NOKER
ELECTRIC

Xi'an Noker Electric Co.,Ltd.

https://www.noker-inverter.com

CONTENTS

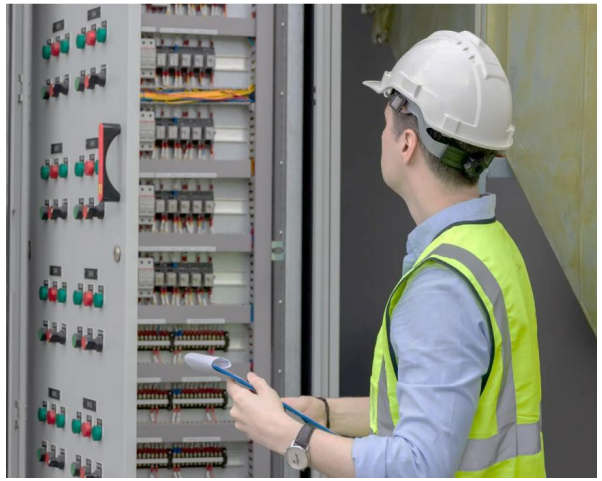
1.Company introduction

Xi’an Noker Electric is a professional power electronic products research and development, production and sales manufacturers. The company has a professional R & D team and testing equipment, and has established deep cooperation with many universities in Xi 'an. Xi 'an high-tech enterprise, 3C certification, CE certification, invention patents more than 100 honors.

Based on SCR/IGBT power electronic devices, Xi’an Noker Electric has developed motor soft starter, scr power controller, active harmonic filter, static var generator, solar water pump inverter, power inverter and many other products. Product technology leading, stable and reliable performance, widely used in industrial fields. Also we have full capability to customize the special products for customers. OEM,ODM more ways to meet your requirement.

Noker Electric highly focuses on international cooperation and communication. Till present, our products have been exported to over 30 countries and regions such as the U.S, Middle East, South Asian, Europe, Australia and South America.Green, energy saving, environmental protection. Xi’an Noker Electric will continue to upgrade technology and improve, for the establishment of a green world.

1.Company introduction



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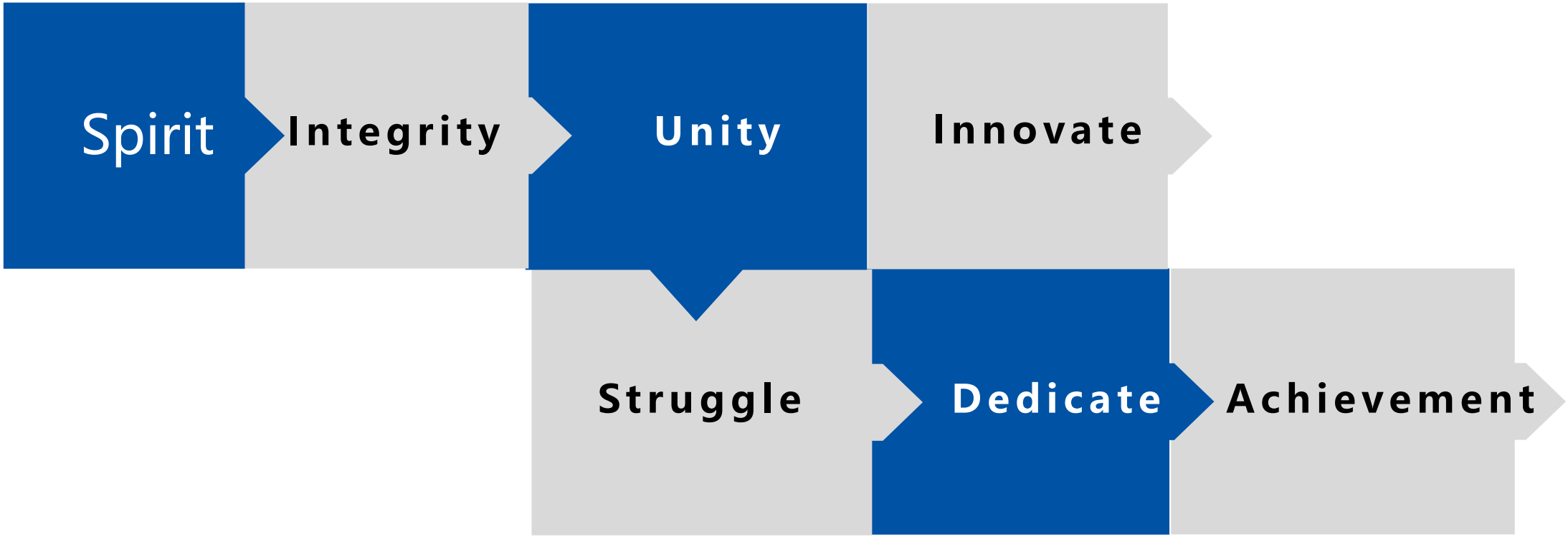
1.Company introduction



2.Company honors


ATTESTATION OF COMPLIANCE

Reference No: TRCN-24130XNE01

Applicant: XI'AN NOKER ELECTRIC CO., LTD. #33 Guo Du North Street, Xi'an High Technology Industrial Zone, China

Manufacturer: XI'AN NOKER ELECTRIC CO., LTD. #33 Guo Du North Street, Xi'an High Technology Industrial Zone, China

Product: Static Var Generator

Type/Model: NKPG-SVG-360V-150kvar-3L, NKPG-SVG-360V-100kvar-3L, NKPG-SVG-360V-75kvar-3L, NKPG-SVG-360V-50kvar-3L, NKPG-SVG-360V-30kvar-3L, NKPG-SVG-360V-150kvar-4L, NKPG-SVG-360V-100kvar-4L, NKPG-SVG-360V-75kvar-4L, NKPG-SVG-360V-50kvar-4L, NKPG-SVG-360V-30kvar-4L

Reference Directive(s): 2014/35/EU LVD (Low Voltage Directive)

Reference Standard(s): EN 60204-1:2018

Base of attestation: EC Declaration of Conformity No: ZIBI07240507101

Issue Date: 09.05.2024 Expiry Date: 08.05.2029


BST A RELIABLE TESTING FOR TRUST

Certificate of Compliance

Certificate No : BST180711398801EC

Applicant : XI'AN NOKER ELECTRIC CO.,LTD. Room402, No.15, Lane.1288, LuoNing Road, BaoShan Distract, SHAANXI, China

Manufacturer : XI'AN NOKER ELECTRIC CO.,LTD. Room402, No.15, Lane.1288, LuoNing Roaid, BaoShan Distract, SHAANXI , China

Product Name : COMPACT INTELLIGENT MOTOR SOFT STARTER

Trade Name : NOKER

Main Test Model : NK5075

Additional Model : NK5060, NK5045, NK5037, NK5030, NK5022, NK5015, NK5011, NK5075, NK50475, NK5003, NK50272, NK5011S

Test Standard : EN61000-6-3:2007/A1:2011/AC:2012 EN61000-3-2:2014 EN61000-3-3:2013 EN61000-6-1:2007

As shown in the Test Report No. : BST180711398801ER

The EUT described above has been tested by us with the listed standards and found in compliance with the council EMC directive 2014/30/EU. It is possible to use CE marking to demonstrate the compliance with this EMC Directive.
The certificate applies to the tested sample above mentioned only and shall not imply an assessment of the whole production.

Christina Deng Manager Jul. 10, 2018

Shenzhen BST Technology Co.,Ltd.


测量管理体系认证（AAA）证书

MEASUREMENT MANAGEMENT SYSTEM(AAA) CERTIFICATE

证书号：ISC-2019-0572

兹 证 明

西安诺克尔电气有限公司

符合 GB/T 19022-2003/ISO10012-2003《测量管理体系 测量过程和测量设备的要求》标准的全部要求，对产品质量、经营管理、环境监测、安全保护、能源管理等方面的计量保障作用，特发此证（认证范围见证书附件）。

This is to certify your measurement management system conforms to all the requirements of ISO10012:2003 " Measurement management system-Requirements for measurement process and measurement equipment".

发证日期：2019 年 12 月 06 日 有效日期：2024 年 12 月 03 日

签 发 人：

认证机构：北京国标联合认证有限公司


环境管理体系认证证书

证书编号：00121E31591R1M/6106

兹证明

西安诺克尔电气有限公司

建立的环境管理体系符合标准：

GB/T 24001-2016 / ISO 14001:2015

通过认证范围如下：

中国质量认证中心

A 0118978


电磁兼容检验证书

EMC TEST CERTIFICATION


质量管理体系认证证书

副本

证书编号：00121Q33665R5M/6106

兹证明

西安诺克尔电气有限公司

建立的质量管理体系符合标准：

GB/T 19001-2016 / ISO 9001:2015

通过认证范围如下：

中国质量认证中心

A 0118937


CERTIFICATE OF CONFORMITY

Certificate of Conformity

Certificate No.: BCT200608C-005E

Applicant : Xi'an Noker Electric Co.,Ltd.

Manufacturer : #33 Guo Du North Street, Xi'an High Technology Industrial Zone,China

Product : Active Power Filter

Model No. : APF-150A-4FL

Trade Mark : Noker

Rated Specification : Input: AC400V, 50Hz, 150A, 100kvar

The submitted products have been tested by us with the following standard(s) and found to be in compliance with the listed European Directives.

The EMC Directive 2014/30/EU

Applied Standards	Report No.
EN 61000-6-4:2007+A1:2011, EN 61000-6-2:2005, EN 61000-4-13: 2002+A2: 2016, IEC 61000-3-11: 2017	BCT200608R-005E

The LVD Directive 2014/35/EU

Applied Standards	Report No.
EN 61439-1:2011, EN 61439-2:2011	BCT200608R-005S

The tests were performed in normal operation mode. The test results apply only to the particular sample tested and to the specific carried out. This certificate applies specifically to the sample investigated in our test reference number only.

The CE Marking as shown below can be affixed on the product after preparation of necessary technical documentation.

Other relevant Directive have to be observed.

Manager June 17, 2020

Shenzhen BCT Technology Co.,Ltd. 6F, Yantian Business Building, Bao'an Road, Bao'an District, Shenzhen, P.R.China Tel: (86)755-2947 5656 Fax: (86)755-2947 5655 Http://www.bct-test.com E-mail:bct@bct-test.com


ATTESTATION OF COMPLIANCE

Reference No: TRCN-24130XNE01

Applicant: XI'AN NOKER ELECTRIC CO., LTD. #33 Guo Du North Street, Xi'an High Technology Industrial Zone, China

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Base of attestation: EC Declaration of Conformity No: ZIBI07240507101

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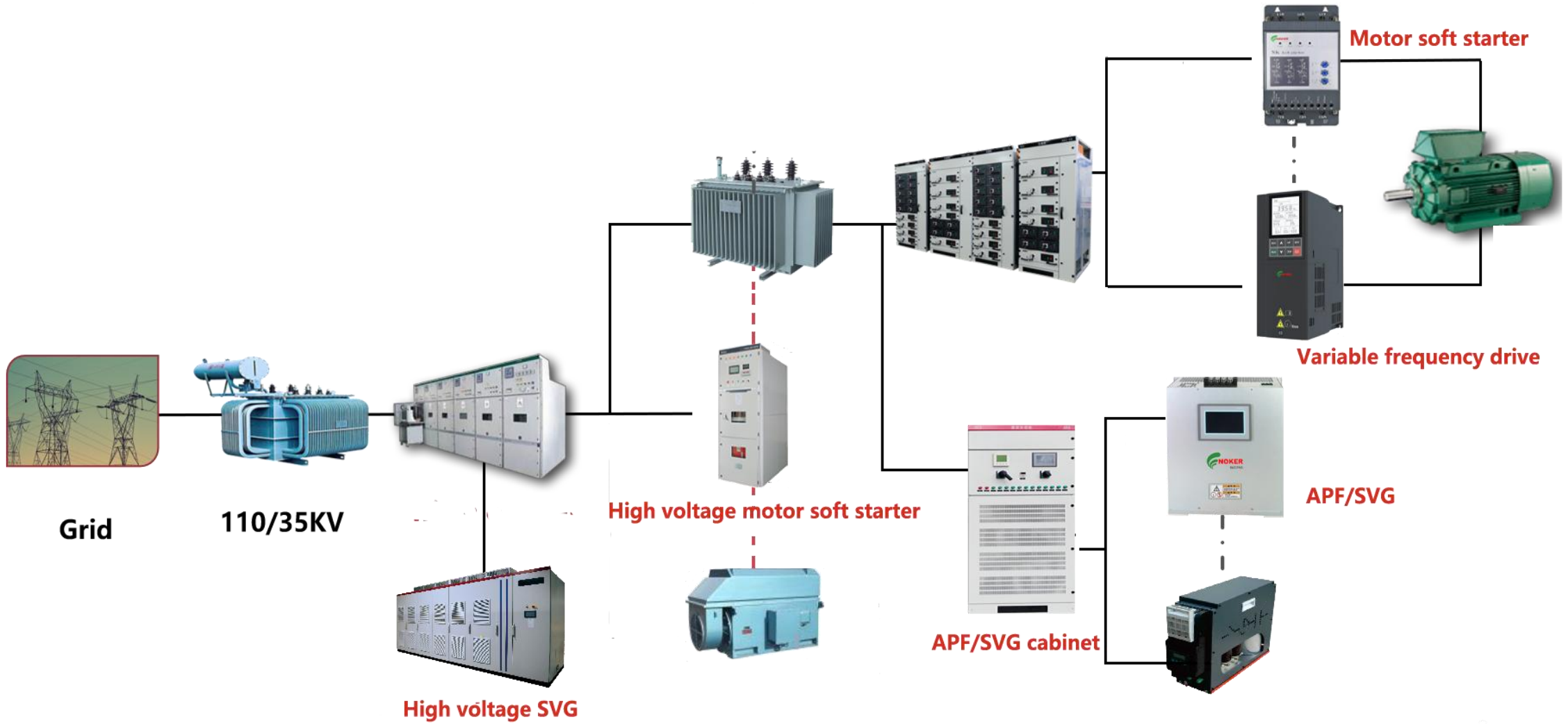
3.Product introduction



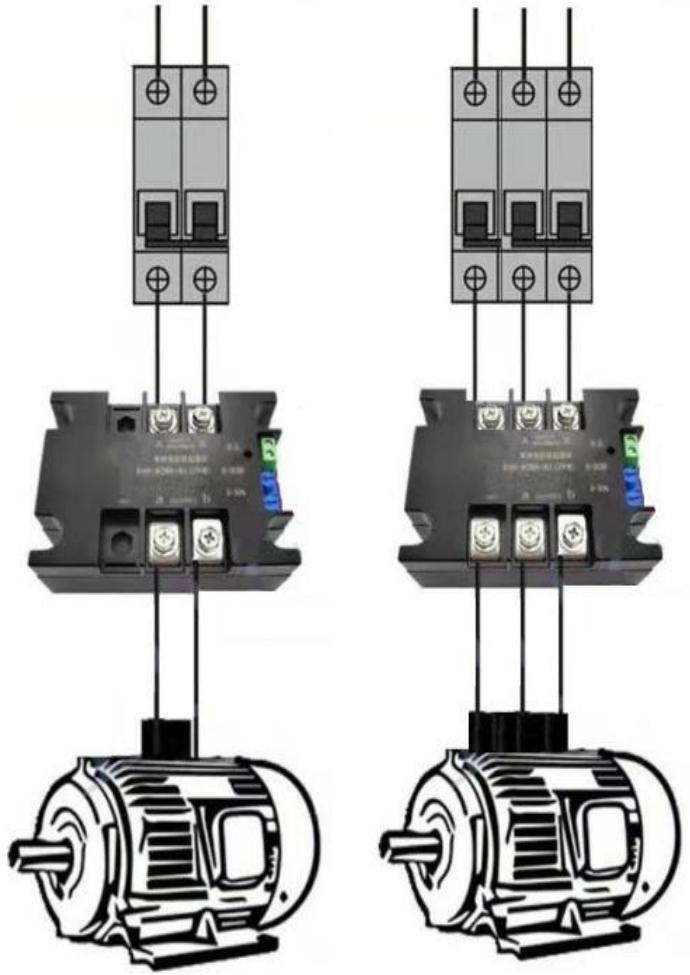
3.Product introduction

Smart motor soft starter

This module is compatible with 220V, 380V, frequency 50-60Hz, soft starting time for 30s adjustable (time rise refers to 0-
220V), when the main power supply is 220V, The starting voltage can be adjusted from 0-110V to the rated voltage of 220V.
If the main power supply is 380V, the starting voltage can be adjusted from 0-180V to the rated voltage of 380V.
There are two software now: soft start without soft stop, with soft start with soft stop.
Note:1.Do not set the start time to the smallest.
2.Do not connect power supply to switch.
3.If not requirement, default R1, if need soft stop function please inform before place an order, model will be R2.
4.Please choose the suitable radiator.
5.If need soft stop, must use the module switch.

3.Product introduction

Model	Phase No.	Power	Rated current
SSR-20WA-R1(1.0KW)	Single phase 220v	1.0kW	20A
SSR-40WA-R1(1.5KW)	Single phase 220v	1.5kW	40A
SSR-60WA-R1(2.0KW)	Single phase 220v	2.0kW	60A
SSR-100WA-R1(4.0KW)	Single phase 220v	4.0kW	100A
SSR-150WA-R1(6.0KW)	Single phase 220v	6.0kW	150A
SSR-200WA-R1(8.0KW)	Single phase 220v	8.0kW	200A
TSR-10WA-R1(1KW)	Three phase 380v	1kW	10A
TSR-20WA-R1(2KW)	Three phase 380v	2kW	20A
TSR-30WA-R1(3KW)	Three phase 380v	3kW	30A
TSR-40WA-R1(4KW)	Three phase 380v	4kW	40A
TSR-60WA-R1(6KW)	Three phase 380v	6kW	60A
TSR-80WA-R1(8KW)	Three phase 380v	8kW	80A
TSR-100WA-R1(10KW)	Three phase 380v	10kW	100A
TSR-120WA-R1(12KW)	Three phase 380v	12kW	120A
TSR-150WA-R1(15KW)	Three phase 380v	15kW	150A
TSR-200WA-R1(20KW)	Three phase 380v	20kW	200A
TSR-220WA-R1(22KW)	Three phase 380v	22kW	220A



Bypass motor soft starter

NK series built-in bypass soft starter is a full digital product. Suitable for squirrel-cage asynchronous motors. Rated voltage from 200V--525V, Rated power from 0.75--75kW. The soft starter can control the motor to accelerate smoothly in the process of stopping, It also provides a comprehensive protection function for motors and itself.

- Start/stop slope and initial voltage set by 3 different potentiometer built-in.
- Bypass relay built-in, no need for extra contactor.
- Voltage slope start-up mode.
- The output torque can be maintained during the stop process, prevent water hammer effect.
- Real-time data of communication.*1
- Reading history fault records by communication.*1
- The statistics data can be read by Modbus communication.*1
- Perfect protection for motor and soft starter

3.Product introduction

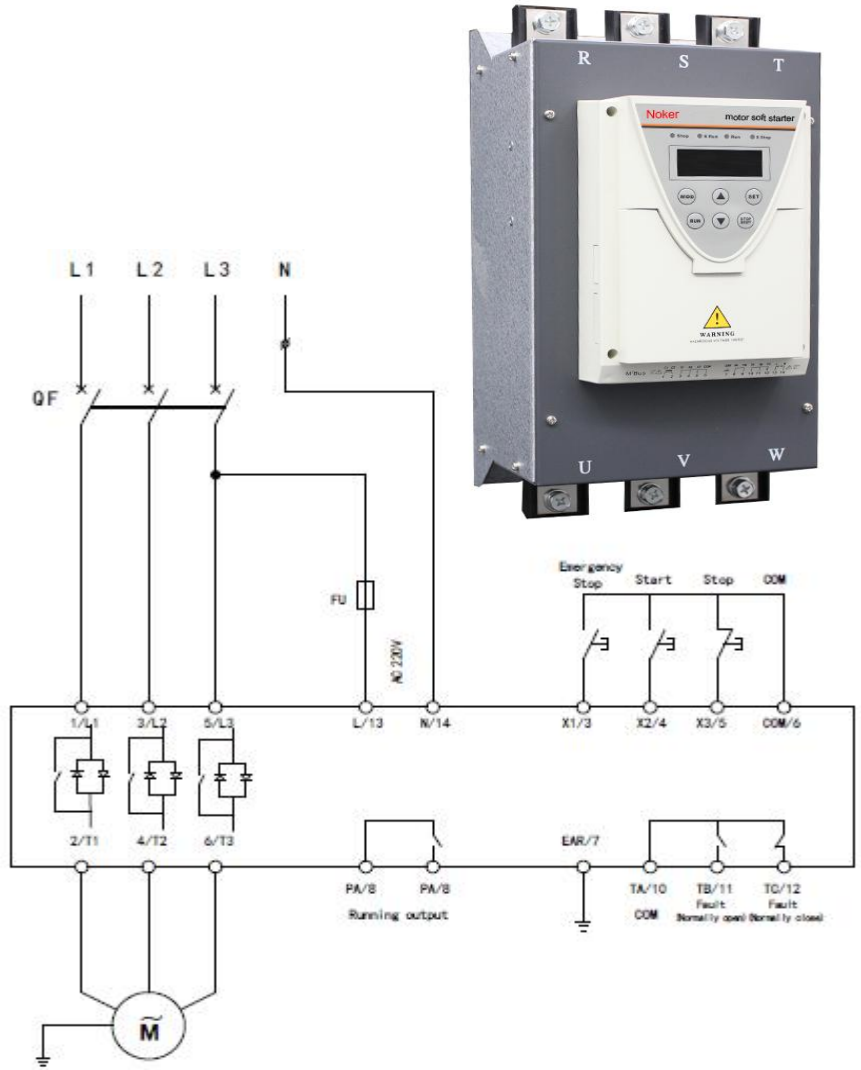
Model	Motor power rating			Rated current
	220V(kW)	400V(kW)	500 V(kW)	Ie(A)
NKXX1T5-X-3P3	0.37	0.75	1.1	1.5
NKXX2T2-X-3P3	0.55	1.1	1.5	2.2
NKXX03-X-3P3	0.75	1.5	2.2	3
NKXX4T5-X-3P3	1.1	2.2	3	4.5
NKXX7T5-X-3P3	1.5	3.7	4.5	7.5
NKXX11-X-3P3	2.2	5.5	7.5	11
NKXX15-X-3P3	3.7	7.5	11	15
NKXX22-X-3P3	5.5	11	15	22
NKXX30-X-3P3	7.5	15	18.5	30
NKXX37-X-3P3	11	18.5	22	37
NKXX45-X-3P3	15	22	30	45
NKXX60-X-3P3	18.5	30	37	60
NKXX75-X-3P3	22	37	45	75
NKXX90-X-3P3	25	45	55	90
NKXX110-X-3P3	30	55	75	110
NKXX150-X-3P3	37	75	90	150

3.Product introduction

Bypass motor soft starter

The NK700 built-in bypass contactor soft starter components, materials and the latest microcomputer control technology. This product used high-qualified device that integrates motor soft start, soft stop, energy saving and multiple protection functions and is dedicated to use a constant speed AC motor as the driving power.

Compared with the traditional starting method, after using the NK700 built-in bypass contactor soft starter, the voltage, torque and current on the motor can work smoothly, so the mechanical impact of the load will be completely improved; rich motor protection functions , It has played a very important role in extending the service life of the motor; at the same time, it has the communication function with the host computer control system, which can effectively implement the networking function of the system.



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3.Product introduction

- The unique SCR close-loop control is specially designed for standard load and heavy load. User can choose current-limit start or voltage ramp start according to load conditions so as to realize absolutely smooth start without torque oscillation.
- User is allowed to choose current-limiting start, voltage ramp start and current ramp start mode. In each starting mode so as to largely meet this site application and achieve the optimal start.
- High performance microprocessor digitally processes signals in control system, which avoids excessive adjustment in previous analog line and obtain the perfect accuracy and execution speed.
- The built-in bypass contactor uses no electricity running technology, different from other external bypass contactor charged operation mode for a long time, so this product is power saving, no noise, no electromagnetic pollution, does not produce sparks, green environmental protection.
- Protective functions of phase failure, overload, overcurrent, phase current unbalance, thyristor overheat to protect motor and other equipment.
- The monitor signal coding system consists of 4-digit display monitors working state of the equipment for 24 hours and provides fast fault diagnosis.

3.Product introduction

Model	Rated voltage (V)	Rated power (kW)	Rated current (A)
NK700-008-03	380	7.5	22
NK700-011-03	380	11	27
NK700-015-03	380	15	30
NK700-018-03	380	18.5	34
NK700-022-03	380	22	35
NK700-030-03	380	30	65
NK700-037-03	380	37	70
NK700-045-03	380	45	88
NK700-055-03	380	55	110
NK700-075-03	380	75	140
NK700-090-03	380	90	172
NK700-110-03	380	110	200
NK700-132-03	380	132	280
NK700-160-03	380	160	320
NK700-185-03	380	185	355
NK700-200-03	380	200	380
NK700-220-03	380	220	440
NK700-250-03	380	250	480
NK700-280-03	380	280	560
NK700-315-03	380	315	600
NK700-355-03	380	355	700
NK700-400-03	380	400	780
NK700-450-03	380	450	820
NK700-500-03	380	500	1000
NK700-630-03	380	630	1100

3.Product introduction

High voltage motor soft starter

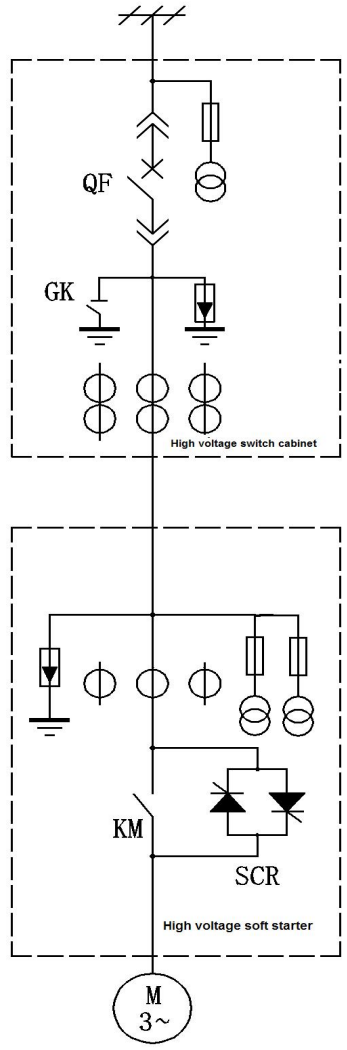
High voltage motor soft starter designed with up-to date concept, mainly applicable to the control of and protection for the starting and stopping of squirrel-cage type asynchronous and synchronous motors. The starter is composed of several thyristors in series-parallel, and it can meet different current and voltage requirements.

The product is widely used in electric industry with rated voltage 3kV to 10kV,building materials chemical industry, metallurgy, steel and paper-making industries etc., and can perform well if used together with various kinds of electromechanical devices including water

pumps, fans, compressors, crashers, agitators and conveyer belt etc., It is the ideal device for starting and protecting high voltage motors.

3.Product introduction

- Different from other kinds of products that need frequent maintenance on liquid and parts etc., it turns the mechanical lift into the service life of electronic components, so it needs no maintenance after running for many years.
- It can put into operation only with the power line and motor line connected. The whole system can be tested electrically under low voltage before operating with high voltage.
- The starter comes equipped with a vacuum contactor which can be used to start the motor directly in the inside. If fails, the vacuum contactor can be used to start the motor directly to ensure the continuity of the production.
- High voltage thyristor is a component of major loop, equipped with voltage balancing protection system and over-voltage protection system.
- Advanced optical fiber transmission technique realizes the triggering detection of high voltage thyristor and the isolation between LV control loops.
- High speed microcontroller is used to perform central control which is real-time and high efficient with high reliability and excellent stability.
- Touch screen display system in English with human-friendly operation interface.
- RS-485 communication port can be used to communicate with the upper computer or centralized control center.



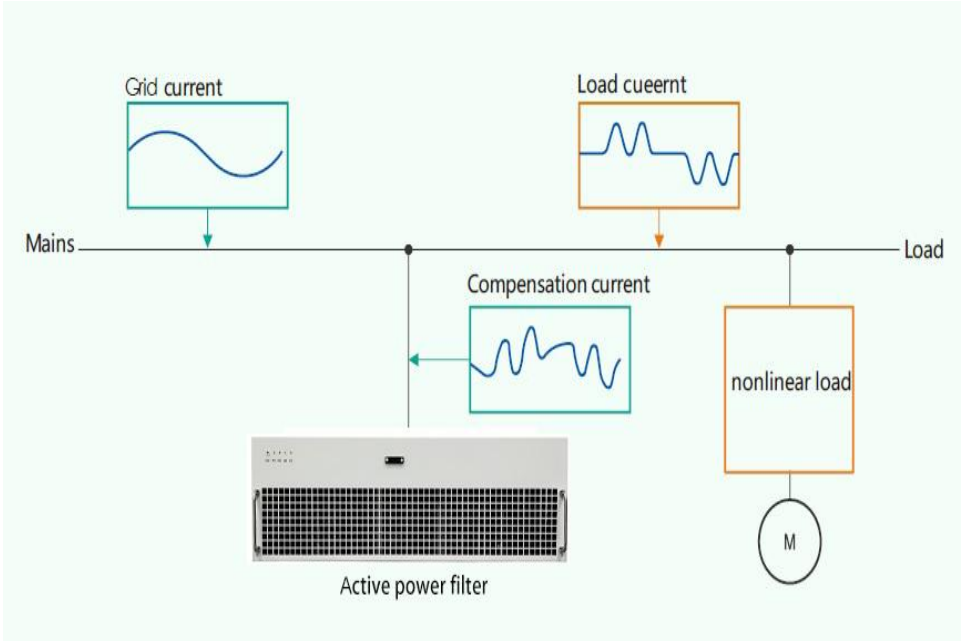
3.Product introduction

Model	Voltage level (kV)	Rated power (kW)	Rated current (A)	Dimensions of the cabinet		
				H(mm)	W(mm)	D(mm)
NMV-500-3	3	500	113	2300	1000	1500
NMV-900-3	3	900	204	2300	1000	1500
NMV-1250-3	3	1250	283	2300	1000	1500
NMV-1800-3	3	1800	408	2300	1200	1500
NMV-2000-3 and above	3		＞450	To be ordered		
NMV-500-6	6	500	57	2300	1000	1500
NMV-1000-6	6	1000	113	2300	1000	1500
NMV-1500-6	6	1500	170	2300	1000	1500
NMV-2000-6	6	2000	226	2300	1000	1500
NMV-2500-6	6	2500	283	2300	1200	1500
NMV-3000-6	6	3000	340	2300	1200	1500
NMV-3500-6	6	3500	396	2300	1500	1500
NMV-4000-6 and above	6		＞450	To be ordered		
NMV-500-10	10	500	34	2300	1000	1500
NMV-1000-10	10	1000	68	2300	1000	1500
NMV-1500-10	10	1500	102	2300	1000	1500
NMV-2000-10	10	2000	136	2300	1000	1500
NMV-2500-10	10	2500	170	2300	1000	1500
NMV-3000-10	10	3000	204	2300	1200	1500
NMV-3500-10	10	3500	238	2300	1200	1500
NMV-4000-10	10	4000	272	2300	1200	1500
NMV-5000-10	10	5000	340	2300	1500	1500
NMV-6000-10 and above	10		＞450	To be ordered		

3.Product introduction

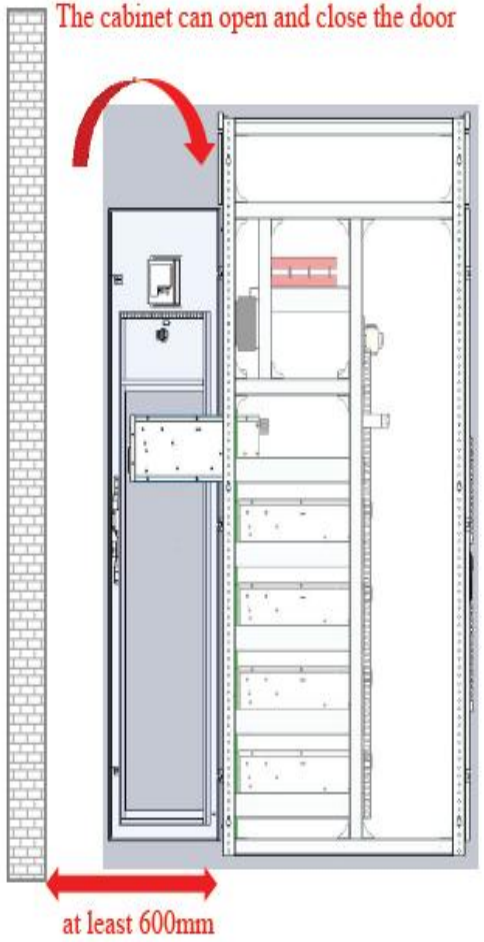
Active power filter

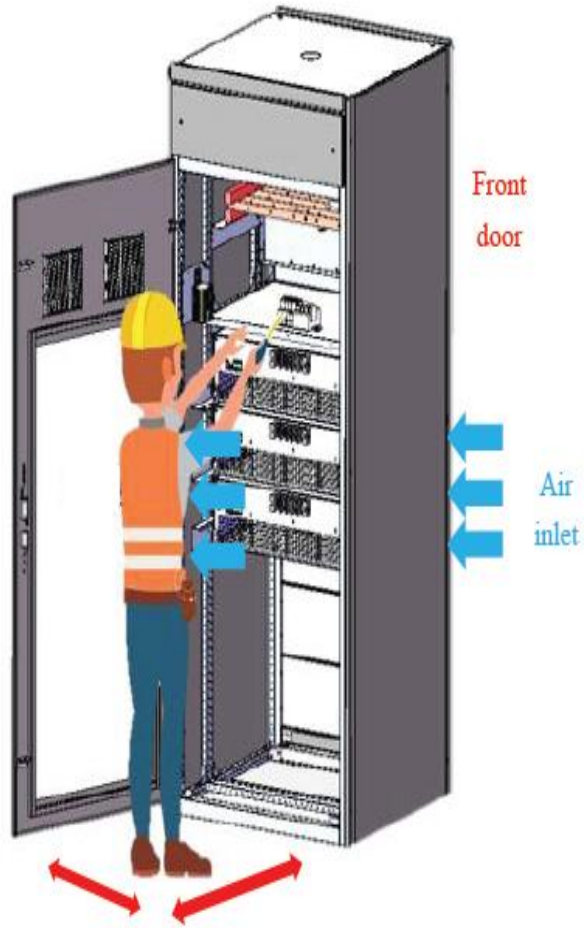
Active Power Filter, operates on the base of a three -level topology circuit, provide power quality solutions such as eliminate harmonic, stepless power factor correction, and load balance. The AHF module capacity of AHF modular from 30A to 150A, and modules could connect in parallel, can easily get the target filter current capacity.



- Eliminate the harmonic current of nonlinear load
- Improve the operating efficiency of the power system and reduce the downtime of the power distribution system, especially for low-voltage systems with frequent load upgrades.
- Meet the strict requirements of utilities for electrical energy quality, avoid fines and power supply interruptions caused by electrical quality problems, and reduce carbon dioxide emissions
- Harmonic compensation up to 50th harmonic, Load balancing between phases and unloaded neutral wire
- Compact design, 3 level topology, Modular system extendable
- Grid resonance detection, Hardware/software prevent resonance,Leading algorithm, fast response
- Accurate compensation,User-friendly HMI,Insensitive to network conditions

3.Product introduction





3.Product introduction

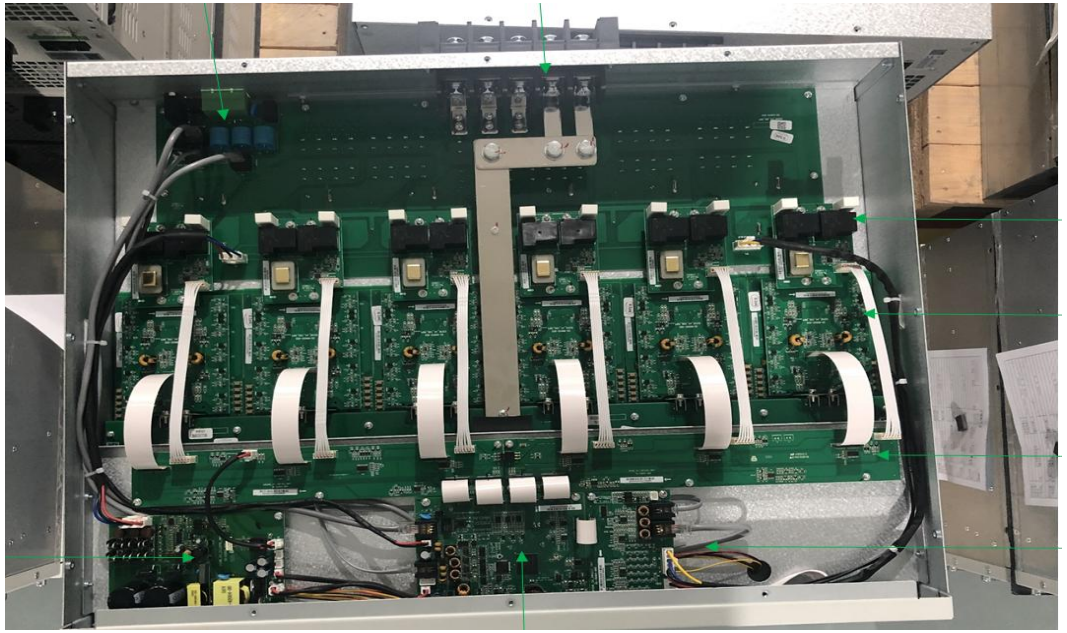
Static var generator

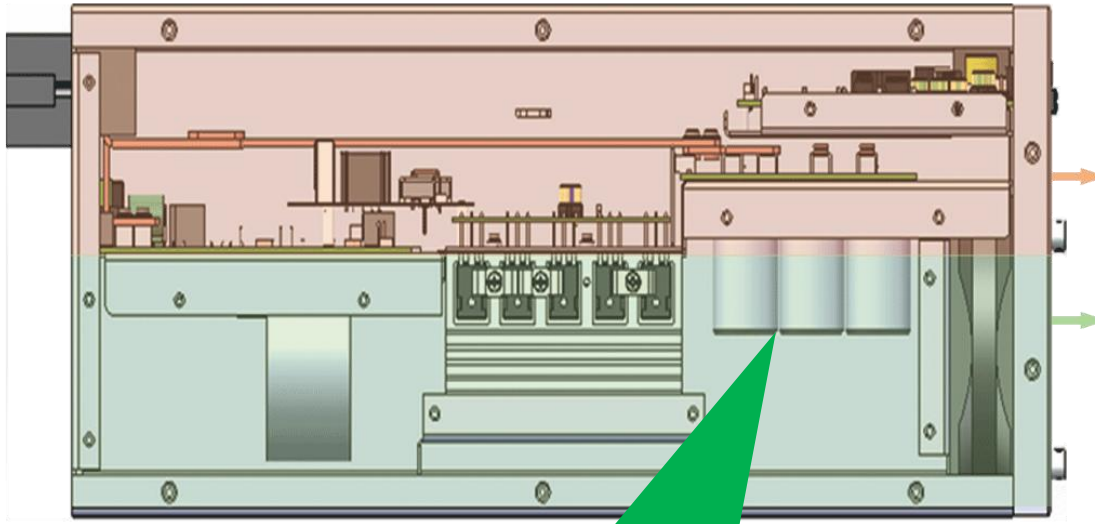
Reactive power is the energy "wasted" by electrical equipment. That is, it does not help to fulfill the purpose of the apparatus: to move, to create heat, to illuminate, etc... however it is consumed by it. To better explain this point, we use the beer analogy.

The SVG is a completely new approach to power factor correction. It uses a high speed inverter that reacts to changes in reactive power, exchanging corrective reactive power in the system. The complete correction takes place in the order of milliseconds. This fast response provides a precise and stable correction of the power factor in real time without the drawbacks of traditional capacitor-based systems. The SVG can continuously adjust the reactive power dynamically and bidirectional (forward or backward).

There is no possibility of system resonance and even in low voltage conditions, the SVG will provide full reactive power compensation. It is made up 100% of inverters, so there are no capacitors that fail. The SVG is a device that connects in parallel with the load to be compensated. The device is a controlled current source that generates a waveform in real time.

3.Product introduction

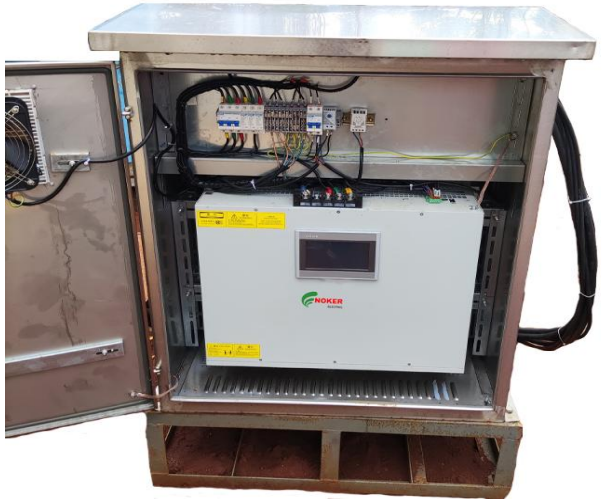




Separate the electronic layer from the power component.
The electronic layer provides effective heat insulation while preventing dust and moisture.
The power layer fully dissipates heat.

Power components are placed on the lower level

3.Product introduction



https://www.noker-inverter.com

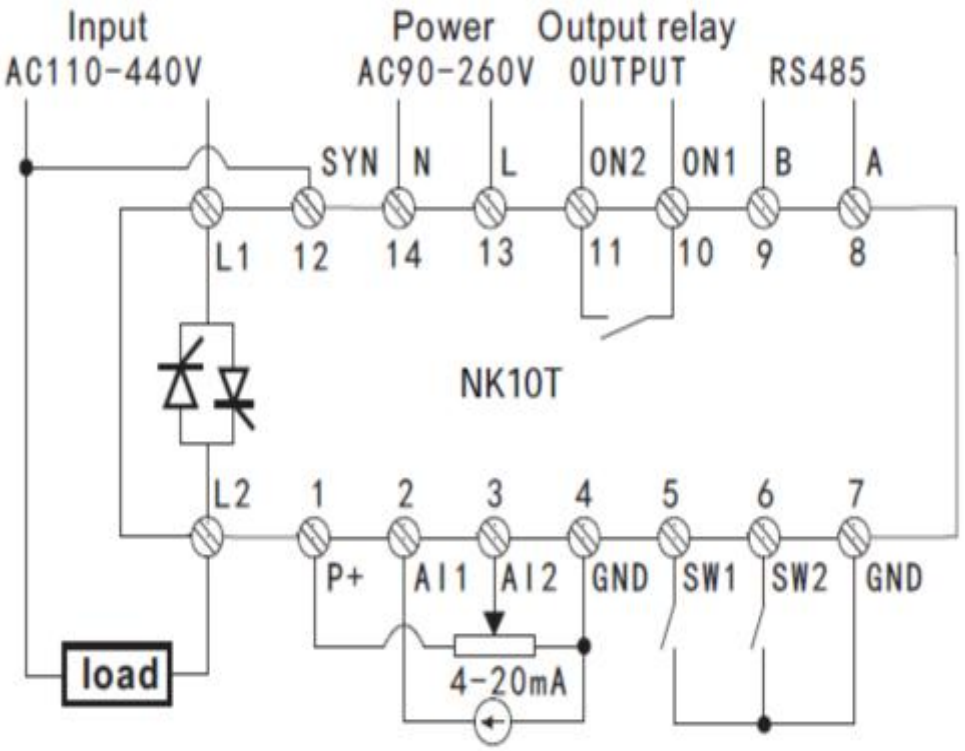
3.Product introduction

Thyristor power regulator

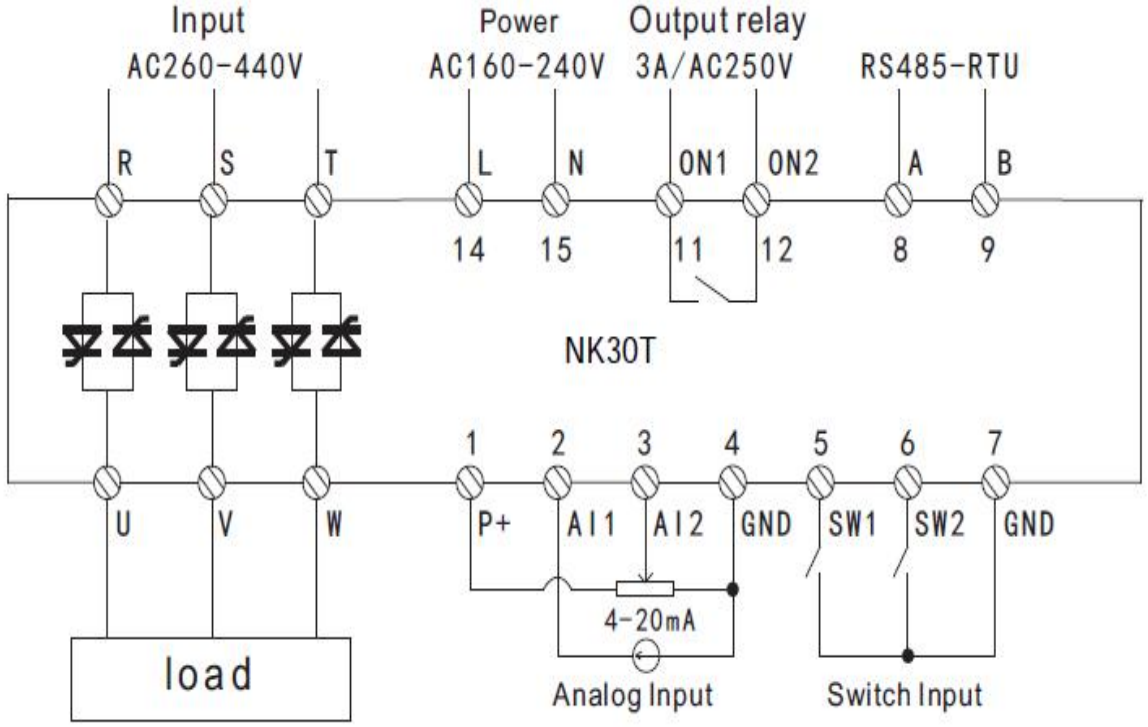
Thyristor power regulator adopts the latest power electronic control technology, thermal simulation technology, with high control precision, small size and other characteristics.It is widely used in general electric heating, float glass production line, monocrystalline silicon, polysilicon heating, metal material molding and other occasions, has been highly praised by our customers.

Thyristor power regulator, also known as scr power controller is used to control power delivery. They are designed to vary the ac voltage across the resistive&inductive loads. The thyristor power controllers provide a smooth way of power delivery to load. Unlike conactors, not have any electromechanical movemen.Thyristor power regulator includes the back to back connect silicon rectifier(scr), trigger pcb board, current transformers, temperature transformer. By the trigger pcb board to control the thyristor by phase angle&zero cross burst two models. The current transformers detect the three phase current, as the constant current control and to be the current protection. The temperature transformers detect the heatsink temperature to protect the Scr to be safe.

3.Product introduction



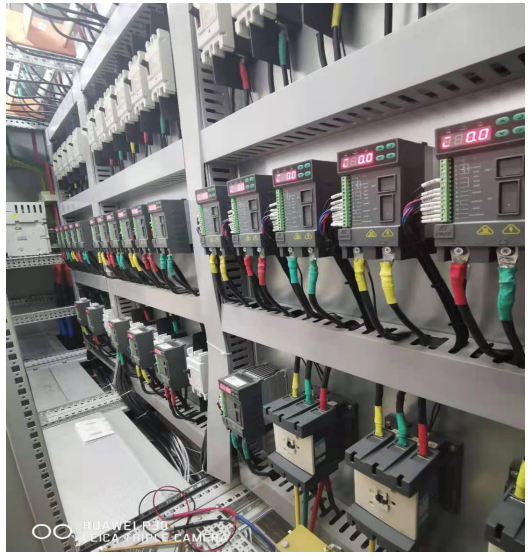
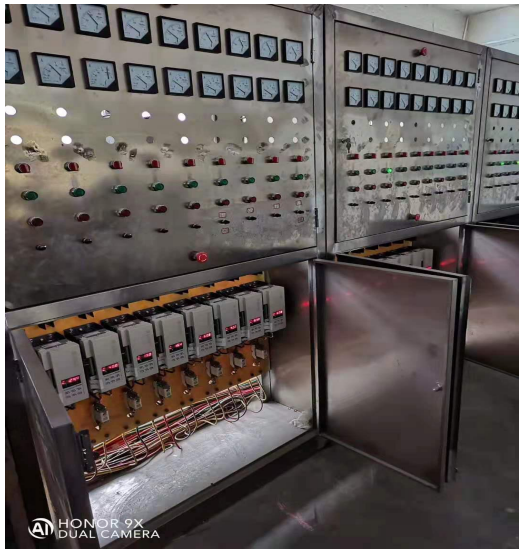
Single phase thyristor power regulator



Three phase thyristor power regulator

3.Product introduction





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Variable frequency drive

NK300 incorporates perfectly the optimized asynchronous driving and years of experience; it is born for asynchronous driving motors! NK300 is built on TI's powerful DSP-based motor control chip, with the adoption of the sensorless current vector control (SVC) and open-loop torque control (TC). NK300 can be widely used for the asynchronous motor driving where better speed control and low-frequency torque are required.

- Almost perfect design and superb manufacturing process

With large design margin for key components and PCB;

Adopting industry-leading automatic spraying and strict automatic testing standards, making sure more stable and reliable products;

With optimized control algorithms and comprehensive protection functions, making more outstanding performance of the complete product.

- Powerful hardware speed tracking

With powerful hardware speed tracking, easily responding to the applications with large inertia requiring quick start.

3.Product introduction

- Accurate parameter identification

With an optimized motor parameter autotuning model, providing more precise identification.

- Enhanced oscillation suppression

With enhanced oscillation suppression, equal to all applications of motor current oscillation with facility.

- Fast current limiting

With fast current limiting function, easily responding to the conditions with sudden load, greatly reducing the probability of inverter’s frequent over-current fault.

- Dual PID switching

With dual PID switching function, adapting to varied complicated conditions with flexibility.

- Original energy-saving mode

With an original energy-saving mode, when at a light load, reducing the output voltage automatically, making more efficient energy saving.

3.Product introduction

- Optimized V/F separation

With optimized V/F separation function, easily meeting various demands of the power inverter industry.

- Flux-weakening control

Flux-weakening control, the max. frequency could be up to 3000Hz, easy for the applications requiring high speed.

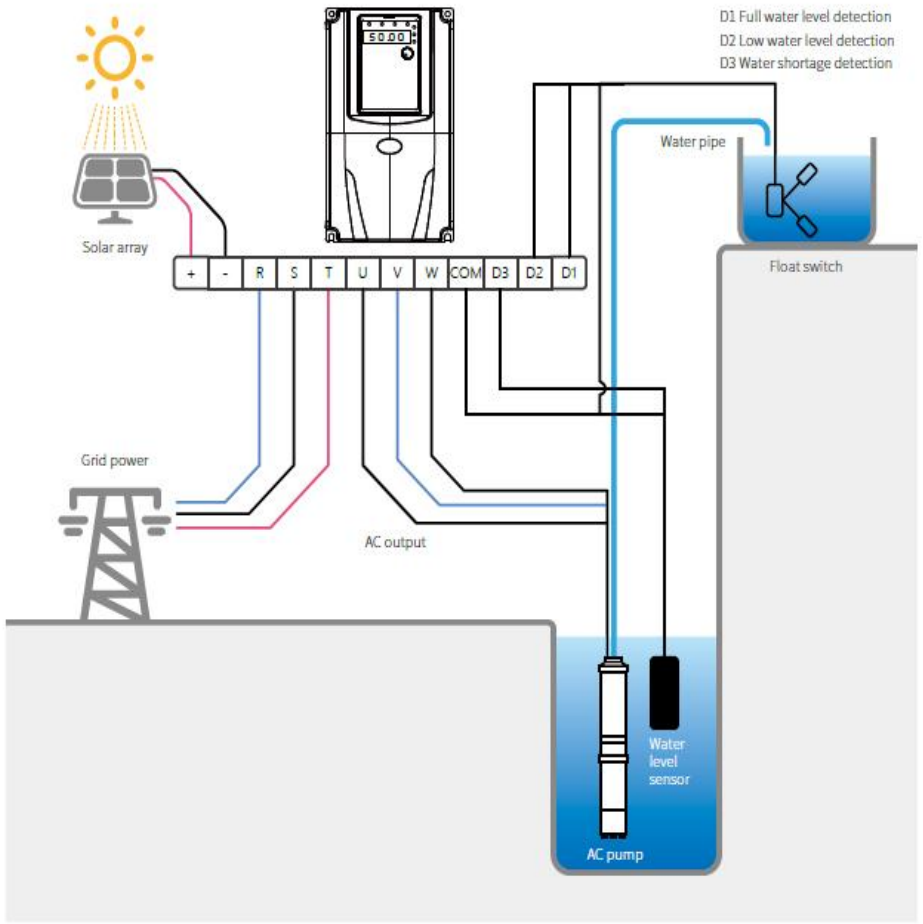
- Powerful PC monitoring software

With various background monitoring functions, facilitating on-site data collection and commissioning;

Capable of batch parameters upload and download, and autogeneration of commissioning documents.

Solar pumping inverter

Solar pump system, consisting of solar array, solar pump inverter, AC water pump and water tank, uses solar cell as power supply to directly take water from deep wells, rivers, lakes and other water sources through the water pump.Solar pump system, consisting of solar array, solar pump inverter, AC water pump and water tank, uses solar cell as power supply to directly take water from deep wells, rivers, lakes and other water sources through the water pump.
The solar array absorbs solar radiation and converts it into electric energy to provide power supply for the whole system. The solar pump inverter converts the DC output by the solar array into AC and drives the water pump; in addition, it adjusts the output voltage and frequency according to the sunshine intensity in real time to realize maximum power point tracking and to maximize the use of solar energy. When the sunshine intensity is low, the solar pump system can switch to grid power for complementary power supply.



3.Product introduction

- The system automatically starts in the morning and stops in the evening. It can run perfectly whenever there is sunshine, with no need of back-up battery.
- Applicable to and suits all applications requiring water pumps.
- Compatible with all types of solar panels and AC pumps (such as self-priming pump, submersible pump, deep-well pump and surface pump).
- Maximum operating ambient temperature 60° C.
- Remote monitoring for real time operation status and switching on/off by GPRS.
- Good performance even in cloudy weather.
- In the long run, the return on investment is much higher than diesel generators.
- Equipped with perfect protection, requires no man to be on duty, runs fully automatically.
- 18 months warranty for the whole system, 10 years warranty for solar panel.
- The solar pump system is a presentation of low-carbon, energy-saving and environmental protection. It can obviously improve the living standard of people in areas lacking water and electricity. Therefore, it has broad market prospect and huge social value.

3.Product introduction



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4.Product application

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Metallurgy
Textile
Coal
Education
Water conservancy
Electricity
Communication
Rail traffic
HVAC
Petroleum
Paper making
Medical
Construction

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