

CR1300 Series

Intelligent Induction Heating Power Supply

Plastic machinery, chemical fiber equipment, food and medicine machinery, etc.



Canroon

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Enterprise introduction

Canroon is a remarkable energy saving solutions provider, whose products and solutions are widely used in shipbuilding, aviation, automotive, metallurgy, chemical engineering, petroleum pipeline construction, new materials, new energy and other fields.

Canroon has a professional R & D team, committed to convert its wisdom into leading products and services to meet the needs of different customers, continuing to create values for customers.

Canroon has been striving to promote the sustainable and healthy development of China's energy conservation and emissions reduction career, with comprehensive advantages in the field of power electronics. We aim to become the industry leader and our duty is to improve the earth's natural environment, satisfy the social sustainable development for the principle, targeted for the user to create reliable, stable green energy production.. "We create; we share", we will join partners to innovation as a means to jointly provide users with more reliable products and better solutions, more harmony between mankind and nature.



Certificates



Patent Certificate



Patent Certificate

Become a world-class provider of power electronic products and system solutions!

◆ Product introduction and Application

CR1300 series intelligent induction heating power supply is a series of products designed based on the combination of modern industrial design thought and future industrial intelligent idea. The product adopts efficient air-cooled structure design, IGBT full-bridge inverter topology, phase shift PWM control technology, automatic current frequency tracking, the output power is 0~100% poleless adjustable.

CR1300 series is mainly used in all kinds of plastic machinery (such as: injection molding machine, extruder, pelletizer, film blowing machine, wire drawing machine energy-saving transformation), chemical fiber equipment, food and medicine machinery, steam and hot air preparation and other industries.



◆ Main functions

1.Start mode is optional

Remote boot (external terminal boot and 24V pulse boot), keyboard boot.

2.Perfect protection function

Overheat, overvoltage, undervoltage, lack of phase, overcurrent (including hardware overcurrent protection, software overcurrent protection, VCE protection) and other protection, and temperature sensor fault detection function

3.Load inductance detection function

Can measure the size of the load inductance, when the inductance is too large or too small, alarm and start the corresponding protection function.

4.Various heating modes

Maximum power heating, curve heating, twenty section heating, analog amount (0 ~ 10V /4 ~ 20mA) control heating and other heating modes

5.Run limited function

The limited run time can be set as required.

6.Parameter storage function

Instant storage of error information; Power consumption, accumulated running time and so on are stored every 2 hours.

7.External error signal input and local error signal output.

◆ Application environment

Working temperature	-20°C ~ +40°C
Relative humidity	Less than 90%RH, no condensation
Altitude	Less than 1000m (when higher than 1000m, the power shall be reduced by 15% for each 1000m rise)
Storage temperature	-30°C ~ +60°C
Others	<ul style="list-style-type: none"> ◆ Please install in the place where it is impossible to be subjected to intense vibration and impact; ◆ Please install it away from electromagnetic radiation sources. ◆ Please install in the place without dust pollution and explosion risk; ◆ Do not install in direct sunlight, oil mist, steam, salt environment.

◆ Features

Overload protection	120% per minute 150% instant protection
startup time	< 0.2S
Electro-thermal conversion	> 95%
Effective power	> 85%
The service life	> 50000Hrs
Protection detection	< 10μS
Others	This product should not be used to endanger personal safety or other occasions with special safety requirements

◆ Specification

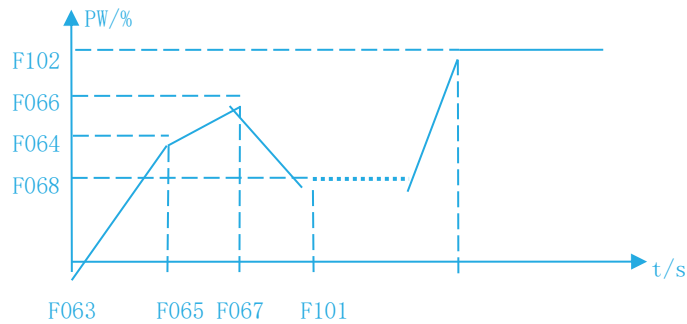
Model	Input			Output		Load inductance range(uH)
	Voltage range and frequency	Power	Current	Minimum line diameter(mm ²)	Frequency	
CR1300-005A-24TF	3 pahse 400V (±20%) 50HZ/60Hz	5KW	8A	6	8 ~ 35KHz	60-200
CR1300-008A-24TF		8KW	12A	10		
CR1300-010A-24TF		10KW	15A	10		
CR1300-015A-14TF		15KW	23A	10	8 ~ 25KHz	80-135
CR1300-020A-14TF		20KW	30A	16		
CR1300-025A-14TF		25KW	38A	16		
CR1300-030A-14TF		30KW	46A	16		
CR1300-035A-14TF		35KW	53A	25		
CR1300-040A-14TF		40KW	61A	25		
CR1300-050A-14TF		50KW	76A	35	8 ~ 16KHz	60-135
CR1300-060A-14TF		60KW	91A	35		
CR1300-080A-14TF		80KW	121A	50		
CR1300-100A-14TF		100KW	152A	75		
CR1300-120A-14TF		120KW	182A	95		
CR1300-160A-14TF		160KW	243A	120		

◆ Five heating modes

Twenty stages heating mode:

Set the heating mode (F008) to 0, that is, set the 20-stage heating mode. The heating power and heating time length (F063 ~ F102) of each section of the 20 sections can be set to run in accordance with the predetermined heating curve mode. In the process of operation, the section with zero power can be skipped, and the power rise and fall rate can be set to improve the operating efficiency.

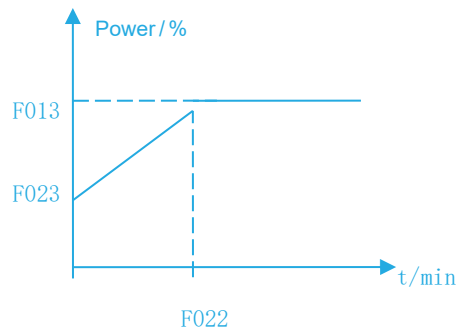
The 20-stage heating mode can set the heating time and power of the curve in each stage. The running time of the power in the N-stage is the heating time of the N-stage. After the end of the 20 stages, the heating power of the last stage is used for heating. The 20-section curve heating model is shown in the figure below:



Curve heating mode:

Set the heating mode (F008) as 1, that is, set the curve heating mode. The initial power (F023) and heating time (F022) of the curve can be set to make it heat according to the predetermined curve.

Curve heating mode can set the curve heating time and starting power. Curve heating time is the time from starting power to the maximum power. The power increases with the slope as a multiple of the maximum power/starting power. When the maximum power is reached, the heat is heated at the maximum power. The curve heating model is shown in the figure below:



Maximum power heating mode:

Set the heating mode (F008) as 2, that is, the maximum power heating mode is set. At this time, the maximum power is used for heating. The maximum power output value can be set by adjusting (F013).

0 ~ 10V control mode:

Set the heating mode (F008) as 3, that is, set the control mode of 0 ~ 10V. At this time, the output power can be adjusted by the input voltage value of the analog quantity.

4 ~ 20mA control mode:

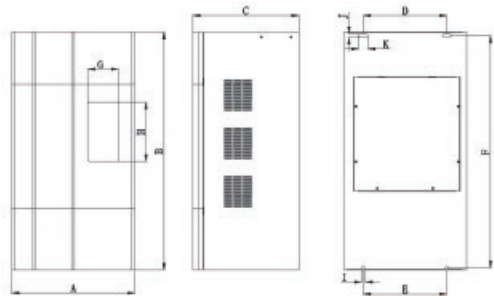
Set the heating mode (F008) as 4, that is, set the mode of 4 ~ 20mA. At this time, the output power can be adjusted through the analog input voltage value.

◆ Equipment protection and Alarm Functions

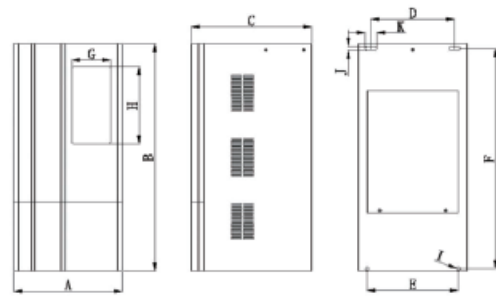
Low voltage alarm
 High voltage alarm
 Current limitation alarm
 Power derating operation alarm
 Non-load or inspect no load alarm
 VCE circuit protection
 Coils overheat protection
 Output current abnormal protection
 Radiator overheat protection
 Running limitation protection

Busbar current overcurrent hardware protection
 Output current over current hardware protection
 Default phase protection
 Input undervoltage protection
 Coil load mismatch protection
 Input overcurrent software protection
 Running set time up protection
 Overload over one minute protection
 Phase-locked anomaly detection protection
 Temperature sensor abnormal protection

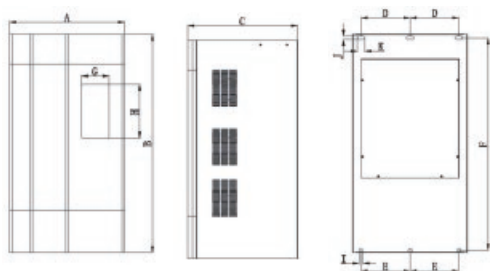
◆ Product Dimensions



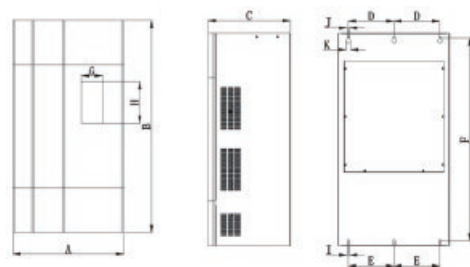
Picture 1



Picture 2



Picture 3



Picture 4

Product Model	W (mm)	H (mm)	D (mm)	W1 (mm)	W2 (mm)	H1 (mm)	D1 (mm)	H2 (mm)	S (mm)	S1 (mm)	S2 (mm)	Picture
CR1300-005A-24TF	175	353	224.5	102	102	340.5	76.9	150.4	φ7	8	23	1
CR1300-008A-24TF												
CR1300-010A-24TF												
CR1300-015A-14TF	215	445	238.5	165	180	432	76.9	150.4	φ7.5	8	23	2
CR1300-020A-14TF												
CR1300-025A-14TF												
CR1300-030A-14TF	255	499	249	178	180	484	76.9	150.4	φ8	8	23	3
CR1300-035A-14TF												
CR1300-040A-14TF												
CR1300-050A-14TF	310	601	265.7	210	210	587	76.9	150.4	φ9	8.5	23	3
CR1300-060A-14TF												
CR1300-060A-14TF												
CR1300-080A-14TF	401	764	311	165	165	731	76.9	150.4	φ9	9	16.5	4
CR1300-100A-14TF												
CR1300-120A-14TF												
CR1300-160A-14TF	560	1000	342	210	210	967	76.9	150.4	φ9	9	16.5	4

◆ Application Cases



Vacuum furnace



Tea degreasing machine



Calcination furnace



Pelleting machine



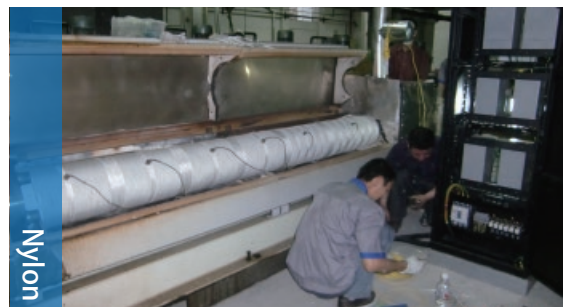
Polypropylene



wire drawing machine



Air cushion film



Nylon



◆ Application Cases



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• Induction Heating • Industrial Automation • New Energy

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