

HD 3N High Performance Smart Inverter



HD 3N is small-sized of inverter with high performance facing to general industry.

Three phase 380 ~ 460V..... 7.5 ~ 75kW

Product Features

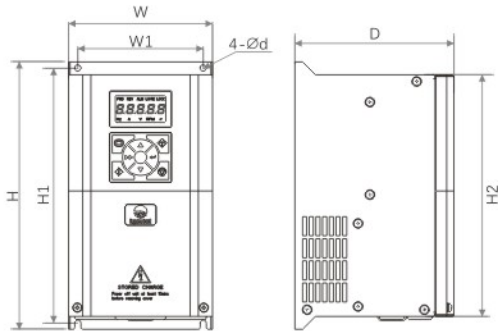
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|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| High performance, Small volume | High performance SVC control, high accuracy. Small volume, about 70% of general inverter and installation space can be saved. |
| Flexible digital input signal | Programmable bipolar signal input. Compatible DC and AC signal input: DC input voltage range 15VDC~56VDC, Compatible 24VDC/ 36VDC/ 48VDC; AC input voltage range 12VAC~54VAC, Compatible 36VAC/ 48VAC. |
| Abundant industry application | Progress PID regulatory function. Simply PLC function. The textile pendulum frequency function. Fixed length control function. Multi-speed control. |
| Energy brake unit | Build-in. |
| Standard LCD keypad | English display, Convenient to be used. |

Technical Data

| Electrical data | |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| Input voltage | Three phase 380~460V Wave deviation not exceed±10%, Unbalanced rates < 3% |
| Input frequency | 50/60Hz±5% |
| Output voltage | 0~Input voltage |
| Output frequency | 0~400.0Hz |
| Performance | |
| Control mode | V/f control, SVC control |
| Overload ability | 2minutes for 150% rated output current, 10 seconds for 180%rated output current |
| Velocity resolutions | Digital setting: 0.01Hz, Analogue setting: 0.1% × Max.frequency |
| SVC control | Speed control accuracy: ±0.5%. Speed control range: 1:100. Torque control respond: < 200ms. Start torque: 180% rated torque/0.5Hz. |
| Input/Output | |
| Analogue power supply | +10V, load ability 100mA |
| Digital power supply | +24V, load ability 200mA |
| Analogue input | AI1 : Voltage 0~10V AI2 : (Voltage/current is selectable)0~10V/0~20mA |
| Analogue output | AO1~AO2 : (Voltage/current is selectable) 0~10V/0~20mA |
| Digital input | DI1~DI6, Optical decoupled input *DI6 can be selected as high speed pulse input |
| Digital output | DO1~DO2, Optical decoupled output *DO2 can be used as high speed pulse output once again |
| Relay output | R1A/R1B/R1C Contactor capacity: 250VAC/3A or 30VDC/1A |
| Environmental characteristics | |
| Work temperature | -10~+40°C no deduction; Output current should be 2% derated for each 1°C over 40-50°C |
| Storage temperature | -40~+70°C |
| Use environment | Not at the direct sunlight, oily dust, corrosive gas, steamer, drops and salts |
| Altitude | No derating under 1000meters and derate above 1000meter and under 4000meters |
| Humidity | Less than 95% RH, no water drops |
| Vibration | 3.5m/s ² in 2~9Hz 10m/s ² in 9~200Hz (IEC60721-3-3) |

| HD 3N High Performance Smart Inverter | | | Power Selection | | | Braking Resistor(recommendation) | | |
|---------------------------------------|---------------|----------------|--------------------|-----------------------|------------------------|----------------------------------|-------------------|--------------------|
| Size | Product Model | Motor Power kW | Rated Capacity kVA | Rated Input Current A | Rated Output Current A | Resistor Range Ω | Resistor Power kW | Energy Brake Units |
| F3 | HD3N-4T7P5G | 7.5 | 11 | 19 | 17 | 60-80 | 0.8 | Build-in |
| F3 | HD3N-4T011G | 11 | 16 | 28 | 25 | 40-50 | 1.2 | Build-in |
| F4 | HD3N-4T015G | 15 | 21 | 35 | 32 | 30-40 | 1.5 | Build-in |
| F4 | HD3N-4T018G | 18.5 | 24 | 39 | 37 | 25-30 | 2 | Build-in |
| F5 | HD3N-4T022G | 22 | 30 | 47 | 45 | 20-25 | 2.5 | Build-in |
| F5 | HD3N-4T030G | 30 | 39 | 62 | 60 | 15-20 | 3.0 | Build-in |
| F6 | HD3N-4T037G | 37 | 49 | 77 | 75 | 15-20 | 4 | Build-in selection |
| F6 | HD3N-4T045G | 45 | 59 | 92 | 90 | 10-15 | 4.5 | Build-in selection |
| F7 | HD3N-4T055G | 55 | 72 | 113 | 110 | 10-15 | 5.5 | Build-in selection |
| F7 | HD3N-4T075G | 75 | 100 | 156 | 152 | 8-10 | 7.5 | Build-in selection |

Production And Installation Size



| Size | Production Size(mm) | | | Installation Size(mm) | | | | GW |
|------|---------------------|-----|-----|-----------------------|-----|-----|----|-----|
| | W | H | D | W1 | H1 | H2 | d | |
| F3 | 140 | 260 | 155 | 122 | 248 | 235 | 6 | 5.4 |
| F4 | 180 | 298 | 175 | 160 | 284 | 270 | 6 | 8.3 |
| F5 | 220 | 375 | 190 | 200 | 360 | 345 | 7 | 13 |
| F6 | 260 | 440 | 230 | 220 | 420 | 403 | 8 | 21 |
| F7 | 300 | 555 | 270 | 240 | 535 | 515 | 10 | 36 |

