

SHENZHEN KEWO ELECTRIC TECHNOLOGY CO., LTD

About us



KEWO is a Chinese famous manufacturer of AC drives, solar pump inverter, also focus on automation solution providing and renewable energy technologies offering. The company employ about 200 people and set up service centers in approximately 25 provinces in China.

KEWO AC DRIVES,

VARIABLE FREQUENCY DRIVE,

FREQUENCY INVERTER

FOCUSING ON MOTOR DRIVES FOR 20 YEARS



ADD: 3 Floor,Block 8,St George Industrial Park,Xinyu Road,Sha Jing,Bao'an, Shenzhen, Guangdong, China, 518104.

Tel: 86-755-84186866, Fax: 0755-84186866, MB: 86-18038034988

Web: www.kewoinverter.com.

Email: service@kewoinverter.com

Company introduction:

SHENZHEN KEWO ELECTRIC TECHNOLOGY CO., LTD. (hereinafter called KEWO) is a professional manufacturer of kinds of AC drives, variable frequency inverter, soft start, and solar pump inverter, etc. We are not only focus on designing, manufacturing, sales and after sales service for above mentioned products, but also providing custom made automation solution and renewable energy technologies.

There are more than 150 staffs working in our factor, 60% of them are engineers. Thanks to our great R&D team hardworking and innovation, we mastered core and leading vector control technology for PMSM and IM.

We also introduced and absorbed latest servo motor control and motor control technology from abroad, that help us keep top position among Chinese manufactures. We have established 2 modernization production lines, digital quality control system, code bar tracking system and EPR management system, etc. And every piece of KEWO products have been tested with full load to ensure 100% good quality. Quality begins and ends with each person in our company.

KEWO products is comprised of high level AC drives, variable speed drive, frequency inverter, solar pump drive with DC and AC input, etc. These products are widely using in industrial automation, cement, textile, metallurgy, HVAC, oil & gas, water treatment, chemical , machine tools, hoisting, agriculture, farming, irrigation...



KEWO factory



Reception room



Production line

KEWO Products Range: (VSD, Frequency Inverter, Servo drive, soft starter, solar pump Inverter)



AD100 (VFD)



AD350(VFD)



AD800(Vector Control Inverter)



Sealed VFD



AD850Z/T(Servo Drive)



Solar Pump Inverter



Soft Starters

Other KEWO AD DRIVES BRIEF INTRODUCTION

| PRODUCTS | SPECIFICATION | PICTURES | BRIEF INTRODUCTION |
|--|--|---|---|
| AD800 Series High Performance Vector Control Drive/ Variable Speed Drive | 1Ph, 220V, 0.4kw to 2.2kw. 3Ph, 220V, 0.75kw to 75kw 3Ph, 380V/660V/1140V, 0.75 to 630kw. |  | Drive for PMSM and IM Accuracy speed and torque control for motor, multiple functions, good protection; Sensorless vector control, sensor vector control with PG, VF control, 180% rated starting torque, big allowance IGBT module , |
| AD100 Mini Economic AC Drive | 1Phase, 220V, 0.4 to 1.5kw |  | Adopt software platform as same as AD800, easy using and powerful function Mini and Economic type, Using IPM of iGBT |
| AD350 Mini Vector Control Drive | 1 Ph 220V,0.4 to 2.2kw, 3 Ph,380V, 0.75 to 3.7kw |  | Mini drive with compact design Vector control and VF using the same software platform as AD800; IGBT module to ensure good quality, rich functions |
| AD800S Frequency Inverter For PMSM (servo drive) | 1Ph, 220V, 0.4kw to 2.2kw. 3Ph, 220V, 0.75kw to 75kw 3Ph, 380V/660V/1140V, 0.75 to 630kw. |  | Enhanced AD800 version, special for PMSM servo motor with sensorless or sensor control, Multiple protection function Rich functions, and flexible using PG card built in controller board |
| AS850 Z Servo Drive For PMSM Of IMM. | 3 phase, 380V±15%, 5.5kw to 110kw |  | Driving f or permanent magnet synchronous motor (PMSM) for energy saving. High energy saving, high power factor, quick response and high accuracy control, etc. |
| AS850T Spindle Servo Drive For PMSM And IM | 3 phase, 380V±15%, 2.2kw to 55kw |  | Spindle servo drive for CNC, machining center, packing, textile, etc. high accuracy speed, torque and position control through close loop servo control |
| SD800 Seal Frequency Inverter (IP54) | 220V (single-phase power) 0.4-2.2kW 380V (three-phase power) 0.75-30kW |  | sealed frequency inverter is enhanced version of AD800 series frequency inverter, built in with IP54 protection grade. With excellent in anti-dust, water proof, anti-grease and anti-corrosion properties |

AD110 Simple & small variable frequency drive

AD110 small VFD is a new and innovation small, economical type and stable running variable frequency inverter. It is focus on small power 100w to 750w 3 phase 200-240V small motor speed control.

It can provides basic function of general purpose inverter that own, such as soft start, soft stop, speed adjusting, start/stop by external terminals, speed control by analog, running in reverse...etc.

We make the cost of this VFD down to limit with great power innovation technology.

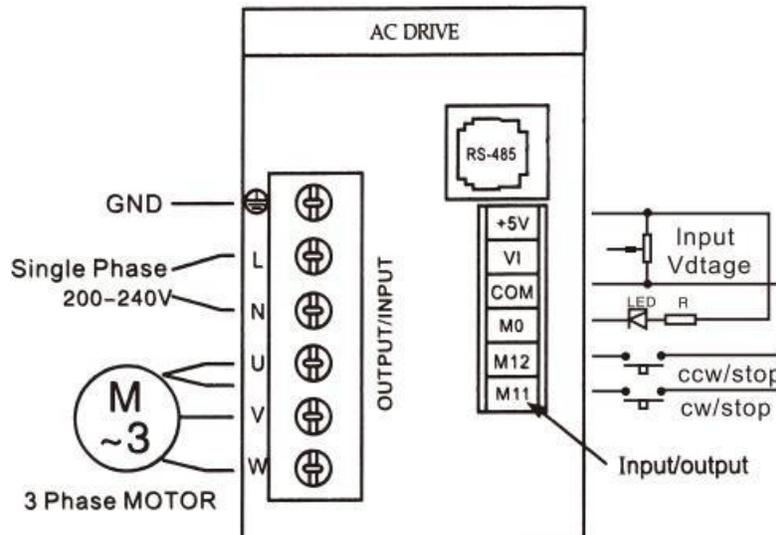
And make every piece of 3 phase 220V smaller power motor with VFD control is available with low cost.



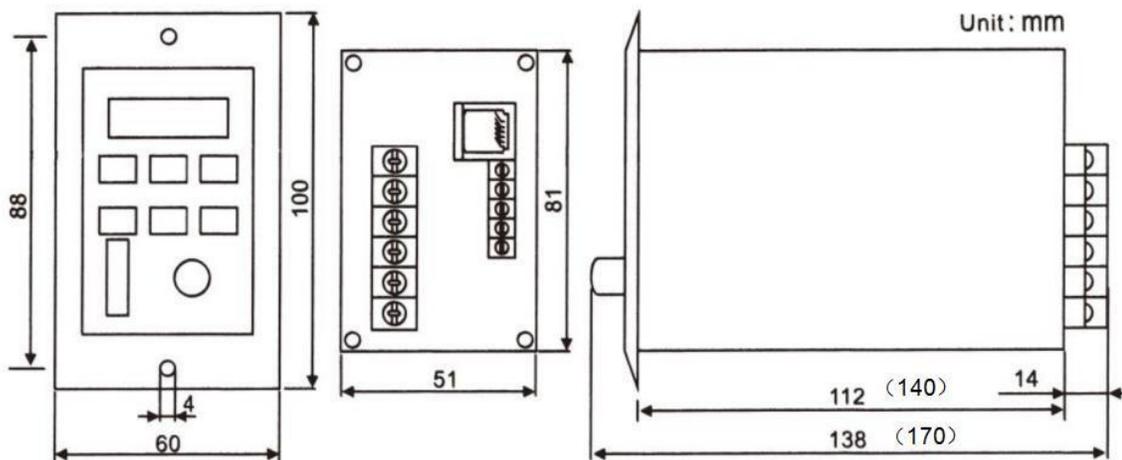
Innovation design, new construction and IPM igt using to ensure good quality

| 1. Specification of AD110 small and economical type 1PH, 220V input, 3 phase output VFD | | | | | |
|---|----------------------|----------------------------|--------------|--------------|---------------|
| Model | | AD110-2S0.1G | AD110-2S0.2G | AD110-2S0.4G | AD110-2S0.75G |
| Output | Rated output power | 100w | 200w | 400w | 750w |
| | Rated output current | 0.8A | 1.0A | 2.0A | 3.8A |
| | Overload tolerance | 150% rated current for 60s | | | |
| | Max output voltage | 3 phase 240V | | | |
| Input | Rated input voltage | single phase 200- 240VAC | | | |
| | Voltage Tolerance | Single phase 180 -250VAC | | | |
| | Frequency accurace | ±5% | | | |
| | Power capacity | 0.8 KVA | | | |
| Cooling Method | | Nature Air- Cooling | | | |
| Consumption wattage | | 15w -25w | | | |

2. Basic Wiring Diagram



3. Installation and Dimensions

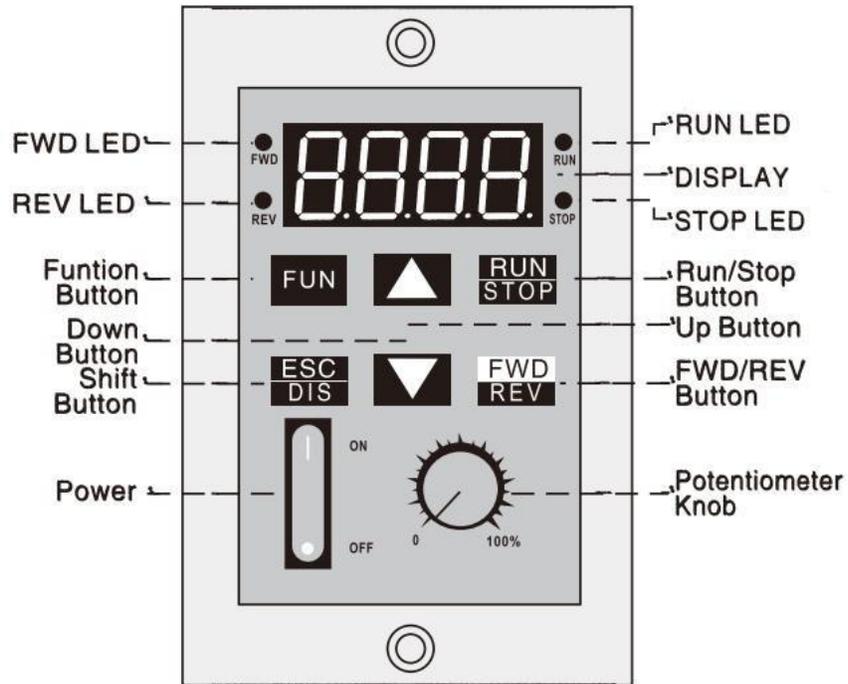


400w, 750w power VFD length is 170mm

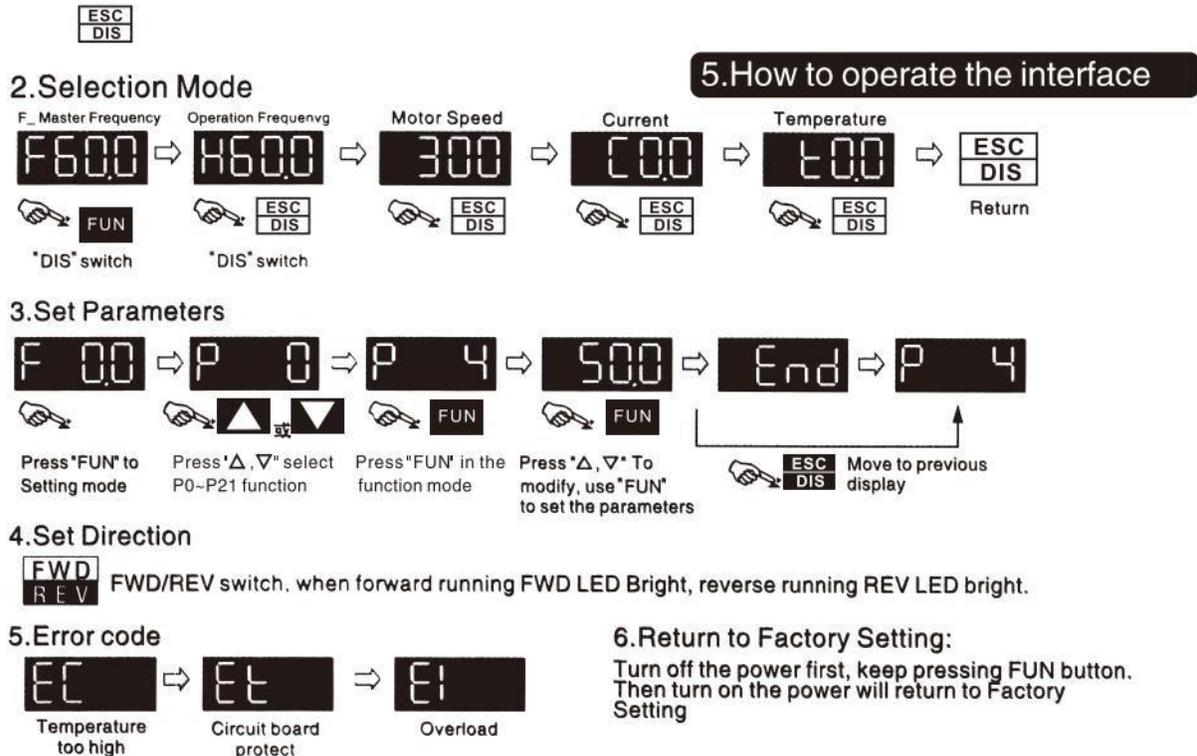
4. Using conditions of AD110 VFD

| Using conditions of AD110 VFD | | |
|-----------------------------------|--|----------------------------------|
| Operation conditions | Ambient Temperature | -10°C to 50°C |
| | Relative Humidity | < 85% (no condensation Allowed) |
| | Atmosphere pressure | 86 to 105Kpa |
| | Installation Site Altitude | <1000m |
| Storage Transportation conditions | Vibration | <20Hz |
| | Air Temperature | -10°C to 60°C |
| | Ambient Humidity | < 90% (no condensation allowed) |
| Pollution Degree | Vibration | <20Hz |
| | 2 Class: good for factory type environment | |

5. Setup with the front panel



5. 6. Operation guide of keypad

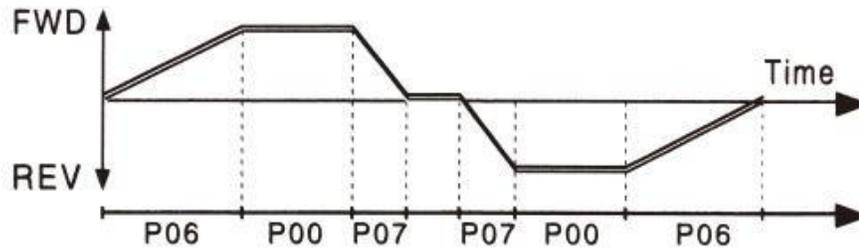


4. Summary of parameters settings of AD110

| Parameter | explanation | settings | Factory setting |
|-----------|-------------------------------|---|-----------------|
| P00 | Frequency reference | 0 ~ 99Hz (unit: 0.5Hz) | |
| P01 | source of frequency command | 0: Interface keypad control 1: Interface Potentiometer 2: exterior potentiometer 3:Rs485 | 1 |
| P02 | Run/stop of operation command | 0:interface keypad control 1:Rs485 2:Forward running while power input 3:Reverse Running while power input 4:Exterior input | 0 |
| P03 | Stop method | 0: Cost stop 1: Ramp stop 2: Brake stop | 1 |
| P04 | Max output frequency | 0 ~ 100Hz | 65Hz |
| P05 | Min Output frequency | 0 ~ 100Hz | 5Hz |
| P06 | Acceleration time | 0 ~ 250Hz/sec | 50Hz/sec |
| P07 | Deceleration time | 0 ~ 250Hz/sec | 50Hz/sec |
| P08 | Brake lead time | 0 ~3 sec | 0.3 sec |
| P09 | Brake value | 0~ 60% | 20%% |
| P10 | 3Hz VF value | 0 ~ 50% | 4% |
| P11 | 50Hz | 0 ~ 99% | 98% |
| P12 | Rs485 frame ASCII | 0:7E1 1:7O1 2:8N2 3:8E1 4:8O1 | 20%% |
| P13 | Rs485 protocol | 0:4800 1:19200 2: 9600 3: 38400 | 1 |
| P14 | Communication address | 1 ~ 255 | 1 |
| P15 | MI mode selection | 0: MI1 FWD/stop, MI2 REV/STop 1: MI1 RUN/stop, MI2 FWD/REV 2:MI1 RUN/Stop, MI2 Multiple-stop speed | 0 |
| P16 | MO mode selection | 0: Running indication 1: Max output frequency arrive 2: Fault indication | 0 |
| P17 | Multiple -step speed command | P04~p05 | 50 |
| P18 | Frequency arrive frequency | P04~p05 | 50 |
| P19 | overload tolerance | 1 ~ 100% | 50% |
| P20 | Temperature tolerance | 1℃ ~80℃ | 80℃ |
| P21 | Speed proportion | 0.25 ~100 | 1 |

Note:

*** How to setting P06、 P07 parameters**



Ex: P00=50,P06=10,P07=25 mean motor in forward running while input power, after 5 seconds, reach 50Hz, 2seconds from 50Hz to 0Hz while stopping
Motor in reverse running, 2 seconds reach 50Hz, and 5 seconds from 50Hz to 0Hz

Standard Motor Precaution:

- The energy loss is greater than for an inverter duty motor.
- While the motor running under lower rpm, the temperature of motor will be rising up due to the fan also running under lower rpm.
- While the motor running under lower rpm, the torque value of this motor will be decreased. Please don't add too much load

If you need more powerful function and multiple function variable speed drive, please get more information from AD100/AD350 and AD800.

And we also provide AS850 enhanced version VFD AC servo drive for simple position control, torque control, syn. Speed control for PMSM and IM.

AD100 Mini Frequency Inverter.

AD100 is a small and economical type inverter, which designed for small machine OEM general purpose application. The good performance of V/F control mode, multiple segment speed, flexible and accuracy PID, DC braking function, ModBus communication, that will make you machine become powerful and improving his competitive edge.

Power range: 0.4 to 1.5kw

Input voltage: single phase 220V \pm 15%

Control mode: Sensorless vector control without PG, V/f control

Protection function: Provide up to 25 kinds fault protection, over current, over voltage, under voltage, phase missing, overload protection function

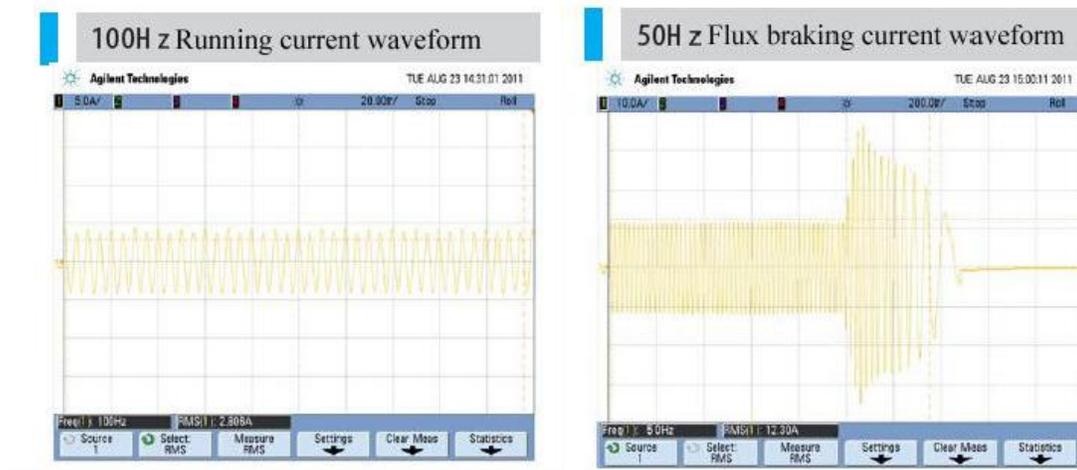
Cooling method: force cooling

Installation method: wall mount

IPM IGBT using

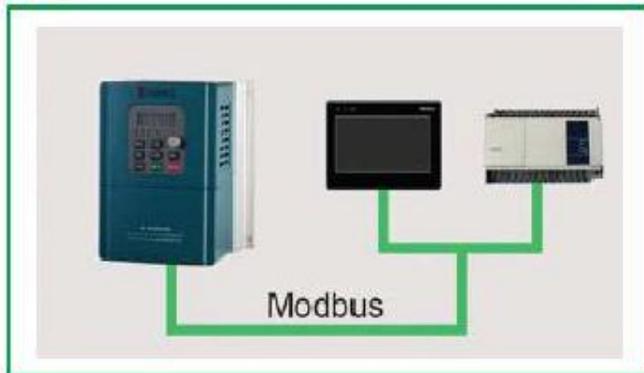


Good performance for smaller machine.



Built in RS485 interface for forming communication easily.

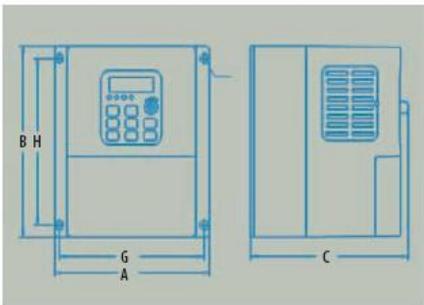
All series support Modbus communication



Multiple keypad connection is available



Data sheet.



| Modes | G | H | A | B | C |
|---|-----|-----|-----|-----|-----|
| AD 100-250.4-2.2G | 117 | 135 | 125 | 155 | 130 |
| AD 350-250.4-2.2G AD 350-4T0.75-3.7G | 117 | 135 | 125 | 155 | 130 |
| AD 350-5.5-7.5G | ... | ... | ... | ... | ... |
| AD 350-11-15G | ... | ... | ... | ... | ... |

Wiring diagram

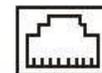
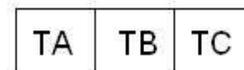
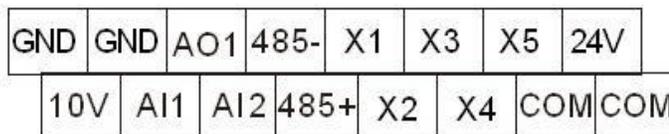
It has 5 digital input, DI5 can use for high pulse train input.

2 analog signal input,

1 analog output and

1 relay output.

Terminals diagram:



Wiring diagram see AD350 chapter.

AD350 High Performance Sensorless Vector Control Inverter

AD350 high performance vector control mini frequency inverter is KEWO independently developed new generation general purpose electrical motor controller, which adopt the same software platform as same as AD800.

With a new generation of high-performance advanced vector control technology applying, high torque control even under low speed, high speed precision, quick torque response and high speed range are available for sophisticated motor control.

It is featured to have modular design, small size, small temperature rise, low noise, and reliable performance. It has built in simple PLC, PID adjusting, programmable input and output terminals function, RS458 terminals, multi function analog input and output function. ect.

Power range: 2S 0.4 to 2.2kw, 4T 0.75 to 3.7kw.

Input voltage: Single phase 220V, 3 phase 380V $\pm 15\%$

Control mode: Sensorless vector control without PG, V/f control

Protection function: Provide up to 25 kinds fault protection, over current, over voltage, under voltage, phase missing, overload protection function

Cooling method: force cooling

Installation method: wall mount

Infineon IGBT module



AD350 Sensorless Vector Control Inverter

Products dimension

Data sheet

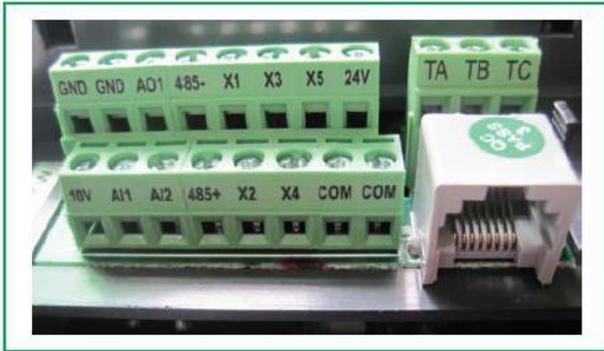


| AC drive models | Install lot mm | | Dimension mm | | | Bolt mm | Reference. |
|----------------------------------|----------------|-----|--------------|-----|-----|---------|------------|
| | G | H | A | B | C | | |
| AD350 series | | | | | | | |
| AD350-2S0.4GB~ AD350-2S2.2GB | 117 | 135 | 125 | 155 | 130 | M4 | Fig.1 |
| AD350-4T0.75GB~ AD350-4T3.7GB | | | | | | | |

Products features:

AD350 inverter has the same software and same operation manual as AD800.
Only the size and I/O layout is difference.

Clear silk print of terminal mark easy for wiring



Adopting new generation IGBT module,
all Kewo AC drive usnig IGBT module for quality guarantee.



Flanging design for easy installation



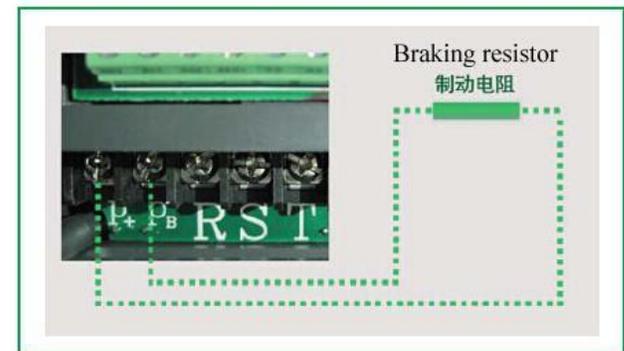
Thick PCBA coating for hard environment using



Heat sink and bottom housing together for better heat dissipation,
the side anti-dust cloth is option.



Bunit it braking unit for full power range of AC350.



*AD350 sensorless vector control inverter can't performance close loop vector control because there are no PG connector.

Wiring diagram

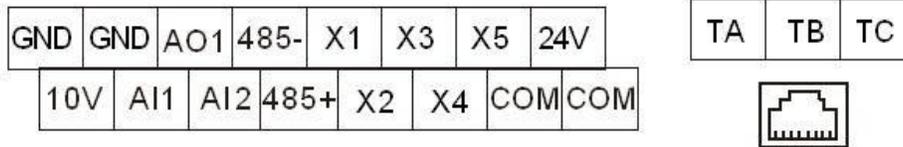
It has 5 digital input, DI5 can use for high pulse train input

2 analog signal input,

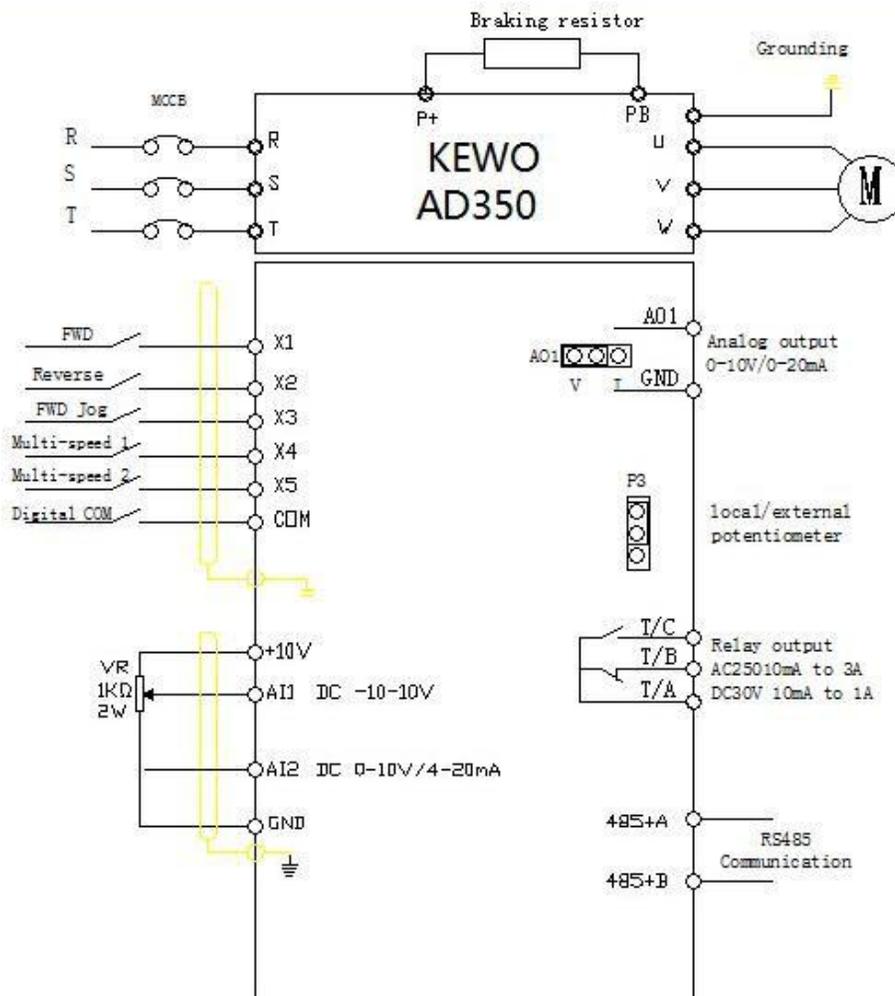
1 analog output and 1 relay output.

In built Rs485 terminal

Terminals diagram:



Wiring diagram.



AD100/AD350 frequency inverter application examples.

1. Food processing machinery

Bakery equipment, confectionary equipment, tea-making machine, noodle-making machines, candy-wrapping machines, rice/barely milling machines, flour milling machines, food mixers, food slicers, fruit sorting machines, etc.

Advantage:

- You can set the operating frequency according to the required work rate.
- Run and Stop keys.
- Ensures safety in the event of an instantaneous power failure.
- Low noise
- High torque from start up to the rated speed.

2. Conveyance machinery

Conveyors, automatic warehousing systems etc. Prevent the collapse of cargo on the conveyor.

The AD100/AD350 allow you to mitigate the shocks caused in starting and stopping a conveyor and change the acceleration /deceleration rates according to the conveyor characteristics and its applications.

The AD100/AD350 can slow down a high –inertia machine in a short period of time without causing an overvoltage trip by increasing the energy consumed by the motor.

The AD100/AD350 can turn on and off the braking circuitry in accordance with the inverter operating status.

It offers vector control and automatic torque boost control modes to achieve strong, stable torque from the start of a motor to the rated speed.

3. Fans & pumps

Built in fans- pumps in industrial machines, water supply and sewage systems, driers, etc.

Energy-saving mode

The variable torque and automatic energy saving modes help saving energy by passing optimal current in accordance with the load.

Automatic process control

Allows a motor to keep running and accelerate smoothly upon the recovery of power even in the event of instantaneous power failure.

Enable an uninterrupted operation without causing a trip.

.4 Health, medical and nursing care equipment.

Stair lifts, nursing bed, bubble baths, health care equipment, medical equipment

5. Environment and daily-life-related machinery

Commercial ironing boards, car washing machines, Garbage disposers, dust collectors, Dries, etc.

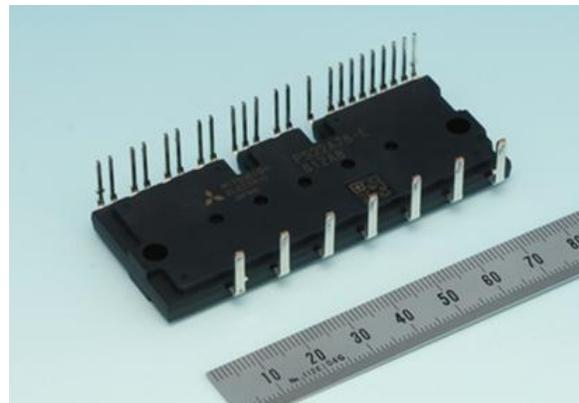
6. Packing machinery.

Inner packaging machine, packing machines, output packing machines, membrane packing machines

The AD100 economic VFD share the same software plat, the same cover, same size and same manual.
The big difference is power board difference.
AD100 use IPM IGBT, but AD350 use the iGBT module.



AD350 use iGBT module.



AD100 using the IPM iGBT, but AD350 use Infineon IGBT module

So the AD350 can used in hot temperature for a long time, and have longer service life span compare to AD100.
AD350 have single phase 220V and 3 phase 220V model.
AD350 have 4T, 380V model from 0.75kw to 4.0kw.

But AD100 only have single phase 220V input, 0.75kw to 1.5kw.

AD800 Series High Performance Vector Control Drive

Variable Frequency Drive (VFD)

When you need simplicity and intelligence in one self-contained solution, The AD series covers a wide range of options, ideal for variable and constant torque applications from pumps and fans to conveyors and mixers as well as many other variable and constant torque applications. Enjoy plug and play convenience right from the start.

- Compatible for IM and PMSM
- Excellent quick response with vector control
- High starting torque even under low speed.
- Rapid current limit, up to 20 kinds protection function.
- Latest generation Infineon IGBT modules using



When you need simplicity and intelligence in one self-contained solution, The AD800 covers a wide range of options. Ideal for variable and constant torque applications from pumps and fans to conveyors and mixers as well as many other variable and constant torque applications. Enjoy plug and play convenience right from the start. No customizing or special product engineering required.

Excellent unique ventilation design with powerful big fans.

Specification: (AD100, AD350, AD800, AD800S)

Single phase, 220V, 0.4kw to 2.2kw.

Three phase, 220V, 0.75kw to 75kw

Three phase, 380V/660V/1140V, 0.75 to 630kw.

Key product feature

- High performance flux vector control for IM and PMSM (AD800S can compatible PMSM)
- Excellent quick response with vector control
- Torque limit for machine safety protection
- Latest generation Infineon IGBT modules using
- High starting torque even under low speed.
- Rapid current limit, up to 20 kinds protection function.

Models, input current, output current.

| Model | Input voltage | 220V (1/2T) | 380V (4T) | 660V (6T) |
|---------------|---------------|-------------|-----------|-----------|
| AD100-2S0.4G | 0.4 | 2.5 | | |
| AD350-4T0.75 | 0.75 | 4 | 2.3 | |
| AD350-4T1.5G | 1.5 | 7 | 3.7 | |
| AD350-4T2.2G | 2.2 | 10 | 5.0 | |
| AD350-4T3.7G | 3.7 | 16 | 8.5 | |
| AD800-4T5.5G/ | 5.5 | 20 | 13 | |
| AD800-4T7.5G/ | 7.5 | 30 | 17 | 10 |
| AD800-4T11G/ | 11 | 42 | 25 | 15 |
| AD800-4T15G/ | 15 | 55 | 32 | 18 |
| AD800-4T18.5 | 18.5 | 70 | 38 | 22 |
| AD800-4T22G/ | 22 | 80 | 45 | 28 |
| AD800-4T30G/ | 30 | 110 | 60 | 35 |
| AD800-4T37G/ | 37 | 130 | 75 | 45 |
| AD800-4T45G/ | 45 | 160 | 90 | 52 |
| AD800-4T55G/ | 55 | 200 | 110 | 63 |
| AD800-4T75G/ | 75 | 260 | 150 | 86 |
| AD800-4T93G/ | 93 | 320 | 180 | 98 |
| AD800-4T110G | 110 | 380 | 210 | 121 |
| AD800-4T132G | 132 | 420 | 250 | 150 |
| AD800-4T160G | 160 | 550 | 310 | 175 |
| AD800-4T185G | 185 | 600 | 340 | 198 |
| AD800-4T200G | 200 | 660 | 380 | 218 |
| AD800-4T220G | 220 | 720 | 415 | 235 |
| AD800-4T250G | 250 | | 470 | 270 |
| AD800-4T280G | 280 | | 510 | 330 |
| AD800-4T315G | 315 | | 600 | 345 |
| AD800-4T355G | 355 | | 670 | 380 |
| AD800-4T400G | 400 | | 750 | 430 |
| AD800-4T500G | 500 | | 860 | 540 |
| AD800-4T560G | 560 | | 990 | 600 |

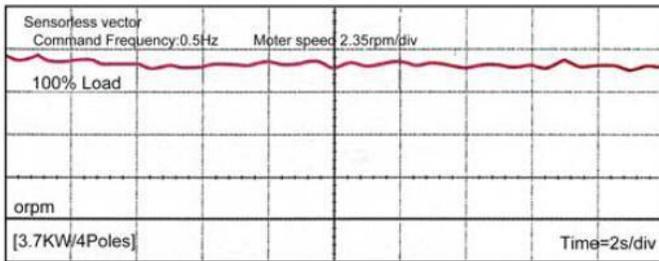
Features of products.

It has V/F, OLV(open loop vector control), CLV (close loop vector control), Compatible with variety of encoder such as collector, differential / rotary transformer .

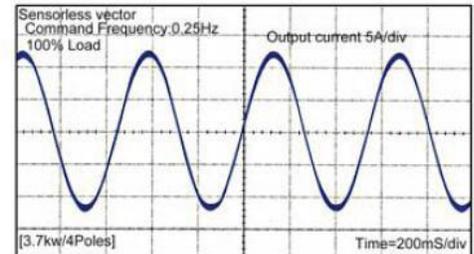
1). Wide speed control range

a). Sensorless open loop vector (OLV) control: 0.5 to 400Hz (1:100/50Hz datum point)

Sensorless without PG mode: 0.5 to 400Hz (1:100/50Hz)



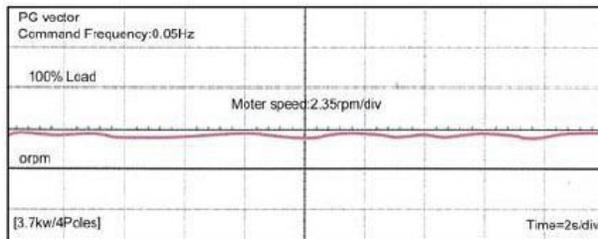
The speed waveform with 100% load under 0.25Hz.



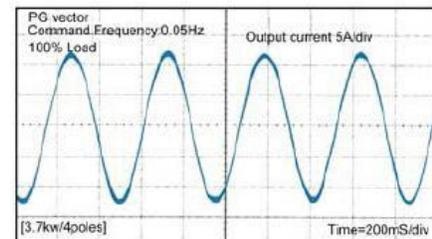
The current waveform with 100% load under 0.25Hz

b). Sensor with PG card: 0.5 to 400Hz (1:100/50Hz datum point) Good current waveform

PG sensor vector control mode: 0,5 to 400Hz (1:100/50Hz datum)



Speed wave form under 0.25Hz with full load in sensor close loop mode



Current wave form under 0.25Hz with full load in sensor close loop mode

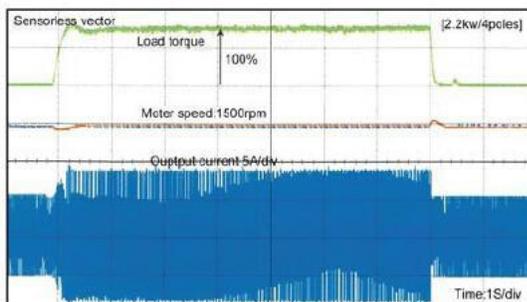
2). Response speed improving

Adopting high speed 32 bit DSP to get the high speed response of frequency inverter.

a.) The response 100rad/s, precision $\pm 0.5\%$ in sensorless open loop vector control mode.

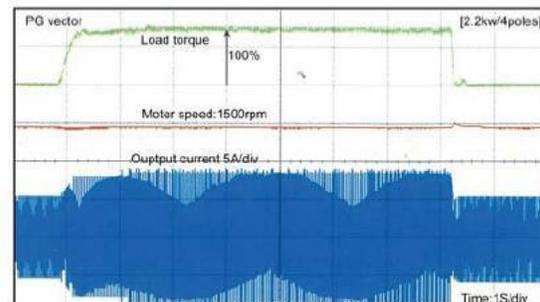
b.). The response 250rad/s, precision $\pm 0.01\%$ in sensor close loop vector control mode

Sensorless vector control mode: response 100 rad/s, accuracy $\pm 0.5\%$.



Impact load response characteristic (Sensorless without PG)

Sensor vector control mode: response 250rad/s, accuracy $\pm 0.01\%$

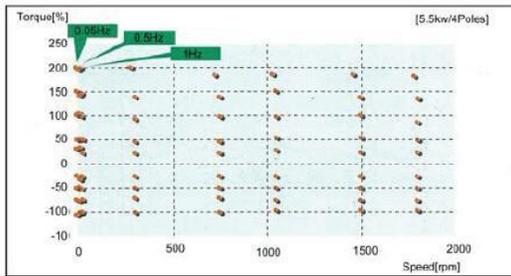


Impact load response characteristic (Sensorless with PG)

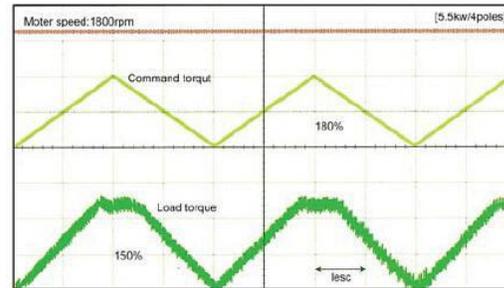
3). High torque output under low speed to meet some big inertia load conditions

High torque under low speed achievement.

Adopting advanced current vector control technology and motor parameters detecting to make high torque under low speed is available.



Torque characteristic

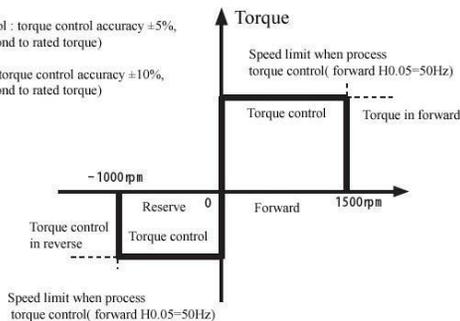


Accuracy torque limit

4). Torque control in OLV and CLV

Without PG open loop vector control : torque control accuracy $\pm 5\%$, torque control range: 1:50 (correspond to rated torque)

With PG close loop vector control: torque control accuracy $\pm 10\%$, torque control range: 1:20 (correspond to rated torque)



Speed limit in torque control mode

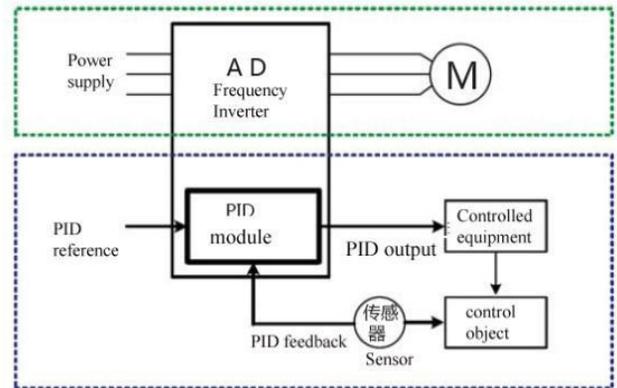
5). Powerful PID function

Possible to set PID1 and PID2 combination function, free switch between two PID parameters.

PID module can be used for external unit using with professional PID control.

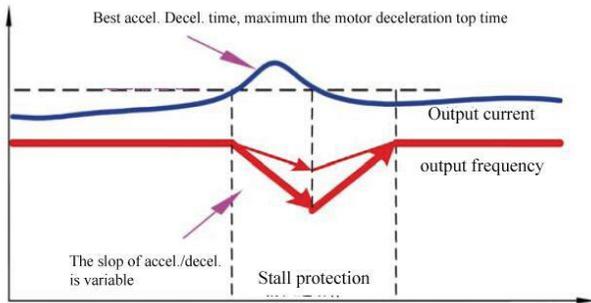
Flexible PID control with sleep mode, configure waking up frequency, sleep frequency, that is very easy using for water supply.

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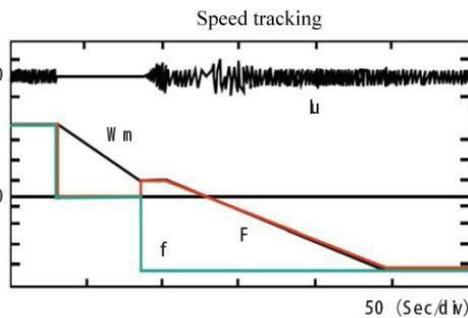
19

Stall protection illustrations



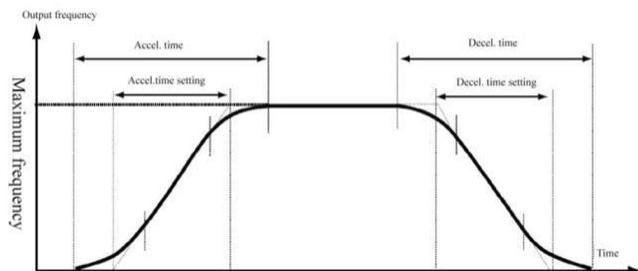
7). Speed tracking restart function

Detect motor speed and rotation direction automatically, no any trip during start even in reverse running status.

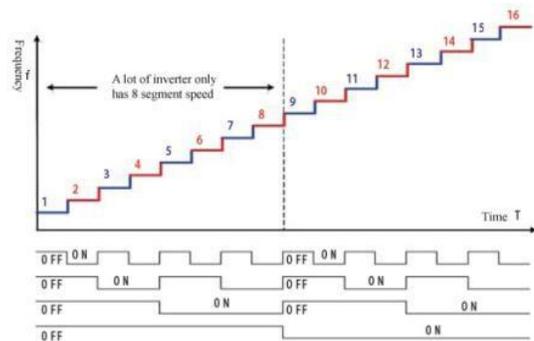
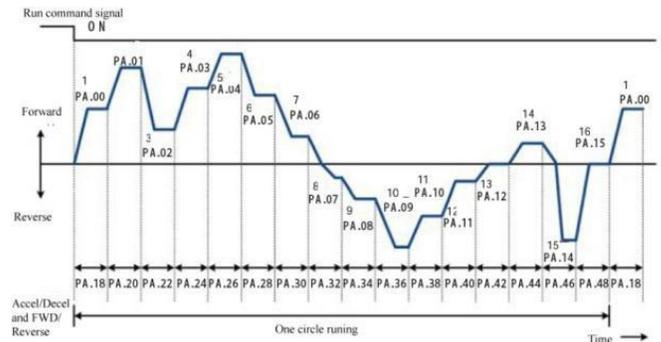


8). S curve function

S curve can improving the impact during the start and stop processing, it is very useful in crane, elevator application

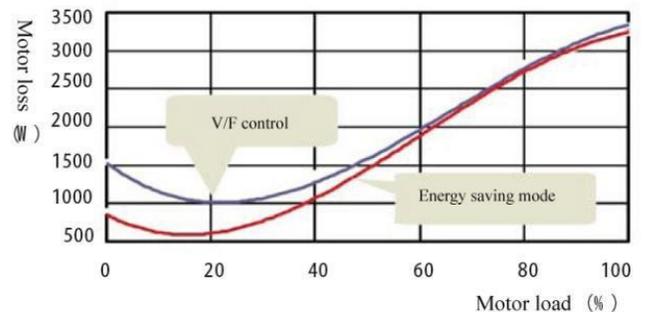


9).16 segment speed circle running, easy to configure.



10). Advanced energy saving technology

AD800 series inverter can detect the load status to control the output voltage and power factor to make motor work in high efficient mode.



Technical specification

| Items | | Specification | | |
|-----------------|--|---|-------------|---------------------------|
| Control mode | Control mode | SVC in open loop | V/F control | Close loop vector control |
| | Starting torque | 0.5Hz 180% | 0.5Hz 150% | 0.00Hz 180% |
| | Speed adjust range | 1:100 | 1:100 | 1:1000 |
| | speed stabilizing precision | | | ±0.02% |
| | Torque precision | NO | NO | ±5% |
| | Motor type | General induction motor, permanent magnet synchronous motor* | | |
| Function design | Highest frequency | General vector control :400Hz V/f control: 4000Hz | | |
| | frequency resolution | Digital setting: 0.01Hz analog setting: maximum×0.025% | | |
| | carrier frequency | 0.5K ~ 16KHz, the carrier frequency can be adjust by temperature automatically | | |
| | Frequency reference setting method | Digital of Control panel, analog AI1, AI2, potentiometer of control panel, UP/DN control, communication, PLC pulse frequency | | |
| | Accel./decel. characteristic | Linear curve and S curve accel. /decel. mode, range of time: 0.0 to 65000S. | | |
| | V/F curve | 3 mode: linear, multiple points, N Power | | |
| | V/F separation | 2 times separation: totally separation, half separation | | |
| | DC braking | DC braking frequency: 0.0 to 300Hz, DC braking current: 0.0% to 100% | | |
| | Braking unit | Built in braking unit up to 15kw, optional is 18.5kw to 75kw, external built in for above 93kw. | | |
| | Jog function | Job frequency range: 0.0 to 50.0Hz, the accel. and decel. time of Jog | | |
| | Configuration PID | Easy to perform pressure, flow, temperature close loop control | | |
| | PLC multiple speed | To achieve 16 segment speed running through built in PLC or terminal control | | |
| | Common Dc bus * | Multiple inverters use one DC bus for energy balance. | | |
| | Auto voltage regulation (AVR) | Enable to keep output voltage constant when grid fluctuation | | |
| | Over load tolerance capability | G type model: 150% rated current for 60s, 180% rated current for 2s, P type Model: 120% rated current for 60s, 150% rated current for 3s. | | |
| | Over current control when over voltage | Carry out limiting automation for running current, voltage to prevent over current, over voltage frequently | | |
| | Fast current limit function | minimize the IGBT module broken to protect the inverter, maximum reduce the over current fault. | | |
| | Torque limit and torque control | "Excavator" characteristics , torque limit automatically during motor running. Torque control is available in close loop vector control mode. | | |
| features | friendly interface | Display Hello when power on. | | |
| | Multiple function key JOG | It can set for Forward Jog, reverse Jog, forward/reverse switch | | |

| Items | | Specification |
|-------------|----------------------------|--|
| | button | |
| | Timing control function | A total running time and total running time calculating |
| | 2 group motor parameters | To achieve two motor switching freely, control mode is selectable |
| | Motor over heat protection | Accepting motor temperature sensor signal input via AI1 terminals. |
| | Multiple kinds encoder * | Compatible collector, difference, and rotary transformer Encoder. |
| | Command source | Control panel, control terminals, series communication, switch freely. |
| | Frequency source | Digital setting, analog current/voltage, pulse setting, serial communication, main and auxiliary combination. |
| Environment | Protection function | Short circuit detect after power on, input/output phase missing, over voltage, over current, under voltage, over heat, over load protection. |
| | Application site | Indoor, free of exposure to sunlight, no dusty, no corrosive, no inflammable gas, no oil and water vapor, and water dipping |
| | Altitude | Lower 1000m |
| | environment temperature | -10°C ~+40°C, power derate for 40 ~ 50°C, rated current derated 1% for 1°C increasing. |
| | humidity | Less than 95%, no water condense. |
| | storage | -40~+70°C |

*:AD350 have no this function
AD800 AC Drive models.



1.5kw to 11kw

15kw to 93kw

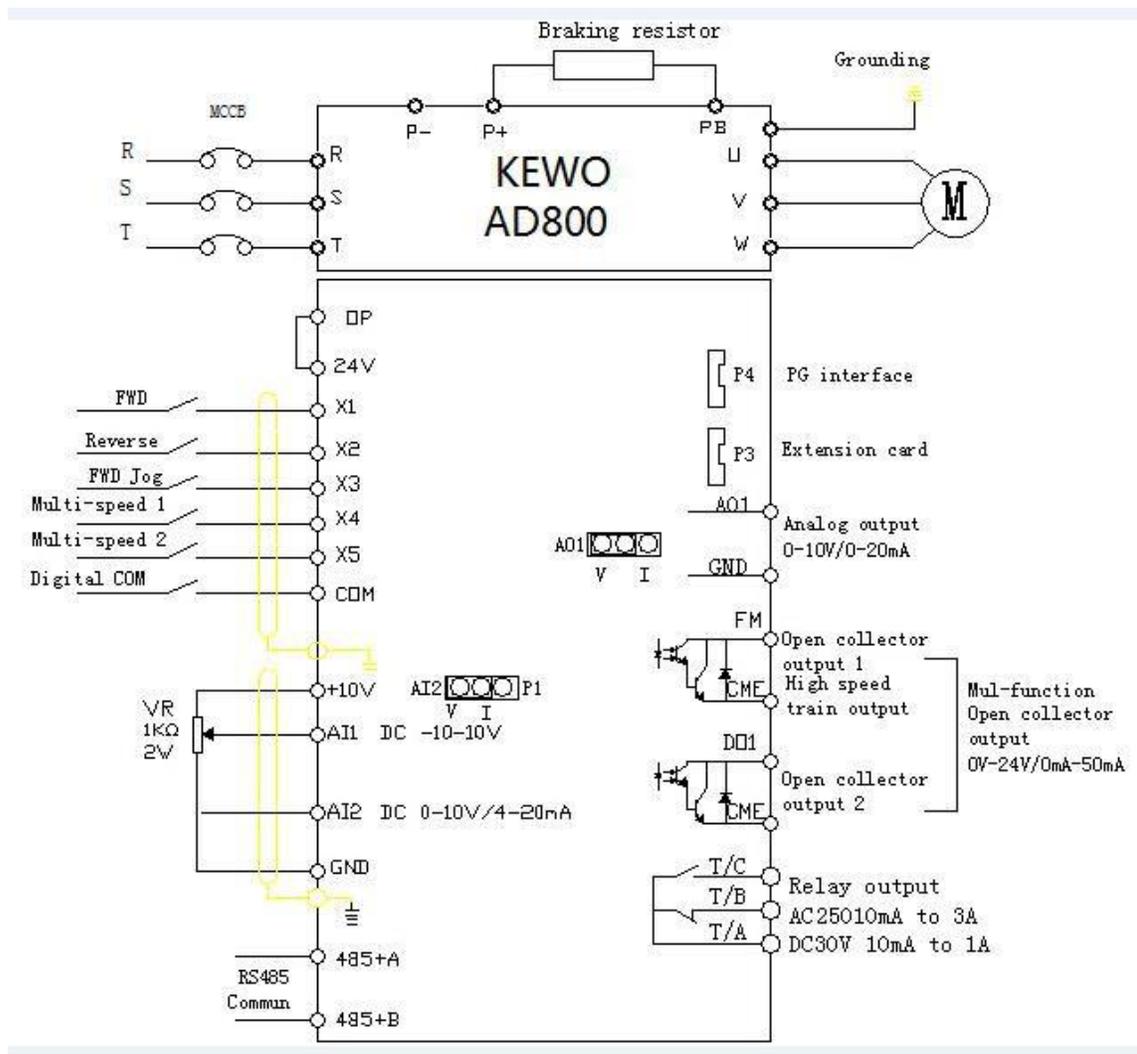
above 110kw

Wiring diagram of AD800.

1. PG cards external built if need, support ABZ optical encoder, ABZ differential input, Rotating transformer encoder...)

2. Built in following functions terminals.

- It has 5 digital I/O input, compatible with sink and source way. (NPN/PNN)
- 2 Analog input, support -10V to 10V, 0-10V, 0/4 to 20mA.
- 1 Analog output (0-10V/0-20mA can be selected)
- 2 collector output (FM and CME support the high pulse output).
- 1 relay output. (if need two relays please built external card)
- Rs485 communication card.(485+, 485-)
- Extension card is available. (4 digital terminals, 24V power supply, OP (external power supply terminal, 1 analog output , and 1 relay output)



AD800 series inverter connection diagram

AD800 Inverter Data sheet.

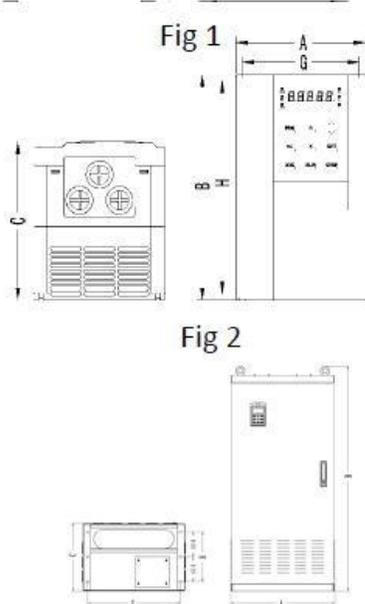


Fig 3

| AD800 series 3 PH, 220V | | | | | | | |
|-------------------------|-----|-----|-----|-----|------|----|-------|
| AD800-2T0.75GB | | | | | | | |
| AD800-2T1.5GB | 117 | 135 | 125 | 155 | 130 | M4 | Fig.2 |
| AD800-2T2.2GB | | | | | | | |
| AD800-2T3.7GB | 140 | 260 | 160 | 270 | 165 | M5 | Fig.2 |
| AD800-2T5.5GB | | | | | | | |
| AD800-2T7.5GB | 140 | 350 | 210 | 370 | 178 | M6 | Fig.2 |
| AD800-2T11G | | | | | | | |
| AD800-2T15G | 200 | 410 | 270 | 430 | 225 | M6 | Fig.2 |
| AD800-2T18.5G | | | | | | | |
| AD800-2T22G | 200 | 500 | 290 | 520 | 225 | M8 | Fig.2 |
| AD800-2T30G | | | | | | | |
| AD800-2T37G | 250 | 580 | 352 | 600 | 285 | M8 | Fig.2 |
| AD800-2T45G | | | | | | | |
| D800-2T55G | 300 | 700 | 458 | 720 | 310- | M8 | Fig.2 |
| AD800-2T75G | | | | | | | |

3 PH 380V/440V

| AC drive models | Install lot mm | | Dimension mm | | | Bolt mm | Reference. |
|-----------------|----------------|-----|--------------|-----|-----|---------|------------|
| | G | H | A | B | C | | |
| AD800-4T1.5GB | 117 | 210 | 130 | 220 | 165 | M4 | Fig2 |
| AD800-4T2.2GB | | | | | | | |
| AD800-4T3.7GB | | | | | | | |
| AD800-4T5.5PB | | | | | | | |
| AD800-4T5.5GB | | | | | | | |
| AD800-4T7.5PB | 140 | 260 | 160 | 270 | 190 | M5 | Fig2 |
| AD800-4T7.5GB | | | | | | | |
| AD800-4T11PB | | | | | | | |
| AD800-4T11GB | | | | | | | |
| AD800-4T15PB | 140 | 355 | 210 | 370 | 190 | M6 | Fig2 |
| AD800-4T15GB | | | | | | | |
| AD800-4T18.5GB | | | | | | | |
| AD800-4T18.5G | | | | | | | |
| AD800-4T22P | 200 | 410 | 270 | 430 | 235 | M6 | Fig2 |
| AD800-4T22G | | | | | | | |
| AD800-4T30P | | | | | | | |
| AD800-4T30G | | | | | | | |
| AD800-4T37P | 200 | 500 | 290 | 520 | 265 | M8 | Fig2 |
| AD800-4T45P | | | | | | | |
| AD800-4T45G | 250 | 560 | 352 | 580 | 295 | M8 | Fig2 |
| AD800-4T55P | | | | | | | |
| AD800-4T55G | | | | | | | |
| AD800-4T75P | | | | | | | |
| AD800-4T75G | | | | | | | |

| AC drive models | Install lot mm | | Dimension mm | | | Bolt mm | Reference. |
|-----------------|----------------|-----|--------------|------|-----|---------|------------|
| | G | H | A | B | C | | |
| AD800-4T75G | 300 | 700 | 458 | 720 | 320 | M8 | Fig2 |
| AD800-4T93P | | | | | | | |
| AD800-4T93G | | | | | | | |
| AD800-4T110P | | | | | | | |
| AD800-4T110G | | | | | | | |
| AD800-4T132P | | | | | | | |
| AD800-4T132G | 400 | 700 | 508 | 720 | 360 | M8 | Fig 2 |
| AD800-4T160P | | | | | | | |
| AD800-4T160G-C | | | | | | | |
| AD800-4T185P-C | 490 | -- | 550 | 1160 | 370 | M12 | Fig 2 |
| AD800-4T160G | | | | | | | |
| AD800-4T185P | | | | | | | |
| AD800-4T185G | | | | | | | |
| AD800-4T200P | 530 | -- | 590 | 1270 | 390 | M12 | Fig 3 |
| AD800-4T200G | | | | | | | |
| AD800-4T220P | | | | | | | |
| AD800-4T220G | | | | | | | |
| AD800-4T250P | 660 | -- | 710 | 1450 | 410 | M12 | Fig 3 |
| AD800-4T250G | | | | | | | |
| AD800-4T280P | | | | | | | |
| AD800-4T280G | | | | | | | |
| AD800-4T315P | | | | | | | |
| AD800-4T315G | 770 | -- | 832 | 1850 | 410 | M16 | Fig 3 |
| AD800-4T355P | | | | | | | |
| AD800-4T355G | | | | | | | |
| AD800-4T400P | | | | | | | |
| AD800-4T400G | 770 | -- | 832 | 1850 | 410 | M16 | Fig 3 |
| AD800-4T450P | | | | | | | |

Application.

AD series high performance inverter better being used in various application with high accuracy speed control quick torque response and starting torque.

Textile: P-jump Winders, Extruders, Tufting Machines, spinning machine

Packaging: In-feed / Out-feed, Case Packing, Bottling & Canning, Carton Manufacturing. Beverage packing

Plastics & Rubber: Extruders, Blow Molding, Thermoforming, Injection Molding.

Pulp & Paper: Paper Machines, Debarkers, Winders, Saw Mills

Converting: Coaters ,Laminators ,Slitters ,
Flying Cutters

Air Handling: Supply and Return Fans ,Cooling Towers ,Spray Booths ,Dryers

Oil & Gas: Top Drives ,Pumpjacks, Down-hole Pumping Centrifuges

Material Handling: Conveyors, Sortation,
Palletizers, Coil Winding

Metals: Stamping / Punch Press, Wind /Unwind, Cut-to-length,cable drawing.
Wire Draw

Construction Materials: Kilns, Planers, Flying Cutoff, Mixers

Laundry: Dryers, Extractors, Folders, Washers

Food & Beverage: Conveyors, Fillers, Mixers, Centrifuges

Automotive: Stamping, Test Stands, Indexing, Metal Cutting

Construction crane, hoist, lifting,

