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## 雷诺尔

Shanghai RENLE  
Science&Technology Co., Ltd.

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2020年3月

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March, 2020



雷诺尔微信公众号

# RENLE

Professional manufacturer of  
Smart Grid · New Energy · Electric Drive

## JJR8000系列

智能型电机软启动器  
Intelligent Motor Soft Starter



创芯科技 · 智惠全球

股票代码：833856



## 雷诺尔

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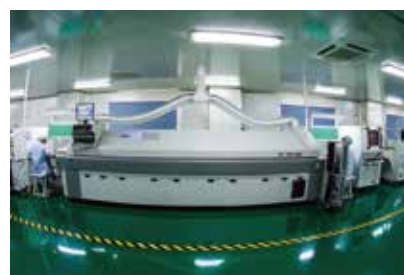


上海雷诺尔科技股份有限公司座落于上海市嘉定区国家级高新技术产业园区内，占地面积100000平方米，厂房85000平方米。产品覆盖高低压电机软起动器、高低压变频调速器、智能化电气、新能源电气和高低压输变电成套设备等，产品广泛应用于电力、冶金、石油石化、矿山、化工、建筑、建材、市政、军工业、轻工业、纺织印染、造纸、制药等行业，产品畅销世界多个国家和地区。

公司先后为上海世博会配套项目、北京奥运会配套项目、上海国际航运中心洋山深水港工程、上海浦东机场、上海虹桥机场、三峡工程、甘肃卫星发射中心、南水北调、西气东输、中国石油集团、中国石化集团等国家重点项目配套使用，优质的产品质量和良好的售后服务赢得了用户的一致好评。

公司严格控制产品质量，力争尽善尽美，构筑了坚实的质量系统工程，公司已获得ISO9001质量管理体系认证、ISO14001环境管理体系认证、欧共体CE认证，国家强制性CCC认证及产品检验认证。公司不断引进国际先进生产设备及检测设备，创建实验室，并为多个国内院校提供研发实验基地，公司一直注重自主创新，建立了颇具实力的新产品开发技术中心。

公司将不断地开发出节能、高效、精密、人性化的产品，以专业独特的工控技术、领先适用的创新产品以及深度整合的解决方案，帮助用户实现经济转型和产业升级，并加快国际化步伐，用品质征服世界，立志成为享誉全球的智能电气专业供应商！



## 企业简介

## Enterprise Introduction

Shanghai RENLE Science & Technology Co., Ltd is located in the High & New Technology Industrial Park of Jiading District, Shanghai, China. The company covers a total area of 100,000 square meters, including 85,000 square meters of workshops. Its products include HV/LV motor soft starter, HV/ LV frequency inverter, intelligent electricals, new-energy electricals, HV/LV complete equipment for electric power transmission distribution and so on. Its products are widely used in electric power, metallurgy, petroleum chemistry, military industry, mining, chemical industry, construction, light industry, pharmaceuticals, municipal construction, textile printing and dyeing, papermaking, rubber and plastic, electrified railway construction and other industries. Its products sell well in many countries and regions of the world.

The company products are used in many projects, such as Expo 2010 Shanghai China, 2008 Beijing Olympic Games, Yangshan Deepwater Port Project of Shanghai International Shipping Center, Shanghai Pudong Airport, Shanghai Hongqiao Airport, the Three Gorges Project, Gansu Satellite Launching Center, South-to-North Water Diversion Project, West-to-East Natural Gas Transmission Project, China National Petroleum Corp., SINOPEC, Double Coin Holdings, Shandong Linglong Tyre and other national key supporting projects. Its premium products and excellent after-sales service are favored by the clients.

Renle always lays emphasis on quality control so as to attain perfection. The company has passed the certification of ISO9001 Quality Management System, ISO 14001 Environment System, OHSAS 18001 Occupational Health and Safety Management System, CE, TUV, GOST and national CCC etc. RENLE has been continuously introducing internationally advanced production and test equipment to establish laboratories and provide R&D experiment base to domestic universities and colleges. The company, paying much attention to independent innovation, has established powerful new product R&D technical center.

The company shall keep developing products of energy-saving, efficiency, precision and humane. With the specialized and unique control technology, advanced and applicable innovative products, and deep-integrated solutions, the company helps clients in realizing economic transformation, industry upgrading and speedy internalization. With its high-qualified products, the company aims to be the world-renowned specialized manufacture of intelligent electrical equipment.

JJR8000 系列  
**智能电机软起动器**  
 JJR8000 Series  
 Intelligent Motor Soft Starter



▶ **产品型号说明** Description of Product Type

JJR8000-□ 1 0 5 - □ 3 8 0 - M

M : modbus总线 P: profibus总线  
 M: Modbus P: Profibus

主回路工作电压 : 380V/690/1140V  
 Main loop work voltage: 380V/690V/1140V

主回路工作电流  
 Main loop work current

## ▶ 产品概述 Product Description

JJR8000系列智能型电机软起动器是采用电力电子技术、微处理器技术及现代控制理论技术生产的具有当今国际先进水平的新型起动设备。该产品能有效的限制异步电动机启动时的起动电压,可广泛应用于风机、水泵、输送类及压缩机等重载设备,是星/三角转换、自耦降压、磁控降压等降压启动设备的理想换代产品。

JJR 8000 series intelligent motor soft starter adopts international advanced electronics technology, microprocessor technology and modern control theory to efficiently limit start voltage of asynchronous motor. The equipment could be widely applied to fan, pump, conveyor and compressor and other heavy load equipment. It is an excellent product to substitute traditional startup equipments such as star/triangle transition, self-coupling voltage reduction, magnetron voltage reduction and so on.

## ▶ 产品特点 Product Features

- ➔ 可通过简单的编程应用负载类型直接选择定制的参数；
  - ➔ 三组启动参数可选,方便于一台电机软起动器启动不同功率的电机负载。
  - ➔ 启动检测电机反馈电压实现闭环控制,保证电机在各种工况和不同的负载启动成功。
  - ➔ 三种起动方式:电压斜坡起动方式可得到最大的输出转矩;恒流软起动方式最佳的限制起动电流;直起软起动方式可以直接起动电机软起动器。
  - ➔ 可编程延时起动方式,可编程连锁控制。
  - ➔ 对输入电源无相序要求。
  - ➔ 起动时间、停车时间均可数字修改。
  - ➔ 具有多种保护功能:过流,三相电流不平衡,过热、缺相,电机过载等进行保护。
  - ➔ 动态故障记忆功能,便于查找故障起因。
  - ➔ 可在线查找最大的起动电流和最大的运行电流。
  - ➔ 现场总线的全动态控制监测起动器,易于组网。
- ➔ Choose parameters through simple programming load type;
  - ➔ A choice of three sets of start-up parameters, convenient for one motor starter starting motor loads with varied powers.
  - ➔ Closed-loop control realized through initiating the motor feedback voltage to ensure a successful motor start-up under all working conditions and varied loads.
  - ➔ Three ways of start-up: voltage-slope start brings the maximum output torque; constant-current soft start brings the optimum limiting start-up current; direct-current soft start can initiate the soft starter directly.
  - ➔ Way of programmable delayed start-up, and programmable inter-lock control.
  - ➔ No phase-sequence requirements for the input power source.
  - ➔ The start-up and stop times can be digitally modified.
  - ➔ Capable of multi-functions: over-current, three-phase current imbalance, overheat, phase loss and motor overload protection.
  - ➔ Dynamic fault memory function is easy for faults identification.
  - ➔ Be capable of online searching for the maximum currents of start-up and operation.
  - ➔ Overall dynamic starter control and monitor in the fieldbus, easy for wiring.

## ▶ 产品典型应用简介 Introduction of Production Applications

- ➔ 水泵—利用软停车功能,停止时缓解泵的水锤显现,节省了系统维修的费用。
  - ➔ 球磨机—利用电压斜坡起动,减少齿轮转矩的磨损,减少维修工作量,既节省时间,又节省了开支。
  - ➔ 风机—减少皮带磨损和机械冲击,节省了维修的费用。
  - ➔ 压缩机—利用限流,实现了平滑启动,减少电动机发热,延长使用寿命。
  - ➔ 皮带输送机—通过软起动实现平滑渐进的起动过程,避免产品移位和液体溢出。
- ➔ Pump: make use of the soft stop function to relieve the influence of water hammer so as to save the system maintenance cost.
  - ➔ Ball mill: make use of the voltage ramp startup to reduce gear torque friction so as to save cost and time.
  - ➔ Fan: reduce the belt friction and mechanical conflict to save maintenance cost.
  - ➔ Compressor: use limited current to realize smooth start-up, decrease heat from motor and prolong device life.
  - ➔ Conveyor: make use of the soft start to realize smooth and gradual startup process in order to avoid product move and liquid overflow.

## ► 技术特征 Technical Features

- ➔ 主回路工作电压: AC380V/690V/1 140V(+10%~-25%);
- ➔ 主回路工作电流: 13A~1500A;
- ➔ 主回路频率: 50Hz/60Hz(±2%);
- ➔ 控制回路供电: AC/DC220V+ 15%(0.5A);
- ➔ 软起动上升时间: 1-120S;
- ➔ 软停车时间: 0-100S;
- ➔ 冲击时间: 0.1~0.3S;
- ➔ 冲击电压: 50%~100%;
- ➔ 限流倍数: 1.5-5.0Ie;
- ➔ 初始电压: 25%~80%Ue;
- ➔ 冷却方式: 自然冷却;
- ➔ 通讯方式: RS485串行通讯(Modbus-RTU/Profibus可选);
  
- ➔ Main loop work voltage: AC380V/690V/1 140V(+10%~-25%);
- ➔ Main loop work current: 13A~1500A;
- ➔ Main loop frequency: 50Hz/60Hz(±2%);
- ➔ Control-loop power supply: AC/DC220V+ 15%(0.5A);
- ➔ Soft-start rising time: 1-120S;
- ➔ Soft-stop time: 0-100S;
- ➔ Impact time: 0.1~0.3S;
- ➔ Impact voltage: 50%~100%;
- ➔ Current limiting times: 1.5-5.0Ie;
- ➔ Initial voltage: 25%~80%Ue;
- ➔ Way of cooling: natural cooling
- ➔ Way of communication: RS485 series communication (An option of Modbus-RTU and Profibus)

## ► 使用及环境条件 Usage and Environment Standard

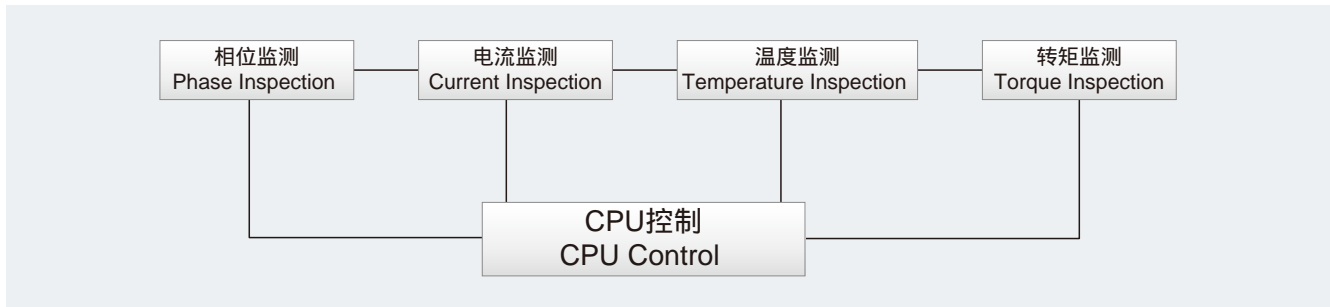
防护等级 Protection level	IP00
耐振性 Vibration resistance	符合IEC 68-2-6: 2至13Hz为1.5mm峰值/13至200Hz为1gn Comply with IEC 68-2-6: 2 Hz to 13Hz is 1.5mm peak value; 13 Hz to 200Hz is 1gn
抗冲击性 Impact resistance	符合IEC 68-2-27: 15g, 11ms Comply with IEC 68-2-27: 15g, 11ms
最大环境污染等级 Maximum ambient pollution class	3级,符合IEC 947-4-2 Class 3, comply with IEC 947-4-2
最大相对湿度 Maximum relative humidity	93%无冷凝或滴水,符合IEC 68-2-3 93% no condensing or drip. Comply with IEC 68-2-3
环境温度 Ambient temperature	贮存:-25 至+70 运行: 10 至+40 不降容;最高+60 , 40 以上每升高1 电流降低2% Storage: -25 to +70 Running: 10 to +40 without derating. Maximum +60 , when temperature above 40 , the current will reduce by 2% for temperature rising per 1 .
最大运行高度 Maximum operation altitude	2000米不降容(2000米以上,每增加100米,电流降低0.5% ) 2000m without capacity reduction ( above 2000m, current will reduce by 0.5% for every 100 meters increase altitude)
运行位置 Operation position	垂直位置, ±10° 以内 Vertical position , A range of ±10°

## ▶ 产品应用 Product Application

JJR8000系列智能型电机软起动器广泛应用于电力、冶金、石油、石化、矿山、化工、建筑、建材、市政、军工业、轻工业、纺织印染、造纸制药等多个行业领域。

JJR 8000 series intelligent motor soft starter is widely used in electric power, metallurgy, petroleum chemistry, military industry, mining, chemical industry, construction, light industry, pharmaceuticals, municipal construction, textile printing and dyeing, papermaking, rubber and plastic, electrified railway construction and other industries.

## ▶ 工作原理 Working principal



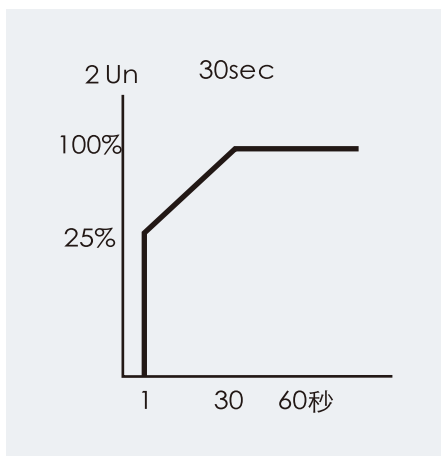
JJR8000的控制核心是微处理器DSP,这个微处理器控制系统可以对电机进行起动和保护。DSP微处理器对SCR进行相位触发控制以降低加在电机上的电压,然后通过控制加在电机上的电压和电流,平滑的增加电机转矩,直到电机加速到全速运行。这种起动方式可以降低电机的起动冲击电流,减少对电网和电机自身的冲击。同时也减少对联在电机上机械负载装置的机械冲击,以延长设备的使用寿命,减少故障和停机。

JJR8000具有三种起动模式:电压模式、限流模式、直起模式。

As the control center of JJR 8000, DSP, a micro-processor, starts and protects the motor through the control system. DSP micro-processor phase triggers and controls the SCR to lower the motor's voltage and current, smoothly add the motor torque until full speed operation. This way of start-up can lower the motor's start-up and impact current, reducing impacts on the power grid, motor itself, and the mechanical influences connected from loads at the same time, in order to prolong the device service life and reduce breakdowns.

JJR8000 has three modes of start-up: voltage mode, limit current mode, and direct-current mode.

## ▶ 电压模式 Voltage Mode



用来确定电机的初始转矩(频率一定时,电机转矩与所加电压平方成正比)。

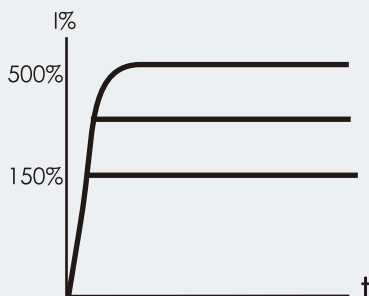
设定范围: 25%-80%。调节时需要考虑电流冲击和机械冲击。若设得太高则可能导致初始电流过大,电流冲击和机械冲击过高。电压模式下电流会依据负载而变化,但最大值限定在额定电流的5倍可以通过增加启动时间降低启动电流。当负载较轻或空载时因为电机势能的加快建立即使没有达到设定的上升时间也会完成启动过程。

Initial motor torque: When the frequency is a constant value, motor torque is proportional to the square of the applied voltage.

Setup range: 25% - 80%. When adjusting the parameter, the user has to consider current impact and mechanical impact. If the value is too big, it will lead to a very big initial current. And then current impact and mechanic impact will be too much more. Under voltage mode, current will change with the exact load. But if maximum value is limited on 5 times rated current, the user could increase start time to reduce its start current. When the load is light or empty, it will also complete start process even though it does not reach setup rising time because of motor potential energy which has accelerated the establishment.



## ▶ 限流起动 Limit Current Start



确定电机在起动期间允许的最高电流。

设定范围: 150-500% FLA (电机额定电流) 延伸范围请咨询厂家, 设定值较高时, 电机将会从主电路中取得较大的电流并快速加速。若设定值太低将会导致电机在加速结束后仍不能达到全速, 一般设定以恰好不失速为宜。为了使启动电流快速达到限定值, 启动时间不宜设定过长。

Setup range: 150-500%FLA( motor rated current). If asking for an extending range, please contact the manufacturer. If the setup value is too big, the motor will get bigger current from the main circuit to accelerate its speed. If the setup value is too small, it will cause that the motor still could not reach the full speed after completing its acceleration process. In order to help start current quickly reach limited value, it's better to setup start time short.

## ▶ 电机和系统保护功能 Motor and system protection functions:

JJR8000系列软起动器提供对软起动器和电机的多种保护。其主要功能有:

- ➡ 三相输入缺相保护, 只有主电路加三相输入电源和一定的负载时才能启动。
- ➡ 温度过高保护, 指起动器启动过于频繁, 使可控硅组件温度过高(达80度以上)。
- ➡ 启动时间过长保护, 启动时间过长对起动器和电机都是不利的, 故出厂时启动时间限制为30秒。根据具体负载这个时间可在10-500秒设定。
- ➡ 大电流保护, 属于定时限制, 当电流超过额定5-8倍(可设定)。在20ms-200ms(可设定)内切断输出。
- ➡ 反时限的过载保护, 4级曲线, 堵转保护。
- ➡ 轻载报警, 跳闸保护。频率出错保护。
- ➡ 可选限制启动保护, 只有当电机冷却到一定时才允许重新启动。

JJR8000 series soft starter provides many kinds of protections upon motor and soft starter. The main functions are as below:

- ➡ 1. Protection for three-phase input phase failure. It won't start unless there is load with power supply from main loop and three phases.
- ➡ 2. Protection for overheat. Monitor the temperature. Frequent starts will lead to too high SCR's temperature. (Over 80 )
- ➡ 3. Protection for overlong start time. It is not good for motor and soft starter if start time is too long. So the default limit for start time is 30s. And the user could set up this time between 10-300s in accordance with exact load.
- ➡ 4. Protection for big current belongs to timing limit. If the current is over 5-8 times (available for setup), it will cut off output within 20ms~200ms (available for setup).
- ➡ 5. Protection for inverse overload. There are 4 grade curves stall protection.
- ➡ 6. Light load alarm; trip protection, frequency mistake alarm.
- ➡ 7. Optional for choosing function of 'prohibiting start'. It will only permit restart when temperature of the motor reaches an expected value.

## ▶ 人机界面 Human-machine Interface

人机界面用于几个方面,如软起动器的编程输入和输出设定,保护功能、警告、总线通讯等等。这个界面还可以用于参数设定,本地控制和显示软起动器的状态信息。

The human-machine interface is used in several aspects, such as programmable input and output settings of soft starter, protection, warning, and bus communication. This interface also can be used in parameter setting, local control and display the status of soft starter.

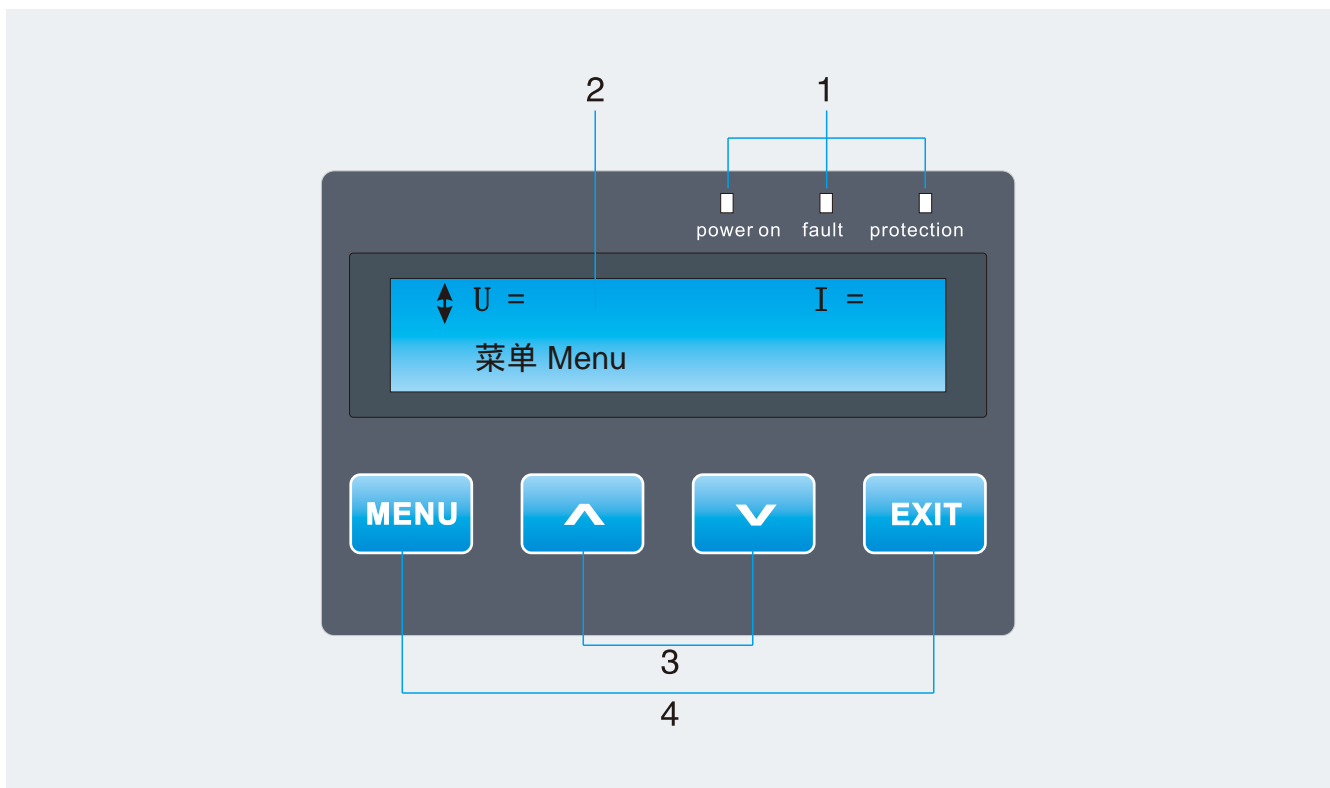
人机界面有以下几部分组成：

The human-machine interface is comprised of following aspects:

LED状态指示 LED status indication

LCD显示指示 LCD display indication

键盘操作 Keyboard operation



注解：

1. LED状态指示灯（电源、故障、保护）
2. LCD显示屏
3. 调节参数的增加或减小。
4. MENU 选择各个模式下的分项功能。  
EXIT 退出键  
(带有箭头的菜单/参数可以滚动/更改)

Notes:

1. LED status indication lamp ( Power, Faults, Protection)
2. LCD Display screen
3. Parameter adjustment, an increase or decrease.
4. MENU choose the function under each mode.  
EXIT Retreat button  
(The menu or parameters with an arrow can be scrolled and changed.)

► **产品外观及接线端说明** Product Outline and Wiring Terminals

M0外形接线说明 MO Outlines and Wiring Instructions

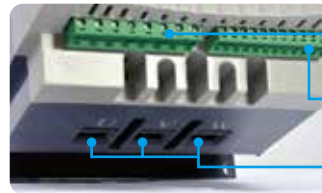


主回路电源接线口 (R、S、T)  
Wiring interface for main loop current (R, S, T)

旁路接触器接线端口 (L11、L12、L13)  
Bypass contactor interface (L11, L12, L13)



485通讯接口  
485 Communication interface

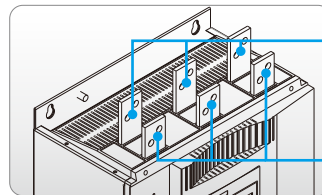


继电器控制端子J  
Relay control terminal J

电源控制端子  
Power control terminal

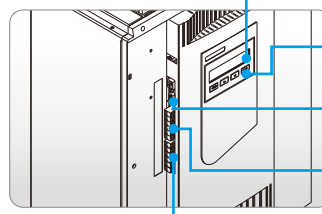
电机接线端子  
Motor wiring terminal

M1/M2/M3 外形接线说明 M1/M2/M3 Outlines and Wiring Instructions



旁路接触器接线端口 (L11、L12、L13)  
Bypass contactor interface (L11, L12, L13)

主回路电源接线端口 (R、S、T)  
Wiring terminals for main loop power (R, S, T)



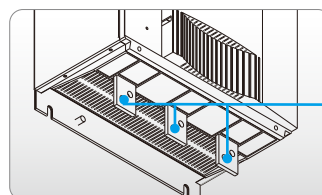
LCD显示屏  
LCD display screen

键盘区  
Keyboard area

485通讯接口  
485 Communication interface

继电器控制端子J  
Relay control terminal J

电源控制端子Us  
Power control terminal Us

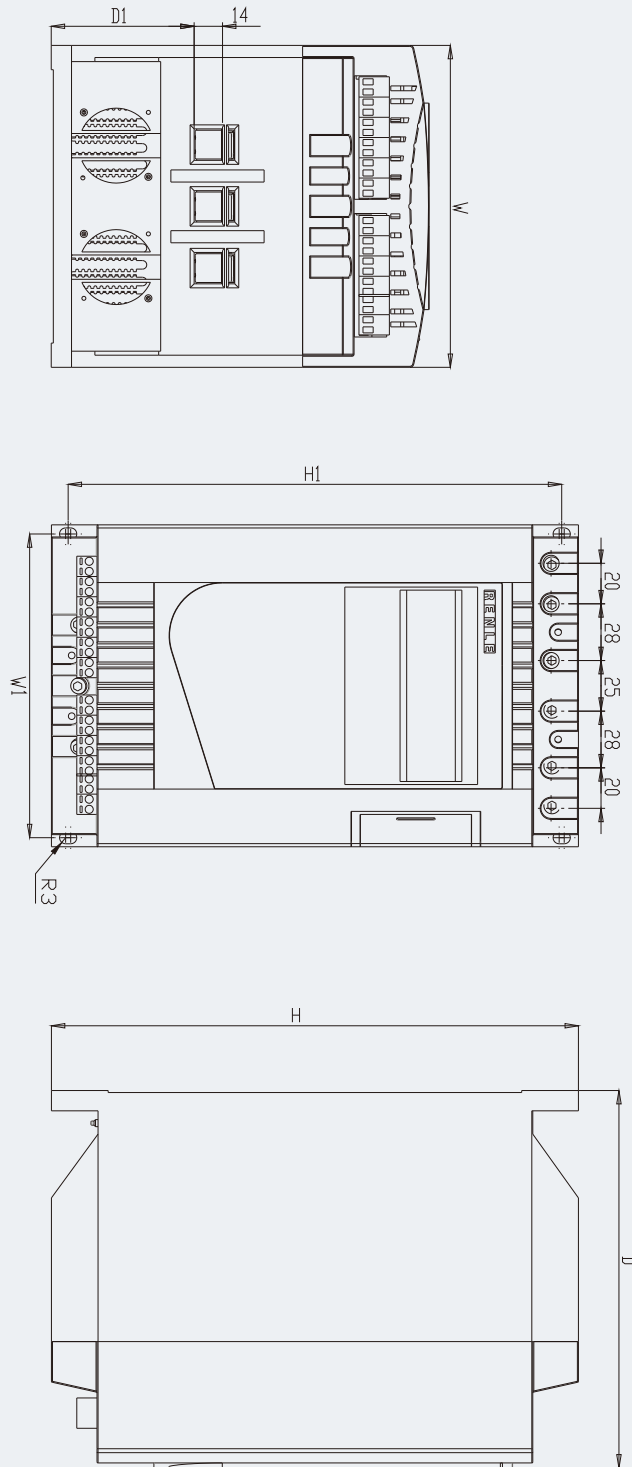


电机接线端口 (UVW)  
Motor wiring terminal (UVW)

▶ 外形尺寸 Outline & Dimension

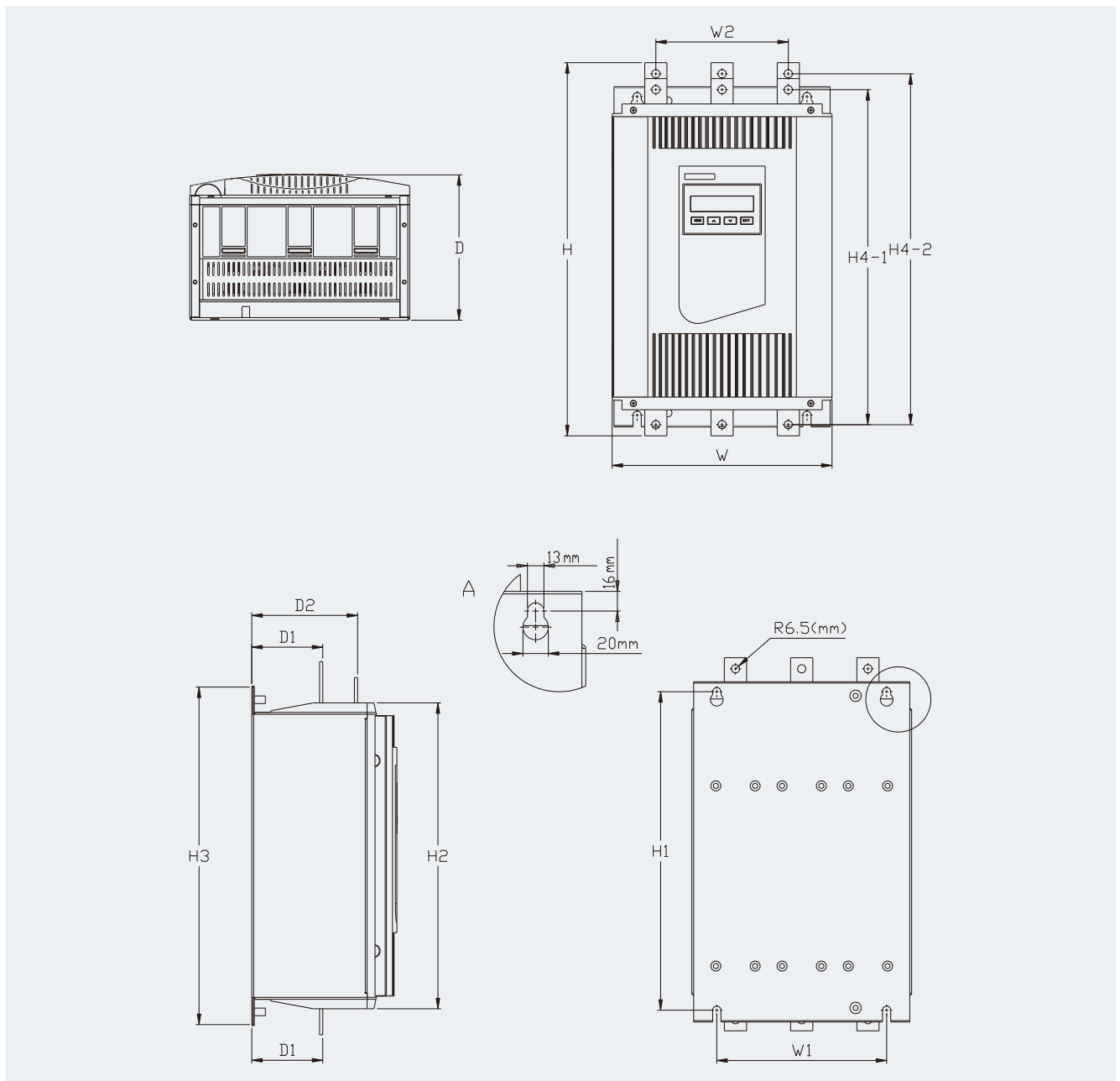
## JJR8000系列智能型电机软起动器M0型外观尺寸

JJR 8000 Series Intelligent Motor Soft Starter Outline & Dimension of M0



## JJR8000系列智能型电机软起动器M1、M2、M3型外观尺寸

JJR 8000 Series Intelligent Motor Soft Starter Outline & Dimension of M1, M2 and M3



型号 Type	外形尺寸 Outline Dimension					安装尺寸 Installation Dimension			铜排孔距 Hole distance of Copper Row			铜排规格 Specification of Copper Row
	W	H	D	D1	D2	W1	H1	R	W2	H4-1	H4-2	
M0型 M0 Type	159	260	186	70.5	/	150	243.5	3	/	/	/	/
M1型 M1 Type	347	588	229	112	167	268	502	6.5	209	528	553	35 × 5
M2型 M2 Type	377	317	249	133	189	298	522	6.5	229	552	557	40 × 6
M3型 M3 Type	438	748	274	160	218	359	612	6.5	269	663	668	50 × 8

**▶ 产品配置选型表** Sheet of Product Configuration and Mode Selection

( M0/M1/M2/M3为外形代号 )  
( M0, M1 and M2 are the code for outlines )

结合实际应用场所，请在相应的“ ”打“ ”。  
Please tick off in related places according to facts.

**JJR8000-M0系列电机软起动器** JJR 8000-M0 Series Motor Soft Starter

规格型号 Specifications & Type			额定电流 Rated Current	适用功率 Power
JJR8000-13	380V	M	13	5.5
	690V	P		10
JJR8000-17	380V	M	17	7.5
	690V	P		13
JJR8000-24	380V	M	24	11
	690V	P		18.5
JJR8000-32	380V	M	32	15
	690V	P		30
JJR8000-38	380V	M	38	18.5
	690V	P		37
JJR8000-45	380V	M	45	22
	690V	P		45
JJR8000-60	380V	M	60	30
	690V	P		55
JJR8000-72	380V	M	72	37
	690V	P		75
JJR8000-86	380V	M	86	45
	690V	P		90
JJR8000-105	380V	M	105	55
	690V	P		110

**JJR8000-M1系列电机软起动器** JJR 8000-M1 Series Motor Soft Starter

规格型号 Specifications & Type			额定电流 Rated Current	适用功率 Power
JJR8000-142	380V	M	142	75
	690V	P		130
	1140V			220
JJR8000-170	380V	M	170	90
	690V	P		160
	1140V			270
JJR8000-220	380V	M	220	150
	690V	P		200
	1140V			350
JJR8000-250	380V	M	250	132
	690V	P		250
	1140V			400
JJR8000-290	380V	M	290	160
	690V	P		315

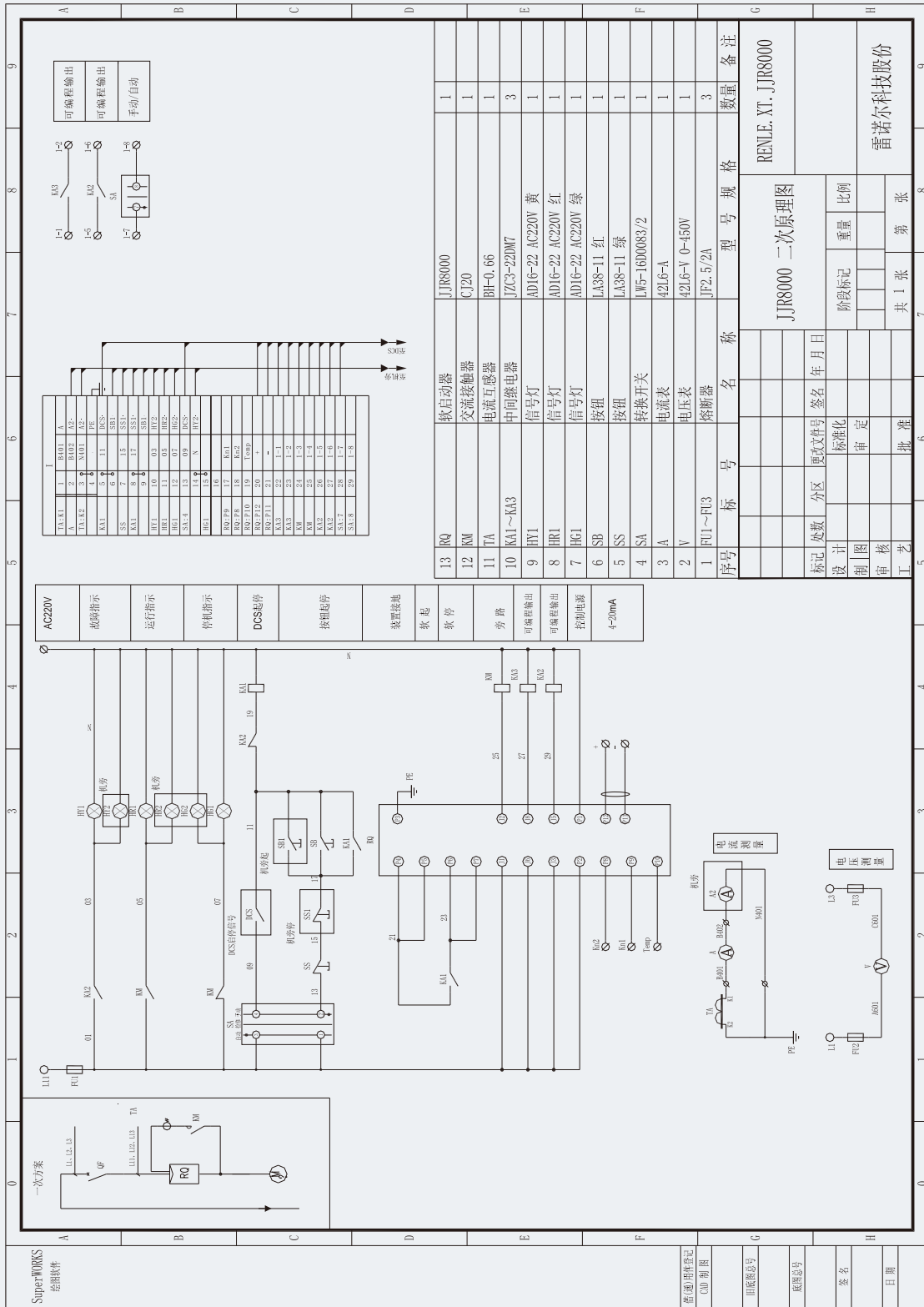
JJR8000-M2系列电机软起动器 JJR 8000-M2 Series Motor Soft Starter

规格型号 Specifications & Type			额定电流 Rated Current	适用功率 Power
JJR8000-290	1140V	M P	290	480
JJR8000-360	380V	M P	360	200
	690V			350
	1140V			600
JJR8000-450	380V	M	450	250
	690V	P		450
JJR8000-560	380V	M	560	320
	690V	P		600
JJR8000-700	380V	M	700	370
	690V	P		670

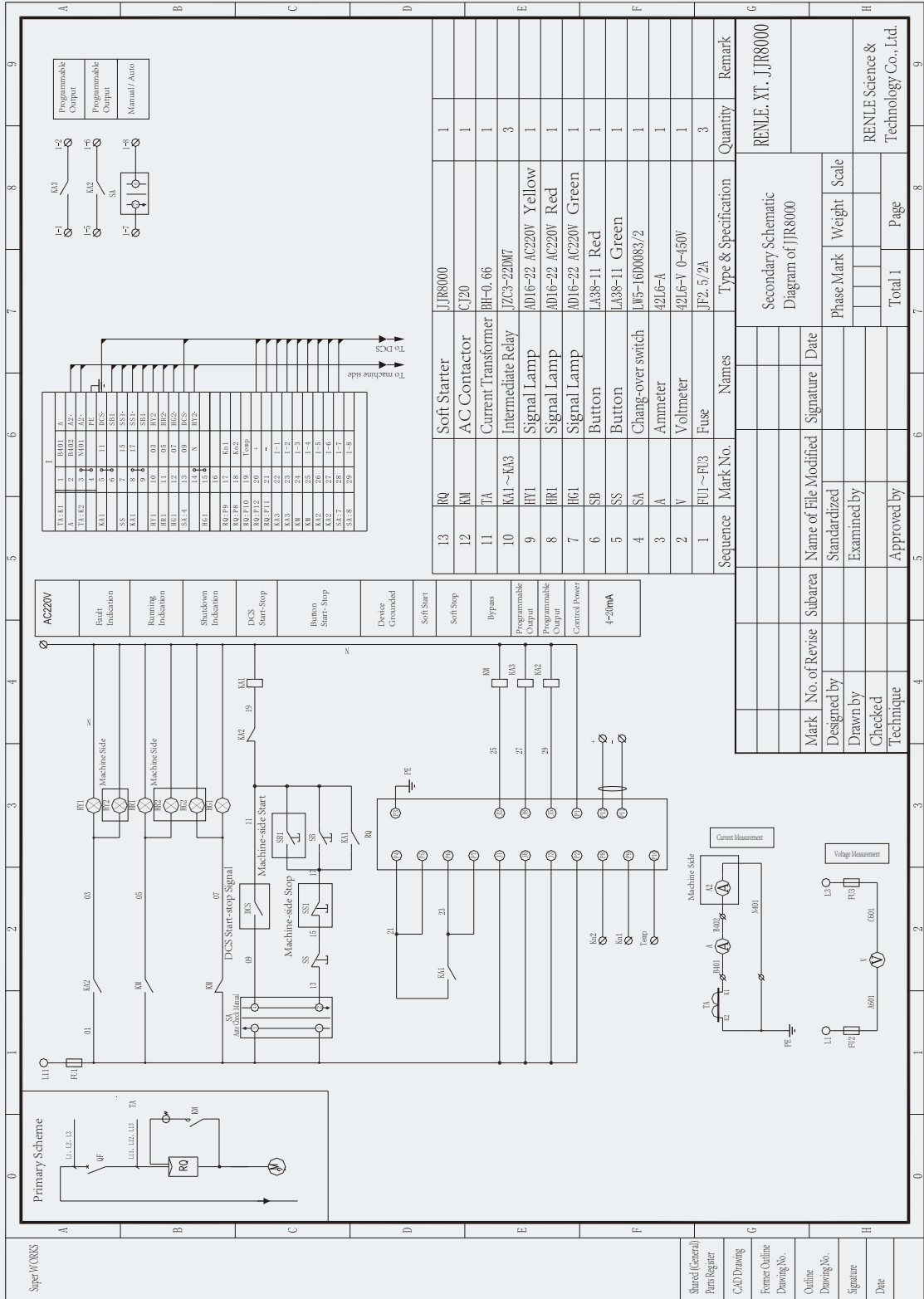
JJR8000-M3系列电机软起动器 JJR 8000-M3 Series Motor Soft Starter

规格型号 Specifications & Type			额定电流 Rated Current	适用功率 Power
JJR8000-450	1140V	M P	450	700
JJR8000-560	1140V	M P	560	900
JJR8000-700	1140V	M P	700	1100
JJR8000-800	380V	M P	800	400
	690V			700
	1140V			1250
JJR8000-900	1140V	M P	900	1450
JJR8000-1000	380V	M P	1000	500
	690V			870
	1140V			1450
JJR8000-1200	380V	M P	1200	600
	690V			1100
	1140V			1650
JJR8000-1400	380V	M	1400	700
	690V	P		1250
JJR8000-1500	380V	M	1500	800
	690V	P		1450
JJR8000-2000	380V	M	2000	1100
	690V	P		1950
JJR8000-2500	380V	M	2500	1350
	690V	P		2450

## ► JJR8000二次方案图 Secondary Wiring Drawing of JJR 8000





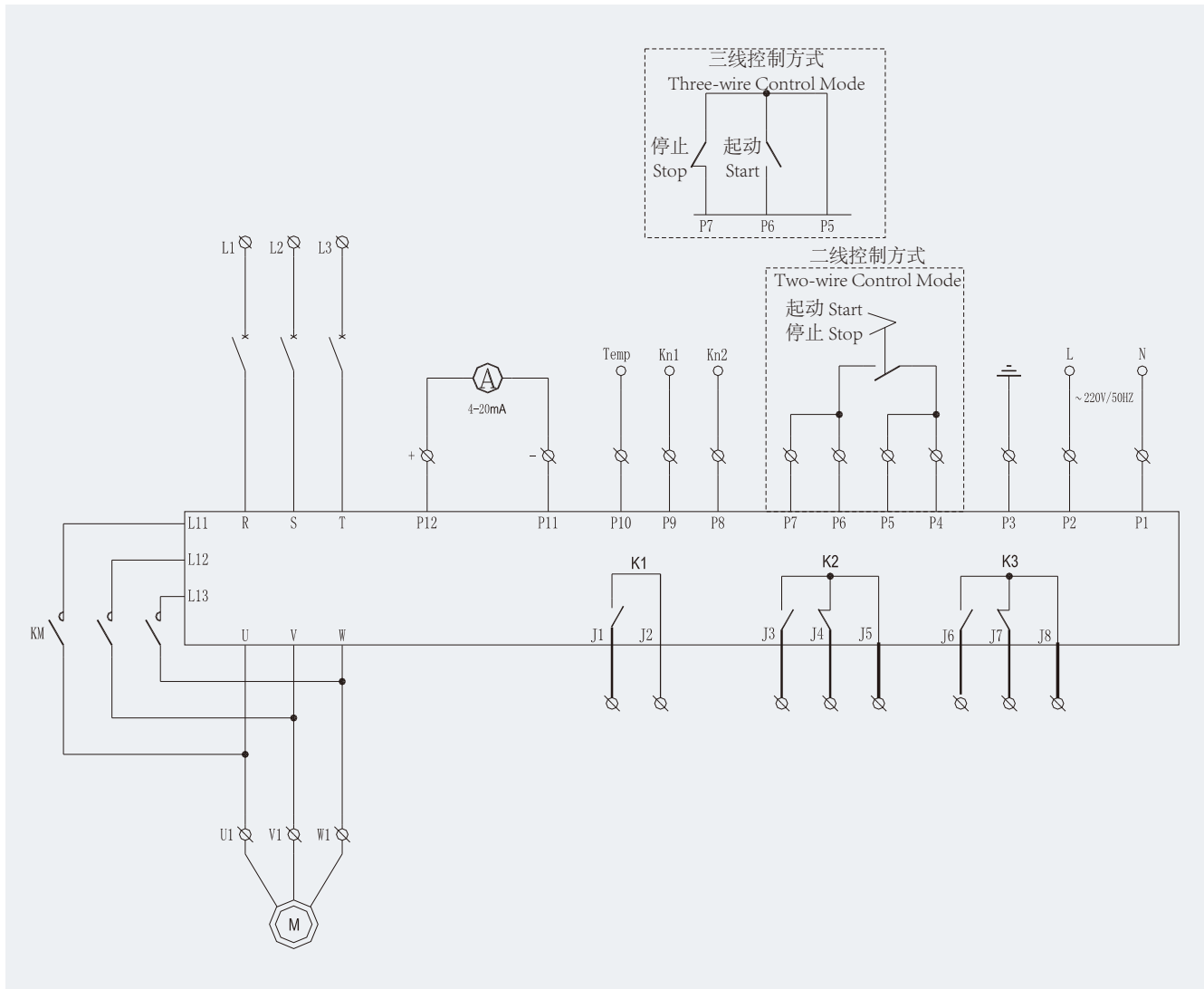


Share (General)									
Parts Register									
CAD Drawing									
Former Outline Drawing No.									
Outline Drawing No.									
Signature									
Date									

Mark	No. of Revise	Subarea	Name of File Modified	Signature	Date
Designed by					
Drawn by					
Checked					
Technique					

Standardized					
Examined by					
Approved by					
Total 1					
Phase Mark					
Weight					
Scale					
Page					
RENLE Science & Technology Co., Ltd.					

## ► JJR8000接线说明 Wiring Instruction of JJR 8000



### 说明:

1. 主回路连接：端子R-S-T连接电源  
端子U-V-W连接电机端。
2. 控制电源连接：接在控制回路端子P1，P2。
3. 接地：接在控制回路P3。
4. K1控制旁路接触器，K2、K3为可编程继电器输出，均是无源触点。
5. 起动和停止回路连接：按照电路图接在控制回路端子P4、P5、P6和P7。
6. P9和P8为可编程输入端子；P10为PTC输入。
7. P11，P12为4-20mA模拟信号输出。

### Instruction:

1. Main loop wiring: Terminal R-S-T connects the power supply; Terminal U-V-W connects the motor.
2. Control power supply wiring: it connects control power supply terminal P1 and P2.
3. Ground wiring: it connects power supply terminal P3.
4. K1 controls bypass contactor. K2 and K3 are programmable relay output, both are passive contacts.
5. Start-up and stop loops connect each other: they should be connected with the control loop terminals of P4, P5, P6 and P7 according to the circuit diagram.
6. P9 and P8 are programmable input terminals; and P10 is the PTC input.
7. P11 and P12 are 4-20mA analogue signal outputs.



# 雷诺尔

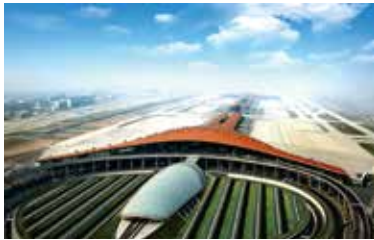
Shanghai RENLE  
Science&Technology Co., Ltd.



## ▶ 国家重点項目 National Key Projects



- 三峡工程
- Three Gorges Project
- 北京奥林匹克水上公园
- Beijing Olympic Rowing - Canoeing Park
- 北京奥运会配套项目
- Supporting Projects for the Beijing Olympic Games
- 北京五棵松体育馆
- Wukesong Indoor Stadium
- 国务院机关事务管理局
- Bureau of Government Offices Administration of the State Council
- 中国中央电视台
- CCTV(China Central Television)
- 首都国际机场
- Beijing Capital International Airport
- 二炮导弹基地
- China Second Artillery Corps Missile Base
- 中国空空导弹研究中心
- China Air - to - air Missile Research Centre
- 中国人民解放军空军雷达基地
- LA Air Force Radar Base
- ?南水北调 "
- South - to - North Water Diversion
- 黄衢南高速公路
- Zhejiang Huangqunan Expressway
- ?西电东送 "
- Electricity Transmission from West to East China
- ?西气东输 "
- West - East Natural Gas Transmission
- 上海磁悬浮轨道交通车站
- Shanghai Maglev Rail Transit Station
- 上海世博会配套项目
- Supporting Projects for Shanghai Expo
- 上海浦东机场
- Shanghai Pudong International Airport
- 上海国际汽车博物馆
- Shanghai Auto Museum
- 上海虹桥机场扩建工程
- Extension Project for Shanghai Hongqiao Airport
- 内蒙古呼和浩特白塔机场扩建工程航站楼
- Terminal Expanded for Hohhot Baita International Airport
- 沈阳奥体中心
- Shenyang Olympic Sports Center
- 北京南苑机场
- Beijing Nanyuan Airport
- 云南2409空军机场
- Yunnan 2409 Airforce Airport
- 青岛奥体中心
- Qingdao Olympic Sports Center
- 济南奥体中心
- Jinan Olympic Sports Center
- 双流国际机场扩建工程
- Extension Projects for Chengdu Shuangliu International Airport
- 重庆袁家岗奥林匹克体育中心
- Chongqing Olympic Sports Center
- 新白云国际机场
- New Baiyun International Airport
- 武汉天河机场
- Wuhan Tianhe Airport
- 上海地铁明珠三号线
- Shanghai Metro Line 3
- 重庆国际会议中心
- Chongqing International Conference Centre
- 山西万家寨引黄工程
- Shanxi Wanjiashai Yellow River Diversion Project
- 青海小游山生态工程
- Qinghai Xiaoyou Mountain Ecological Project



天津“八大片”供热工程  
 Tianjin Badapian Heating Project  
 山东菏泽市引黄供水工程  
 Shandong Heze Yellow River Diversion & Water Supply Project  
 上海国际航运中心洋山深水港工程  
 Shanghai International Shipping Center Yangshan Deepwater Port  
 四川西昌卫星发射中心  
 Xichang Satellite Launch Center  
 广西龙滩水电工程  
 Guangxi Longtan Hydropower Project  
 甘肃卫星发射中心  
 Gansu Satellite Launch Center  
 云南红河南沙水电站  
 Yunnan Honghe Nansha Hydropower Station  
 大唐国际发电股份有限公司  
 Datang International Power Generation Co., Ltd.  
 贵州开磷化工  
 Guizhou Kailin Group Co., Ltd.  
 内蒙古神华集团有限责任公司  
 Inner Mongolia Shenhua Group  
 金山石化  
 Jinshan Petrochemical Company  
 上海宝钢集团  
 Shanghai Baosteel Group  
 泰州石化  
 Taizhou Petrochemical Company  
 鞍山钢铁集团  
 Anshan Iron and Steel Group  
 吉林石化  
 Jilin Petrochemical Company  
 武汉钢铁公司  
 Wuhan Iron and Steel Group  
 广西柳州  
 Guangxi Liuzhou Chemical Industry  
 中国首钢集团  
 Capital Iron and Steel Company  
 广州石化  
 Guangzhou Petrochemical Company  
 中国长城铝业公司  
 China Great Wall Aluminum Corporation  
 洛阳石化  
 Luoyang Petrochemical Company  
 广西平果铝业  
 Guangxi Pingguo Aluminum Company  
 岳阳石化  
 Yueyang Petrochemical Company  
 广西柳钢  
 Guangxi Liuzhou Iron and Steel Group  
 南京石化  
 Nanjing Petrochemical Company  
 马鞍山钢铁  
 Maanshan Iron and Steel  
 北京燕山石化  
 Beijing Yanshan Petrochemical Company  
 山西中阳钢厂  
 Shanxi Zhongyang Steel  
 乌鲁木齐石化  
 Urumqi Petrochemical Company  
 大庆油田  
 Daqing Oilfield  
 锦西石化  
 Jinxi Petrochemical Company  
 胜利油田  
 Shengli Oilfield  
 独山子石化  
 Dushanzi Petrochemical Company  
 辽河油田  
 Liaohe Oilfield  
 北京金融街  
 Beijing Financial Street  
 塔里木油田  
 Talimu Oilfield  
 成都大熊猫生态园大熊猫博物馆  
 Panda Museum in the Chengdu Ecological Park of Giant Panda  
 克拉玛依油田  
 Karamay Oilfield  
 青岛北海船厂  
 Qingdao Beihai Shipyard  
 陕西长庆石油  
 Shaanxi Changqing Oilfield