

Automation for a Changing World

Delta IP55 Fan and Pump Drive CFP2000 Series


www.deltaww.com


Smarter. Greener. Together.

## CFP2000

Delta's CFP2000 series is an AC motor drive specially designed for HVAC, fans \& pumps, IP55 enclosure to provide effective protection from dust and other particles and to offer a many outstanding features and built-in functions that reduce setup and tuning time in ope

The CFP2000 is equipped with a built-in EMC filter and a DC choke. This design replaces $t$ space for other devices, while providing the benefits of harmonic suppression and better are also included, which allow you to simply select the needed application in the paramets safety standard is required, an optional main switch function is also available upon select IM/PM motors, real time clock, built-in 10k steps PLC capacity and various optional extens needs into one drive, it is your friendliest and smartest choice available in the industry.


and water treatment applications. It is designed with an good level of protection to water. In addition, it includes ration and provide higher efficiency.
he need for an electrical distribution cabinet and saves power quality to the system. Various parameter groups group setting and the system setup is ready. If a higher ion. Other outstanding features include support for both ion cards. The CFP2000 series integrates all of your


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## Highlights



## Standard Models

Power range: AC 380 to 480V/3 phase

| kW | 0.75 | 1.5 | 2.2 | 3.7 | 4 | 5.5 | 7.5 | 11 | 15 | 18.5 | 22 | 30 | 37 | 45 | 55 | 75 | 90 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HP | 1 | 2 | 3 | 5 | 5 | 7.5 | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 75 | 100 | 125 |
| Frame Size |  |  |  |  |  |  |  |  |  |  |  |  | A | B | B |  | C |

## Application



HVAC


Fans


Chiller


Water treatment

## Features

- Motor controls

- Overload ability

Light duty:
120\% for 60sec
Normal duty:
$120 \%$ for 60 sec
$160 \%$ for 3 sec


## Built-in STO SIL2



- 10 Ml
- 2 AO
- 3 AI
- 3 relay
- Optional I/O extension cards



## - Mains Switch (Optional)

- Available for all IP55 models 0.75 kW to 90 kW
- Allows users to turn off the power easily during daily maintenance and does not require an additional breaker box


## - LCD Keypad

- Quick setting for frequent use modes and facilitates the installation process
- Multi-row display, Intuitive operation, user friendly operation interface
- Parameter management and copy
-Real time clock
- Multi-language: English, Spanish, Portuguese, French, Russian, Turkish, Polish


Create homepage logo


Editable message display


## Features

## Built-in PLC Function

- Built-in 10k steps PLC function supports independent and distributed control when connecting to a network system for high operation flexibility.
- Real Time Clock (RTC) function facilitates the PLC program writing process for ON/OFF chronology, daylight savings operation and many other settings.



## Skip Frequency

- Skip Frequency function avoids motor vibration at a specific frequency band and protects the equipment. User can restrict up to 3 zones of frequency range



## Fire Mode

- Application: ventilation of buildings, tunnels, subways and more
- The drive will bypass the alarm warning in fire mode. When a fire occurs, it forces the drive to continue to operate to extract smoke or supplies water until the drive fails or runs out of emergency power

Preset speed mode: set the drive to continue to operate under a preset speed
» BYPASS mode: the AC Mains Bypass breaker will bypass the drive and connect to the emergency power
» Fire mode with PID control: it balances the pressure between the stairwell and fire location to ensure the fire door can be easily opened


## - Flying Start

- Ensures the drive runs smoothly under high inertial load without triggering the alarm, does not require the motor to stop
- When the drive restarts after momentary power loss (within 5s on LV), the speed searching allows the drive to activate flying start immediately and ensure a stable operation of the system
 without requiring the motor to fully stop in order to save time


## - Multi-pumps control

Built-in various modes for multi-pump control

- Fixed time circulation (by time)
- Fixed amount circulation (by PID)
- Fixed amount control (by PID)
- Fixed time circulation + fixed amount circulation
- Fixed time circulation + fixed amount control

Built-in 10k steps PLC function and RTC for user to program a time sequence control


## Parameter groups

Without parameter group.....


CFP2000 parameter group function simplifies the drive setting procedures. Various applications are provided:
01 : User Defined
02 : AHU
03 : Fan
04 : Pump
05 : Compressor



## Operating Environment



## Environment for Operation, Storage and Transportation



## Specifications for Operation Temperature and Protection Level

| Model | Frame | Protection Level | OperationTemperature |
| :---: | :---: | :---: | :---: |
| VFDxxxxFPxxx-52 | Frame A~D: <br> $0.75 \sim 90 \mathrm{~kW}$ | IP55/NEMA12 | $-10^{\circ} \mathrm{C} \sim 50^{\circ} \mathrm{C}$ |

## Specifications

| Frame Size |  |  | A |  |  |  |  |  |  |  | B |  |  |  | C |  | D0 |  | D |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Models VFD-___PP4E- |  |  | 007 | 015 | 022 | 037 | 040 |  | 055 | 075 | 110 | 150 | 185 | 220 | 300 | 370 | 450 | 550 | 750 | 900 |
|  |  | Rated Output Capacity (kVA) | 2.4 | 3.3 | 4.4 | 6.8 | 8.4 |  | 10.4 | 14.3 | 19 | 25 | 30 | 36 | 48 | 58 | 73 | 88 | 120 | 143 |
|  |  | Rated Output Current (A) | 3 | 4.2 | 5.5 | 8.5 | 10. |  | 13 | 18 | 24 | 32 | 38 | 45 | 60 | 73 | 91 | 110 | 150 | 180 |
|  |  | Applicable Motor Output (kW) | 0.75 | 1.5 | 2.2 | 3.7 | 4.0 |  | 5.5 | 7.5 | 11 | 15 | 18.5 | 22 | 30 | 37 | 45 | 55 | 75 | 90 |
|  |  | Applicable Motor Output (HP) | 1 | 2 | 3 | 5 | 5 |  | 7.5 | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 75 | 100 | 125 |
|  |  | Overload Tolerance | $120 \%$ for 60 seconds in every 5 minutes |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | Rated Output Capacity (kVA) | 1.4 | 2.4 | 3.2 | 4.8 | 7.2 |  | 8.4 | 10 | 14 | 19 | 25 | 30 | 36 | 48 | 58 | 73 | 88 | 120 |
|  |  | Rated Output Current (A) | 1.7 | 3.0 | 4.0 | 6.0 | 9.0 |  | 10.5 | 12 | 18 | 24 | 32 | 38 | 45 | 60 | 73 | 91 | 110 | 150 |
|  |  | Applicable Motor Output (kW) | 0.4 | 0.75 | 1.5 | 2.2 | 3.7 |  | 4.0 | 5.5 | 7.5 | 11 | 15 | 18.5 | 22 | 30 | 37 | 45 | 55 | 75 |
|  |  | Applicable Motor Output (HP) | 0.5 | 1 | 2 | 3 | 5 |  | 5 | 7.5 | 10 | 15 | 20 | 25 | 30 | 40 | 53 | 60 | 75 | 100 |
|  |  | Overload Tolerance | $120 \%$ for 60 seconds in every 5 minutes $160 \%$ for 3 seconds in every 25 seconds |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Max. Output Frequency (Hz) |  | 599.00 Hz |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Carrier Frequency (kHz) |  | $2 \sim 15 \mathrm{kHz}$ (default setting 6 kHz ) |  |  |  |  |  |  |  |  |  |  | $2 \sim 10 \mathrm{kHz}$ (default setting 6 kHz$)^{\text {+1 }}$ |  |  |  |  |  |  |
|  | Input Current (A) Light Duty |  | 3.0 | 4.2 | 5.5 | 8.5 | 10. |  | 13 | 18 | 24 | 32 | 38 | 45 | 60 | 73 | 91 | 110 | 150 | 180 |
|  | Input Current (A) Normal Duty |  | 1.7 | 3.0 | 4.0 | 6.0 | 9.0 |  | 10.5 | 12 | 18 | 24 | 32 | 38 | 45 | 60 | 73 | 91 | 110 | 150 |
|  | Rated Voltage/Frequency |  | 3-phase AC 380V ~ 480V (-15\% $\sim+10 \%), 50 / 60 \mathrm{~Hz}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Operating Voltage Range |  | $323 \sim 528 \mathrm{~V}_{\mathrm{AC}}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Frequency Tolerance |  | $47 \sim 63 \mathrm{~Hz}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Drive Weight |  |  | 6.8 kg |  |  |  |  |  |  |  | 14.5 kg |  |  |  | 26.5 kg |  | 42 kg |  | 59.5 kg |  |
| Cooling Method |  |  | Natural cooling |  | Fan cooling |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Braking Chopper |  |  | Frame A, B, C, Built-in |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| DC Choke |  |  | Built-in DC choke meets EN6100-3-12 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| EMC Filter |  |  | Built-in EMC filter meets EN61800-3 C2 \& C1* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

[^0]
## General Specifications



## Wiring

Wiring Diagram for Frame A ~ C
*Input: 3-phase power

## Brake resistor (optional)



## Wiring Diagram for Frame D0 ~ above

*Input: 3-phase power

Factory setting: NPN (SINK) Mode
Please refer to Figure 2 for
wiring of NPN mode and PNP mode.

## Dimensions




MODEL
FRAME_B



DETAILA
(MOUNTING HOLE)


DETAIL B (MOUNTING HOLE) VFD150FP4EA-52S VFD185FP4EA-52S VFD220FP4EA-52S
VFD110FP4EA-52 VFD150FP4EA-52 VFD185FP4EA-52 VFD220FP4EA-52

FRAME_B-2
VFD110FP4EA-52S

| FRAME |  | W | H | D | W1 | H1 | D1 | S1 | $\varnothing 1$ | $\varnothing 2$ | $\varnothing 3$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| B-1 | mm | 216.0 | 491.4 | - | 181.0 | 479.0 | 229.0 | 8.5 | 41.0 | 25.4 | 20.3 |
|  | inch | 8.50 | 19.35 | - | 7.13 | 18.86 | 9.02 | 0.33 | 1.61 | 1.00 | 0.80 |
| B-2 | mm | 216.0 | 491.4 | 274.0 | 181.0 | 479.0 | 229.0 | 8.5 | 41.0 | 25.4 | 20.3 |
|  | inch | 8.50 | 19.35 | 10.79 | 7.13 | 18.86 | 9.02 | 0.33 | 1.61 | 1.00 | 0.80 |

## Dimensions



MODEL
FRAME_C
FRAME_C-1
VFD300FP4EA-52
VFD370FP4EA-52



DETAILA (MOUNTING HOLE) (MOUNTING HOLE)

FRAME C-2
VFD300FP4EA-52S
VFD370FP4EA-52S

| FRAME |  | W | H | D | W1 | H1 | D1 | S1 | W2 | H2 | D2 | S2 | $\varnothing 1$ | $\varnothing 2$ | $\emptyset 3$ | $\emptyset 4$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| C-1 | mm | 282.0 | 630.0 | - | 231.0 | 611.0 | 265.0 | 9.0 | 271.0 | 602.5 | 27.8 | 16.0 | 51.0 | 41.0 | 25.4 | 20.3 |
|  | inch | 11.10 | 24.80 | - | 9.09 | 24.06 | 10.43 | 0.35 | 10.67 | 23.72 | 1.09 | 0.63 | 2.01 | 1.61 | 1.00 | 0.80 |
| C-2 | mm | 282.0 | 630.0 | 310.0 | 231.0 | 611.0 | 265.0 | 9.0 | 271.0 | 602.5 | 27.8 | 16.0 | 51.0 | 41.0 | 25.4 | 20.3 |
|  | inch | 11.10 | 24.80 | 12.20 | 9.09 | 24.06 | 10.43 | 0.35 | 10.67 | 23.72 | 1.09 | 0.63 | 2.01 | 1.61 | 1.00 | 0.80 |



## MODEL

FRAME_DO
FRAME_D0-1
VFD450FP4EA-52
VFD550FP4EA-52

FRAME D0-2
VFD450FP4EA-52S
VFD550FP4EA-52S


| FRAME |  | W | H | D | W1 | H1 | D1 | S1 | H2 | D2 | S2 | $\varnothing 1$ | $\varnothing 2$ | $\varnothing 3$ | $\varnothing 4$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| D0-1 | mm | 308.0 | 680.0 | - | 272.0 | 651.0 | 307.0 | 13.0 | 622.0 | 17.0 | 18.0 | 51.0 | 41.0 | 25.4 | 20.3 |
|  | inch | 12.13 | 26.77 | - | 10.71 | 25.63 | 12.09 | 0.51 | 24.49 | 0.67 | 0.71 | 2.01 | 1.61 | 1.00 | 0.80 |
| D0-2 | mm | 308.0 | 680.0 | 352.0 | 272.0 | 651.0 | 307.0 | 13.0 | 622.0 | 17.0 | 18.0 | 51.0 | 41.0 | 25.4 | 20.3 |
|  | inch | 12.13 | 26.77 | 13.86 | 10.71 | 25.63 | 12.09 | 0.51 | 24.49 | 0.67 | 0.71 | 2.01 | 1.61 | 1.00 | 0.80 |

## Dimensions



MODEL
FRAME_D
FRAME_D-1
VFD750FP4EA-52
VFD900FP4EA-52
FRAME D-2
VFD750FP4EA-52S
VFD900FP4EA-52S

| FRAME |  | W | H | D | W1 | H1 | D1 | S1 | H2 | D2 | S2 | $\varnothing 1$ | $\varnothing 2$ | Ø3 | $\varnothing 4$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| D-1 | mm | 370.0 | 770.0 | - | 334.0 | 739.0 | 335.0 | 13.0 | 707.0 | 17.0 | 18.0 | 64.0 | 51.0 | 25.4 | 20.3 |
|  | inch | 14.57 | 30.31 | - | 13.15 | 29.09 | 13.19 | 0.51 | 27.83 | 0.67 | 0.71 | 2.52 | 2.01 | 1.00 | 0.80 |
| D-2 | mm | 370.0 | 770.0 | 380.0 | 334.0 | 739.0 | 335.0 | 13.0 | 707.0 | 17.0 | 18.0 | 64.0 | 51.0 | 25.4 | 20.3 |
|  | inch | 14.57 | 30.31 | 14.96 | 13.15 | 29.09 | 13.19 | 0.51 | 27.83 | 0.67 | 0.71 | 2.52 | 2.01 | 1.00 | 0.80 |

## Accessories

- EMC-D42A


EMC-D611A

Terminals

AC power common for multi-function input terminal (Neutral)

|  | Refer to Pr. 02.26~Pr. 02.31 for multi-function input selectio |
| :--- | :--- |
| MI10 ~ M115 | Input voltage: $100 \sim 130 \mathrm{~V}_{\text {Ac }} ;$ Input frequency: $57 \sim 63 \mathrm{~Hz}$ |
| Input impedance: $27 \mathrm{~K} \Omega$ |  |

I/O Extension Card
Input impedance: $27 \mathrm{~K} \Omega$
Terminal response time: ON: 10 ms ; OFF: 20 ms

EMC-R6AA


Relay
Extension Card

| Terminals | Descriptions |
| :---: | :---: |
| $\begin{aligned} & \text { RA10 ~ RA15 } \\ & \text { RC10 ~RC15 } \end{aligned}$ | Refer to Pr. 02.36 ~ Pr. 02.41 for multi-function input selection <br> Resistive load: <br> 3 A (N.O.) / $250 \mathrm{~V}_{\mathrm{AC}}$ <br> 5A (N.O.) / $30 \mathrm{~V}_{\text {DC }}$ <br> Inductive load (COS 0.4) <br> 2.0A (N.O.) / $250 \mathrm{~V}_{\mathrm{AC}}$ <br> 2.0A (N.O.) / 30 V Vc <br> It is used to output each monitor signal, such as for drive in operation, frequency attained or overload indication. |

EMC-BPS01


## Terminals

## Descriptions

When the AC motor drive power is off, the external power supply card provides external power to the network system, PLC function, and other functions to allow continued operations.
Input power: $24 \mathrm{~V}_{\mathrm{DC}} \pm 5 \%$
Maximum input current: 0.5A
Note:
Do not connect the control terminal +24 V (Digital control signal common: SOURCE) directly to the EMC-BPS01 input terminal 24 V . Do not connect control terminal GND directly to the EMC-BPS01 input terminal GND.

## Screw Specifications for Option Card Terminals

| EMC-D42A/EMC-D611A | Wire gauge | $24 \sim 12 \mathrm{AWG}\left(0.205 \sim 3.31 \mathrm{~mm}^{2}\right)$ |
| :--- | :--- | :--- |
| EMC-BPS01 | Torque | $4 \mathrm{Kg}-\mathrm{cm}[3.47 \mathrm{lb}-\mathrm{in}]$ |
| EMC-R6AA | Wire gauge | $24 \sim 16 \mathrm{AWG}\left(0.205 \sim 1.31 \mathrm{~mm}^{2}\right)$ |
|  | Torque | $6 \mathrm{Kg}-\mathrm{cm}[5.21 \mathrm{lb}-\mathrm{in}]$ |

## Accessories

## - EMC-COP01

RJ-45 Pin definition

|  |  |  | Pin | Pin name | Definition |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\square$ |  | 1 | CAN_H | CAN_H bus line (dominant high) |
|  |  |  | 2 | CAN_L | CAN_L bus line (dominant low) |
|  | $\begin{gathered} 8 \sim 1 \\ \text { Male } \end{gathered}$ | $8 \sim 1$ | 3 | CAN GND | Ground/0V/V- |
|  |  |  | 6 | CAN GND | Ground/0V/V- |

## - CMC-MOD01



Network Interface

Features

- MDI/MDI-X auto-detect
- Supports MODBUS TCP protocol
- AC motor drive keypad/Ethernet configuration
- E-mail alarm
- Baud rate: 10/100 Mbps auto-detect
- Virtual serial port


## Network Interface

| Interface | RJ-45 with Auto MDI/MDIX | Transmission speed | 10/100 Mbps Auto-Detect |
| :--- | :--- | :--- | :--- |
| Number of ports | 1 Port | Network rotocol | ICMP, IP, TCP, UDP, DHCP, SMTP, <br> MODBUS over TCP/IP, <br> Delta Configuration |
| Transmission method | IEEE 802.3 , IEEE 802.3 u |  |  |
| Transmission cable | Category 5e shielding 100 M |  |  |

## - CMC-EIP01



## Features

- MDI/MDI-X auto-detect
- Supports MODBUS TCP and Ethernet/IP
- AC motor drive keypad/Ethernet configuration protocol
- Virtual serial port

Network Interface

- Baud rate: 10/100 Mbps auto-detect


## Network Interface

| Interface | RJ-45 with Auto MDI/MDIX | Transmission speed | 10/100 Mbps Auto-Detect |
| :--- | :--- | :--- | :--- |
| Number of ports | 1 Port | Network protocol | ICMP, IP, TCP, UDP, DHCP, SMTP, <br> MODBUS over TCP/IP, <br> Delta Configuration |
| Transmission method | IEEE 802.3 , IEEE 802.3 u |  |  |
| Transmission cable | Category 5 e shielding 100 M |  |  |

## - CMC-PD01



Features

- Supports PZD control data exchange
- Supports PKW polling AC motor drive parameters
- Supports user diagnosis function
- Auto-detects baud rates; supports Max. 12 Mbps

PROFIBUS DP Connector

| Interface | DB9 connector |
| :--- | :--- |
| Transmission method | High-speed RS-485 |
| Transmission cable | Shielded twisted pair cable |
| Electrical isolation | $500 \mathrm{~V}_{\text {DC }}$ |

## Communication

| Message type | Cyclic data exchange |
| :--- | :--- |
| Module name | CMC-PD01 |
| GSD document | DELA08DB.GSD |
| Company ID | 08DB (HEX) |
| Serial transmission <br> speed supported <br> (auto-detection) | $9.6 \mathrm{kbps} ; 19.2 \mathrm{kbps} ; 93.75 \mathrm{kbps} ; 187.5 \mathrm{kbps} ;$ <br> $125 \mathrm{kbps} ; 250 \mathrm{kbps} ; 500 \mathrm{kbps} ; 1.5 \mathrm{Mbps} ;$ <br> $3 \mathrm{Mbps} ; 6 \mathrm{Mbps} ; 12 \mathrm{Mbps}$ (bits per second) |



## Features

- Based on the high-speed communication interface of Delta HSSP protocol, able to conduct immediate control of an AC motor drive
- Supports Group 2 only connection and polling I/O data exchange
- For I/O mapping, supports Max. 32 words of input and 32 words of output
- Supports EDS file configuration in DeviceNet configuration software
- Supports all baud rates on DeviceNet bus: 125 kbps , $250 \mathrm{kbps}, 500 \mathrm{kbps}$ and extendable serial transmission speed mode
- Node address and serial transmission speed can be set up on AC motor drive
- Power supplied from AC motor drive

DeviceNet Connector

| Interface | 5-Pin 5.08mm Pluggable Connector |
| :--- | :--- |
| Transmission method | CAN |
| Transmission cable | Shielded twisted pair cable <br> (with 2 power cables) |
| Transmission speed | $125 \mathrm{kbps}, 250 \mathrm{kbps}, 500 \mathrm{kbps}$ and <br> extendable serial transmission <br> speed mode |
| Network protocol | DeviceNet protocol |

DeviceNet Connector

| Interface | 50 PIN communication terminal |
| :--- | :--- |
| Transmission method | SPI communication |
| Terminal function | 1. Communicating with AC motor drive <br> 2. Transmitting power supply from AC motor drive |
| Communication <br> protocol | Delta HSSP protocol |
|  |  |

## Accessories

- CANopen Communication Cable

Model: TAP-CB05, TAP-CB10


| Title | Part No. |  | inch |
| :---: | :---: | :---: | :---: |
|  |  | mm | 11.8 |
| 1 | UC-CMC003-01A | 300 | 19.6 |
| 2 | UC-CMC005-01A | 500 | 39 |
| 3 | UC-CMC010-01A | 1000 | 59 |
| 4 | UC-CMC015-01A | 1500 | 78.7 |
| 5 | UC-CMC020-01A | 2000 | 118.1 |
| 6 | UC-CMC030-01A | 3000 | 196.8 |
| 7 | UC-CMC050-01A | 5000 | 393.7 |
| 8 | UC-CMC100-01A | 10000 | 787.4 |
| 9 | UC-CMC200-01A | 20000 |  |

- Digital Keypad Accessories: RJ45 Extension Leads and CMC-EIP01 Cables

Applicable Models: CBC-K3FT, CBC-K5FT, CBC-K7FT, CBC-K10F, CBC-K16FT

| Title | Part No. | Explanation |
| :---: | :---: | :--- |
| 1 | CBC-K3FT | RJ45 extension lead, 3 feet (approximately 0.9 m ) |
| 2 | CBC-K5FT | RJ45 extension lead, 5 feet (approximately 1.5 m ) |
| 3 | CBC-K7FT | RJ45 extension lead, 7 feet (approximately 2.1 m ) |
| 4 | CBC-K10FT | RJ45 extension lead, 10 feet (approximately 3 m ) |
| 5 | CBC-K16FT | RJ45 extension lead, 16 feet (approximately 4.9 m ) |



## Ordering I nformation

| Power |
| :---: | :---: | :---: | :---: |
| Range | FRAME | IP55 |
| :---: |
| 0.75 |
| 1.5 |
| 2.2 |

## Model Name



Smarter. Greener. Together.

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[^0]:    *1 The carrier frequency range of VFD900FP4EA-xx is $2 \sim 9 \mathrm{kHz}$, default setting 6 kHz
    *2 A zero phase reactor is required to fulfill EMC category C1

