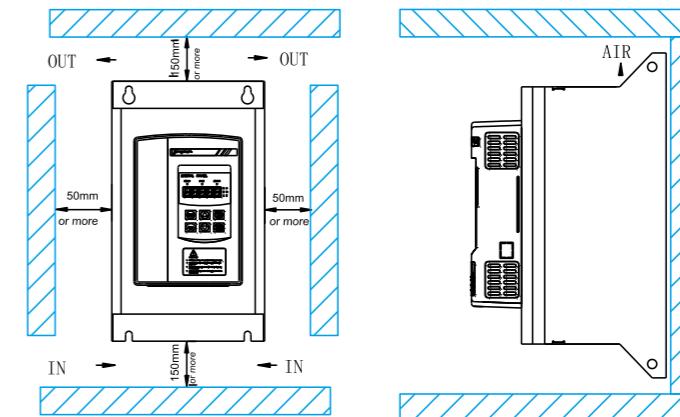


| Model         | Voltage (V) | Rated power (kW) | Rated current (A)       | Dimension (mm) |     |     |     |     | Installation Dimension (mm) |     |     | Net (KG) | Base No. |
|---------------|-------------|------------------|-------------------------|----------------|-----|-----|-----|-----|-----------------------------|-----|-----|----------|----------|
|               |             |                  |                         | L1             | L   | W   | H1  | H   | a                           | b   | d   |          |          |
| PR5200+ 7R5G2 | 7.5         | 30               | 3 phase<br>220V<br>±10% | 303            | 288 | 146 | 159 | 105 | 270                         | 115 | Ø8  | <4.8     | 5R1      |
| PR5200+ 011G2 | 11          | 45               |                         |                |     |     |     |     |                             |     |     |          |          |
| PR5200+ 015G2 | 15          | 60               |                         |                |     |     |     |     |                             |     |     |          |          |
| PR5200+ 018G2 | 18.5        | 75               |                         |                |     |     |     |     |                             |     |     |          |          |
| PR5200+ 022G2 | 22          | 90               |                         |                |     |     |     |     |                             |     |     |          |          |
| PR5200+ 030G2 | 30          | 110              |                         |                |     |     |     |     |                             |     |     |          |          |
| PR5200+ 037G2 | 37          | 150              |                         | 371.5          | 350 | 206 | 210 | 156 | 330                         | 160 | Ø9  | <10      | 5R2      |
| PR5200+ 045G2 | 45          | 180              |                         |                |     |     |     |     |                             |     |     |          |          |
| PR5200+ 055G2 | 55          | 230              |                         |                |     |     |     |     |                             |     |     |          |          |
| PR5200+ 075G2 | 75          | 260              |                         |                |     |     |     |     |                             |     |     |          |          |
| PR5200+ 090G2 | 90          | 320              |                         |                |     |     |     |     |                             |     |     |          |          |
| PR5200+ 115G2 | 115         | 370              |                         |                |     |     |     |     |                             |     |     |          |          |
| PR5200+ 132G2 | 132         | 420              |                         | 529            | 390 | 280 | 264 | 210 | 450                         | 230 | Ø9  | <21      | 5R3      |
| PR5200+ 160G2 | 160         | 560              |                         |                |     |     |     |     |                             |     |     |          |          |
| PR5200+ 185G2 | 185         | 600              |                         |                |     |     |     |     |                             |     |     |          |          |
| PR5200+ 200G2 | 200         | 660              |                         |                |     |     |     |     |                             |     |     |          |          |
| PR5200+ 5R5G3 | 5.5         | 11               |                         |                |     |     |     |     |                             |     |     |          |          |
| PR5200+ 7R5G3 | 7.5         | 15               |                         |                |     |     |     |     |                             |     |     |          |          |
| PR5200+ 011G3 | 11          | 23               | 3 phase<br>380V<br>±10% | 303            | 288 | 146 | 159 | 105 | 270                         | 115 | Ø8  | <4.8     | 5R1      |
| PR5200+ 015G3 | 15          | 30               |                         |                |     |     |     |     |                             |     |     |          |          |
| PR5200+ 018G3 | 18.5        | 37               |                         |                |     |     |     |     |                             |     |     |          |          |
| PR5200+ 022G3 | 22          | 45               |                         |                |     |     |     |     |                             |     |     |          |          |
| PR5200+ 030G3 | 30          | 60               |                         |                |     |     |     |     |                             |     |     |          |          |
| PR5200+ 037G3 | 37          | 75               |                         |                |     |     |     |     |                             |     |     |          |          |
| PR5200+ 045G3 | 45          | 90               |                         | 371.5          | 350 | 206 | 210 | 156 | 330                         | 160 | Ø9  | <10      | 5R2      |
| PR5200+ 055G3 | 55          | 110              |                         |                |     |     |     |     |                             |     |     |          |          |
| PR5200+ 075G3 | 75          | 150              |                         |                |     |     |     |     |                             |     |     |          |          |
| PR5200+ 090G3 | 90          | 180              |                         |                |     |     |     |     |                             |     |     |          |          |
| PR5200+ 115G3 | 115         | 230              |                         |                |     |     |     |     |                             |     |     |          |          |
| PR5200+ 132G3 | 132         | 260              |                         |                |     |     |     |     |                             |     |     |          |          |
| PR5200+ 160G3 | 160         | 320              | 529                     | 390            | 280 | 264 | 210 | 450 | 230                         | Ø9  | <21 | 5R3      |          |
| PR5200+ 185G3 | 185         | 600              |                         |                |     |     |     |     |                             |     |     |          |          |
| PR5200+ 200G3 | 200         | 660              |                         |                |     |     |     |     |                             |     |     |          |          |
| PR5200+ 5R5G4 | 5.5         | 11               |                         |                |     |     |     |     |                             |     |     |          |          |
| PR5200+ 7R5G4 | 7.5         | 15               |                         |                |     |     |     |     |                             |     |     |          |          |
| PR5200+ 011G4 | 11          | 23               |                         |                |     |     |     |     |                             |     |     |          |          |
| PR5200+ 015G4 | 15          | 30               | 3 phase<br>460V<br>±10% | 303            | 288 | 146 | 159 | 105 | 270                         | 115 | Ø8  | <4.8     | 5R1      |
| PR5200+ 018G4 | 18.5        | 37               |                         |                |     |     |     |     |                             |     |     |          |          |
| PR5200+ 022G4 | 22          | 45               |                         |                |     |     |     |     |                             |     |     |          |          |
| PR5200+ 030G4 | 30          | 60               |                         |                |     |     |     |     |                             |     |     |          |          |
| PR5200+ 037G4 | 37          | 75               |                         |                |     |     |     |     |                             |     |     |          |          |
| PR5200+ 045G4 | 45          | 90               |                         |                |     |     |     |     |                             |     |     |          |          |
| PR5200+ 055G4 | 55          | 110              |                         | 371.5          | 350 | 206 | 210 | 156 | 330                         | 160 | Ø9  | <10      | 5R2      |
| PR5200+ 075G4 | 75          | 150              |                         |                |     |     |     |     |                             |     |     |          |          |
| PR5200+ 090G4 | 90          | 180              |                         |                |     |     |     |     |                             |     |     |          |          |
| PR5200+ 115G4 | 115         | 230              |                         |                |     |     |     |     |                             |     |     |          |          |
| PR5200+ 132G4 | 132         | 260              |                         |                |     |     |     |     |                             |     |     |          |          |
| PR5200+ 160G4 | 160         | 320              |                         |                |     |     |     |     |                             |     |     |          |          |
| PR5200+ 185G4 | 185         | 370              | 529                     | 390            | 280 | 264 | 210 | 450 | 230                         | Ø9  | <21 | 5R3      |          |
| PR5200+ 200G4 | 200         | 400              |                         |                |     |     |     |     |                             |     |     |          |          |
| PR5200+ 250G4 | 250         | 500              |                         |                |     |     |     |     |                             |     |     |          |          |
| PR5200+ 280G4 | 280         | 560              |                         |                |     |     |     |     |                             |     |     |          |          |
| PR5200+ 320G4 | 320         | 630              |                         |                |     |     |     |     |                             |     |     |          |          |
| PR5200+ 400G4 | 400         | 800              |                         |                |     |     |     |     |                             |     |     |          |          |

| Model         | Voltage (V) | Rated power (kW) | Rated current (A)       | Dimension (mm) |     |     |     |     | Installation Dimension (mm) |     |     | Net (KG) | Base No.                |     |     |     |     |     |     |     |    |     |     |
|---------------|-------------|------------------|-------------------------|----------------|-----|-----|-----|-----|-----------------------------|-----|-----|----------|-------------------------|-----|-----|-----|-----|-----|-----|-----|----|-----|-----|
|               |             |                  |                         | L1             | L   | W   | H1  | H   | a                           | b   | d   |          |                         |     |     |     |     |     |     |     |    |     |     |
| PR5200+ 185G3 | 185         | 370              | 3 phase<br>380V<br>±10% | 529            | 390 | 280 | 264 | 210 | 450                         | 230 | Ø9  | <21      | 5R3                     |     |     |     |     |     |     |     |    |     |     |
| PR5200+ 200G3 | 200         | 400              |                         |                |     |     |     |     |                             |     |     |          |                         |     |     |     |     |     |     |     |    |     |     |
| PR5200+ 250G3 | 250         | 500              |                         |                |     |     |     |     |                             |     |     |          |                         |     |     |     |     |     |     |     |    |     |     |
| PR5200+ 280G3 | 280         | 560              |                         |                |     |     |     |     |                             |     |     |          |                         |     |     |     |     |     |     |     |    |     |     |
| PR5200+ 320G3 | 320         | 630              |                         |                |     |     |     |     |                             |     |     |          |                         |     |     |     |     |     |     |     |    |     |     |
| PR5200+ 400G3 | 400         | 800              |                         |                |     |     |     |     |                             |     |     |          |                         |     |     |     |     |     |     |     |    |     |     |
| PR5200+ 5R5G4 | 5.5         | 11               | 3 phase<br>460V<br>±10% | 303            | 288 | 146 | 159 | 105 | 270                         | 115 | Ø8  | <4.8     | 5R1                     |     |     |     |     |     |     |     |    |     |     |
| PR5200+ 7R5G4 | 7.5         | 15               |                         |                |     |     |     |     |                             |     |     |          |                         |     |     |     |     |     |     |     |    |     |     |
| PR5200+ 011G4 | 11          | 23               |                         |                |     |     |     |     |                             |     |     |          |                         |     |     |     |     |     |     |     |    |     |     |
| PR5200+ 015G4 | 15          | 30               |                         |                |     |     |     |     |                             |     |     |          |                         |     |     |     |     |     |     |     |    |     |     |
| PR5200+ 018G4 | 18.5        | 37               |                         |                |     |     |     |     |                             |     |     |          |                         |     |     |     |     |     |     |     |    |     |     |
| PR5200+ 022G4 | 22          | 45               |                         |                |     |     |     |     |                             |     |     |          |                         |     |     |     |     |     |     |     |    |     |     |
| PR5200+ 030G4 | 30          | 60               |                         |                |     |     |     |     |                             |     |     |          |                         |     |     |     |     |     |     |     |    |     |     |
| PR5200+ 037G4 | 37          | 75               |                         |                |     |     |     |     |                             |     |     |          |                         |     |     |     |     |     |     |     |    |     |     |
| PR5200+ 045G4 | 45          | 90               |                         |                |     |     |     |     |                             |     |     |          |                         |     |     |     |     |     |     |     |    |     |     |
| PR5200+ 055G4 | 55          | 110              |                         |                |     |     |     |     |                             |     |     |          |                         |     |     |     |     |     |     |     |    |     |     |
| PR5200+ 075G4 | 75          | 150              |                         |                |     |     |     |     |                             |     |     |          |                         |     |     |     |     |     |     |     |    |     |     |
| PR5200+ 090G4 | 90          | 180              |                         |                |     |     |     |     |                             |     |     |          |                         |     |     |     |     |     |     |     |    |     |     |
| PR5200+ 115G4 | 115         | 230              | 371.5                   | 350            | 206 | 210 | 156 | 330 | 160                         | Ø9  | <10 | 5R2      |                         |     |     |     |     |     |     |     |    |     |     |
| PR5200+ 132G4 | 132         | 260              |                         |                |     |     |     |     |                             |     |     |          |                         |     |     |     |     |     |     |     |    |     |     |
| PR5200+ 160G4 | 160         | 320              |                         |                |     |     |     |     |                             |     |     |          |                         |     |     |     |     |     |     |     |    |     |     |
| PR5200+ 185G4 | 185         | 370              |                         |                |     |     |     |     |                             |     |     |          |                         |     |     |     |     |     |     |     |    |     |     |
| PR5200+ 200G4 | 200         | 400              |                         |                |     |     |     |     |                             |     |     |          |                         |     |     |     |     |     |     |     |    |     |     |
| PR5200+ 250G4 | 250         | 500              |                         |                |     |     |     |     |                             |     |     |          |                         |     |     |     |     |     |     |     |    |     |     |
| PR5200+ 280G4 | 280         | 560              | 529                     | 390            | 280 | 264 | 210 | 450 | 230                         | Ø9  | <21 | 5R3      |                         |     |     |     |     |     |     |     |    |     |     |
| PR5200+ 320G4 | 320         | 630              |                         |                |     |     |     |     |                             |     |     |          |                         |     |     |     |     |     |     |     |    |     |     |
| PR5200+ 400G4 | 400         | 800              |                         |                |     |     |     |     |                             |     |     |          |                         |     |     |     |     |     |     |     |    |     |     |
| PR5200+ 5R5G4 | 5.5         | 11               |                         |                |     |     |     |     |                             |     |     |          | 3 phase<br>380V<br>±10% | 528 | 505 | 326 | 256 | 200 | 476 | 260 | Ø9 | <25 | 5R4 |
| PR5200+ 7R5G4 | 7.5         | 15               |                         |                |     |     |     |     |                             |     |     |          |                         |     |     |     |     |     |     |     |    |     |     |
| PR5200+ 011G4 | 11          | 23               |                         |                |     |     |     |     |                             |     |     |          |                         |     |     |     |     |     |     |     |    |     |     |
| PR5200+ 015G4 | 15          | 30               |                         |                |     |     |     |     |                             |     |     |          |                         |     |     |     |     |     |     |     |    |     |     |
| PR5200+ 018G4 | 18.5        | 37               |                         |                |     |     |     |     |                             |     |     |          |                         |     |     |     |     |     |     |     |    |     |     |
| PR5200+ 022G4 | 22          | 45               |                         |                |     |     |     |     |                             |     |     |          |                         |     |     |     |     |     |     |     |    |     |     |
| PR5200+ 030G4 | 30          | 60               | 371.5                   | 350            | 206 | 210 | 156 | 330 | 160                         | Ø9  | <10 | 5R2      |                         |     |     |     |     |     |     |     |    |     |     |
| PR5200+ 037G4 | 37          | 75               |                         |                |     |     |     |     |                             |     |     |          |                         |     |     |     |     |     |     |     |    |     |     |
| PR5200+ 045G4 | 45          | 90               |                         |                |     |     |     |     |                             |     |     |          |                         |     |     |     |     |     |     |     |    |     |     |
| PR5200+ 055G4 | 55          | 110              |                         |                |     |     |     |     |                             |     |     |          |                         |     |     |     |     |     |     |     |    |     |     |
| PR5200+ 075G4 | 75          | 150              |                         |                |     |     |     |     |                             |     |     |          |                         |     |     |     |     |     |     |     |    |     |     |
| PR5200+ 090G4 | 90          | 180              |                         |                |     |     |     |     |                             |     |     |          |                         |     |     |     |     |     |     |     |    |     |     |
| PR5200+ 115G4 | 115         | 230              | 529                     | 390            | 280 | 264 | 210 | 450 | 230                         | Ø9  | <21 | 5R3      |                         |     |     |     |     |     |     |     |    |     |     |
| PR5200+ 132G4 | 132         | 260              |                         |                |     |     |     |     |                             |     |     |          |                         |     |     |     |     |     |     |     |    |     |     |
| PR5200+ 160G4 | 160         | 320              |                         |                |     |     |     |     |                             |     |     |          |                         |     |     |     |     |     |     |     |    |     |     |
| PR5200+ 185G4 | 185         | 370              |                         |                |     |     |     |     |                             |     |     |          |                         |     |     |     |     |     |     |     |    |     |     |
| PR5200+ 200G4 | 200         | 400              |                         |                |     |     |     |     |                             |     |     |          |                         |     |     |     |     |     |     |     |    |     |     |
| PR5200+ 250G4 | 250         | 500              |                         |                |     |     |     |     |                             |     |     |          |                         |     |     |     |     |     |     |     |    |     |     |
| PR5200+ 280G4 | 280         | 560              | 528                     | 505            | 326 | 256 | 200 | 476 | 260                         | Ø9  | <25 | 5R4      |                         |     |     |     |     |     |     |     |    |     |     |
| PR5200+ 320G4 | 320         | 630              |                         |                |     |     |     |     |                             |     |     |          |                         |     |     |     |     |     |     |     |    |     |     |
| PR5200+ 400G4 | 400         | 800              |                         |                |     |     |     |     |                             |     |     |          |                         |     |     |     |     |     |     |     |    |     |     |

\* Note: PR5200+ series 5.5kw-400kw soft starter with 3 in 6 out of factory standard

## ● Installation Requirements



# Integrated soft starter cabinet

PR5200C+ Series

## Product positioning:

PR5200C+ series motor soft start integrated machine is the device with the motor soft start operation control. For the PR5200+ model, use the core starting unit to configure the main loop, line breaker, bypass contactor, thermal relay and other control display devices, the protection function is perfect, The protection level is high, the practicability is strong, it can be directly installed and used without additional power distribution. It is widely used in fans, pumps, compressors and ball mills, crushers, lifting machinery, conveyors and so on



## Product features



- ★ It can effectively reduce the starting current of the motor, reduce the capacity of distribution, and avoid the investment of the grid capacity increasing, the starting stress of the motor and the load equipment is reduced, and the service life of the motor and the related equipment is prolonged
- ★ The soft stop function effectively solves the parking surge problem of the inertial system, and is difficult to be realized by the traditional starting device
- ★ It has six unique starting modes and adapts to complex motor and load conditions to achieve perfect starting effect
- ★ It has perfect and reliable protection function, and effectively protects the use safety of motor and related production equipment
- ★ The application of the intelligent network technology of motor soft starter makes the motor control technology adapt to the rapid development of higher requirements of electric power automation technology.
- ★ With reliable performance and quality, lay the foundation for quality services, to provide customers with excellent and complete matching facilities
- ★ Improve product performance according to the user's opinion continuously.
- ★ It has design patent, proprietary software copyright, proprietary motor starting and protection technology, unique testing and debugging equipment and process.

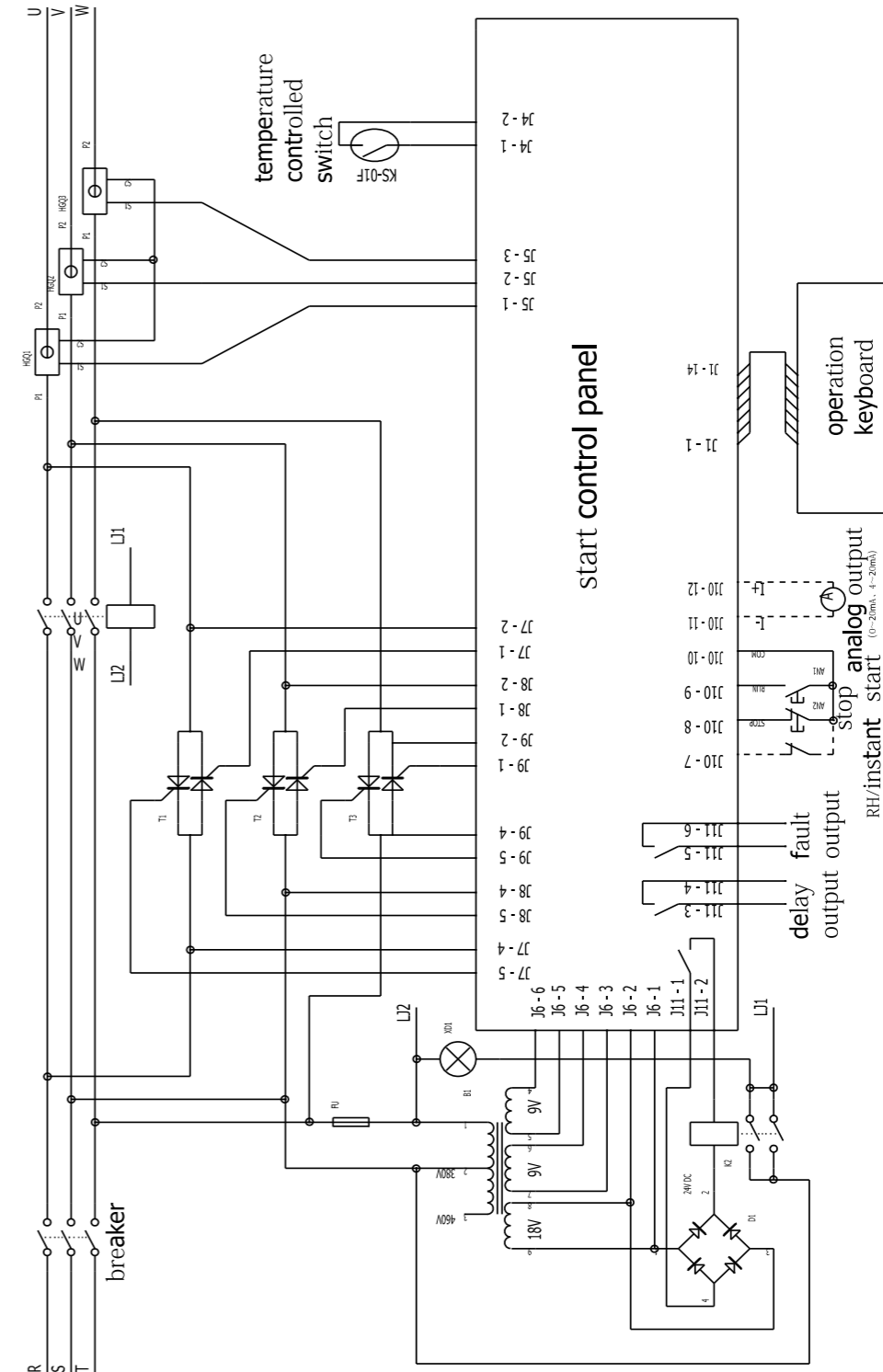
## Nameplate instruction

|                            |                                      |
|----------------------------|--------------------------------------|
| Soft starter model         | MODEL: PR5200C+ 320G3                |
| Output power spec          | POWER: 320kW                         |
| Input source spec          | INPUT: AC 3PH 380V ±10% 50Hz/60Hz    |
| Output spec                | OUTPUT: AC 3PH 0-380V 640A 50Hz/60Hz |
| Bar Code                   |                                      |
| Production sequence number | ZPB1A0100001                         |
| Production address         | DALIAN POWTRAN TECHNOLOGY CO.,LTD.   |

PR 520 C+ 320 G 3

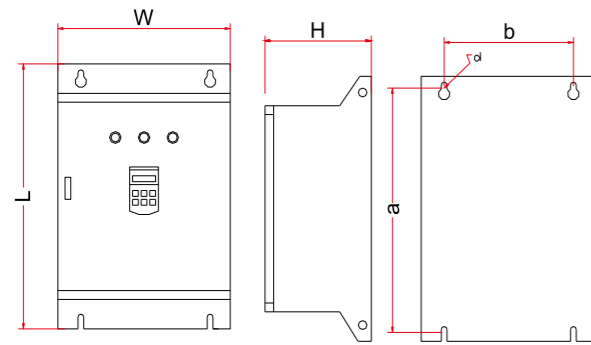
Powtran soft starter: PR  
 Series code: 520  
 Class code: C+  
 Type code: 3  
 Output: 0 Standard  
 Input Voltage: 3. 3phase 380V±15V  
 4. 3phase 440V±60V  
 product function code: G. Standard  
 Rated power: e.g. 5R5: 5.5KW  
 320: 320KW  
 C: integrative machine  
 C+: means function enhanced  
 a: General (omit)

## PR5200C+ series main circuit wiring schematic diagram

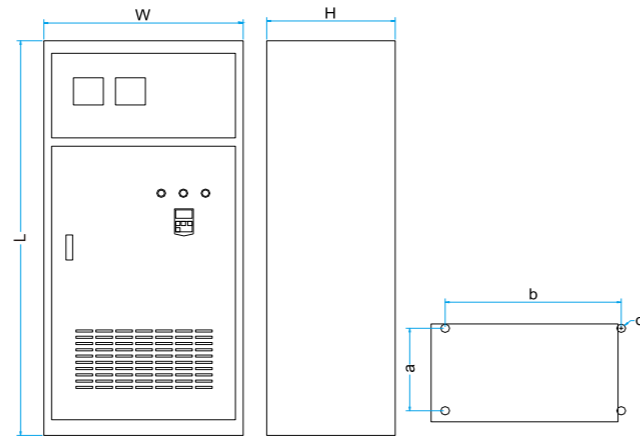


380V soft starter circuit diagram

## ● Installation size



Wall-mounted dimensions(6R1-6R3)



Floor stand dimensions(GGD)

| Model          | Rated Power (kW) | Rated Current (A) | Dimension(mm) |     |     | Installation Dimension (mm) |     |    | Base |
|----------------|------------------|-------------------|---------------|-----|-----|-----------------------------|-----|----|------|
|                |                  |                   | L             | W   | H   | a                           | b   | d  |      |
| PR5200C+ 015G3 | 15               | 30                | 620           | 400 | 220 | 600                         | 250 | 10 | 6R1  |
| PR5200C+ 018G3 | 18               | 37                |               |     |     |                             |     |    |      |
| PR5200C+ 022G3 | 22               | 44                |               |     |     |                             |     |    |      |
| PR5200C+ 030G3 | 30               | 60                |               |     |     |                             |     |    |      |
| PR5200C+ 037G3 | 37               | 74                |               |     |     |                             |     |    |      |
| PR5200C+ 045G3 | 45               | 90                |               |     |     |                             |     |    |      |
| PR5200C+ 055G3 | 55               | 110               | 980           | 534 | 278 | 852                         | 275 | 12 | 6R2  |
| PR5200C+ 075G3 | 75               | 150               |               |     |     |                             |     |    |      |
| PR5200C+ 090G3 | 90               | 180               |               |     |     |                             |     |    |      |
| PR5200C+ 115G3 | 115              | 230               |               |     |     |                             |     |    |      |
| PR5200C+ 132G3 | 132              | 264               | 1000          | 590 | 300 | 939                         | 370 | 12 | 6R3  |
| PR5200C+ 160G3 | 160              | 320               |               |     |     |                             |     |    |      |
| PR5200C+ 185G3 | 185              | 370               |               |     |     |                             |     |    |      |
| PR5200C+ 200G3 | 200              | 400               | 1800          | 800 | 600 | 650                         | 540 | 16 | GGD  |
| PR5200C+ 250G3 | 250              | 500               |               |     |     |                             |     |    |      |
| PR5200C+ 280G3 | 280              | 560               |               |     |     |                             |     |    |      |
| PR5200C+ 320G3 | 320              | 640               |               |     |     |                             |     |    |      |
| PR5200C+ 400G3 | 400              | 800               |               |     |     |                             |     |    |      |
| PR5200C+ 450G3 | 450              | 900               |               |     |     |                             |     |    |      |
| PR5200C+ 500G3 | 500              | 1000              |               |     |     |                             |     |    |      |
| PR5200C+ 560G3 | 560              | 1120              |               |     |     |                             |     |    |      |
| PR5200C+ 630G3 | 630              | 1260              |               |     |     |                             |     |    |      |