

Additional information

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Product description

HSD2 series synchronous AC servo drive is designed and manufactured based on the market requirements with employing the advanced control algorithm. It can realize both speed and accurate position digital control. With intelligent power module (IPM) and other latest technology design HSD2 servo drive makes simple operation, high reliability, small size and easy to install.

Covering a wide power range of servo motor(up to 5.5KW) HSD2 servo driver has mature servo technology and the highest cost performance.

At a glance

- Wide Speed Range: 0.1 to 5000rpm
- Strong Overload feature: three times of rated torque
- High dynamic feature: Velocity loop bandwidth up to 300Hz, small speed
- Various I/O functions: opto-coupler isolation and programmable functions
- Three control mode: position / speed / torque
- Three kind of pulse and analog command input
- Various protection functions
- 0.2~5.5KW power range
- 2500PPR encoder, best cost- performance in the market. More encoder type can be customized.

Customer benefits

- HSD2 servo drive could be used in various industries thanks to the perfect response feature and stability. It can work for plenty of applications like:
- Lathe/Milling machine(cost effective solution combine with HNC602/606(T/M) CNC system)
- Cutter/Turret control of machine tool
- X-Y table control
- Sealing machine
- Feeding machine
- Packaging and printing machine
- Carving machine
- Lathe/Milling machine(cost effective solution combine with HNC602/606(T/M) CNC system)
- High-speed winding machine
- Cutting applications replace stepper motor
- Textile equipment

www.hncelectric.com/hsd2

For more information, please enter the link or scan the code via mobile devices and get direct access to technical date,manual,application examples and much more.



Specifcaiton

| Type | | HSD2-020 | HSD2-030 | HSD2-050 | HSD2-065 |
|-------------------------|-----------------------------|---|----------|----------|----------|
| Power supply | | Three-phase: AC220V -15%~+10% 50/60Hz | | | |
| Environment | Temperature | Operation: 0~40°C Storage: -40~50°C | | | |
| | Humidity | Operation: 40%~80% (non-condensing) Storage: Below 93% (non-condensing) | | | |
| IP rating | | IP20 | | | |
| Control of main circuit | | SVPWM control | | | |
| Regeneration | | Built-in | | | |
| Feedback type | | 2500ppr incremental encoder(10000resolution) | | | |
| Control mode | | Position/Speed/Torque | | | |
| Analog input | | -10V~+10V, input resistance 10k | | | |
| Digital input | | Five programmable input terminals (optical isolation). Functions are: Servo-ON, Alarm clear, CCW over-travel inhibition, CW over-travel inhibition, CCW torque limit, CW torque limit, Emergency stop, Electronic gear select 1, Electronic gear select 2, Position deviation clear, Pulse input inhibition. | | | |
| Digital outputs | | Three programmable output terminals (optical isolation), Functions are: Servo ready, Servo alarm, Positioning complete, At speed reached, Electromagnetic brake release, Torque in-limit. | | | |
| Encoder signal outputs | | Signal type A, B, Z(Differential output line driver),Z singal (open collector output) | | | |
| Position | | Differential input: ≤500KHZ (kpps) , Single-end input: ≤200KHZ (kpps) , | | | |
| | Command mode | Pulse+Direction; CCW pulse+CW pulse; A phase+B phase (orthogonal) | | | |
| | Electronic gear ratio | 1~32767/1~32767 | | | |
| Monitor function | | Speed, current, position, position deviation, motor torque, motor current, command pulse frequency, etc. | | | |
| Protection function | | Over-speed, over-voltage, over-current, over-load, regeneration abnormal, encoder signal abnormal, excess position deviation, etc. | | | |
| Characteristic | Frequency response of speed | >300Hz | | | |
| | Fluctuation of speed | < ±0.03%(load 0~100%) ; < ±0.02%(power supply -15~+10%) | | | |
| | Speed control range | 1:5000 | | | |

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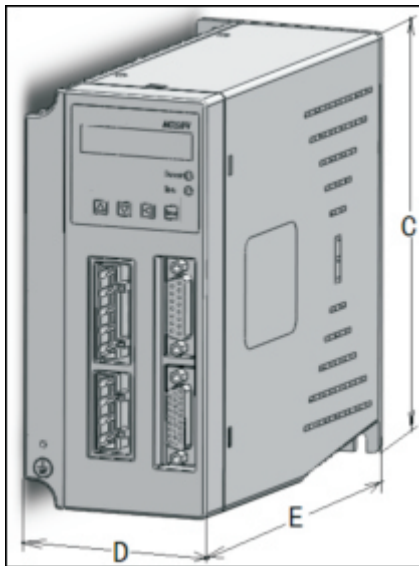


Model Definition



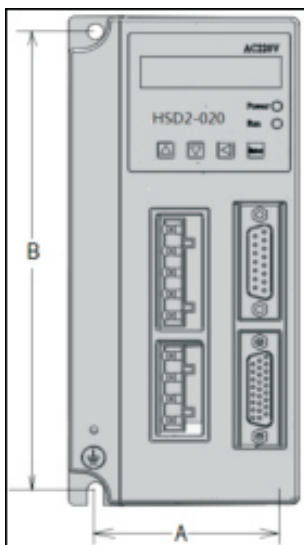
Dimensional Drawing

HSD2 Servo Drive Dimensions



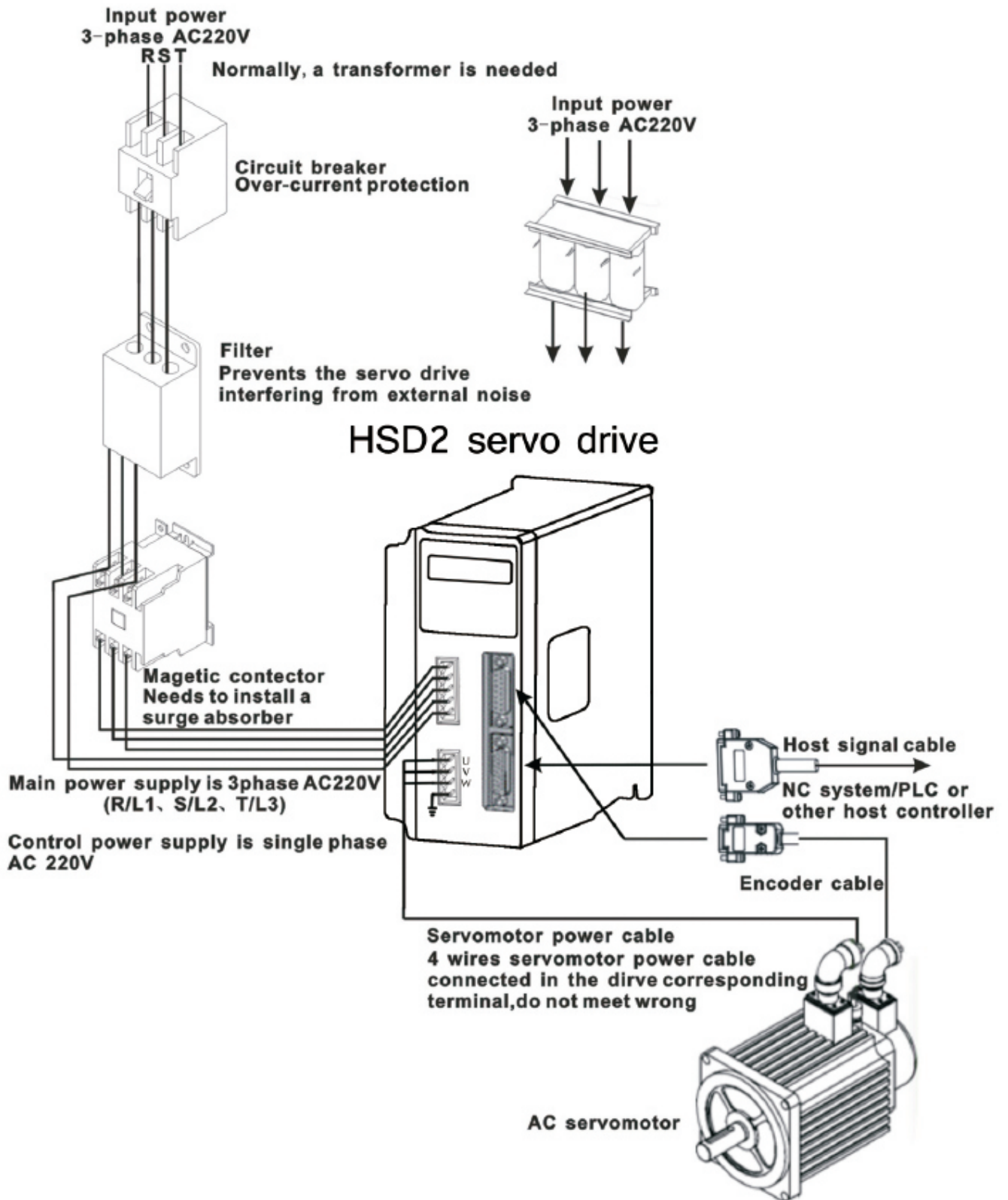
| Type | C(mm) | D(mm) | E(mm) |
|-----------|-------|-------|-------|
| HSD2-020 | 170 | 77 | 172 |
| HSD2-030 | 185 | 82 | 182 |
| HSD2-050 | 200 | 92 | 186 |
| HSD2-065 | 215 | 105 | 207 |
| HSD2-030A | 195 | 97 | 155 |

HSD2 Servo Drive Installation Dimensions



| Size data of installation | | |
|---------------------------|-------|-------|
| Type | A(mm) | B(mm) |
| HSD2-020 | 60 | 160 |
| HSD2-030 | 65 | 175 |
| HSD2-050 | 75 | 189.3 |
| HSD2-065 | 88 | 203.5 |
| HSD2-030A | 25 | 208 |

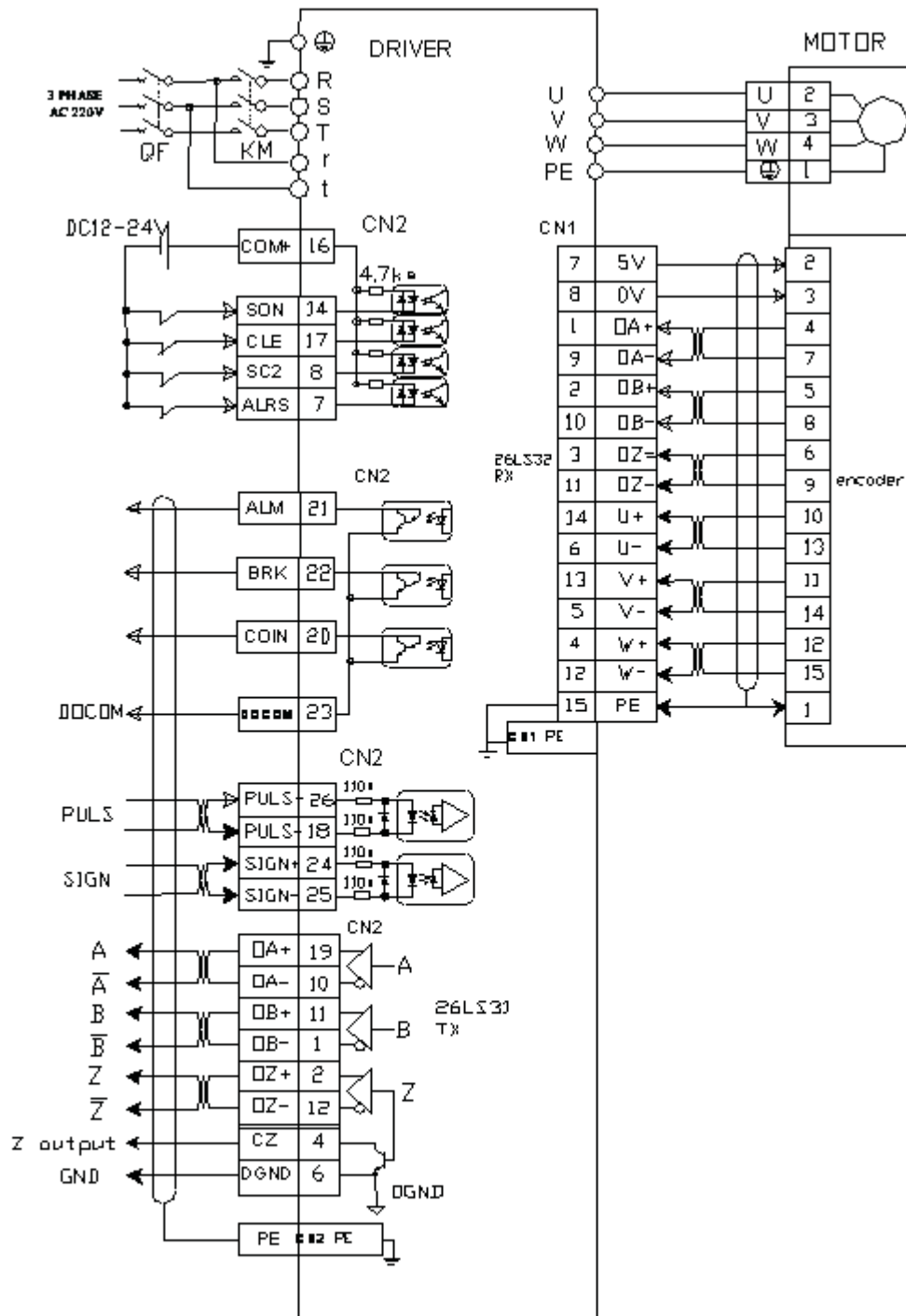
Connection of Peripheral Devices



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Connection Diagram

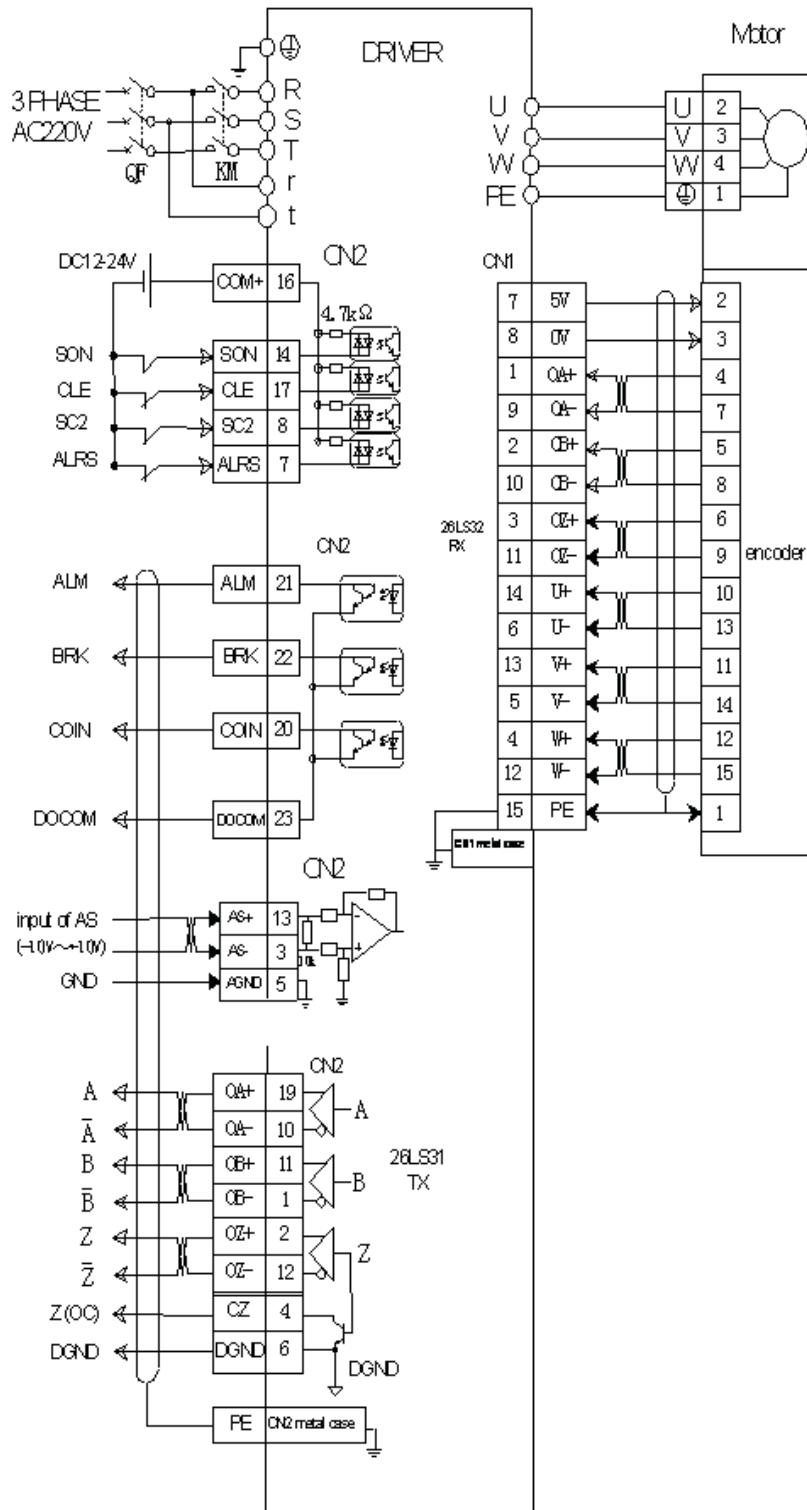
Position control mode



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Speed / torque control mode



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