WENZHOU ZIRI ELECTRICAL TECHNOLOGY CO.,LTD.

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CHZIRI®
ZIRI ELECTRICAL

Products Catalog

Inverter / Soft Starter / Control Panel
Intelligent Water Supply Controller
Inverter Optional Parts

ZIRI ELECTRICAL TECHNOLOGY CO.,LTD.

Company Introduction

About US

Http://www.chziri.com

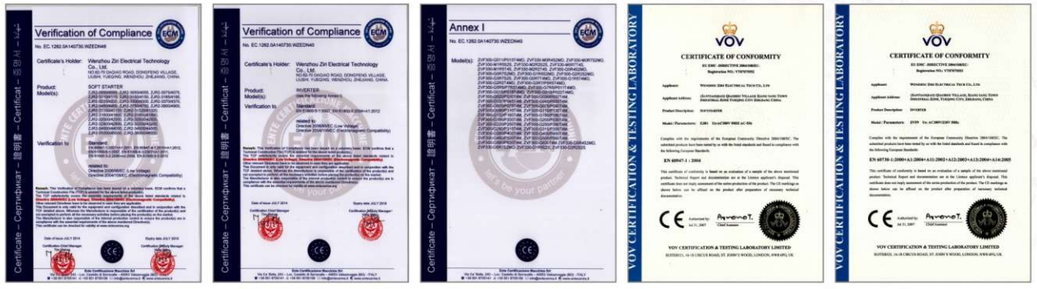
ZIRI Electrical Technology Co.Ltd. is engaged in R&D, manufacture ,sale .distribution and service of electric frequency drive , soft starter and control products .Professional and experience supplier of automation solution for multiple field . It is a Hi-Tech enterprise conveniently located the golden area of Liushi, Wenzhou , which is the capital city of electrical appliance in China .

The main products includes general –purpose inverters , special –purpose inverters for pump and fan , soft starter , control cabinet, breaking unit and other inverter accessories which has characteristic of advanced technology , complete function , stable running , simple operation , fine energy saving and excellent performance and so on . The products are widely applied to the various industries ,metallurgy , plastic,textile,food,papermaking.drugsmanufacture,printing,construction material,cement,oil, chemical industry mining . transmission device ect.

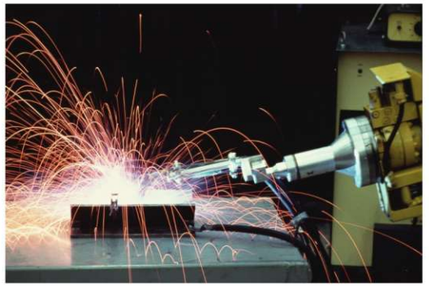
At present, ZIRI Electrical has become the top professional manufacturer that devotes to researching, developing, producing and marketing frequency inverter and soft starters in China. Thanks to the good quality, we respectively obtained ISO9001, CE ,CCC and other certificates .ZIRI Electrical set up branch offices in more than 30 cities and established a perfect, professional and efficient sale-and-service system. At the same time , ZIRI Electrical also working up international sales net. Our products have been exported in large quantity to Europe, South America, Southeast Asia, Middle East, Africa and so on. Which earn good reputation and high praise in the market .

We adhere to the remarkable tradition of technical innovation , continue to introduce new generation products to meet market demands . make great strides forward gradually to high-end application domain , and strive to shoulder heavy responsibilities to create a full of hope for the future .

CHZIRI Certificate



CHZIRI Clients



Catalog

NOTE: Products listed in the catalog are our standard products . Whose parameters are for reference only. If you have any questions .Please contact with us directly . Parameters information subject to change will not notice again .

CHZIRI®
ZIRI ELECTRICAL TECHNOLOGY CO.,LTD.

Excellent Quality Top Manufacturer

Frequency Inverter

High Performance Vector Control Frequency Inverter

ZVF300 Series frequency inverter has the good effect energy conservation, fine speed adjustment performance , stable operation , stable operation , electrical machinery soft start, protect function and self diagnostics fault and other advantages.

ZVF300 Frequency Inverter

Main Features

ZVF300 Series frequency inverter are high performance open loop vector inverters for controlling asynchronous AC induction motors and permanent synchronous motors.

1.Output frequency :0-600Hz.

2.Multiple password protection mode.

3.Remote control operation keypad, convenient for remote control.

4.V/F curve &multi-inflection point setting, flexible configuration .

5.Keyboard parameter copy function . easy to set the parameters for multi-inverters .

6.Wide industry application . to expand special function according to different industries.

7.Multiple hardware and software protection and optimized hardware for anti-interference technology.

8. Multi-step speed and wobble frequency running (external terminal 15 steps speed control).

9.Unique adaptive control technology . Auto current limiting and voltage limiting and under-voltage restrain .

10.Optimized external installation and internal structure and independent air flue design , fully enclosed electrical space design .

11.Output automatic voltage regulation function (AVR),automatically adjust the output pulse width . to eliminate the influence of the grid change on load .

12.Built-in PID regulation function to facilitate the realization of closed loop control of the temperature,pressure and flow . and reduce the cost of the control system .

13.Standard MODBUS communication protocol . easy to achieve the communication between PLC,IPC and other industrial equipments.

Application Range

1.Handing machinery, conveyor.

2.Wire drawing machines, industrial washing machines .sports machines.

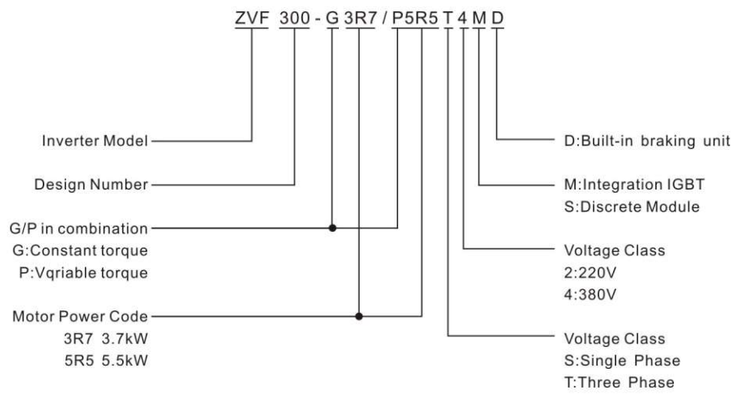
3.Fluid machinery: Fan, water pump ,blower. music fountain .

4.Public mechanical equipment: high precision CNC machine tools.CNC machine.

5.Metal processing, wire drawing machine and other mechanical equipment .

6.Paper-making equipment, chemical industry ,pharmaceutical industry, textile industry ,ect.

Demonstration Of The Model



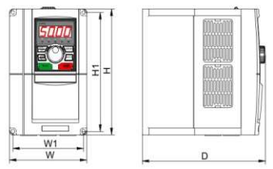


Fig.1

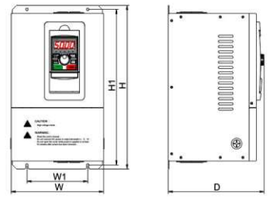


Fig.2

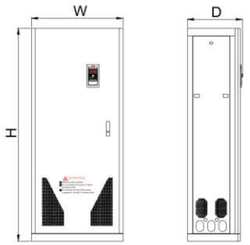


Fig.3

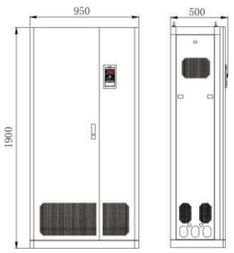


Fig.4

ZVF300 Series High Performance Frequency Inverter

Input Voltage (V)	Output Voltage(V)	Power Range (kW)
Single phase 220V± 20%	Three phase 0~Input Voltage	0.4kW~3.7kW
Three phase 380V ± 20%	Three phase 0~Input Voltage	0.75kW~630kW

G type Overload capacity :150% 1 minute; 180% 1 second;200% transient protection.
P type Overload capacity :120% 1 minute; 150% 1 second;180% transient protection.

Inverter Outline& Mounting Dimension (Unit:mm)

Inverter Model	Power (kW) G/P	Current (A)	Dimension (mm)						Figure
			H	H1	W	W1	D	d	
ZVF300-G0R4S2MD	0.4	2.4	185	175	118	108	170	Φ4	Fig.1
ZVF300-G0R7S2MD	0.75	7.5							
ZVF300-G1R5S2MD	1.5	7.0	185	175	118	108	190	Φ4	
ZVF300-G2R2S2MD	2.2	10							
ZVF300-G3R7S2SD	3.7	16	215	205	145	135	193	Φ4	
ZVF300-G0R7T4MD	0.75	2.5	185	175	118	108	170	Φ4	Fig.1
ZVF300-G1R5T4MD	1.5	3.7							
ZVF300-G2R2T4MD	2.2	5.0							
ZVF300-G3R7/P5R5T4MD	3.7/5.5	9.0/13	215	205	145	135	193	Φ4	
ZVF300-G5R5/P7R5T4MD	5.5/7.5	13/17							
ZVF300-G7R5/P011T4MD	7.5/11	17/25	265	253	185	174	215	Φ5.5	
ZVF300-G011/P015T4MD	11/15	25/33							
ZVF300-G015/P018T4MD	15/18.5	33/37	380	360	220	140	230	Φ6	Fig.2
ZVF300-G018/P022T4MD	18.5/22	37/45							
ZVF300-G022/P030T4M	22/30	45/60	460	443	260	177	268	Φ6	
ZVF300-G030/P037T4M	30/37	60/75							
ZVF300-G037/P045T4M	37/45	75/90	620	603	265	182	300	Φ8	
ZVF300-G045/P055T4M	45/55	90/110							
ZVF300-G055/P075T4M	55/75	110/150							
ZVF300-G075/P090T4M	75/90	150/176	720	702	365	240	360	Φ9	
ZVF300-G090/P110T4M	90/110	176/210							
ZVF300-G110/P132T4M	110/132	210/253							
ZVF300-G132/P160T4M	132/160	253/300	1190		493		390		Fig.3
ZVF300-G160/P185T4M	160/185	300/340							
ZVF300-G185/P200T4M	185/200	340/380							
ZVF300-G200/P220T4M	200/220	380/420	1600		660		415		
ZVF300-G220/P250T4M	220/250	420/470							
ZVF300-G250/P280T4M	250/280	470/520							
ZVF300-G280/P315T4M	280/315	520/600							
ZVF300-G315/P350T4M	315/350	600/640	1750		750		470		
ZVF300-G350/P400T4M	350/400	640/690							
ZVF300-G400/P450T4M	400/450	690/790							
ZVF300-G450/P500T4M	450/500	790/860	1900		950		520		Fig.4
ZVF300-G500/P560T4M	500/560	860/950							
ZVF300-G560/P630T4M	560/630	950/1100							
ZVF300-G630T4M	630	1100							

ZVF300 T2 Series frequency Drive

Input Voltage (V)	Output Voltage(V)	Power Range (kW)
Three phase 220V± 20%	Three phase 0~input voltage	0.4kW~110kW
Overload Capacity : 150% 1 minute ;180% 1 second ;200% transient protection .		

Application Range

ZVF300 T2 Series frequency drive is suitable for all kind of mechanical devices such as metallurgy, plastic ,textile .food . chemical industry,paper making , drug manufacture .printing . construction materials and hoisting for driving and speeding control of AC asynchronous motor .

Inverter Outline& Mounting Dimension (Unit:mm)

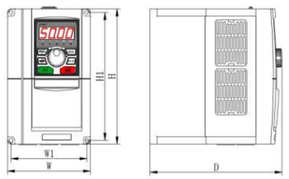


Fig.1

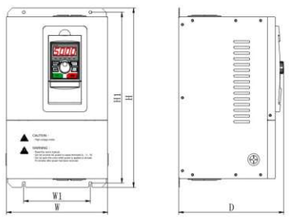


Fig.2

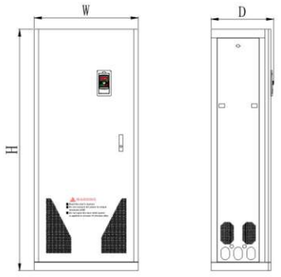


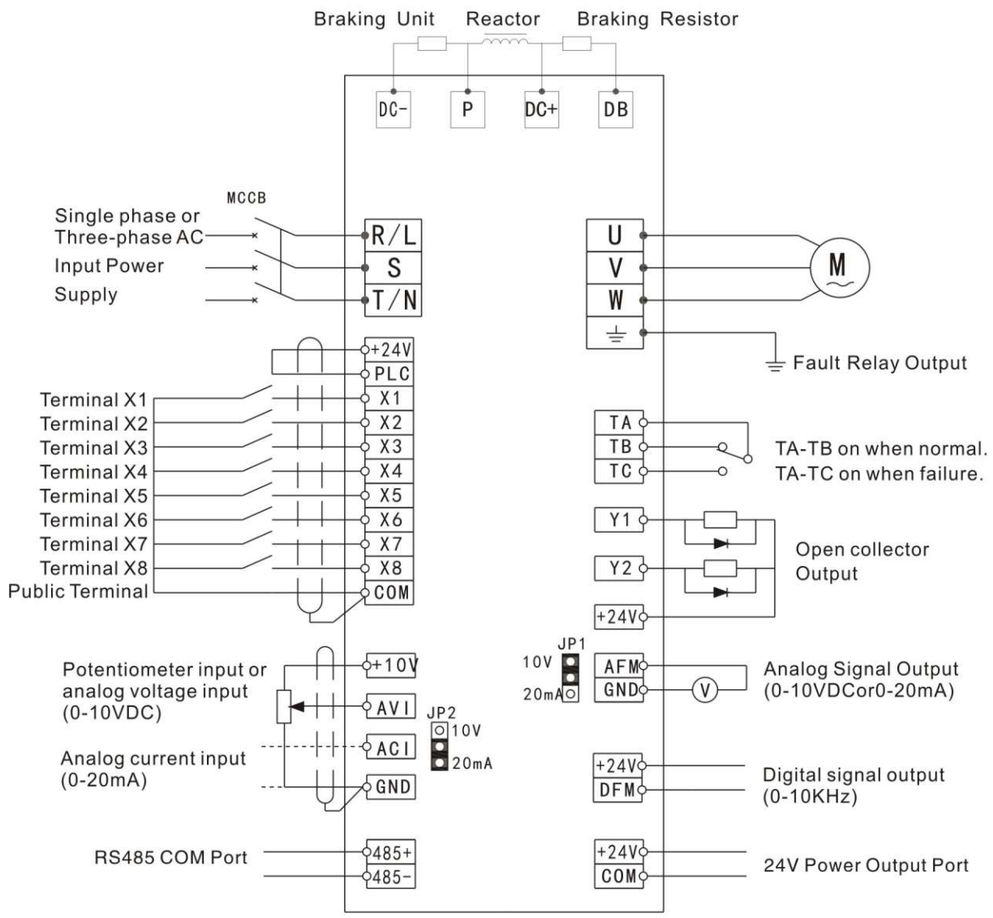
Fig.3

Inverter Model	Power (kW) G/P	Current (A)	Dimension (mm) H	H1	W	W1	D	d	Figure
ZVF300-G0R4T2MD	0.4	2.4	185	175	118	108	170	Φ4	Fig.1
ZVF300-G0R7T2MD	0.75	5.0							
ZVF300-G1R5T2MD	1.5	7.5	185	175	118	108	190	Φ4	
ZVF300-G2R2T2MD	2.2	10							
ZVF300-G3R7T2MD	3.7	16	215	205	145	135	193	Φ4	
ZVF300-G5R5T2MD	5.5	25	265	253	185	174	215	Φ5.5	
ZVF300-G7R5T2MD	7.5	33	380	360	220	140	230	Φ6	Fig.2
ZVF300-G011T2M	11	42	460	443	260	177	268	Φ6	
ZVF300-G015T2M	15	55							
ZVF300-G018T2M	18.5	70	620	603	265	182	300	Φ8	
ZVF300-G022T2M	22	80							
ZVF300-G030T2M	30	110							
ZVF300-G037T2M	37	130	720	702	365	240	360	Φ9	
ZVF300-G045T2M	45	160							
ZVF300-G055T2M	55	200							
ZVF300-G075T2M	75	270	1190		493		390	Φ12	Fig.3
ZVF300-G090T2M	90	320							
ZVF300-G110T2M	110	380	1600		660		415		

Specification and Technical Indications

Item		Item Description
Input	Rated voltage& Frequency	Single /Three phase 220VAC . Three phase 380V.50Hz/60Hz
	Allowable Voltage range	Voltage fluctuate range：-20%~+20% Voltage unbalance rate：<3%;Frequency fluctuation：≤5%
Output	Rated voltage	Three phase 0~ input AC voltage
	Frequency	0.00~600.00Hz
	Overload capacity	Type G：150% 1minute，180% 1 second，200% transient protection Type P：120% 1minute，150% 1 second，180% transient protection
Control Function	Modulation mode	Optimal space voltage vector PWM modulation
	Control mode	Sensorless vector control (SVC), V/F control . Torque control
	Frequency accuracy	Digital setting：Max. Frequency×±0.01% Analog setting：Max. Frequency×±0.2%
	Frequency resolution	Digital setting :0.01HZ; Analog setting :Max. Frequency ×0.1%.
	Starting frequency	0.00~10.00Hz
	Torque lift	Automatic torque lift: To lift the torque automatically according to the output current. Manual torque lift, Range: 0.1—30.0%
	Slip compensation	Setting range：0～150%，The inverter output frequency can be auto-regulated within this range according to the motor load, so as to reduce the speed variation of the motor due to load fluctuation.
	Acceleration/deceleration time	Minutes/Seconds can be selected as time unit .0.1~3600S can be set in sequence .
	Carrier frequency	1.0~15.0KHz
	Jog function	Jog frequency range：0.01~600.00Hz, Jog acceleration /deceleration time 0.1~3600.0S can be set.
	V/F curve	1：linear curve；2：quadratic；3：user defined V/F curve
	Automatic energy-saving operationAutomatic energy -saving operation	Auto optimize V/F curve according to the load changes to realize the energy saving operation .
	Auto voltage regulation (AVR)	When the network voltage changes, it can regulate PWM output automatically to maintain constant voltage.
	Built-in PID	This can form a convenient closed-loop control system (CLCS)and is applicable to pressure control, flow control and other process control .
Operation Function	Operating command	Operation panel control ,external terminal control and COM control
	Frequency setting	Keypad potentiometer setting , operation panel▲▼setting, external terminal UP/DOWN setting, analog voltage signal or external potentiometer setting , analog current signal setting .terminal combination setting ,485 COM setting and so on
	Input Signal	Forward/Reverse signal、multi-speed signal 、 fault signal 、reset signal etc.
	Output signal	Programmable relay、 open collector output 、 Fault signal output.
	Multi-function analog and digital output terminal	This can realize the output of frequency current and other physical quantity by output 0-10V or 0-20mA DC signal and 0-10KHz digital signal output.
Braking function	Dynamic braking	With an external braking resistor, the maximum braking torque may reach 100%.
	DC Braking	This can be selected when the motor starts or stops with the action frequency of 0-20Hz,action current level of 0-100% and actuation time of 0-30sec., which can be set in sequence.
Other Function		Skip frequency、Jog function、 Counter 、Rotation speed tracking、 Momentary power loss restart 、Frequency upper/lower limiting、 Acceleration/ Deceleration mode can be adjusted 、Frequency meter and Voltmeter output 、Multi-speed/ program running 、Two wire mode/ three wire mode control 、Wobble frequency control、Multi-function input terminal selection 、 Fault auto reset、RS485 serial communication .
	Protection Function	Input phase loss protection、 Over current protection 、Overload protection、 Over voltage protection 、Under voltage protection、 Over heat protection etc.
	LED display	Can display the real time running status of the inverter , monitor parameter .function parameter and fault code and other information of the inverter.
	Matching parts	Braking assembly, remote keypads and wire connection , communication panel .
Ambient	Place to be used	Indoor location free from direct exposure to sun light, high humidity or dew condensation, high levels of dust, corrosive gas, explosive gas, inflammable gas, oil mist, salt and etc
	Altitude	Below 1000 M
	Ambient Temperature	-10℃ to +45℃ (Bare Machine: -10℃ to+50℃)
	Humidity	20%-90% RH without dew condensation
	Vibration	<0.5G
	Storage temperature	-20~+60℃
Structure	Protection class	IP20
	Cooling mode	Forced air cooling
	Installation mode	Wall mounted or floor-type actuator

Basic system Description on Inverter Wiring



ZVF330 Series Mini Type AC Drive

Main Features

ZVF330 Series Mini Type AC Drive are developed for general applications of small power and OEM market. It applies V/f control technology, making the functions of PID, multiple-speed step, DC braking, Modbus communication, as well as less installation space .ZVF330 Series AC drive is for small automation equipment of economical type, especially suitable for electronic equipment, food packaging, wood, glass and other small power transmission.

1. Output frequency :0-600Hz.
2. Multiple password protection mode.
3. Remote control operation keypad, convenient for remote control.
4. V/F curve &multi-inflection point setting, flexible configuration .
5. Keyboard parameter copy function. easy to set the parameters for multi-inverters .
6. Wide industry application . to expand special function according to different industries.
7. Multiple hardware and software protection and optimized hardware for anti-interference technology.
8. Multi-step speed and wobble frequency running (external terminal 15 steps speed control).
9. Unique adaptive control technology . Auto current limiting and voltage limiting and under-voltage restrain .
10. Optimized external installation and internal structure and independent air flue design , fully enclosed electrical space design .
11. Output automatic voltage regulation function (AVR),automatically adjust the output pulse width . to eliminate the influence of the grid change on load .
12. Built-in PID regulation function to facilitate the realization of closed loop control of the temperature ,pressure and flow . and reduce the cost of the control system .
13. Standard MODBUS communication protocol . easy to achieve the communication between PLC,IPC and other industrial equipments.

Application Range

Metal processing ,digital machine tool ,wire drawing bench and other mechanical equipment . paper making equipment ,chemistry industry ,medicine industryand textile industry ,all kinds of fans and pumping load .etc.

Demonstration Of The Model

ZVF 330 - M 1R5 T 4 M D

- Inverter Model
- Design Number
- Type
  M:Mini Type
- Power Code
  1R5:1.5kW
- D:Built-in braking unit
- M:Integration IGBT
  S:Mosfets IGBT
- Voltage Class
  2:220V
  4:380V
- Voltage Class
  S:Single Phase
  T:Three Phase

Input Voltage (V)	Output Voltage(V)	Power Range (kW)
Single phase 220V± 20%	Three phase 0~input voltage	0.4kW~2.2kW
Three phase 380V± 20%	Three phase 0~input voltage	0.75kW~7.5kW
Overload Capacity : 150% 1 minute ;180% 1 second ;200% transient protection .		

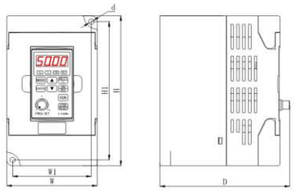


Fig.1

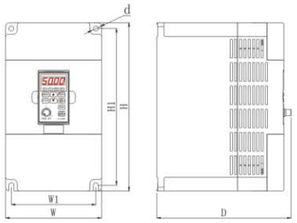
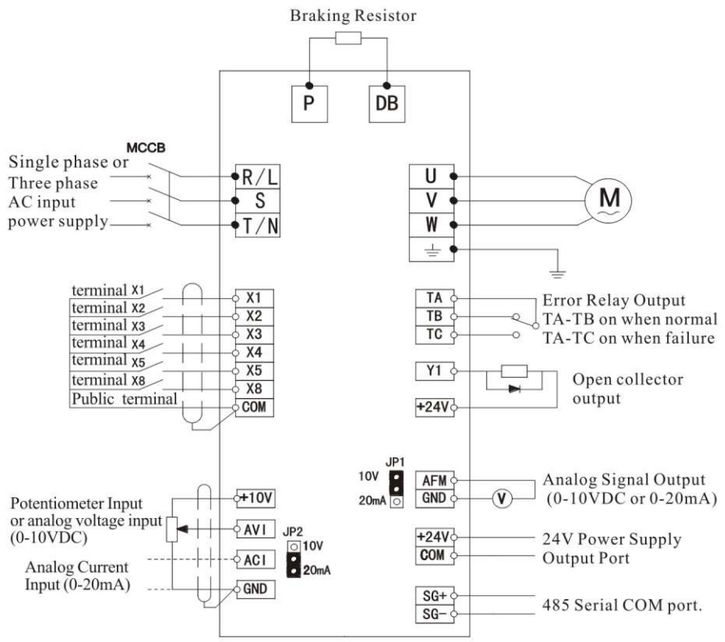


Fig.2

Inverter Outline& Mounting Dimension (Unit:mm)

Inverter Model	Voltage (V)	Power (kW) G/P	Current (A)	Dimension (mm)						Figure
				H	H1	W	W1	D	d	
ZVF330-M0R4S2MD/T2	220V	0.4	2.4	141.5	130.5	85	74	125	Φ5	Fig.1
ZVF330-M0R7S2MD/T2		0.75	4.0	141.5	130.5	85	74	125	Φ5	
ZVF330-M1R5S2S/T2		1.5	7.5	151.0	140	100	89.5	128.5	Φ5	
ZVF330-M2R2S2S/T2		2.2	10	151.0	140	100	89.5	128.5	Φ5	
ZVF330-M0R7T4S	380V	0.75	2.3	151.0	140	100	89.5	128.5	Φ5	
ZVF330-M1R5T4S		1.5	3.7	151.0	140	100	89.5	128.5	Φ5	
ZVF330-M2R2T4S		2.2	5.0	151.0	140	100	89.5	128.5	Φ5	
ZVF330-M3R7T4/T2		3.7	9.0	220	205	125	110	176	Φ6.5	Fig.2
ZVF330-M5R5T4/T2		5.5	13	220	205	125	110	176	Φ6.5	
ZVF330-M7R5T4		7.5	17	220	205	125	110	176	Φ6.5	

ZVF330 Inverter's Standard Wiring Diagram



ZVF600 Series Pump Inverter

Main Features

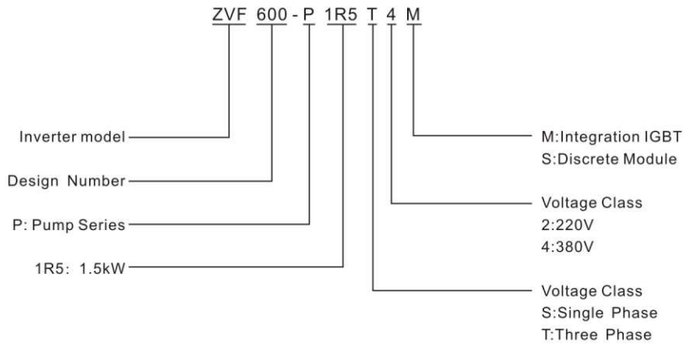
ZVF600 series pump control inverter is the company's own research and development of high degree protection pump inverter, the shell is dustproof and splash water, can be installed different brand water pump motor junction box. Adapt to a variety of sensor signals, simple operation, high reliability, low noise, can be individually controlled a pump and can also be more on-line operation.

1. High Protection IP54 , All-round Anti-corrosion Anti-splash Water
2. High Performance V / F And Vector Control
3. Water Supply Special Design, Water Shortage Protection, Water Coming Start Automatically
4. Single Pump Constant Pressure, Main And Auxiliary Pump Single-line Networking, Automatic Control
5. Antifreeze, Rust-proof Function, More Humane Protection For Protecting Pump
6. One-button Pressure Setting, Quick Parameter View
7. Dedicated Water Supply Function And Fault Protection Function.
8. Professional Heat-resistant Design, Small Power, Without Fan Can Be More Reliable
9. Directly Installed On The Motor, No Need For The Cabinet, Simple And Convenient To Operate .

Application Range

Constant water supply,fire fighting apparatus, Environmental protection equipment, Environmental Engineering, water treatment equipment and etc.

Demonstration Of The Model



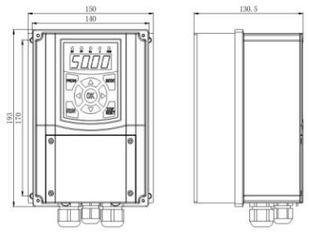


Fig.1

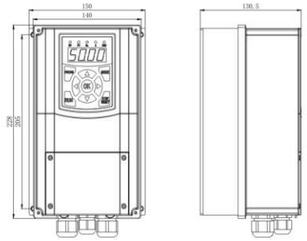
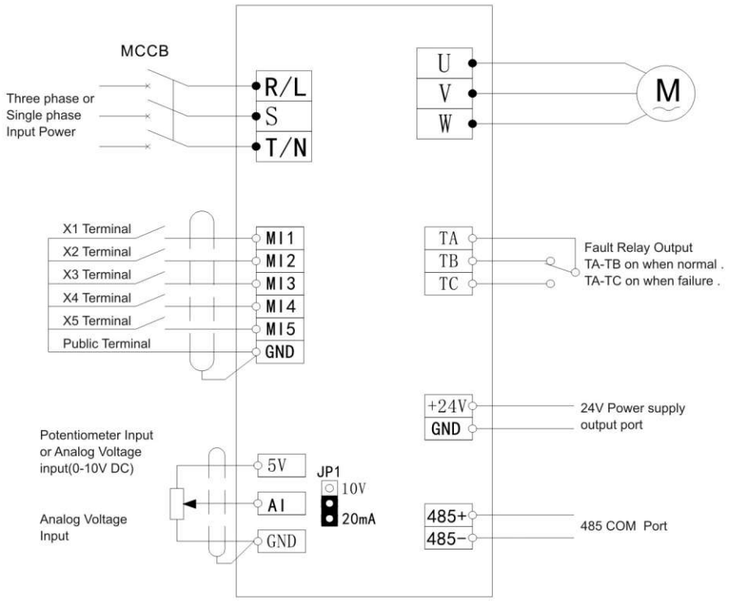


Fig.2

Pump Inverter Outline& Mounting Dimension (Unit:mm)

Inverter Model	Voltage(V)	Power(kW)	Output Current(A)	Figure
ZVF600-P0R7S2/T2M	220	0.75	5	Fig.1
ZVF600-P1R5S2/T2M		1.5	7.5	
ZVF600-P2R2S2/T2M		2.2	10	
ZVF600-P3R7T2M		3.7	16	Fig.2
ZVF600-P0R7T4M	380	0.75	2.5	Fig.1
ZVF600-P1R5T4M		1.5	3.7	
ZVF600-P2R2T4M		2.2	5	
ZVF600-P3R0T4M		3.0	6.8	
ZVF600-P4R0T4M		4.0	9.0	Fig.2
ZVF600-P5R5T4M		5.5	13	
ZVF600-P7R5T4M		7.5	17	

ZVF600 Pump Inverter Wiring Diagram



Technical Indications

Item		Item Description
Input	Rated voltage& Frequency	Single /Three phase 220VAC . Three phase 380V.50Hz/60Hz
	Allowable Voltage range	Voltage fluctuate range：-20%~+20% Voltage unbalance rate：<3%;Frequency fluctuation：≤5%
Output	Rated voltage	Three phase 0~ input AC voltage
	Frequency	0.00~600.00Hz
Basic Function	Frequency accuracy	Digital setting：Max. Frequency×±0.01% Analog setting：Max. Frequency×±0.2%
	Frequency resolution	Digital setting :0.01HZ; Analog setting :Max. Frequency x0.1%.
	Starting frequency	0.00~10.00Hz
	Acceleration/deceleration time	0.1~3600 can be set in sequence .
	Carrier frequency	1.0~15.0KHz
	V/F curve	1：linear curve；2：quadratic；3：user defined V/F curve
	Automatic energy-saving operationAutomatic energy -saving operation	Auto optimize V/F curve according to the load changes to realize the energy saving operation .
	Built-in PID	This can form a convenient closed-loop control system (CLCS)and is applicable to pressure control, flow control and other process control .
	Operating command	Operation panel control ,external terminal control and COM control
	Frequency setting	Keypad potentiometer setting , operation panel▲▼setting,. analog voltage signal or external potentiometer setting , analog current signal setting .terminal combination setting ,485 COM setting and so on.
	Input Signal	Forward/Reverse signal、multi-speed signal 、 fault signal 、reset signal etc
	Output signal	Programmable relay
	Other Function	Over voltage alarm 、Rotation speed tracking、 Momentary power loss restart 、Frequency upper/ lower limiting、 Acceleration/ Deceleration mode can be adjusted 、Multi-speed/ program running、 Fault auto reset、RS485 serial communication .
	Protection Function	Input phase loss protection、 Over current protection 、Overload protection、 Over voltage protection 、Under voltage protection、 Over heat protection etc.
	LED Display	Can display the real time running status of the inverter , monitor parameter .function parameter and fault code and other information of the inverter.
Ambient	Place to be used	Indoor location free from direct exposure to sun light, high humidity or dew condensation, high levels of dust, corrosive gas, explosive gas, inflammable gas, oil mist, salt and etc
	Altitude	Below 1000 M
	Ambient Temperature	-10 ℃ to +45 ℃ (Bare Machine: -10 ℃ to+50 ℃)
	Humidity	20%-90% RH without dew condensation
	Vibration	<0.5G
	Storage temperature	-20～+60℃

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ZJR2 Series

Motor Soft Starter

ZJR2 series soft starter can work with three-phase, AC squirrel cage induction asynchronous motor, The voltage is 320V~460V, 50Hz/60Hz and the current is 1200A and below. The soft starter is a device type. It's necessary to add breakers (short-circuit protection) and AC contactor (Bypass) inside the cabinet. together with switches are made up of electric motor control circuit.

ZJR2 Series Soft Starter

Main Features

ZJR2 series soft starter can work with three-phase, AC squirrel cage induction asynchronous motor,The voltage is 320V~460V, 50Hz/60Hz and the current is 1200A and below. The soft starter is a device type. It's necessary to add breakers (short-circuit protection) and AC contactor (Bypass) inside the cabinet. together with switches are made up of electric motor control circuit.

ZJR2 device type can work without three-phase AC motor in the process of starting too big acceleration torque, and power supply system plays a protection from excessive current harvest dynamic impact role, and has the following characteristics:

1. 16 SCM control, intelligent all-digital display.
2. can be put into practice a soft starter control multiple motors.
3. Starting modes: Current limiting starter, Voltage ramp start, Kick start +current-limiting start, kick start+voltage ramp start. Current ramp start. Voltage current-limiting double closed-loop start.
4. free stop and soft stop, The stop time from 0 to 60 seconds can be arbitrary choosed.
5. Over current, Overload, Open phase, instantaneous stop and other fault protection. with the flow, lack phase, instantaneous stop, and other malfunction protection.
6. Easy installation, simple operation, strong function and reasonable price.
7. 5.5kW-75kW soft starter also have built-in bypass contactor . But the factory default is not with built-in bypass contactor.Clients need to confirm this once order confirmed .

Application Range

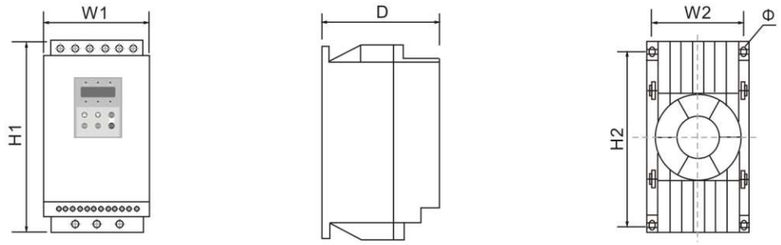
ZJR2 Soft starter can meet the requirements of following loads: Centrifugal pump, bill grinder, fan , piston compressor, light load motor ,hoist machinery, mixer, crusher screw compressor, screw conveyor belt, belt conveyor and heat pump and so on .

Demonstration of the Model

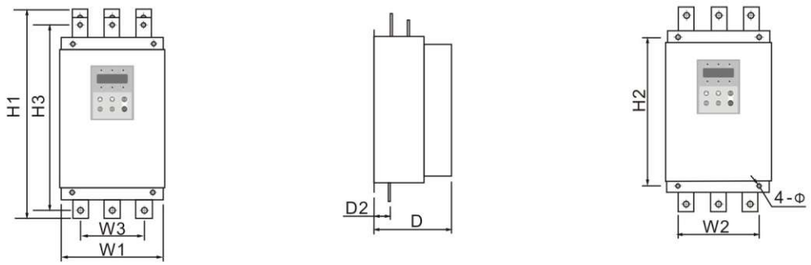
Z JR 2 – 3 370

- 370: Adaptive Motor Power: 370=37KW, 1600=160KW
- 3: 3 Indicate AC 380V, 4 Indicate AC415V~440V
- 2: Design Serial Number
- JR: Motor Soft Starter
- Z: Biz Code

Soft Starter Outline & Mounting Dimension(Unit:mm)



Model	Rated Power (KW)	Rated Current (A)	Outline Size(mm)			Install Size(mm)			Net Weight (KG)
			H1	W1	D	H2	W2	d	
ZJR2-3055/4055	5.5	11	270	145	159	245	130	M6	<3. 5
ZJR2-3075/4075	7.5	15	270	145	159	245	130	M6	<3. 5
ZJR2-3110/4110	11	23	270	145	159	245	130	M6	<3. 5
ZJR2-3150/4150	15	30	270	145	159	245	130	M6	<3. 5
ZJR2-3185/4185	18.5	37	270	145	159	245	130	M6	<3. 5
ZJR2-3220/4220	22	44	270	145	159	245	130	M6	<3. 5
ZJR2-3300/4300	30	60	270	145	159	245	130	M6	<3. 5
ZJR2-3370/4370	37	75	270	145	159	245	130	M6	<3. 5
ZJR2-Z3450/4450	45	90	270	145	159	245	130	M6	<3. 5
ZJR2-Z3550/4550	55	110	270	145	159	245	130	M6	<3. 5

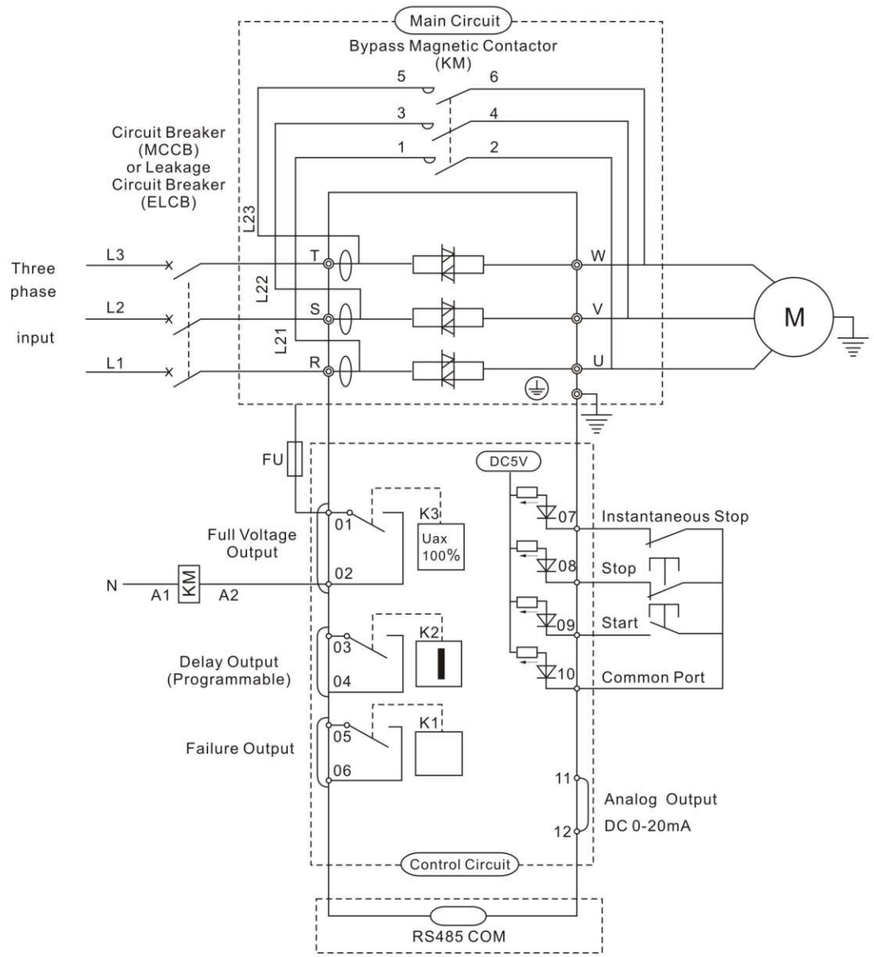


Model	Rated Power (KW)	Rated Current (A)	Outline Size(mm)			Install Size(mm)			Net Weight (KG)
			H1	W1	D	H2	W2	d	
ZJR2-3750/4750	75	150	530	260	202	380	196	M8	<25
ZJR2-3900/4900	90	180	530	260	202	380	196	M8	<25
ZJR2-31150/41150	115	230	530	260	202	380	196	M8	<25
ZJR2-31320/41320	132	264	530	260	202	380	196	M8	<25
ZJR2-31600/41600	160	320	530	260	202	380	196	M8	<25
ZJR2-32000/42000	200	400	530	260	202	380	196	M8	<25
ZJR2-32500/42500	250	500	580	290	245	460	260	M8	<35
ZJR2-32800/42800	280	560	580	290	245	460	260	M8	<35
ZJR2-33150/43150	315	630	580	290	245	460	260	M8	<35
ZJR2-34000/44000	400	800	630	330	245	500	265	M8	<40
ZJR2-Z34500/44500	450	900	630	330	245	500	265	M8	<40
ZJR2-Z35000/45000	500	1000	760	406	260	540	370	M8	<45
ZJR2-Z36000/46000	600	1200	760	406	260	540	370	M8	<45

Technical Indications

Item		Item Description
Input Power Supply	Input Voltage	Three phase 380V-15%~440V+10%.
	Frequency	50/60Hz
Adaptive Motor		Squirrel-cage three phase asynchronous motor.
Starting Times		It is recommended not to exceed 20 times per hour.
Control Mode		1. Operation panel control. 2. Operation panel + external control. 3. External control. 4. External control + COM control. 5. Operation panel + external + COM control. 6. Operation panel + COM control. 7. COM control. 8. No start or stop operation.
Start Mode		1. Current-limiting start. 2. Voltage ramp start. 3. Kick start + current-limiting start. 4. Kick start + voltage ramp start. 5. Current ramp start. 6. Voltage current-limiting double closed-loop start.
Stop Mode		1. Soft stop. 2. Free stop.
Protection Function		1. Open loop protection for external instantaneous stop terminals. 2. Over-heat protection for soft starter. 3. Protection for too long starting time. 4. Input open phase protection. 5. Output open phase protection. 6. Unbalanced three-phase protection. 7. Starting over current protection. 8. Running overload protection. 9. Under voltage protection for power voltage. 10. Over voltage protection for power voltage. 11. Protection for fault parameter setting. 12. Load short circuit protection. 13. Auto restart or incorrect wiring protection. 14. Incorrect wiring protection of external control stop terminals.
Ambient	Place to be used	Indoor location with good ventilation free from corrosive gas and conductive dust.
	Altitude	Below 3000M. It have to rise the rate power when the altitude is more than 3000M.
	Ambient Temperature	-30℃~+55℃
	Ambient Humidity	≤90%RH without dew condensation.
	Vibration	<0.5G
Structure	Protection Class	IP20
	Cooling Pattern	Natural wind cooling.

ZJR2 Series Soft Starter Wiring Diagram



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Control Panel

CHZIRI Electrical can design different inverter control cabinet ,soft starter panel and MCC panel according to clients' wiring diagram .

Inverter Control Cabinet

Main Features

With the frequency technology become more and more mature, the use of frequency inverter, PLC, digital-analog conversion module, temperature sensor, temperature module and other devices combine to form a closed-loop automatic temperature control system, the system can work smoothly and more stable, More important Its energy-saving reach to as much as 30% or more, can bring good economic benefits.

The frequency inverter control panel adopts the enclosed cabinet structure, adopts the frame skeleton, the surface coating spray, and easy to install the cabinet, the upper end can configure the bus bar . the keypad of frequency inverter leads to the front foot of cabinet and can operate directly, it can set local and remote control or PC/PLC communication control .the inverter control cabinet can display different kinds of function .

Frequency inverter is a dedicated accessory of inverter cabinet ,the variable frequency control the speed and the main technical parameters depends on the specification of built-in inverter and external configuration. Inverter cabinet have big difference according to the use of different application and different functions

According to the needs of the operating conditions, we can install AC input reactor, output reactor, DC reactor, EMI filter, braking unit, breaking resistor, contactor, intermediate relay, thermal relay, PLC, GOT , Electricity meter , cooling fan and ect inside the control cabinet .

According to the system working conditions, we can set a variety of control button and indicators. Such as forward, reverse, motor speed boost, motor speed deceleration, jog forward, jog reverse, manual / automatic, emergency stop, frequency conversion, power frequency, PLC control, touch screen and so on in the front door of the panels .

Model Description

ZBTG - □ □

- Motors: 1T2 :One inverter run with two motors; 2B1 :Two are running one spare use; no mark: standard model
- Frequency inverter power (kW)
- CHZIRI frequency inverter control panel

Using Condition

- Power Supply: Electric supplyr, self-connected power network, diesel generator set, 3phase AC 380V, (10%,+15%),50HZ
- Applicable motor: three-phase asynchronous motor, variable frequency motor
- Start frequency: can start frequently
- Protection class: IP41 or IP20

Environment Condition

- Altitude ≤ 2km (used and downgraded if altitude beyond of 2km),
- Environment temperature : -25℃~ +40℃
- Relative humidity: ≤90%, no condensation
- Vibration: ≤0.5G

Applicable Industry

The frequency converter control panel (VFD electric control panel / electrical control panel) can widely use in metallurgy, chemical industry, petroleum, water supply, mine, building material, electrical motor industry, such as pumps, fans, air compressor, rolling mill, injection molding machine, conveyer belt and other machinery and equipments.

Inverter Control Panel Function

1.The power switch and protection frequency inverter cabinet l are equipped with low-voltage MCCB which is connected to the power line, in addition to complete and disconnect the circuit, can protect the circuit and VFD short circuit and overload protection . can cut off the power during maintenance .

2.Start and Control function . on the front door of the panel set the inverter start pushbutton .inverter stop pushbutton for the inverter operation control. easy for on-site operation .

3.Frequency (speed) adjustment :

Adjust the setting frequency and potentiometer on the front panel, It can easily and convenient to adjust the output frequency of the VFD manually. to control the motor speed.

4.Meters display on the front door of the panel . install the voltmeter、Ammeter、frequency meter and different kinds of indicators .Such as power indication、alarm indication、 running indication、 working frequency 、 inverter input voltage、 inverter output current、 inverter output frequency and monitoring of different working status .

5.Spare working frequency switching . the user can select the inverter cabinet with spare use working frequency switch . when the inverter get failure. can make the motor switch to working frequency power supply according to the automatic control circuit .(you can select manual /automatic mode, When the working frequency start device is more than 15kW . you can use soft starter to realize this function).

6.A variety of control function. According to the system working .it can set a variety of control buttons and indicators on the front door of the panel. such as Forward、Reverse 、 Motor increase the speed 、 motor reduce the speed 、 Jog forward 、 Jog reverse、 manual/automatic、 Emergency stop、 variable frequency/working frequency 、PLC control、 Touch screen .

7.According to the needs of the operating conditions, we can install AC input reactor, output reactor, DC reactor, EMI filter, braking unit, breaking resistor, contactor, intermediate relay, thermal relay, PLC, HMI , Electricity meter , cooling fan and ect inside the control cabinet .

8.Safety protection .Install the VFD in the frequency control panel, can reduce environmental pollution, reduce the risk of electric shock, will have better protective effect.

9.Neat and beautiful appearance. install the VFD in the frequency control panel, have the same size with other low -voltage switchgear .the same color ,to maintain the power distribution facilities and control equipment coordination, neat, beautiful.

Characteristics Analysis

1.Save energy

Inverter control motor compared with the traditional control of the motor, energy conservation is the most practical significance, you can achieve energy-saving effect.

2.Lower operating cost.

The traditional motor are consists of three parts: initial purchase cost, maintenance cost, and energy cost. The Energy costs account for about 77% of the motor's operating costs. After install the frequency and soft starter start to reduce the impact of the device. The energy costs can be reduced by 44.3%.The maintenance and repair volume also reduced . So the operating costs will be greatly reduced.

3.Extend motor's life

In addition, the frequency conversion control can reduce the unit start when the current fluctuation, this fluctuation current will affect the power grid and other equipment, the inverter can effectively reduce the peak starting current to a minimum. Starting from 0HZ, the start-up time can be adjusted to reduce the impact on the electrical components and mechanical parts of the motor at start-up, thus enhancing the reliability of the system and prolonging the service life of the motor. In addition, the frequency conversion control can reduce the unit start when the current fluctuation, this fluctuation current will affect the power grid and other equipment, the inverter can effectively reduce the peak starting current to a minimum.

4.Reduce motor's noise

According to the requirements of the motor operating conditions, the installation of frequency inverter, the motor speed significantly slowed down, so effectively reduce the noise of the motor running.

MCC Panel

Main Features

The MCC Panels are installed in a sewage treatment plant .

There have plant C & D each with 8× Aerators, 2× Mixers and 2× Stirers. C & Dshare the same panel.

The dimensions of the panel are L8000×H2000×W600

The Doors Should Be Mounted With

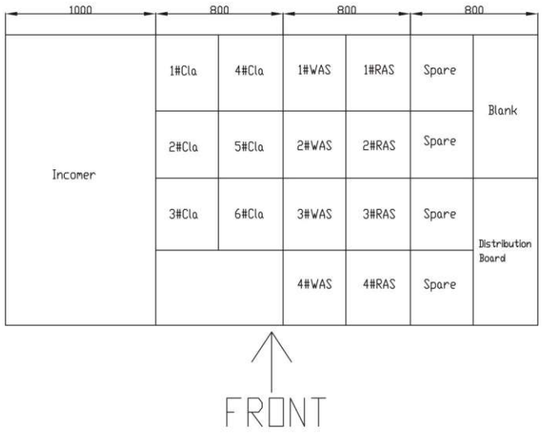
- Running/trip Lights
- Emergency Stop Button
- Start/stop Buttons
- Local/remote Selector Switch
- Ammeters
- Voltmeter
- Running Hour Meters
- Panel Fans

Below Are The Circuits

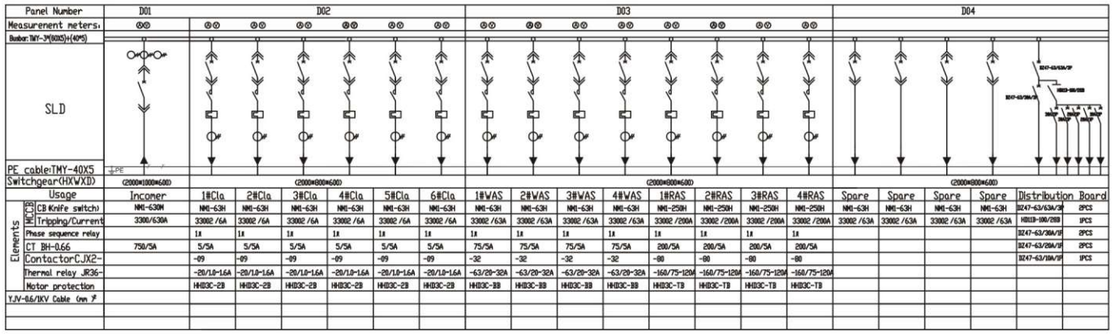
- 16× 55kW motors with VSDs
- 4× 7.5kW motors with VSDs
- 4× 5kW motors with VSDs
- Incomer with a 2000A circuit breaker and a 2400A isolator
- Panel with two circuit breakers for C and D (splitting the two sectionsof the plant)
- RAS/WAS Isolator
- Distribution board

All the circuits have the same control philosophy. We just want to beable to start and stop the motors both from remote and local.We havealso attached the control philosophy of the 3 circuits.

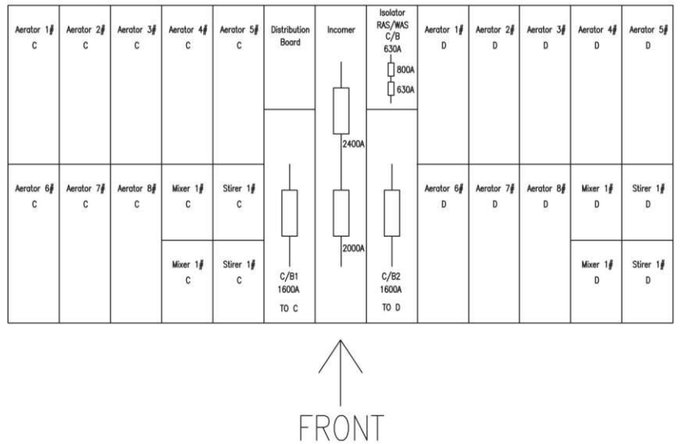
MCC Panel Layout



MCC Panel Primary Wiring Diagram



Note::1.Outlet and Inlet line from bottom;
2.All circuit breakers are CHINT Brand.
3.The control circuit off inverter are with timer and fan.
4.Cabinet Size:500*600*2000;1000*600*2000
5.All Inverters are CHZIRI brand.



Soft Starter Control Panel

Main Features

ZJRG series soft starter control panel is suitable for three-phase AC squirrel cage induction motors. The control panel is mainly composed of a soft starter, AC contactor (bypass) and circuit breaker (short circuit protection). Have the function of protecting the motor improvement in motor starting and running process; adopt closed-loop control, greatly improving the stability and reliability of soft torque start and soft torque stop, run by the bypass contactor, the power consumption is close to zero.

Model Description

ZJRG - □ □

- Motors: 1T2 : One soft start run with two motors; 2B1 : Two running one spare; No mark: Standard type
- Control Power(kW)
- CHZIRI soft starter cabinet

Main Technical Indications

- Power voltage three-phase phase 380V±15%， frequency :50/60HZ.
- Start times: less than 20 times per hour.
- Altitude: less than 3km, if beyond 3km, shall improve power.
- Environment temperature: -30~+55℃.
- Environment humidity: less than 90%, No dew condensation phenomenon.
- Application: no corrosive gas, no Conductive dust, good ventilation condition.
- Protect class: IP20、 Ip30.

Technical Features

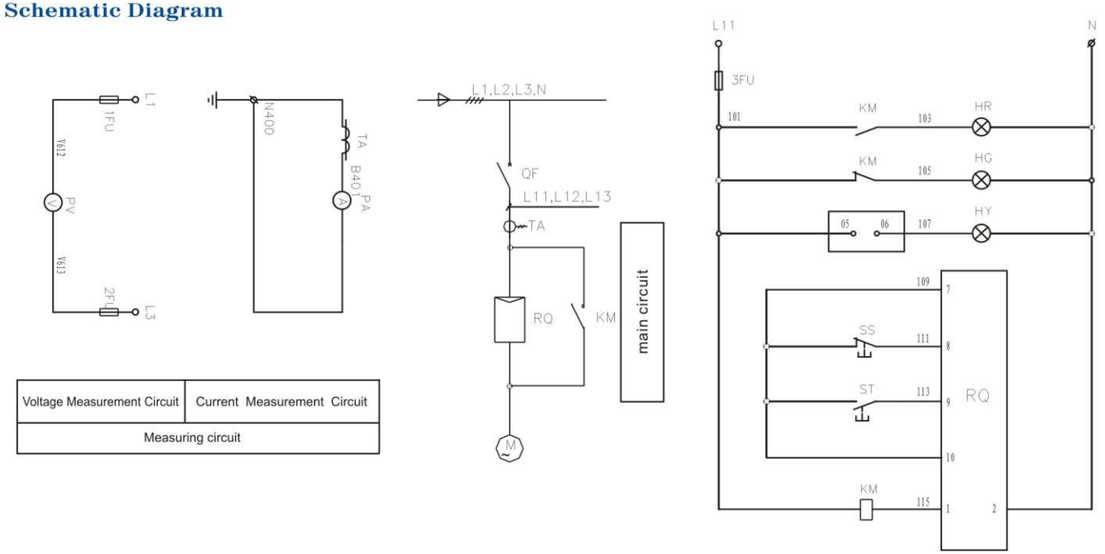
- Starting time can be preset, set different starting time according to different load types.
- Initial voltage can be preset, different initial voltage is set according to different load type.
- With current limiting function, the starting current does not exceed the setting current value.
- Stop mode have soft stop and free stop.
- Bypass contactor function, starting complete, can be connected to bypass contactor.
- One soft starter run multiple motors, One soft starter can start multiple motors in turn.
- Have 14 kinds of protection functions.

Application Load Type

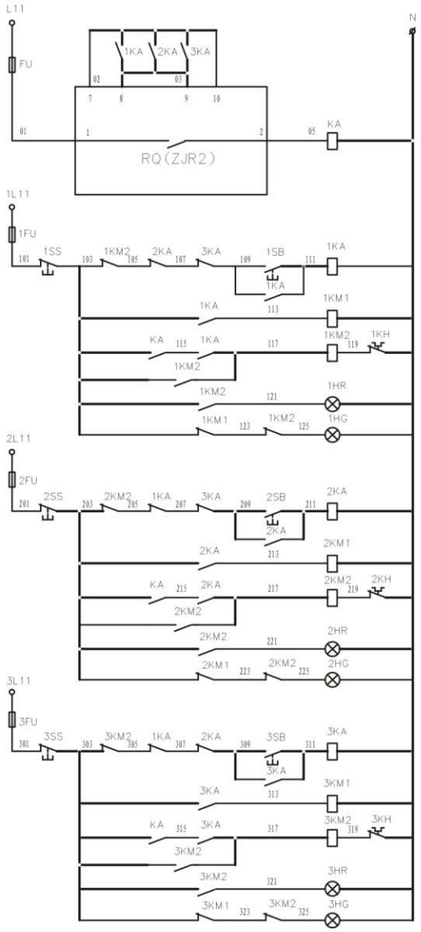
This soft starter cabinet can meet the requirement of most heavy load. The table below is just for reference only .

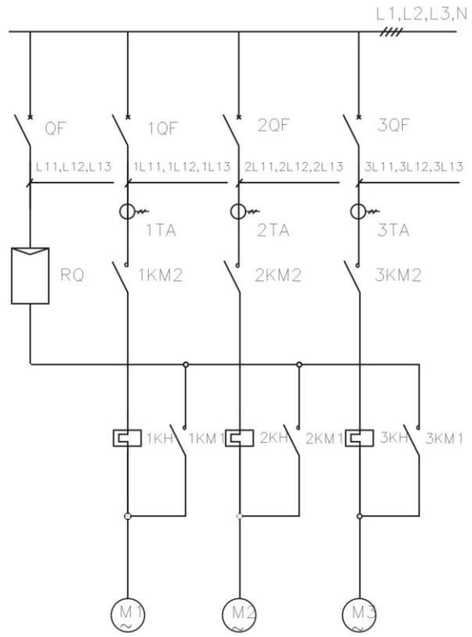
Varieties of Application Loads	Stop Ramp Time (S)	Stop Ramp Time (S)	Inception Voltage (%)	Voltage Start (Maximum Current-limiting Value)	Current-limiting Start
Centrifugal Pump	16	20	40	4	2.5
Ball Grinder	20	6	60	4	3.5
Fan	26	4	30	4	3.5
Piston Type Compressor	16	4	40	4	3
Light Load Motor	16	2	30	4	3
Elevating Mechanism	6	10	60	4	3.5
Mixer	16	2	50	4	3
Crusher	16	10	50	4	3.5
Screw Compressor	16	2	40	4	3
Spiral Conveyor	20	10	40	4	2
Leather Belt Conveyer	20	10	40	4	2.5
Heat Pump	16	20	40	4	3

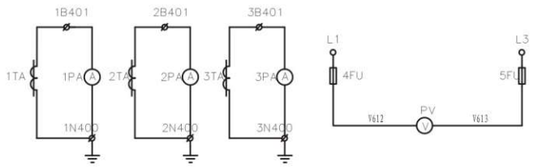
Schematic Diagram



ZJRG/1T1 Wiring Diagram







Voltage Measurement Circuit	Current Measurement Circuit
Measuring circuit	

ZJRG/1T3 Wiring Diagram

Order Information

Soft starter cabinet have many specification , different high technical request . Please make sure you have a detailed understanding of how the equipment load works and performance indicators, and select the electrical control cabinet features before ordering.

CHZIRI Electrial will offer the clients standard design if no requirements marked. So please specify in the contract if you have special requirements.

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Excellent Quality Top Manufacturer

Intelligent Water Supply Controller

Intelligent water supply controller are designed for water supply system . water supply controller can make the water supply system run steadily and reliably, and realize a true automatic cycle pump and variable frequency operation.

Constant Pressure Water Supply Controller

Main Features

ZHG-9603 Series Constant Pressure Water Supply Controller is specialized for constant pressure water supply pump variable frequency controller. The constant pressure water supply controller can make the water supply system run steadily and reliably, and realize a true automatic cycle pump and variable frequency operation. to ensure the optimal running efficiency of each water pump and the stable operation of the equipment start smoothly.Eliminates high-current shocks and lowers the pump's average speed, extending pump life and eliminating water hammer during start-up and shutdown.

1. Include 3 units main pumps & one unit small pump, it has multiple controlling mode and meets all kinds of complex requests of water supply.

2. Timing change pump function, balance all kinds of pumps' working time . improve the average life of the pumps.

3. Up to 8 periods pressure control, and each period can be set any pressure setting control .and realize the timer ON/OFF function .

4.Sleep function and auxiliary small pump function, save energy and reduce consumption , extend machine's life.

5. Positive and negative feedback function , can be used for water supply, but also can be used to pump water and maintain the water level.

6.Over-pressure, low water level, sensor disconnection, inverter failure and alarm control functions ect.

7.Feedback can connect with passive remote pressure gauge, active voltage and current transmitter.

8. Feedback device power 0-24V can be modified, stronger commonality.

9. Feedback signals can be selected .it is more convenient to connect with outer .

10. Standard 0-10V voltage output, can also be arbitrarily modified to other voltage values, the application will be more flexible.

11.when the inverter get failure,The controller can choose the automatic transfer to the working frequency running (pressure range control)

12 .Relay fault output function can be selected.

13. Strong adaptable, applicable to various brands frequency inverter at home and abroad.

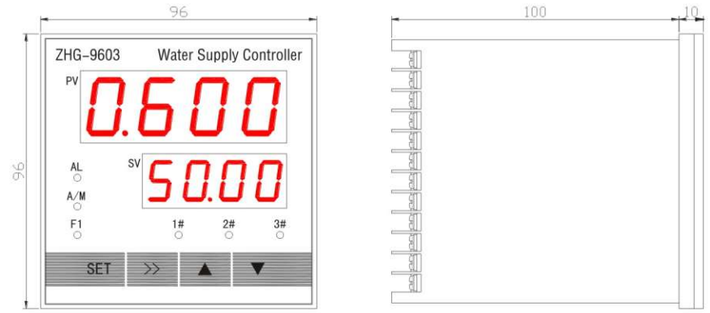
14.All digital signal use photoelectric isolation, strong interference ability .

15.With complete key function.

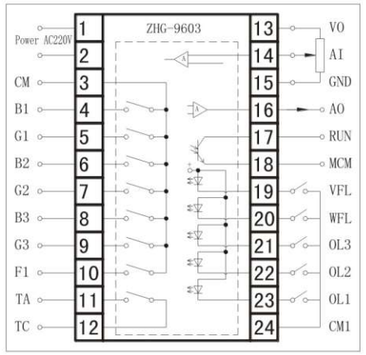
Technical Indications

Item	Item Description
Input Power Specification	Single phase 220VAC±5%,50Hz/60Hz
Digital input signal	Level signal，low level is actual，5mA
Digital Output Signal	Max. load current I≤50mA
DC Output Power 1	5V/100mA，10V/50mA，24V/30mA
DC Output power 2	10V/10mA，
Reply Output Signal	Contact rating：250VAC/3A，30VDC/1A
Analog input Signal	10V/10bit
Analog Output Signal	10V/10bit
Ambient Temperature	-10～+50℃
Humidity	20～90%RH，No condensation of water droplets
Vibration	< 0.5G
Outline Dimension(W×H×T)	96mm×96mm×110mm

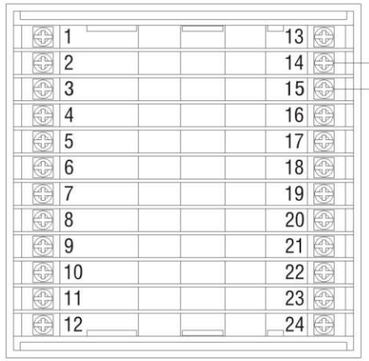
Controller Outline Dimension (Unit:mm)



Controller Circuit Terminal



Controller Wiring Schematic Diagram



Connect with 499Ω resistor outside if current signal is input.

Intelligence Pump Controller

Main Features

ZBK Series Intelligence Pump Controller adopt the digital control chip, set upper and down liquid level and automatic control in one function. Automatic and manual two working mode can be selected..the controller have loss phase, overload, empty load, over voltage and under voltage function protection. Small size .elegant appearance. Applicable to a variety of water supply control occasions.

Product Characteristics

- Rated working voltage: single-phase AC220V / 50 ~ 60Hz; three-phase AC3800V / 50 ~ 60Hz
- The matched motor power: 0.37 ~ 15kW
- Set upper and down liquid level and automatic control in one function
- Automatic and manual two working mode can be selected .
- Have loss phase, overload, empty load, over voltage and under voltage function protection
- The restart time 1-999 minutes can be adjusted while without load.
- Fault memory function
- Rust protection, can effectively prevent the motor rust
- AC digital signal detection, The probe is durable.
- Easy installation, simple debug.

Demonstration of the model

ZBK - 2 022

- 022: Controller Model
- 2: 2:220V 4:380V
- ZBK: 022:2.2kW

Model Selection

Model	Applicable power	Voltage	Figure
ZBK-2022	0.37-2.2	220	Fig1
ZBK-4055	0.75-5.5	380	Fig 2
ZBK-4075	7.5	380	Fig 2
ZBK-4110	11	380	Fig 2
ZBK-4150	15	380	Fig 2

Outline& Mounting Dimension (Unit:mm)

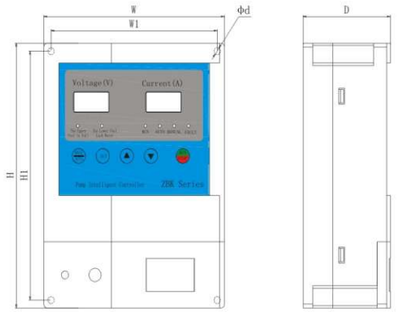


Fig.1

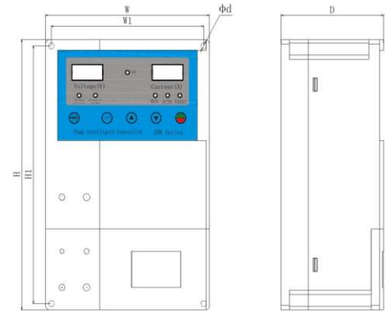
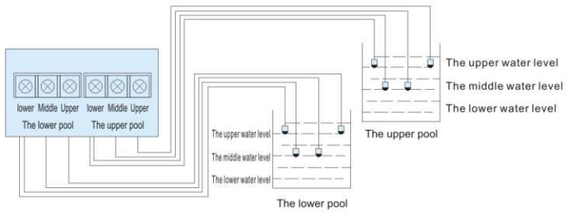


Fig.2

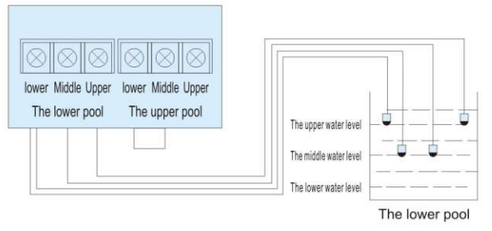
Model	Dimension(mm)						Picture	Gross Weight (kg)
	H	H1	W	W1	D	d		
ZBK-2022	200	188	150	138	73	Φ5	Fig.1	
ZBK-4055	300	286	200	186	125	Φ6.5	Fig.2	
ZBK-4075								
ZBK-4110								
ZBK-4150								

Wiring Diagram of typical application

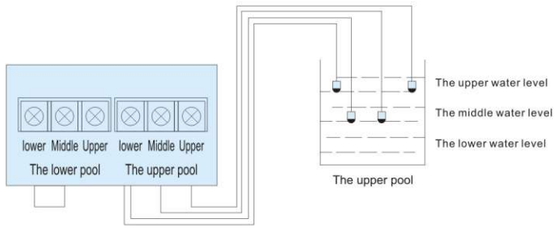
A、The upper and lower pool water supply connection



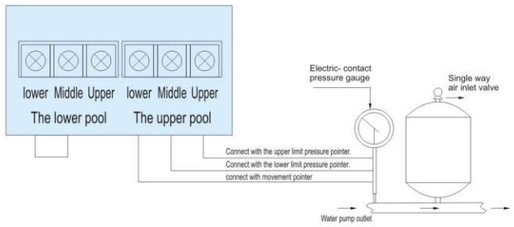
B、 The lower pool water



C、The upper pool water



D、Constant pressure connection



Constant Pressure Water Supply Panel

Main Features

ZBHG series variable constant pressure water supply control cabinet is the company development of a new generation of energy-saving water supply products.

Its core is the AC frequency inverter technology and the microcomputer control technology. Use closed-loop control system. The control panel can automatically adjust the pump speed and the number of units running, so that the pressure of the water supply network to maintain the required pressure and flow, so as to improve the quality of water supply and high efficient energy saving purposes. The control cabinet can replace the high water-level tank, water tower and other facilities and valve adjustment and other measures . to improve the automation of water supply and drinking water quality, to prevent secondary pollution, is an ideal modern water supply products.

Application Range

- Urban and rural residential area, high-rise buildings water supply, hotels, restaurants and large-sized structures' water supply and fire fighting water;
- City central heating water supply and air-conditioning system of hot and cold water circulation system;
- Water pumping stations, pipeline system;
- Industrial production and water recycling water of industrial boiler water supply system;
- sewage treatment system;
- old water supply (pressure water tower high water-level and water tank supply) transformation;
- Agricultural irrigation, sprinkler irrigation and music fountain.

Demonstration Of The Model

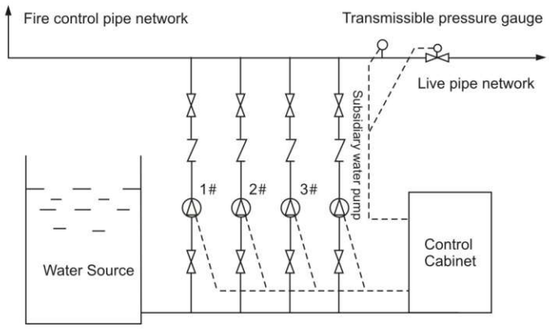
ZBHG - G/S - □ - □

- □ (last): Number of pumps
- □ (middle): Inverter Power(kW)
- G/S: Industry/ Lift Type
- ZBHG: CHZIRI Variable Constant pressure water supply controller

Constant Pressure Water Supply Principle

When water supply automatic control system is working , Through the high sensitivity pressure transducer which is installed in the water supply network. the equipment detect the water supply network's pressure change when water level changes.

Continuously transmission the frequency inverter's change signal,After judging by microcomputer and comparing the setting pressure . send onechanging frequency command to the controller . The controller change the pump motor speed and the number of running by changing the frequency automatically adjust the peak water consumption, to ensure the water supply network pressure constant and meet the needs of users 'water.



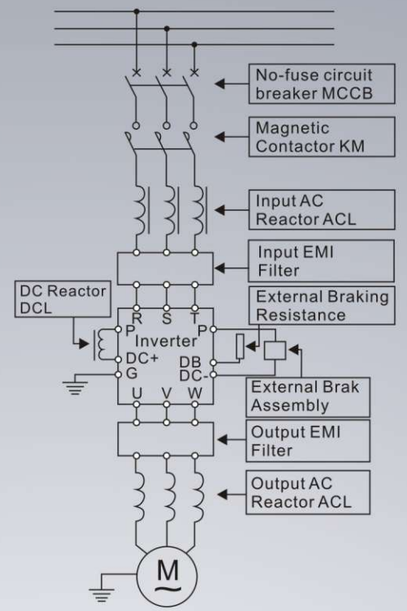
CHZIRI®
ZIRI ELECTRICAL TECHNOLOGY CO.,LTD.

Excellent Quality Top Manufacturer

Inverter Optional Parts

Braking Unit .Braking Resistors ,Reactor . Filter ,Keypad ,Remote Control Panel. Clients can select necessary parts according to the actual application.

Wiring Diagram for Inverter System



Recommended Brake Assembly Matching Specification

Inverter		Braking Unit		Braking resistor		
Voltage(V)	Motor(KW)	Model	Quantity(PCS)	Recommend resistor value	Resistor specification	Quantity(PCS)
220V	0.75KW	Built-in		80W200Ω	80W200Ω	1
	1.5KW	Built-in		200W100Ω	200W100Ω	1
	2.2KW	Built-in		300W70Ω	300W70Ω	1
	3.7KW	Built-in		400W40Ω	400W40Ω	1
380V	0.75KW	Built-in		80W750Ω	80W750Ω	1
	1.5KW	Built-in		200W400Ω	200W400Ω	1
	2.2KW	Built-in		300W250Ω	300W250Ω	1
	3.7KW	Built-in		400W150Ω	400W150Ω	1
	5.5KW	Built-in		600W100Ω	600W100Ω	1
	7.5KW	Built-in		800W75Ω	800W75Ω	1
	11KW	Built-in		1000W50Ω	1000W50Ω	1
	15KW	Built-in		1500W40Ω	1500W40Ω	1
	18.5KW	4030	1	2500W35Ω	2500W35Ω	1
	22KW	4030	1	3000W27.2Ω	3000W27.2Ω	1
	30KW	4030	1	5000W19.2Ω	2500W38.4Ω	2
	37KW	4045	1	6000W16Ω	2000W48Ω	3
	45KW	4045	2	9600W13.6Ω	2500W54.4Ω	4
	55KW	4030	2	12000W10Ω	2000W60Ω	6
	75KW	4045	2	19200W6.8Ω	2500W54.4Ω	8
				Braking Resistor Box		Quantity(PCS)
	90KW	4030	3	9600W20Ω		3
	110KW	4220	1	9600W20Ω		3
	132~160KW	4220	1	40KW3.4Ω		1
	185~220KW	4220	1	60KW3.2Ω		1
	250~315KW	4220	2	40KW4.5Ω		2
	315~600KW	4220	3	60KW3Ω		3

Braking Unit

Main Features

The braking unit in the DBU series is applied to consume in the braking resistor the regenerative energy produced in the deceleration process of the motor in the form of heat energy .In this way ,the braking performance of the frequency inverter is improved and the braking time of the frequency inverter is reduced .

1.Safety: The tripping function of the equipment against IGBT short circuit and breakdown can effectively avoid the hidden danger of fire caused by the breakdown of IGBT and the overload operation of the resistor in a long time.

2.Wide Compatibility :The special design of this braking unit allows for the usage of common resistance rather than the non-inductive resistance .It can be adjusted to adapt to 600V-760V DC chopper wave voltage . Further more, this device is used in various type of medium and low voltage frequency inverter (Specially designed product reaches up to 1200V)

3.Economy: This facility is characterized by high performance cost ratio . With relatively economical price .its quality is same as that of similar imported products. It is therefore considered as the most economical and practical component product for the braking unit of the inverter .

4.Adaptable to connection in Parallel : It adopts a book-shape design and can be installed in a parallel connection with zero clearance .It is recommended that up to 3 units can be connected in parallel .

Technical Specification

Model		AC200V-AC300V			AC380V~AC460V			
		2015	2022	2030	4030	4045	4220	4300
Input And Output	Peak current (A)	50	75	90	50	75	300	400
	Rated Current(A)	15	25	30	15	25	85	120
	Breaking initial voltage	380±5V			630/660/690/730/760V±10V			
	Maximum Hysteresis Error	About 8V			About 16V			
	Multiple units	Maximum: breaking unit are parallel connected						
Power	DC Bus Voltage Range	DC 243~400V			DC460~800V			
Indication Function	Power ON	The red "power" LED will be on when the inverter DC Bus voltage is above ~35VDC						
	Braking ON	The green "braking" LED will be on during braking unit work						
Ambient	Temperature	-10℃~+40℃ (-10℃~+50℃ for store)						
Humidity		90% RH (no dew)						
Vibration		1G(10~20Hz), 0.2G (20~50Hz)						
Protection		IP20						
Structure		Wall mounted						

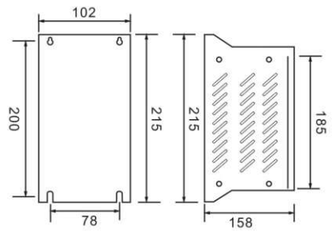


Fig.1

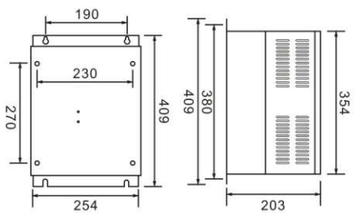


Fig.2

Outline & Mounting Dimension(Unit:mm)

Type	Mounting Hole Size (mm)	Terminal Screw Size	Wire Size (mm^2)	Figure
2015/2030/4015/ 4030/4045	6	M4	4-6	Fig.1
4220	8	M8	16-36	Fig.2

Braking Resistor

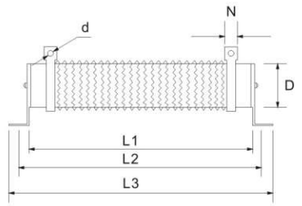
Main Features

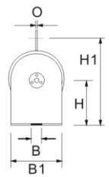
The wirewound resistor is made by fixing two leading-out terminals on the cylindrical ceramic tube which is coiled by bandlet and wave shape alloy resistance wire. The surface of the ceramic tube is coated by layer of coating which is resistant to flaming and high temperature .As the framework of the resistance wire. The ceramic tube can also work as the radiator .this product can be made to order .It is suitable for simulated load test .the discharging of equipment .automatic control and the dynamic braking of the transducer .

Two terminal extensions are fixed on both ends of a ceramic tube on whose surface winds wave-shaped alloy resistance wire and a high temperature-resistant and fireproof coating are applied. The ceramic tube can function as resistance wire skeleton and heat radiator as well . This product can be customized to special needs of customers and applicable to simulation load test, equipped discharge, automated control and inverter's energy loss brake.

Technical Indications

- Rated Power Range: 50W-2500W
- Voltage Range: 0.5KV—10KV
- Resistance Range: 1R-1KR
- Dielectric Voltage: AC2.5KV-20KV/1min 50Hz
- Rated Temperature Rise: 375℃
- Temperature Coefficient: 80-400ppm/℃
- Carrier Material: 0Cr25AL5/Ni80Cr20 Optional
- Advantage: Work in high voltage
- Disadvantage: Inferior vibration
- Packing: Paper box





Outline & Mounting Dimension(Unit:mm)

Rated power (w)	Dimension(mm)										
	L1(±2)	D(±2)	L3(±3)	D(±2)	B	B1	H	H1(±3)	N	¢d	O
50	102	124	146	28	6.5	28	28	61	10	4.5	1.2
60	102	124	146	28	6.5	28	28	61	10	4.5	1.2
80	152	174	196	28	6.5	28	28	61	10	4.5	1.2
100	182	204	226	28	6.5	28	28	61	10	4.5	1.2
120	182	204	226	28	6.5	28	28	61	10	4.5	1.2
150	195	217	239	40	8	40	41	81	12	5.5	2.0
200	195	217	239	40	8	40	41	81	12	5.5	2.0
300	282	304	326	40	8	40	41	81	12	5.5	2.0
400	282	304	326	40	8	40	41	81	12	5.5	2.0
500	316	338	360	50	8	50	45	101	16	6	2.0
600	345	367	389	40	8	40	41	81	16	5.5	2.0
750	316	338	360	50	8	50	45	101	16	6	2.0
1000	300	325	360	60	8.5	60	60	119	16	6	2.0
1200	415	440	465	60	8.5	60	60	119	16	6	2.0
1500	415	440	465	60	8.5	60	60	119	16	6	2.0
2000	510	535	560	60	8.5	60	60	119	16	6	2.0
2500	600	625	650	60	8.5	60	60	119	16	6	2.0

Note: For big power inverter, we suggest you use braking resistor box.

Power Resistor Box

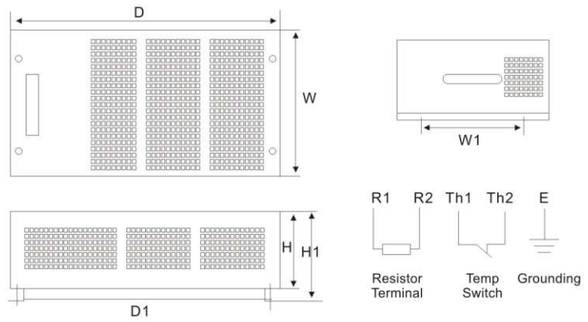
Main Features

The BRU series of products are resistor boxes that are assembled with wire wound resistors and are applicable for power-consuming circuits of inverter for braking equipment with large rated power and current ,testing equipment ,elevator and crane .its operating voltage is 500V DC and rated power ranges from 1KW to 10KW

Technical Indications

1.Power Range:2.4W-20KW
2.Operating Voltage Range:<800V
3.Resistance Range:1R-1KR
4.Electric strength: AC 3KV 50HZ 5S
5.IP Grade:IP20/IP23
6.Vibration:0.5g
7.Range of temperature excursion: <400ppm/℃
8.Material of the current carrier: 0Cr25AL5.
9.Advantages: relatively bad working environment.

Outline & Mounting Dimension(Unit:mm)



Type	Power (KW)	Dimension(mm)						Terminal	Weight (kg)	Cable (mm^2)	Combination
		W	D	H	H1	D1	W1				
BRU	1	250	500	125	150	480	180	M6	5.3	6	0.5KW*2
	1.5	250	500	125	150	480	180	M6	5.9	6	0.5KW*3
	2	280	500	145	170	480	210	M6	6.5	6	1.0KW*2
	3	280	500	145	170	480	210	M6	7.8	6	1.5KW*3
	4.5	340	600	145	170	580	291	M6	12	6	1.5KW*3
	6	340	600	145	170	580	291	M6	14	6	1.5KW*4
	8	410	685	145	170	642	340	M6	16.5	6	2.0KW*4
	10	410	685	145	170	642	340	M6	18.5	6	2.0KW*5
	16	410	685	145	340	642	340	M6	18.5	6	8KW*2
	20	410	685	145	340	642	340	M6	18.5	6	10KW*2

Power Resistor Unit

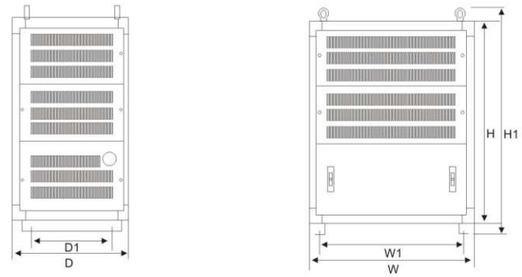
Main Features

The power resistor unit in the PRU series is a type of resistor cabinet which is made up of wire wound resistors. It is suitable for the dynamic braking circuit of the transducer of the high-power, strong current braking equipment, testing equipment, elevator and crane. The working voltage of the routine product is below 1200V DC and the rated power ranges from 20KW to 200KW.

Technical Indications

1. Rated power range: 30kW-200kW
2. Operating voltage range: <1200V
3. Rated resistance range: 0.5kR-100kR
4. Electric strength: AC 3KV 50Hz 5s
5. IP Grade: IP00/IP23
6. Vibration: 0.5g
7. Range of temperature excursion: ≤400ppm/℃
8. Material of the current carrier: 0Cr25AL5
9. Advantage: High-power
10. Disadvantage: Relatively poor vibration resistance
11. It is applied in elevator, lifting high-power brake circuit and the simulated load test

Outline & Mounting Dimension(Unit:mm)



Type	Power (KW)	Dimension(mm)						Terminal	Gross weigth (kg)	Cable (mm^2)	Combination
		W	D	H	H1	D1	W1				
PRU	30	700	500	1100	1185	342	615	M6	73.4	16	12*2. 5kW
	40	700	500	1100	1185	342	615	M6	87	25	16*2. 5kW
	50	700	500	1500	1585	342	615	M6	100	25	20*2. 5kW
	60	700	500	1500	1585	342	615	M6	114	35	24*2. 5kW
	70	700	500	1800	1885	342	615	M6	127	35	28*2. 5kW
	80	700	500	1800	1885	342	615	M6	138	50	32*2. 5kW
	90	700	500	2000	2085	342	615	M6	155	50	36*2. 5kW
	100	700	500	2000	2085	342	615	M6	165	50	40*2. 5kW
	200	1400	500	2000	2085	342	615	M6	331	75	2*100kW

AC Input Reactor (Voltage drop 2%)

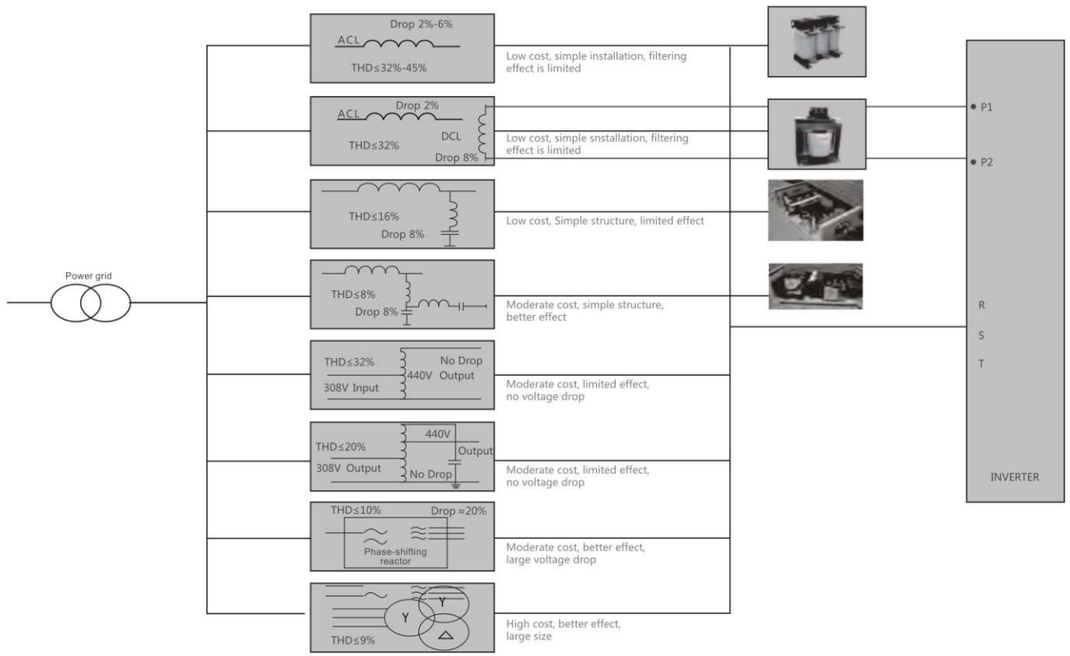
Main Features

Due to the excellent foil winding structure, CHZIRI input AC reactor is characterized by small DC resistance, strong ability to withstand short circuit and strong short-time overload capability. F Class insulation materials with reliable performance make our product working even in harsh operating conditions. Designed with low magnetic flux density, this line reactor has high linearity and powerful overload capacity. Moreover, combined with VPI process, the reactor noise is low. The core of our AC line reactor is made by grain-oriented cold rolled silicon steel sheets, so it features of high efficiency, low core loss and low temperature rise.

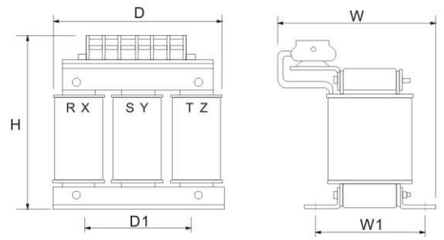
Technical Indications

1.Rated operating Voltage: φ3/380V/50Hz
2.Rated operating current: 5A to 1600A
3.Operating environment temperature:40℃
4.Dielectric strength: Core-wingding 3000VAC/50Hz/5mA/10S
No flashover breakdown(factory test)
5.Insulation Resistance＞1000VDC， Insulation resistance value ＞100MΩ.
6.Noise of the reactor is less than 65dB (Tested at the point with a horizontal distance of 1 meter away from the reactor).
7.Level of protection:IP00
8.Insulation class: Above F
9.Executive standard of product:GB19212.1-2008,GB19212.21-2007.GB1094.6-2011.

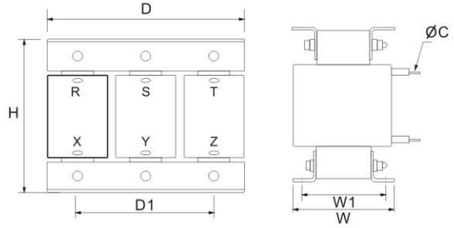
Solution of Frequency Input



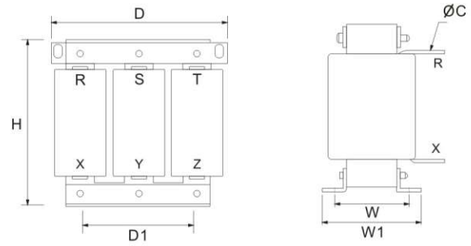
Outline & Mounting Dimension(Unit:mm)



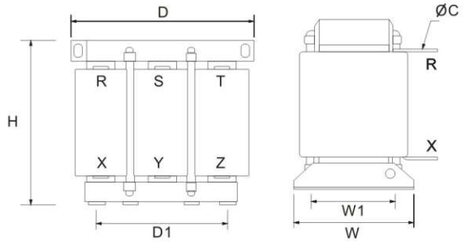
Picture A



Picture B



Picture C



Picture D

Reactor Type	No.	Power (kW)	Rated Current	Inductance (mH)	Voltage Drop	Insulation Class	Weight (Kg)	Dimension(±0.5mm)					
								D	D1	W	W1	H	A*B
ACL-0005-EISC-E2M8C	A	1.5	5A	3.8mH	2%	F、H	2.5	110	91	120	65	135	6*11
ACL-0007-EISC-E2M0C		2.2	7A	2.5mH	2%	F、H	2.5	110	91	120	65	135	6*11
ACL-0010-EISC-E1M4C		3.7	10A	1.5mH	2%	F、H	2.6	155	95	110	61	155	6*15
ACL-0015-EISC-EM93C		5.5	15A	1.0mH	2%	F、H	3.3	155	95	130	80	155	6*15
ACL-0020-EISC-EM70C		7.5	20A	0.75mH	2%	F、H	3.3	155	95	135	80	155	6*15
ACL-0030-EISCL-EM47C		11	30A	0.60mH	2%	F、H	4.9	190	120	115	85	150	8.5*20
ACL-0040-EISCL-EM35C	B	15	40A	0.42mH	2%	F、H	4.9	195	120	110	82	165	8.5*20
ACL-0050-EISCL-EM28C		18.5	50A	0.35mH	2%	F、H	5.9	195	120	130	102	165	8.5*20
ACL-0060-EISCL-EM24C		22	60A	0.28mH	2%	F、H	5.9	195	120	135	107	165	8.5*20
ACL-0090-EISCL-EM16		30	80A	0.19mH	2%	F、H	6.9	195	120	135	107	165	8.5*20
ACL-0090-EISCL-EM16		37	90A	0.19mH	2%	F、H	6.9	195	120	135	107	165	8.5*20
ACL-0120-EISCL-EM12C	C	45	120A	0.13mH	2%	F、H	10	250	182	135	96	230	11*18
ACL - 0150 - EISH - E95UC		55	150A	0.11mH	2%	F、H	14	295	214	150	110	240	11*18
ACL - 0200 - EISH - E70UC		75	200A	0.08mH	2%	F、H	16	295	214	160	120	240	11*18
ACL - 0250 - EISH - E56UC		110	250A	0.065mH	2%	F、H	18	295	214	160	120	240	11*18
ACL - 0290 - EISH - E48UC		132	290A	0.05mH	2%	F、H	21	325	243	165	122	270	12*20
ACL - 0330 - EISH - E42UC		160	330A	0.05mH	2%	F、H	22	325	243	165	122	270	12*20
ACL - 0390 - EISH - E36UC		185	390A	0.044mH	2%	F、H	25	325	243	180	137	270	12*20
ACL - 0490 - EISH - E28UC	D	220	490A	0.035mH	2%	F、H	33	385	260	200	175	350	12*20
ACL - 0530 - EISH - E26UC		240	530A	0.035mH	2%	F、H	42	385	260	200	175	350	12*20
ACL - 0600 - EISH - E23UC		280	600A	0.025mH	2%	F、H	42	395	275	200	175	350	12*20
ACL - 0660 - EISH - E21UC		300	660A	0.025mH	2%	F、H	45	395	275	200	175	350	12*20
ACL - 0800 - EISH - E17UC		380	800A	0.025mH	2%	F、H	55	430	295	215	190	400	12*20
ACL - 1000 - EISH - E14UC		450	1000A	0.014mH	2%	F、H	56	430	295	215	190	450	12*20
ACL - 1250 - EISH - E11UC		550	1200A	0.011mH	2%	F、H	76	490	345	225	195	575	14*25

Note: For AC input reactor at 4% voltage drop, Feel free to contact with us.

AC Output Reactor (Voltage Drop 1%)

Main Features

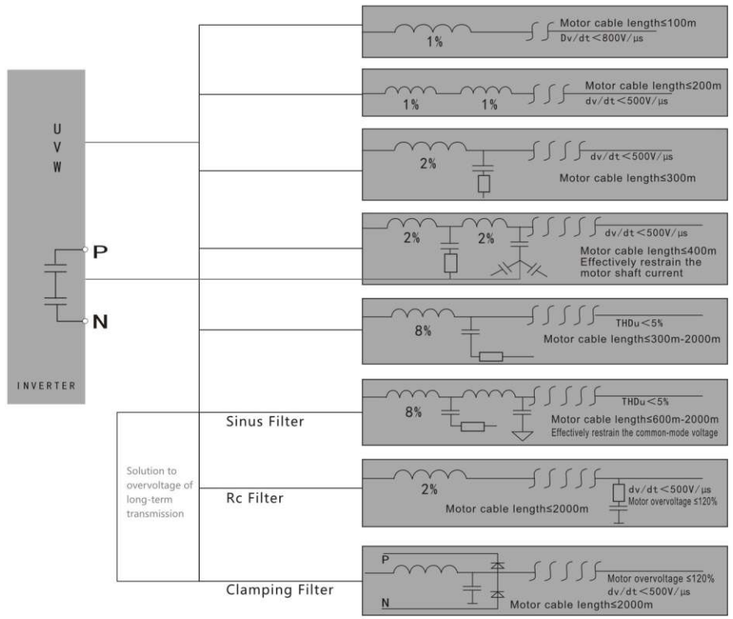
Based on different operating frequency, clients can reasonably choose the magnetic materials (such as silicon steel sheet, ferrite, amorphous iron core and magnetic powder core) as the raw material of this product.

The excellent performance of this equipment is due to the foil winding structure, low DC resistance, strong resistance to electromagnetic force and good overload ability in short time. F and above class composite insulating materials are used to ensure the reliable performance of the output AC reactor under harsh working conditions; The advantages of the design includes low magnetic flux density, high linearity and good overload capacity. Moreover, the cooperation of the design and the vacuum pressure impregnation process ensures the low noise of the product.

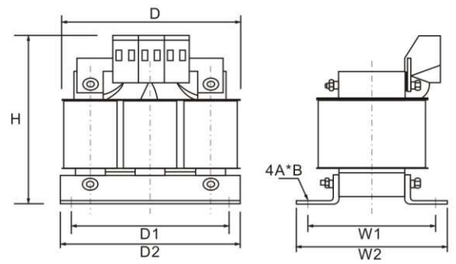
Technical Indications

1.Rated operating Voltage: φ3/380V/50Hz
2.Rated operating current: 5A to 1600A
3.Operating environment temperature:40℃
4.Dielectric strength: Core-wingding 3000VAC/50Hz/5mA/10S No flash over breakdown(factory test)
5.Insulation Resistance＞1000VDC, Insulation resistance value ＞100MΩ.
6.Noise of the reactor is less than 80dB (Tested at the point with a horizontal distance of 1 meter away from the reactor).
7.Level of protection:IP00
8.Insulation class: Above F
9.Executive standard of product:GB19212.1-2008,GB19212.21-2007.GB1094.6-2011.

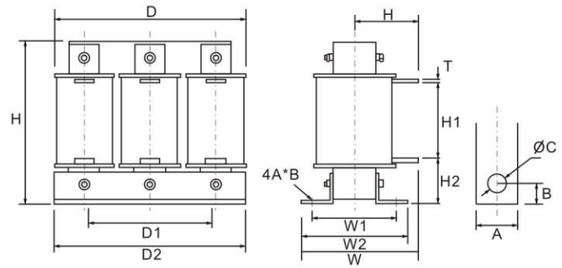
Solution of Frequency Output



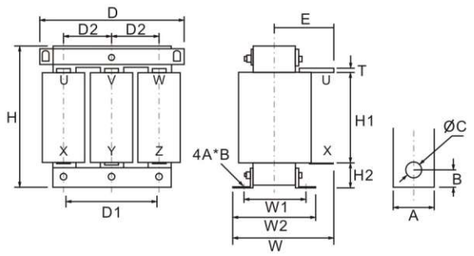
Outline & Mounting Dimension(Unit:mm)



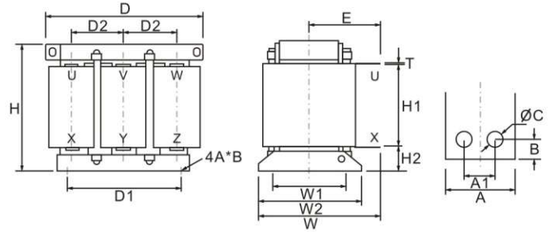
Picture A



Picture B



Picture C



Picture D

Reactor Type	No.	Power (kW)	Rated Current	Inductance (mH)	Voltage Drop	Insulation Class	Weight (Kg)	Dimension(±0.5mm)					
								D	D1	W	W1	H	A*B
OCL-0005-EISC-E1M4C	A	1.5	5A	1.4mH	1%	F、H	2.4	110	91	105	84	130	6×11
OCL-0007-EISC-E1M0C		2.2	7A	1.0mH	1%	F、H	2.4	110	91	105	84	130	6×11
OCL-0010-EISC-EM70C		3.7	10A	0.7mH	1%	F、H	2.4	110	91	105	84	130	6×11
OCL-0015-EISC-EM47C		5.5	15A	0.47mH	1%	F、H	3	155	95	148	76	130	6×15
OCL-0020-EISC-EM35C		7.5	20A	0.35mH	1%	F、H	3.8	155	95	148	76	150	6×15
OCL-0030-EISCL-EM23C	B	11	30A	0.23mH	1%	F、H	4.6	155	95	148	96	130	6×15
OCL-0040-EISCL-EM18C		15	40A	0.18mH	1%	F、H	4.8	155	95	148	96	130	6×15
OCL-0050-EISCL-EM14C		18.5	50A	0.14mH	1%	F、H	5	155	95	148	96	130	6×15
OCL-0060-EISCL-EM12C		22	60A	0.12mH	1%	F、H	5.1	195	120	188	92	165	8.5×20
OCL-0080-EISC-E87UC		30	80A	0.087mH	1%	F、H	6	195	120	188	92	165	8.5×20
OCL-0090-EISC-E78UC		37	90A	0.78mH	1%	F、H	6	195	120	188	92	165	8.5×20
OCL-0120-EISC-E58UC		45	120A	0.58mH	1%	F、H	9	195	120	188	112	165	8.5×20
OCL-0150-EISH-E47UC	C	55	150A	0.047mH	1%	F、H	10	250	182	81	113	230	11×18
OCL-0200-EISH-E35UC		75	200A	0.035mH	1%	F、H	12	250	182	81	123	230	11×18
OCL-0250-EISH-E28UC		110	250A	0.028mH	1%	F、H	12	250	182	81	123	230	11×18
OCL-0290-EISH-E24UC		132	290A	0.024mH	1%	F、H	20	290	214	95	127	250	11×18
OCL-0330-EISH-E21UC		160	330A	0.021mH	1%	F、H	20	290	214	95	132	250	11×18
OCL-0390-EISH-E18UC		185	390A	0.018mH	1%	F、H	20	290	214	95	132	250	11×18
OCL-0490-EISH-E14UC		220	490A	0.014mH	1%	F、H	28	320	243	106	143	320	12×20
OCL-0530-EISH-E13UC		250	530A	0.013mH	1%	F、H	29	320	243	106	143	320	12*20
OCL-0600-EISH-E12UC		280	600A	0.012mH	1%	F、H	33	320	243	106	158	320	12×20
OCL-0660-EISH-E11UC		300	660A	0.011mH	1%	F、H	38	320	243	106	158	320	12×20
OCL-0800-EISH-E8U7C	D	380	800A	0.0087mH	1%	F、H	40	385	260	123	198	395	12×20
OCL-1000-EISH-E7U0C		450	1000A	0.007mH	1%	F、H	40	385	260	123	198	395	12×20
OCL-1200-EISH-E5U8C		550	1200A	0.0058mH	1%	F、H	56	395	275	130	198	435	12×20
OCL-1600-EISH-E4U3		630	1600A	0.0043mH	1%	F、H	92	395	275	130	198	435	12×20

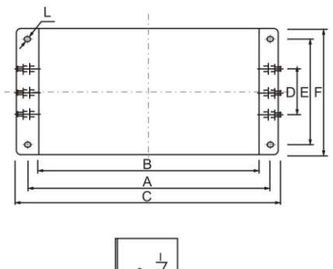
Note: For AC output reactor at 2% voltage drop, Feel free to contact with us.

EMI Filter

Main features

- Wire current area.
- Moderate leakage current.
- The filters are suited for power supplies for industrial installations, Particularly for the output filter used on inverter equipments. Such as inverter speed controlled systems.
- Rated voltage:275/480VAC.
- Operating frequency:50/60Hz.
- Rated current:5A-1000A.

Outline & Mounting Dimension(Unit:mm)



Model	A	B	C	D	E	F	G	H	I	J	K	M	N	P	L
5EBK5															
10EBK5	184	160	202	42	60	86	18	58	M4	38				M4	6.4x9.4
16EBK5															
25EBK5															
35EBK5	243	224	265	58	70	102	25	92	M6	58	M4	74	49	M6	6.4x9.4
50EBK5															
65EBK5															
80EBK5															
100EBK5															
130EBK5	354	323	388	66	155	188	30	92	M8	62	M4	86	56	M8	6.4x9.4
160EBK5															
200EBK5															

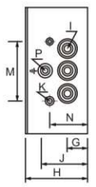


Fig.1

Model	A	B	C	D	E	F	G	H	I	J	K
250EBK5											
320EBK5	290	210	350	440	234	262	25	160	M12	25	Φ12
400EBK5											
600EBK5											
800EBK5	290	230	356	536	255	280	25	220	M12	25	Φ13

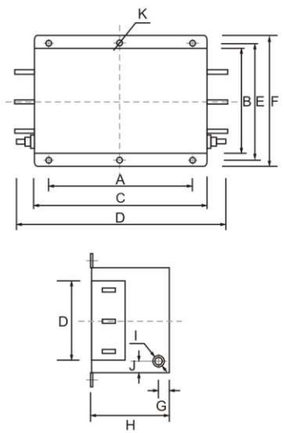


Fig.2

Input Filter & Output Filter For Inverter Selection

Voltage	Inverter Power	Current (A)	Input filter	Output filter
220V	0.4~0.75KW	6A	DL-6TH1	
	1.5KW	10A	DL-10TH3	
	2.2KW	15A	DL-15TH1	
380V	1.5KW	5A	DL-5EBK5	DL-5EBL5
	2.2KW	10A	DL-10EBK5	DL-10EBL5
	3.7~5.5KW	16A	DL-16EBK5	DL-16EBL5
	7.5KW	25A	DL-25EBK5	DL-25EBL5
	11KW	35A	DL-35EBK5	DL-35EBL5
	15~22KW	50A	DL-50EBK5	DL-50EBL5
	30KW	65A	DL-65EBK5	DL-65EBL5
	37KW	80A	DL-80EBK5	DL-80EBL5
	45KW	100A	DL-100EBK5	DL-100EBL5
	55KW	130A	DL-130EBK5	DL-130EBL5
	75KW	160A	DL-160EBK5	DL-160EBL5
	95KW	200A	DL-200EBK5	DL-200EBL5
	110~132KW	300A	DL-300EBK3	DL-300EBL3
	160KW	400A	DL-400EBK3	DL-400EBL3
	200~250KW	600A	DL-600EBK3	DL-600EBL3
	315KW	800A	DL-800EBK5	DL-800EBL5

Sine Wave Filter

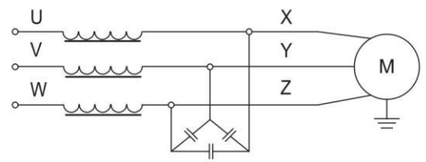
Main Features

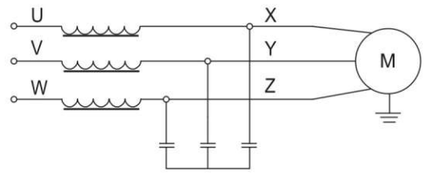
The sine wave filter transforms the PWM Output signal of the electro motor into a smooth sine wave of the low residual ripple voltage so as to prevent the damaged to the winding insulation of the motor .It also reduces the occurrence of the distributed capacitance cause by the over-length of cable and the phenomenon of resonances which is resulted from distributed inductance . Besides .It eliminates the over-voltage of the motor caused by high dv/dt, spares the damage of the motor in advance resulted from the eddy-current loss .the sine wave filter also reduces the perceivable noise of the electro motor.

Features

This sine wave filter adopts the foil winding structure and the copper bar leading-out .It is featured with DC resistance . Strong resistance to electromagnetism and excellent overload ability in short time .The usage of F or above grade composite insulating materials with high performance allows for the reliable performance of the equipment under harsh working conditions .Its strong insulating strength makes it possible to bear ultra high voltage shock . The vacuum pressure impregnation process adopted in this sine wave filter reduces the perceivable noise to a low degree.

Electrical Schematic Diagrams





Outline & Mounting Dimension(Unit:mm)

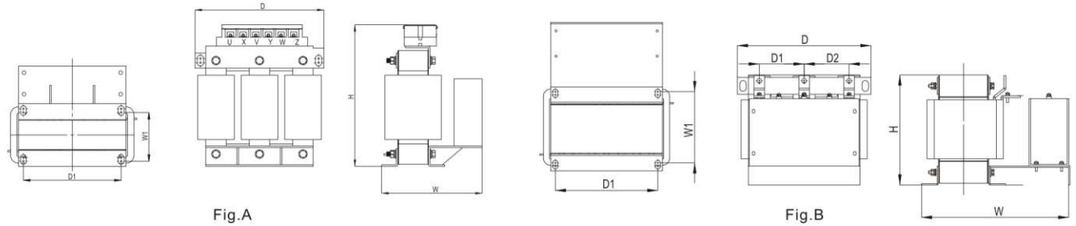


Fig.A

Fig.B

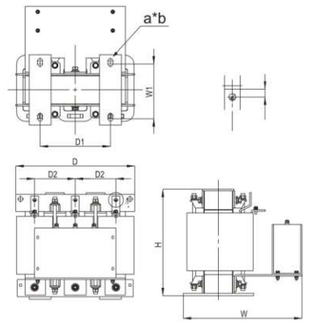


Fig.C

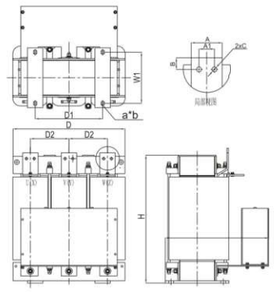


Fig.D

Type	Power (kW)	Rated Current (A)	Insulation Grade	Inductance Value (mH)	Picture	Dimension (±0.5mm)							Material	Gross weight (kg)
						D	H	W	D1	W1	a*b	C		
OSF-0015-EISA-E3M0	5.5	15	H	4.00	Fig.A	250	270	220	182	91	11*18	ϕ6.4	AL	22
OSF-0020-EISA-E3M0	7.5	20	H	3.00		250	280	220	182	100	11*18	ϕ6.4	AL	22
OSF-0030-EISA-E2M0	11	30	H	2.00		250	280	240	182	106	11*18	ϕ6.4	AL	26
OSF-0040-EISA-E1M4	15	40	H	1.40		250	280	240	182	121	11*18	ϕ6.4	AL	26
OSF-0050-EISA-E1M2	18.5	50	H	1.20		290	290	250	214	110	11*18	ϕ6.4	AL	31
OSF-0060-EISA-E1M0	22	60	H	1.00		290	290	250	214	120	11*18	ϕ6.4	AL	45
OSF-0080-EISA-EM80	30	80	H	0.80		320	320	270	243	142	12*20	ϕ6.4	AL	60
OSF-0090-EISA-EM65	37	90	H	0.65	Fig.B	320	280	340	243	159	12*20	ϕ 11	AL	60
OSF-0120-EISA-EM52	45	120	H	0.52		320	280	355	243	169	12*20	ϕ 11	AL	90
OSF-0150-EISA-EM45	55	150	H	0.45	Fig.C	320	360	390	225	175	15*25	ϕ 11	AL	90
OSF-0200-EISA-EM35	75	200	H	0.35		400	355	435	225	200	15*25	ϕ 11	AL	95
OSF-0250-EISA-EM30	110	250	H	0.30		400	340	470	225	225	15*25	ϕ 11	AL	115
OSF-0300-EISA-EM24	132	300	H	0.15		430	470	470	250	250	15*25	ϕ 14	AL	170
OSF-0360-EISA-EM20	160	360	H	0.15		430	470	470	250	250	15*25	ϕ 14	AL	170
OSF-0450-EISA-EM15	185	450	H	0.15		430	470	470	250	250	15*25	ϕ 14	AL	170
OSF-0500-EISA-EM15	220	500	H	0.15		455	470	480	270	250	15*25	ϕ 14	AL	190
OSF-0600-EISA-EM12	280	600	H	0.12		480	535	480	275	250	15*25	ϕ 14	AL	250
OSF-0660-EISA-EM10	315	660	H	0.10		480	530	510	300	250	15*25	ϕ 14	AL	255
OSF-0750-EISA-EM09	355	750	H	0.09	Fig.D	475	570	515	275	250	15*25	ϕ 14	AL	290
OSF-0900-EISA-E75U	400	900	H	0.08		550	620	530	275	250	15*25	2-ϕ 13	AL	330

Notes:1.All the above dimensions are subject to tolerance .So please contact with us for type selection.

Remote Control Cable

Main Features

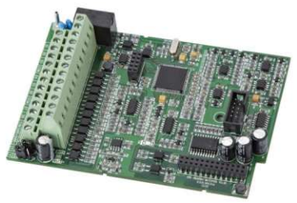
ZIRI Electrical can provide a range of extended shielding remote control cables with different specifications such as 1m,1.5m,2m,3m,5m and 10m.If there is any special requirement on cable length . Just place an order with the company .

Other Optional Parts For Inverters

Aluminum Power Resistor

RS485-USB Converter

ZVF300 Inverter Keypad



Inverter Control Board

Inverter Drive Board

ZVF330 Inverter Keypad

Note: For more details .Please contact with us directly .