



DELTA ELECTRONICS, INC.  
www.delta.com.tw/industrialautomation

www.nicsanat.com  
021-87700210



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### **America**

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\*We reserve the right to change the information in this catalogue without prior notice

# VFD-EL

Multiple Functions/Micro Type Drive





## Features

- **Standard MODBUS Protocol** Standard MODBUS Protocol via RS-485
- **Built-in EMI Filter (230V 1-phase and 460V 3-phase)**  
The built-in EMI filter reduces electromagnetic interferences and complies with EN61800-3 standard.
- **Compact Design**  
Space saving and easy DIN rail mounting with optional DIN rail adapter (Built in Frame B)
- **Optional Fieldbus Modules**  
Provide connection to a variety of networks, including PROFIBUS, DeviceNet, LonWorks and CANopen.
- **RFI-Switch for IT Mains**  
Removable "Y" capacitor to use with IT mains supplies.
- **Easy DC BUS Sharing**  
Multiple VFD-EL can be connected in parallel to share the regenerative braking energy. In this way, over-voltage is prevented and the DC-bus voltage stabilized. This function is not for 115V models.
- **Complete Protection Function**  
High precision current detection, full overload protection (oL, oL1 and oL2), over-voltage/over-current stall prevention, short-circuit protection, reset after fault, speed search function and motor overheat protection by PTC.
- **Power Range**  
1-phase 115V series: 0.2~0.75kW (0.25~1hp)  
1-phase 230V series: 0.2~2.2kW (0.25~3hp)  
3-phase 230V series: 0.2~3.7kW (0.25~5hp)  
3-phase 460V series: 0.4~3.7kW (0.50~5hp)
- **Side-by-side Installation(40°C)**  
High-efficiency cooling and flexible space
- **Easy Maintenance**  
Removable cooling fan for easy maintenance



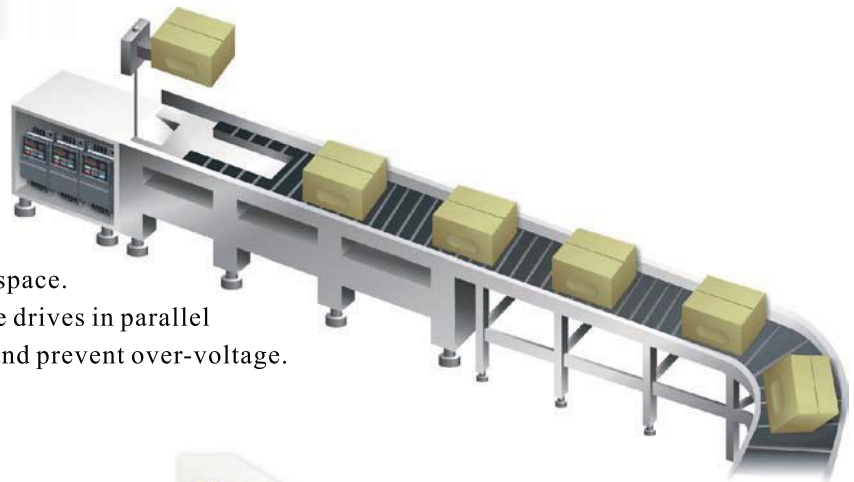
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## Application cases

### • Conveyor Belts

1. Multi-step speed  
application: provides multi-step speed settings to meet the needs of conveyor belt.
2. Side-by-side installation to save space.
3. DC-bus sharing: connect multiple drives in parallel to share the regenerative energy and prevent over-voltage.



### • Winders

With auto acceleration/deceleration function, it can have a rapid start/stop to increase productivity and speed.



### • Constant Pressure Control of Water Pumps

1. Built-in smart PID controller to save the cost of specific external PID meter.
2. Built-in auto detection of water suspension and auto power-on to save the cost of external PLC controller and relay.
3. A wide range of input voltages, including 1-phase 110V/230V and 3-phase 230V/460V, for various pump applications and different countries.





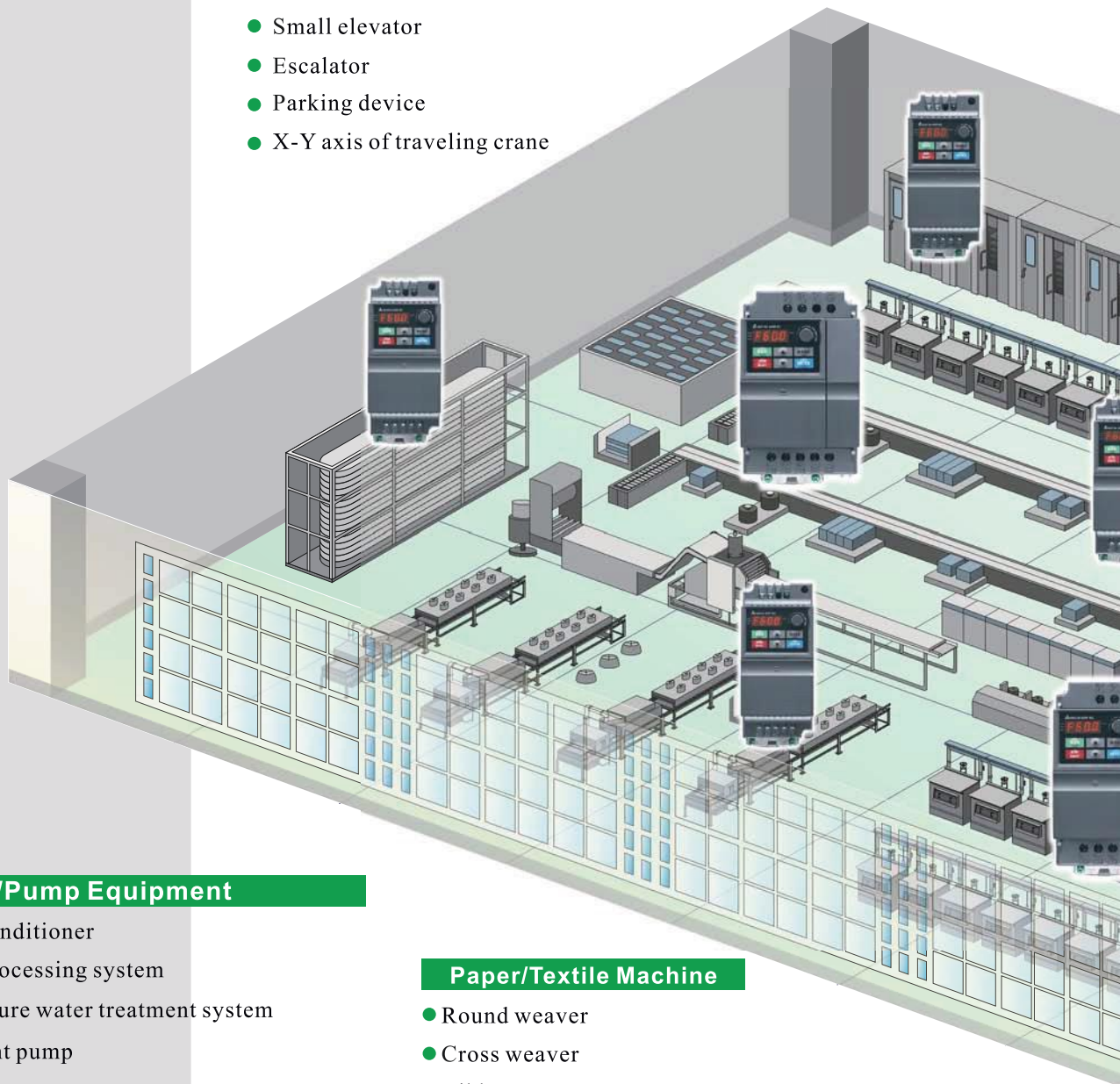
## Application Fields

### Conveyor and Transportation Machinery

- Conveyor belt
- Automatic doors
- Roller door
- Small elevator
- Escalator
- Parking device
- X-Y axis of traveling crane

### Food Processing

- Dumpling maker
- Food stirrer
- Noodle maker



### Fan/Pump Equipment

- Building air conditioner
- Waste water processing system
- Constant pressure water treatment system
- Water treatment pump
- Agricultural pump
- Temperature control of middle/large oven
- Air compressor
- Heat exchange fans
- Building water dispenser system
- Dryer's windmill

### Paper/Textile Machine

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

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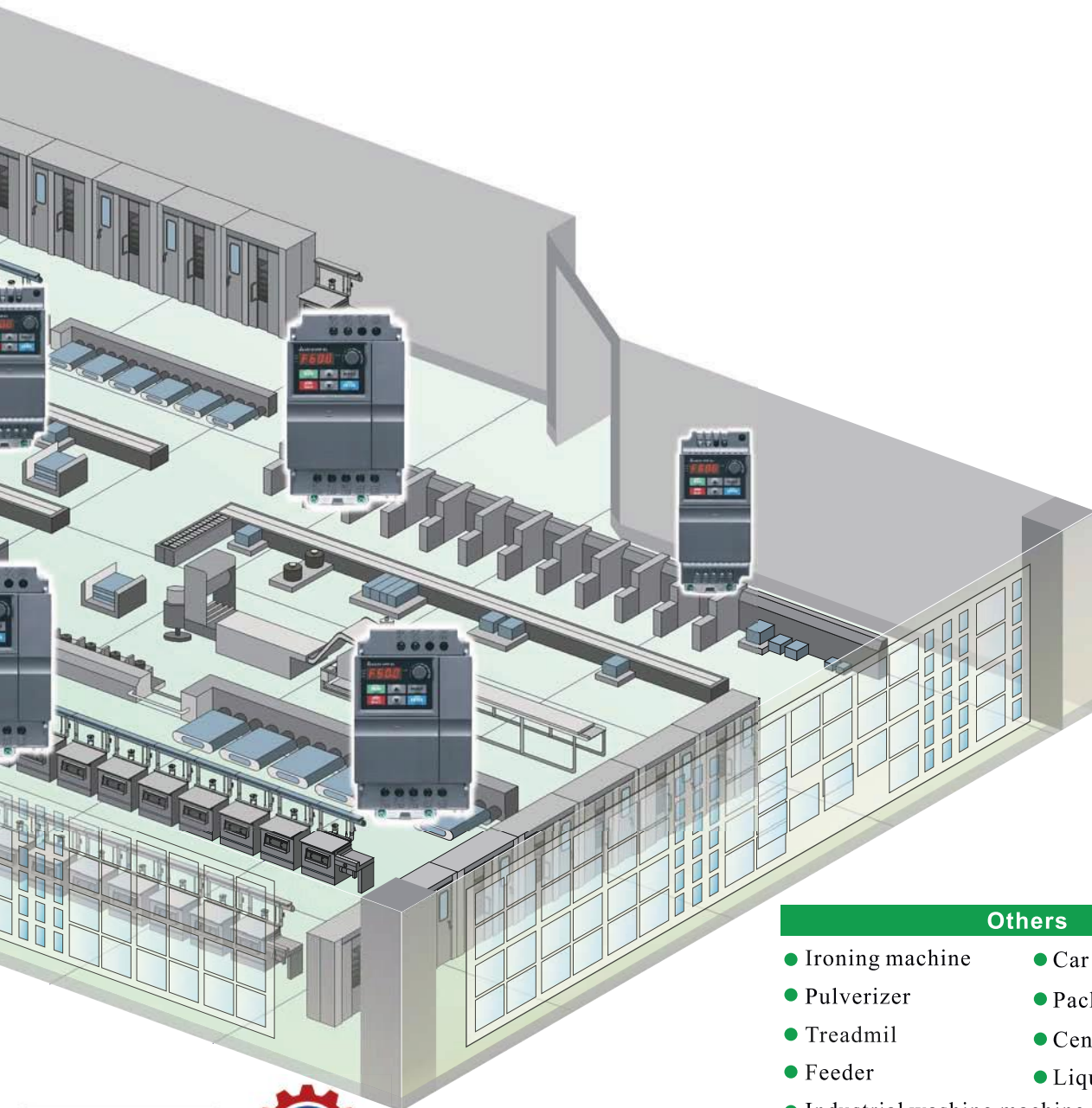


## Machine Tool/Metal Processing Machinery

- Grinder
- Drill
- Small lathe
- Milling machines
- Injection molding (clamp)

## Wood Working Machinery

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

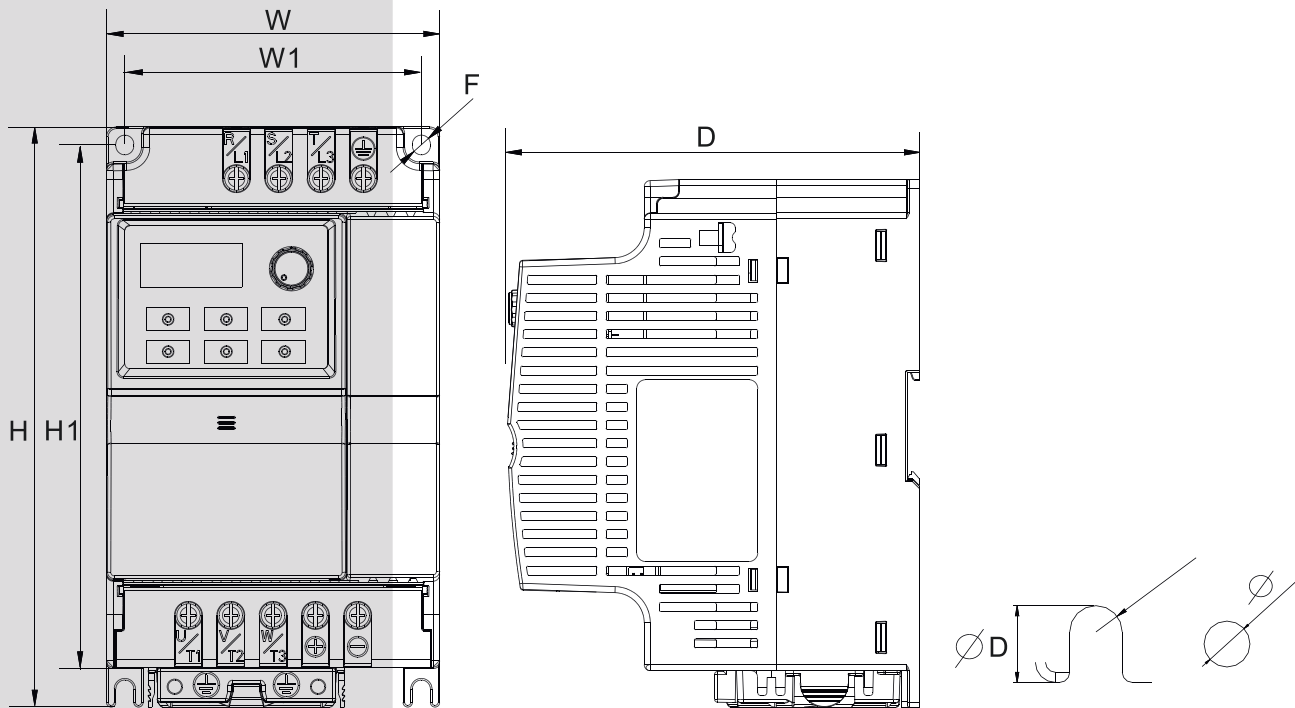


## Others

- Ironing machine
- Pulverizer
- Treadmil
- Feeder
- Industrial washing machine
- Car washing machine
- Packing machine
- Centrifuge
- Liquid mixer



## Dimensions



Unit: mm(inch)

Model	W	W1	H	H1	D	F
VFD002EL11A						
VFD002EL21A						
VFD002EL23A						
VFD004EL11A						
VFD004EL21A						
VFD004EL23A	72.0 (2.83)	59.0 (2.32)	174.0 (6.86)	151.6 (5.97)	136.0 (5.35)	5.4 (0.21)
VFD004EL43A						
VFD007EL21A						
VFD007EL23A						
VFD007EL43A						
VFD015EL23A						
VFD015EL43A						
VFD007EL11A						
VFD015EL21A						
VFD022EL21A	100.0 (3.94)	89.0 (3.50)	174.0 (6.85)	162.9 (6.42)	136.0 (5.35)	5.4 (0.21)
VFD022EL23A						
VFD022EL43A						
VFD037EL23A						
VFD037EL43A						

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## Fieldbus Modules

- **DeviceNet**  
CME-DN01



- **Profibus**  
CME-PD01



- **LonWorks**  
CME-LW01



- **CANopen**  
CME-COP01



## Accessories

- **Zero phase reactor**  
RF220X00A



- **Keypad for communication**  
VFD-PU06



- **DIN Rail (Width 35mm)**

MKEL-DRA



(Frame A is optional)

MKEL-DRB



(Frame B is built-in)

- **Grounding plate**  
MKE-EP



- **Brake resistor**



- **Brake unit**

BUE-20015  
BUE-20037

BUE-40015  
BUE-40037



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