



Automation for a Changing World

## **Delta Sensorless Vector Control Compact Drive VFD-E Series**



[www.deltaww.com](http://www.deltaww.com)

 **DELTA**  
Smarter. Greener. Together.

# Features

## ▶ **Modular Design**

Modular structure and extension with optional cards

## ▶ **Standard MODBUS Protocol**

Standard MODBUS protocol via RS-485

## ▶ **Built-in EMC Filter** (230V single-phase and 460V 3-phase)

Efficiently reduces electromagnetic interference

## ▶ **Compact Design**

Space saving and easy DIN rail mounting with optional DIN rail adapter

## ▶ **Optional Fieldbus Modules**

Provide connection to a variety of networks, including PROFIBUS, DeviceNet and CANopen

## ▶ **Flexible Extension**

Via optional cards, such as I/O card, Relay card, PG (Encoder) card and USB card, to meet your application requirements



## ▶ **RFI Switch for IT Mains**

Removable "Y" capacitor to use with IT mains supplies



## ▶ **Easy DC Bus Sharing**

Multiple VFD-E units can be connected in parallel to share regenerative braking energy. It prevents over-voltage and stabilizes the DC bus voltage

## ▶ **Complete Protection Functions**

High precision current detection, full overload protection (oL, oL1 and oL2), overvoltage/overcurrent stall prevention, short circuit protection, reset after fault, speed search function and motor overheat protection by PTC

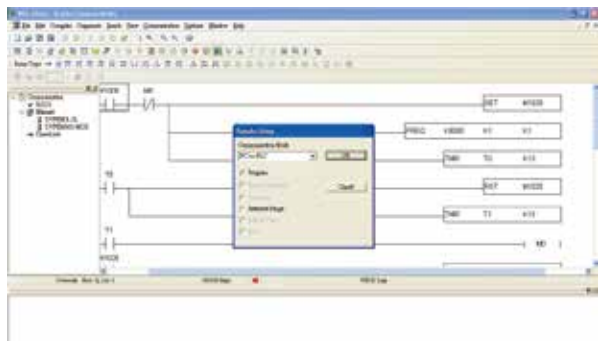
## ▶ **Removable Keypad**

The standard keypad acts as a status monitor. More functions, including parameter modification, RUN/STOP, speed change, and status display, are available via an optional keypad



### ► Built-in PLC Function

PLC programming and editing capability without the need of an actual PLC



### ► Side-by-side Installation (40°C)

High-efficiency cooling and flexible spacing



### ► Power Range

Single-phase 115 V series: 0.2~0.75 kW (0.25~1 hp)  
 Single-phase 230 V series: 0.2~2.2 kW (0.25~3 hp)  
 3-phase 230 V series: 0.2~15 kW (0.25~20 hp)  
 3-phase 460 V series: 0.4~22 kW (0.50~30 hp)

### ► Easy Maintenance

Removable cooling fan for easy maintenance



## ► Applications

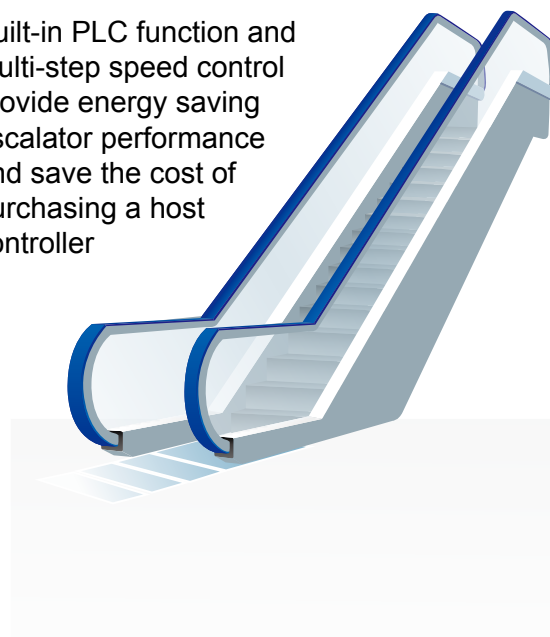
### ► Vacuum compressor

Outstanding overload capability of VFD-E reduces the impact of sudden load increase to the vacuum compressor

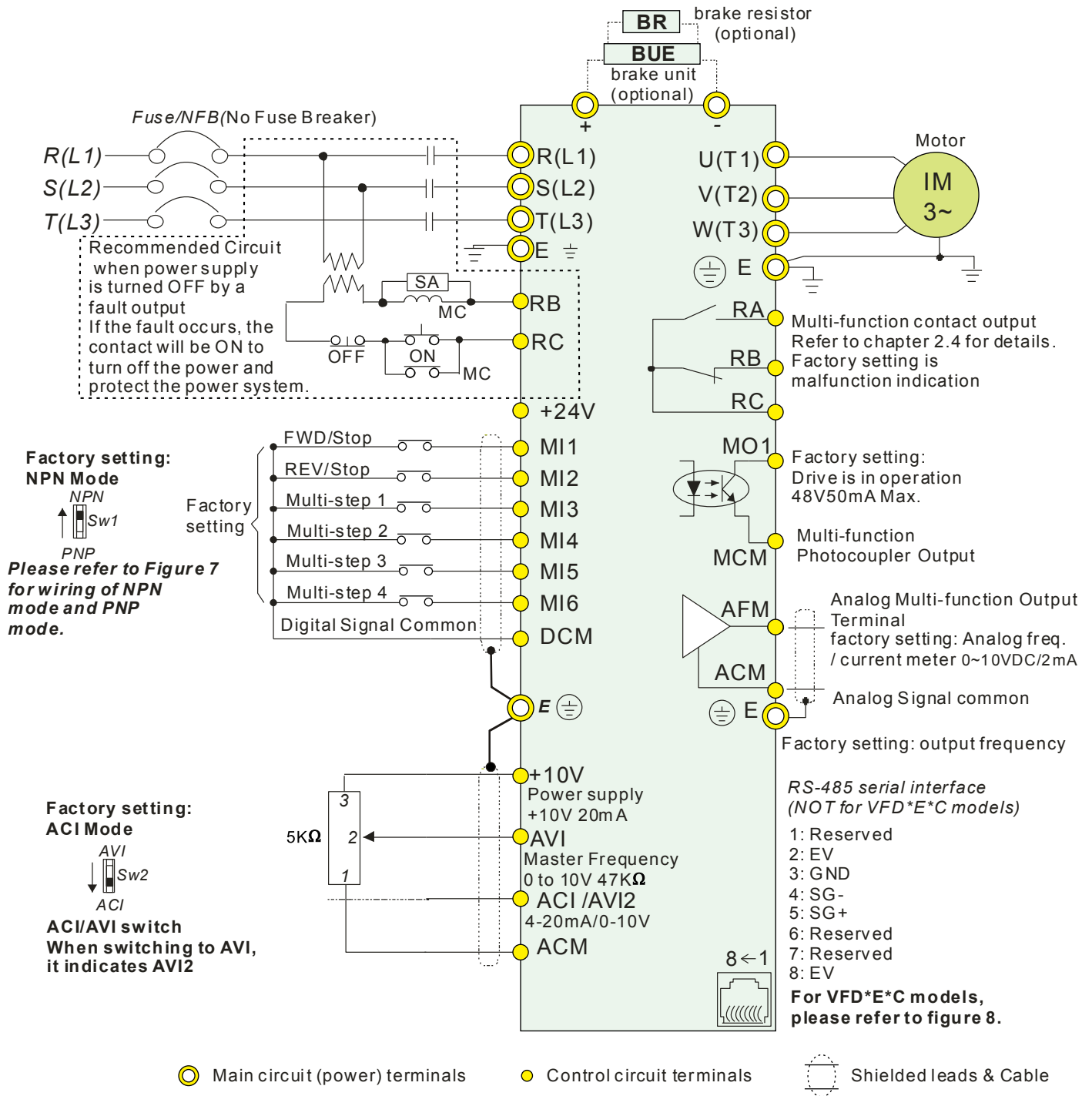


### ► Escalator

Built-in PLC function and multi-step speed control provide energy saving escalator performance and save the cost of purchasing a host controller



# Standard Wiring Diagram

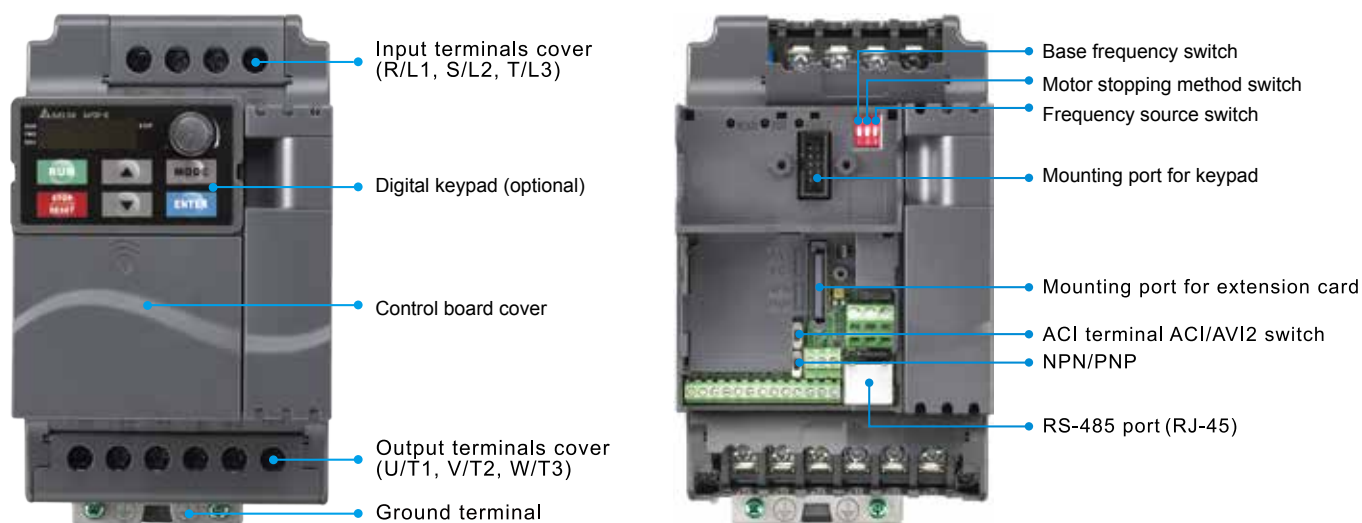


## NOTE

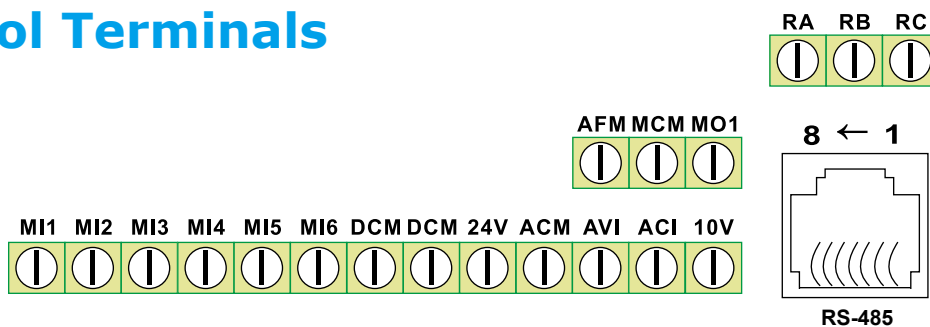
It is recommended to install a circuit breaker at the control terminal to protect the circuit from an operation abnormality or sudden power outage.

The protection circuit uses the multi-function output terminal of the AC motor drive for connection. When an abnormal condition (closed contact) occurs, the external power supply is disconnected to protect the power system of the AC motor drive.

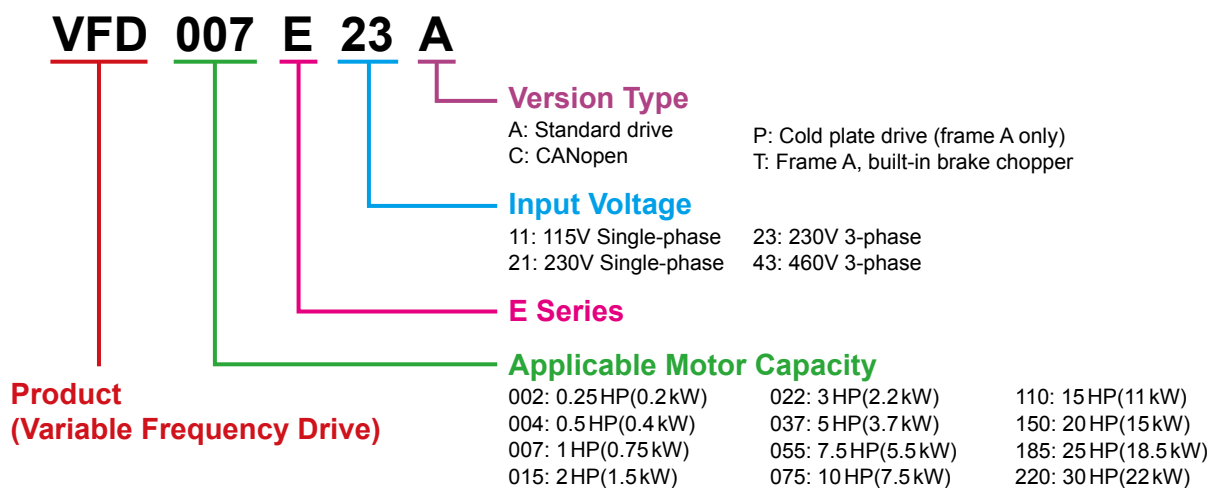
## External Parts



## Control Terminals



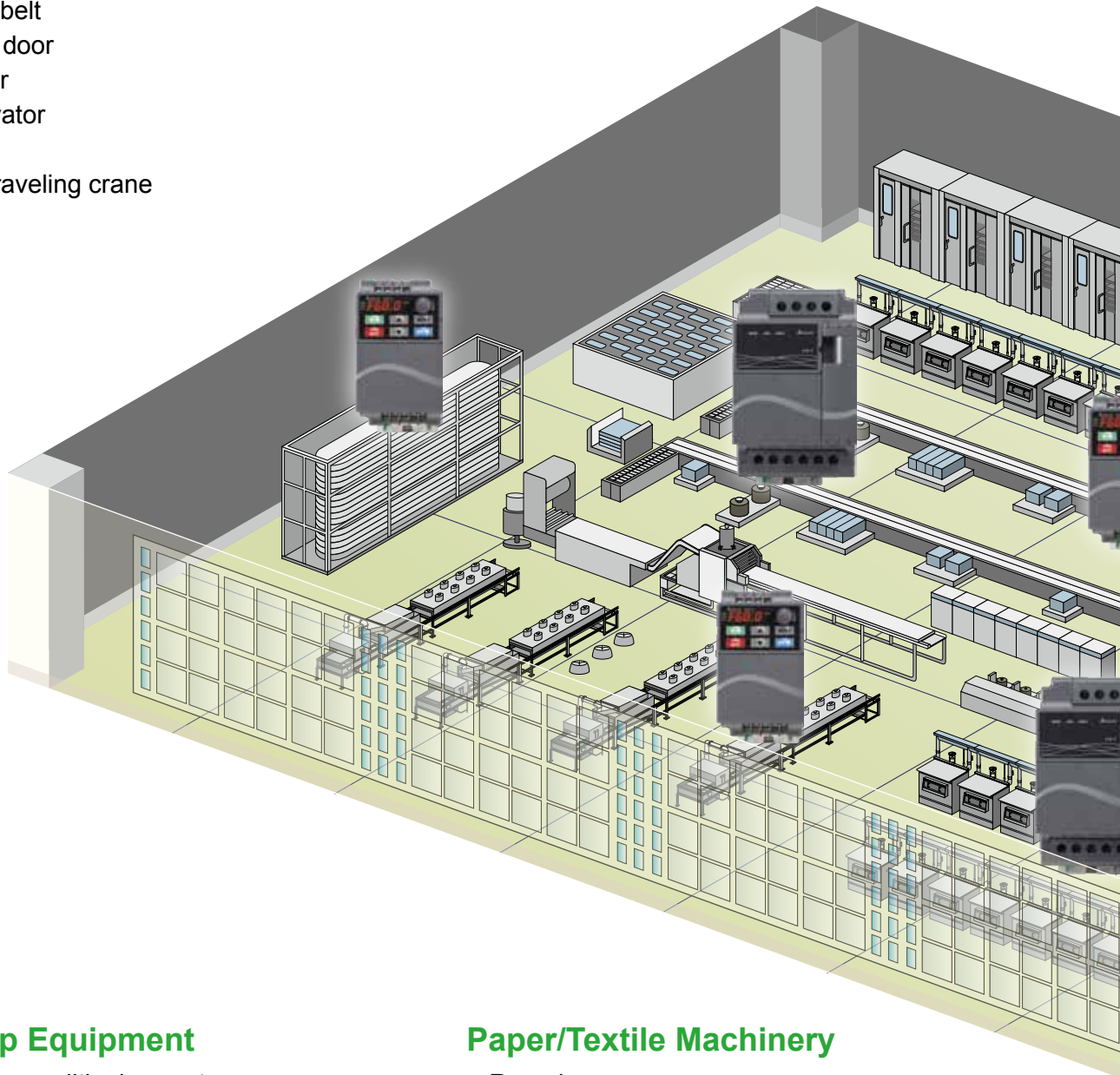
## Model Explanation



# Application Fields

## Conveyor and Transportation Machinery

- Conveyor belt
- Automatic door
- Roller door
- Small elevator
- Escalator
- X-Y axis traveling crane



## Fan/Pump Equipment

- Building air conditioning system
- Wastewater processing system
- Constant pressure water treatment system
- Water treatment pump
- Agricultural pump
- Temperature control of mid and larger oven
- Air compressor
- Heat exchange fan
- Building water dispenser system
- Dryer's windmill

## Paper/Textile Machinery

- Round weaver
- Cross weaver
- Ribbon weaver
- Printing press
- Industrial sewing machine
- Knitting machine

## Food Processing

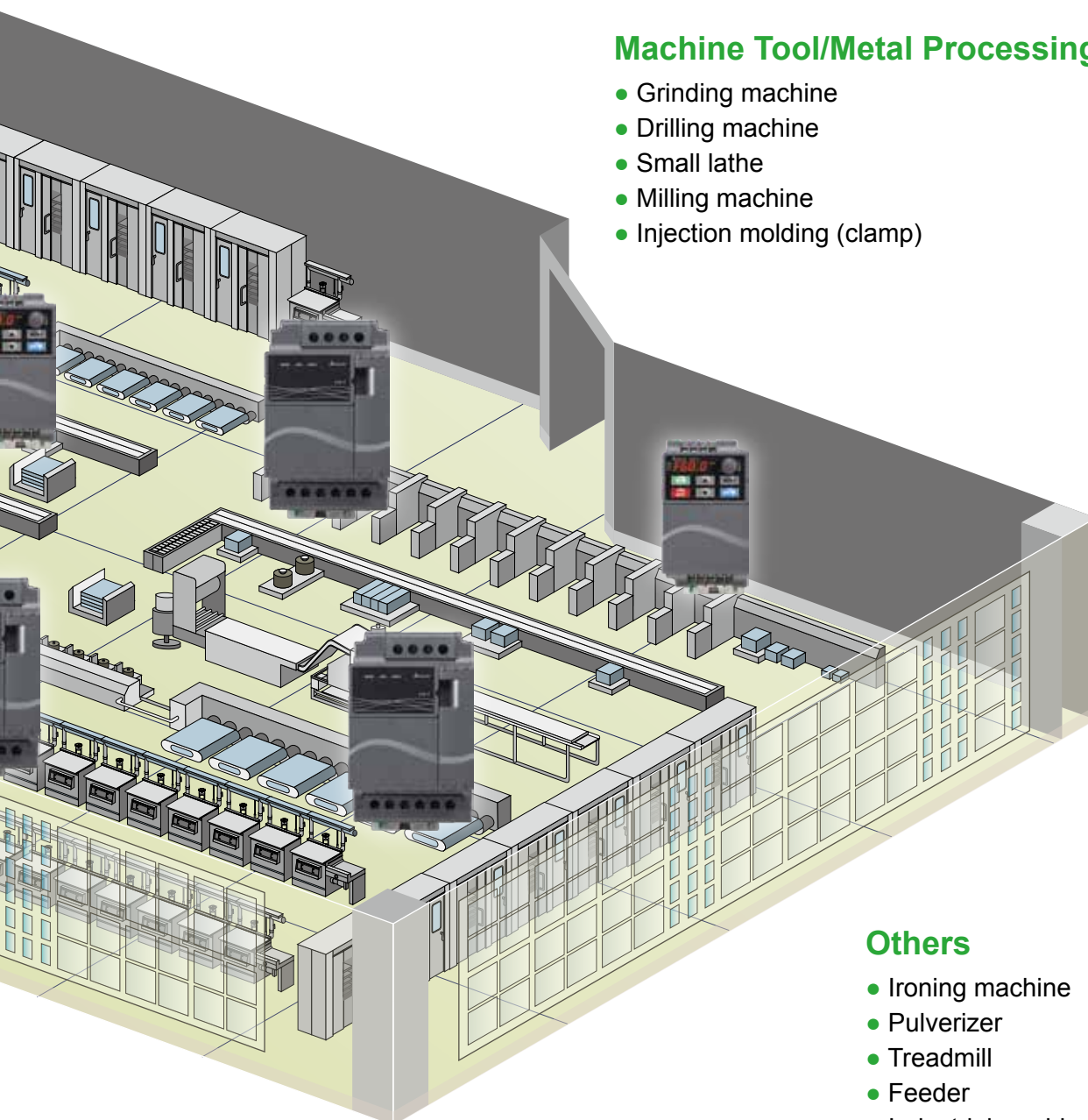
- Dumpling making machine
- Food mixer
- Noodle making machine

## Wood Working Machinery

- 4 side planer
- Wood carving machine
- Woodworking machine
- Simple cutting machine for wood working
- Spraying machine

## Machine Tool/Metal Processing Machinery

- Grinding machine
- Drilling machine
- Small lathe
- Milling machine
- Injection molding (clamp)



## Others

- Ironing machine
- Pulverizer
- Treadmill
- Feeder
- Industrial washing machine
- Car washing machine
- Packing machine
- Centrifuge
- Liquid mixing machine

# Specifications

|      |                                   |                                                 |     |      |
|------|-----------------------------------|-------------------------------------------------|-----|------|
| 115V | Voltage Class                     | 115V                                            |     |      |
|      | Model Number VFD-___ E            | 002                                             | 004 | 007  |
|      | Max. Applicable Motor Output (kW) | 0.2                                             | 0.4 | 0.75 |
|      | Max. Applicable Motor Output (hp) | 0.25                                            | 0.5 | 1.0  |
|      | Output Rating                     | Rated Output Capacity (kVA)                     |     |      |
|      |                                   | 0.6                                             | 1.0 | 1.6  |
|      |                                   | Rated Output Current (A)                        |     |      |
|      |                                   | 1.6                                             | 2.5 | 4.2  |
|      | Input Rating                      | Maximum Output Voltage (V)                      |     |      |
|      |                                   | 3-phase proportional to twice the input voltage |     |      |
|      |                                   | Output Frequency (Hz)                           |     |      |
|      |                                   | 0.1~599 Hz                                      |     |      |
|      | Cooling Method                    | Carrier Frequency (kHz)                         |     |      |
|      |                                   | 1-15                                            |     |      |
|      |                                   | Rated Input Current (A)                         |     |      |
|      |                                   | 6                                               | 9   | 18   |

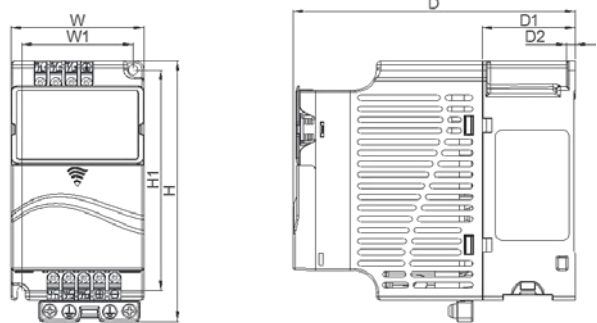
|      |                                   |                                                 |         |         |        |       |      |     |      |      |     |
|------|-----------------------------------|-------------------------------------------------|---------|---------|--------|-------|------|-----|------|------|-----|
| 230V | Voltage Class                     | 230V                                            |         |         |        |       |      |     |      |      |     |
|      | Model Number VFD-___ E            | 002                                             | 004     | 007     | 015    | 022   | 037  | 055 | 075  | 110  | 150 |
|      | Max. Applicable Motor Output (kW) | 0.2                                             | 0.4     | 0.75    | 1.5    | 2.2   | 3.7  | 5.5 | 7.5  | 11   | 15  |
|      | Max. Applicable Motor Output (hp) | 0.25                                            | 0.5     | 1.0     | 2.0    | 3.0   | 5.0  | 7.5 | 10   | 15   | 20  |
|      | Output Rating                     | Rated Output Capacity (kVA)                     |         |         |        |       |      |     |      |      |     |
|      |                                   | 0.6                                             | 1.0     | 1.6     | 2.9    | 4.2   | 6.5  | 9.5 | 12.5 | 17.1 | 25  |
|      |                                   | Rated Output Current (A)                        |         |         |        |       |      |     |      |      |     |
|      |                                   | 1.6                                             | 2.5     | 4.2     | 7.5    | 11    | 17   | 25  | 33   | 45   | 65  |
|      | Input Rating                      | Maximum Output Voltage (V)                      |         |         |        |       |      |     |      |      |     |
|      |                                   | 3-phase proportional to twice the input voltage |         |         |        |       |      |     |      |      |     |
|      |                                   | Output Frequency (Hz)                           |         |         |        |       |      |     |      |      |     |
|      |                                   | 0.1~599 Hz                                      |         |         |        |       |      |     |      |      |     |
|      | Cooling Method                    | Carrier Frequency (kHz)                         |         |         |        |       |      |     |      |      |     |
|      |                                   | 1-15                                            |         |         |        |       |      |     |      |      |     |
|      |                                   | Rated Input Current (A)                         |         |         |        |       |      |     |      |      |     |
|      |                                   | 4.9/1.9                                         | 6.5/2.7 | 9.7/5.1 | 15.7/9 | 24/15 | 20.6 | 26  | 34   | 48   | 70  |

| 460V Voltage Class                |                             | 460V                                  |      |             |     |      |     |      |      |      |      |      |
|-----------------------------------|-----------------------------|---------------------------------------|------|-------------|-----|------|-----|------|------|------|------|------|
| Model Number VFD-__ E             |                             | 004                                   | 007  | 015         | 022 | 037  | 055 | 075  | 110  | 150  | 185  | 220  |
| Max. Applicable Motor Output (kW) |                             | 0.4                                   | 0.75 | 1.5         | 2.2 | 3.7  | 5.5 | 7.5  | 11   | 15   | 18.5 | 22   |
| Max. Applicable Motor Output (hp) |                             | 0.5                                   | 1.0  | 2.0         | 3.0 | 5.0  | 7.5 | 10   | 15   | 20   | 25   | 30   |
| Output Rating                     | Rated Output Capacity (kVA) | 1.2                                   | 2.0  | 3.3         | 4.4 | 6.8  | 9.9 | 13.7 | 18.3 | 24   | 29   | 34   |
|                                   | Rated Output Current (A)    | 1.5                                   | 2.5  | 4.2         | 5.5 | 8.5  | 13  | 18   | 24   | 32   | 38   | 45   |
|                                   | Maximum Output Voltage (V)  | 3-phase proportional to input voltage |      |             |     |      |     |      |      |      |      |      |
|                                   | Output Frequency (Hz)       | 0.1~599Hz                             |      |             |     |      |     |      |      |      |      |      |
|                                   | Carrier Frequency (kHz)     | 1- 15                                 |      |             |     |      |     |      |      |      |      |      |
| Input Rating                      | Rated Input Current (A)     | 3-phase                               |      |             |     |      |     |      |      |      |      |      |
|                                   |                             | 1.9                                   | 3.2  | 4.3         | 7.1 | 11.2 | 14  | 19   | 26   | 35   | 41   | 49   |
|                                   | Rated Voltage/Frequency     | 3-phase, 380-480V, 50/60Hz            |      |             |     |      |     |      |      |      |      |      |
|                                   | Voltage Tolerance           | ±10% (342-528V)                       |      |             |     |      |     |      |      |      |      |      |
|                                   | Frequency Tolerance         | ±5% (47-63Hz)                         |      |             |     |      |     |      |      |      |      |      |
| Cooling Method                    |                             | Natural cooling                       |      | Fan cooling |     |      |     |      |      |      |      |      |
| Weight (kg)                       |                             | 1.2                                   | 1.2  | 1.2         | 1.9 | 1.9  | 4.2 | 4.2  | 4.2  | 7.47 | 7.47 | 7.47 |

|                           |                                    |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------------------------|------------------------------------|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Control Characteristics   | Control System                     |                 | SPWM (Sinusoidal Pulse Width Modulation) Control (V/F or sensorless vector control)                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|                           | Frequency Setting Resolution       |                 | 0.01 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                           | Output Frequency Resolution        |                 | 0.01 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                           | Torque Characteristics             |                 | Including the auto-torque/auto-slip compensation; starting torque can be 150% at 3.0 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                           | Overload Endurance                 |                 | 150% of rated current for 1 minute                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|                           | Skip Frequency                     |                 | Three zones, setting range 0.1 ~ 599 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                           | Accel/Decel Time                   |                 | 0.1 to 600 seconds (2 Independent setting of Accel/Decel time)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                           | Stall Prevention Level             |                 | Setting 20 to 250% of rated current                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|                           | DC Braking                         |                 | Operation frequency 0.1 ~ 599.0 Hz, output 0~100% rated current<br>Start time 0~60 seconds, stop time 0~60 seconds                                                                                                                                                                                                                                                                                                                                                                                                                               |
|                           | Regenerated Braking Torque         |                 | Approx. 20% (up to 125% possible with optional brake resistor or externally mounted brake unit, 1-15hp models (built-in brake chopper))                                                                                                                                                                                                                                                                                                                                                                                                          |
|                           | V/F Pattern                        |                 | Adjustable V/F pattern                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Operating Characteristics | Frequency Setting                  | Keypad          | Setting by ▲ ▼                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                           |                                    | External Signal | Potentiometer 5 k $\Omega$ /0.5 W, 0 to +10 V <sub>DC</sub> , 4 to 20 mA, RS-485 interface;<br>Multi-function Inputs 3 to 9 (15 steps, Jog, up/down)                                                                                                                                                                                                                                                                                                                                                                                             |
|                           | Operation Setting Signal           | Keypad          | Set by RUN and STOP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|                           |                                    | External Signal | 2 wires/3 wires (MI1, MI2, MI3), JOG operation, RS-485 serial interface (MODBUS), programmable logic controller                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|                           | Multi-function Input Signal        |                 | Multi-step selection 0 to 15, Jog, accel/decel inhibit, 2 accel/decel switches, counter, external Base Block (NC, NO), auxiliary motor control is invalid, ACI/AVI/AUI selections, driver reset, UP/DOWN key settings, sink/source (=NPN/PNP) selection                                                                                                                                                                                                                                                                                          |
|                           | Multi-function Output Indication   |                 | AC drive operating, frequency attained, non-zero frequency, Base Block, fault indication, local/remote indication, auxiliary motor output, drive is ready, overheat alarm, emergency stop and status selections of input terminals (NC/NO)                                                                                                                                                                                                                                                                                                       |
|                           | Analog Output Signal               |                 | Output frequency/current                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                           | Alarm Output Contact               |                 | Contact will be On when drive malfunctions<br>(1 Form C/change-over contact or 1 open collector output)                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                           | Operation Functions                |                 | Built-in PLC, AVR, accel/decel S-Curve, over-voltage/over-current stall prevention, 5 fault records, reverse inhibition, momentary power loss restart, DC braking, auto torque/slip compensation, auto tuning, adjustable carrier frequency, output frequency limits, parameter lock/reset, vector control, PID control, external counter, MODBUS communication, abnormal reset, abnormal re-start, power-saving, sleep/wake function, fan control, 1st/2nd frequency source selections, 1st/2nd frequency source combination, NPN/PNP selection |
|                           | Protection Functions               |                 | Over voltage, over current, under voltage, under current, external fault, overload, ground fault, overheating, electronic thermal, IGBT short circuit, PTC, instantly stop and then reboot (up to 20 sec by setting parameter)                                                                                                                                                                                                                                                                                                                   |
| Environmental Conditions  | Display Keypad                     |                 | 6-key, 7-segment LED with 4-digit, 5 status LED, master frequency, output frequency, output current, custom units, parameter values for setup and lock, faults, RUN, STOP, RESET, FWD/REV                                                                                                                                                                                                                                                                                                                                                        |
|                           | Built-in EMC Filter                |                 | For 230 V 1-phase and 460 V 3-phase models                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|                           | Enclosure Rating                   |                 | IP20                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|                           | Pollution Degree                   |                 | 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                           | Installation Location              |                 | Altitude 1,000 m or lower, keep from corrosive gasses, liquid and dust                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|                           | Ambient Temperature                |                 | -10 °C to + 50 °C (40 °C for side-by-side mounting) Non-Condensing and not frozen                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                           | Storage/Transportation Temperature |                 | -20 °C to 60 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|                           | Ambient Humidity                   |                 | Below 90% RH (non-condensing)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|                           | Vibration                          |                 | 10 Hz ≤ f ≤ 57 Hz Fix Amplitude: 0.075 mm, 57 Hz ≤ f ≤ 150 Hz Fix Acceleration: 1 G<br>(According to IEC 60068-2-6)                                                                                                                                                                                                                                                                                                                                                                                                                              |
|                           | Certifications                     |                 |                                                                                                                                                                                                                                                                                      |

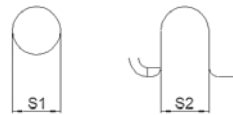
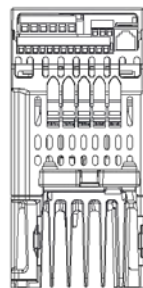
# Dimensions

## Frame A1



### MODEL

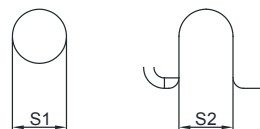
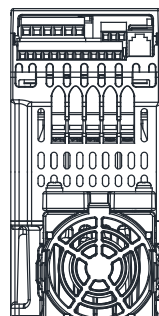
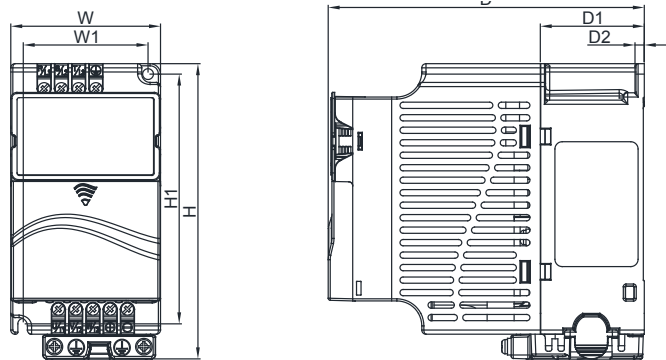
VFD002E11A/11C/11T  
VFD002E21A/21C/21T  
VFD002E23A/23C/23T  
VFD004E11A/11C/11T  
VFD004E21A/21C/21T  
VFD004E23A/23C/23T  
VFD004E43A/43C/43T  
VFD007E23A/23C/23T  
VFD007E43A/43C/43T



Unit: mm[inch]

| Frame |      | W    | W1   | H     | H1    | D     | D1   | D2   | S1   | S2   |
|-------|------|------|------|-------|-------|-------|------|------|------|------|
| A1    | mm   | 72.0 | 60.0 | 142.0 | 120.0 | 152.0 | 50.0 | 4.5  | 5.2  | 5.2  |
|       | inch | 2.83 | 2.36 | 5.59  | 4.72  | 5.98  | 1.97 | 0.18 | 0.20 | 0.20 |

## Frame A2



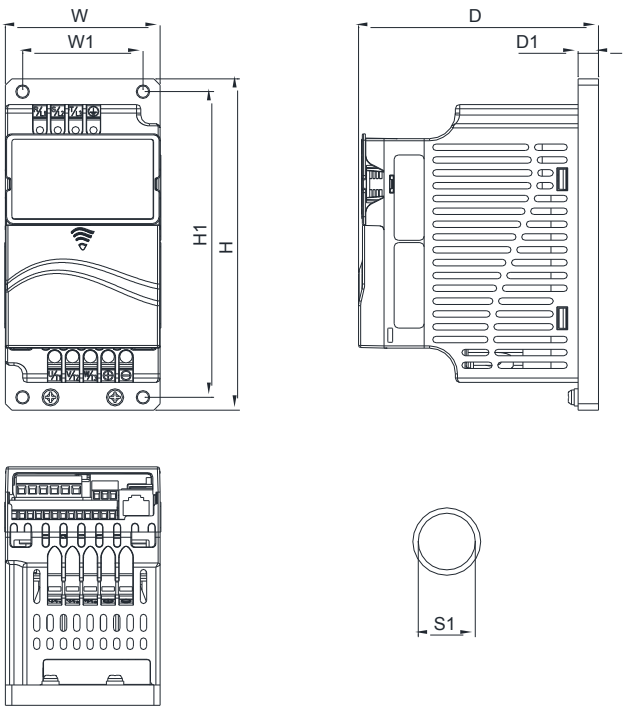
### MODEL

VFD015E23A/23C/23T  
VFD015E43A/43C/43T

Unit: mm[inch]

| Frame |      | W    | W1   | H     | H1    | D     | D1   | D2   | S1   | S2   |
|-------|------|------|------|-------|-------|-------|------|------|------|------|
| A2    | mm   | 72.0 | 60.0 | 142.0 | 120.0 | 152.0 | 50.0 | 4.5  | 5.2  | 5.2  |
|       | inch | 2.83 | 2.36 | 5.59  | 4.72  | 5.98  | 1.97 | 0.18 | 0.20 | 0.20 |

Frame A3



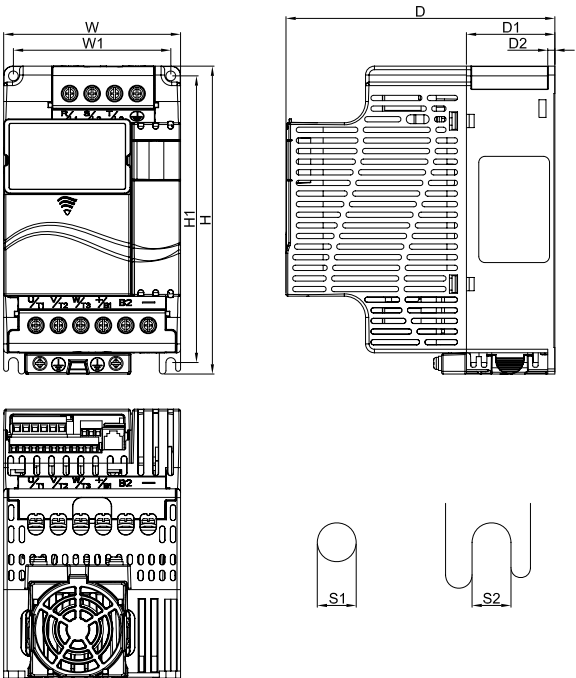
MODEL

VFD002E11P/21P/23P  
VFD004E11P/21P/23P/43P  
VFD007E21P/23P/43P  
VFD015E23P/43P

Unit: mm[inch]

| Frame |      | W    | W1   | H     | H1    | D     | D1   | S1   |
|-------|------|------|------|-------|-------|-------|------|------|
| A3    | mm   | 72.0 | 56.0 | 155.0 | 143.0 | 111.5 | 9.5  | 5.3  |
|       | inch | 2.83 | 2.20 | 6.10  | 5.63  | 4.39  | 0.37 | 0.21 |

Frame B



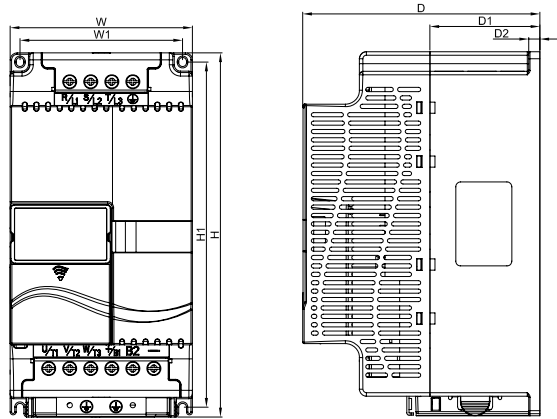
MODEL

VFD007E11A/11C  
VFD015E21A/21C  
VFD022E21A/21C  
VFD022E23A/23C  
VFD022E43A/43C  
VFD037E23A/23C  
VFD037E43A/43C

Unit: mm[inch]

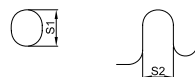
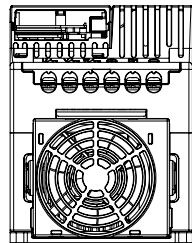
| Frame |      | W     | H     | D     | W1   | H1    | D1   | D2   | S1   | S2   |
|-------|------|-------|-------|-------|------|-------|------|------|------|------|
| B     | mm   | 100.0 | 174.0 | 152.0 | 89.0 | 162.0 | 50.0 | 4.0  | 5.5  | 5.5  |
|       | inch | 3.94  | 6.86  | 5.98  | 3.50 | 6.86  | 1.97 | 0.16 | 0.22 | 0.22 |

Frame C



MODEL

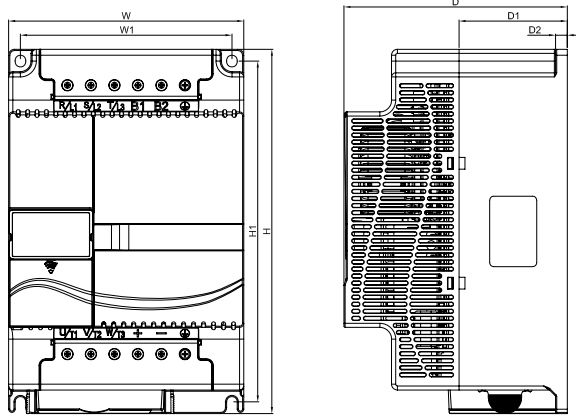
VFD055E23A/23C  
VFD055E43A/43C  
VDF075E23A/23C  
VDF075E43A/43C  
VFD110E23A/23C  
VFD110E43A/43C



Unit: mm[inch]

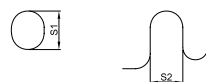
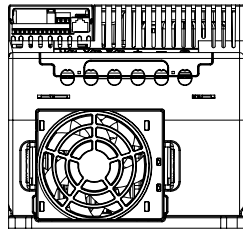
| Frame |      | W     | H     | D     | W1    | H1    | D1   | D2   | S1   | S2   |
|-------|------|-------|-------|-------|-------|-------|------|------|------|------|
| C     | mm   | 130.0 | 260.0 | 169.2 | 116.0 | 246.5 | 78.5 | 8.0  | 6.5  | 5.5  |
|       | inch | 5.12  | 10.24 | 6.66  | 4.57  | 9.70  | 3.09 | 0.31 | 0.26 | 0.22 |

Frame D



MODEL

VFD150E23A/23C  
VFD150E43A/43C  
VFD185E43A/43C  
VFD220E43A/43C



Unit: mm[inch]

| Frame |      | W     | H     | D     | W1    | H1    | D1   | D2   | S1   | S2   |
|-------|------|-------|-------|-------|-------|-------|------|------|------|------|
| D     | mm   | 200.0 | 310.0 | 190.0 | 180.0 | 290.0 | 92.0 | 10.0 | 10.0 | 9.0  |
|       | inch | 7.87  | 12.20 | 7.48  | 7.09  | 11.42 | 3.62 | 0.39 | 0.39 | 0.35 |

# Accessories

## Option Cards



- **EME-R3AA**  
Relay card  
(3 form A/ NO contacts)



- **EME-R2CA**  
Relay card  
(2 form C/Change-over contacts)



- **EME-A1D3A**  
Anglog I/O Card (12 bits)



- **EME-A22A**  
Anglog I/O Card (12 bits)



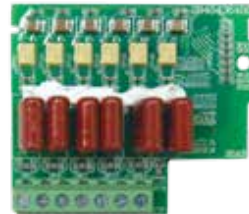
- **EME-PG01**  
PG card



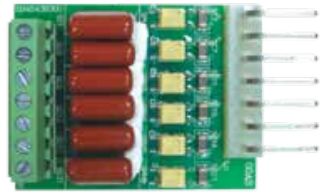
- **CME-USB01**  
Second communication card  
(USB1.1)



- **EME-D33A**  
I/O card  
(photocoupler 3in + 3out)



- **EME-D611A**  
Multi-function Input  
Terminal MI1~MI6-COM Card  
(For Internal Installation)



- **EME-D611B**  
Multi-function Input Terminal  
MI1~MI6-COM Card  
(For External Installation)

# Accessories

## Fieldbus Modules



▪ **DeviceNet**  
CME-DN01



▪ **PROFIBUS**  
CME-PD01



▪ **CANopen**  
CME-COP01

## Others



▪ **Brake Unit**  
BUE-20015    BUE-40015  
BUE-20037    BUE-40037



▪ **Keypad for Communication**  
VFD-PU06 / KPC-CC01



▪ **DIN Rail (Width 35mm)**  
MKE-DRA    MKE-DRB



▪ **Brake Resistor**



▪ **Zero Phase Reactor**  
RF220X00A



▪ **Grounding Plate**  
MKE-EP



▪ **Digital Keypad**

# Ordering Information

## VFD-E Series

| Frame Size         |                                                                                     | Power Range                                                       | Models                                                                                                                     |                                                                                      |
|--------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| <b>Frame A1~A3</b> |    | 115V: 0.2kW ~ 0.4kW<br>230V: 0.2kW ~ 1.5kW<br>460V: 0.4kW ~ 1.5kW | Frame A1:<br>VFD002E11A/11C/11T<br>VFD002E21A/21C/21T<br>VFD002E23A/23C/23T<br>VFD004E11A/11C/11T<br>VFD004E21A/21C/21T    | VFD004E23A/23C/23T<br>VFD004E43A/43C/43T<br>VFD007E23A/23C/23T<br>VFD007E43A/43C/43T |
|                    |                                                                                     |                                                                   | Frame A2:<br>VFD015E23A/23C/23T<br>VFD015E43A/43C/43T                                                                      |                                                                                      |
|                    |                                                                                     |                                                                   | Frame A3:<br>VFD002E11P/21P/23P<br>VFD004E11P/21P/23P/43P                                                                  | VFD007E21P/23P/43P<br>VFD015E23P/43P                                                 |
| <b>Frame B</b>     |  | 115V: 0.75kW<br>230V: 1.5kW ~ 3.7kW<br>460V: 2.2kW ~ 3.7kW        | VFD007E11A/11C<br>VFD015E21A/21C<br>VFD022E21A/21C<br>VFD022E23A/23C<br>VFD022E43A/43C<br>VFD037E23A/23C<br>VFD037E43A/43C |                                                                                      |
| <b>Frame C</b>     |  | 230V: 5.5kW ~ 11kW<br>460V: 5.5kW ~ 11kW                          | VFD055E23A/23C<br>VFD055E43A/43C<br>VDF075E23A/23C<br>VDF075E43A/43C<br>VFD110E23A/23C<br>VFD110E43A/43C                   |                                                                                      |
| <b>Frame D</b>     |  | 230V: 15kW<br>460V: 15kW ~ 22kW                                   | VFD150E23A/23C<br>VFD150E43A/43C<br>VFD185E43A/43C<br>VFD220E43A/43C                                                       |                                                                                      |