



CP2000 series - Fan and Pump purpose drives

CP2000 series drives for energy-saving HVAC systems, Fan and Pump applications. Pre-configured with dedicated HVAC parameters, intelligent PID control, Sensorless Vector Control (SVC) and auto-tuning functions improve motor performance in variable torque load applications. Multi-segment V/F control curve and soft start functions improve efficiency with real-time adjustment of output voltage under variable torque load environments.

- Built-in PLC 10K steps programming capacity with real-time-clock and calendar
- Skip frequency function (*avoids motor vibration at specific frequency bandwidths*)
- Built-in RS-485 (MODBUS) and BACnet MS/TP, expandable with extension cards
- Multi-pump control of up to 8 motors provide fixed amount and fixed time circulation control
- Flying start and auto restart after momentary power loss functions, suitable for fan application
- Quick setup mode with pre-configured user defined parameter management, simplify installation
- Energy saving control functions include PID control, sleep/wakeup mode and auto-energy saving mode
- Enhanced PCB coatings (IEC 60721-3-3 class 3C2 standard) ensures drive operation in harsh environments



VFD150CP4EB-21



VFD220CP4EA-21



VFD450CP43S-21

| type | motor rating | description | frame size | dimensions (mm) | | |
|------|--------------|-------------|------------|-----------------|-----|-----|
| | | | | (H) | (W) | (D) |

Three - phase input 380 - 480V 50/60Hz

| | | | | | | |
|-----------------|---------|----------------------------|----|------|-----|-----|
| VFD015CP4EB-21* | 1.5kW | three phase AC motor drive | A | 250 | 130 | 170 |
| VFD022CP4EB-21* | 2.2kW | three phase AC motor drive | A | 250 | 130 | 170 |
| VFD040CP4EA-21* | 4.0kW | three phase AC motor drive | A | 250 | 130 | 170 |
| VFD055CP4EB-21* | 5.5kW | three phase AC motor drive | A | 250 | 130 | 170 |
| VFD075CP4EB-21* | 7.5kW | three phase AC motor drive | A | 250 | 130 | 170 |
| VFD110CP4EB-21* | 11.0kW | three phase AC motor drive | B | 320 | 190 | 190 |
| VFD150CP4EB-21* | 15.0kW | three phase AC motor drive | B | 320 | 190 | 190 |
| VFD185CP4EB-21* | 18.5kW | three phase AC motor drive | B | 320 | 190 | 190 |
| VFD220CP4EA-21* | 22.0kW | three phase AC motor drive | C | 400 | 250 | 210 |
| VFD300CP4EB-21* | 30.0kW | three phase AC motor drive | C | 400 | 250 | 210 |
| VFD370CP4EB-21* | 37.0kW | three phase AC motor drive | C | 400 | 250 | 210 |
| VFD450CP43S-21 | 45.0kW | three phase AC motor drive | D0 | 500 | 280 | 255 |
| VFD550CP43S-21 | 55.0kW | three phase AC motor drive | D0 | 500 | 280 | 255 |
| VFD750CP43B-21 | 75.0kW | three phase AC motor drive | D | 550 | 330 | 275 |
| VFD900CP43A-21 | 90.0kW | three phase AC motor drive | D | 550 | 330 | 275 |
| VFD1100CP43A-21 | 110.0kW | three phase AC motor drive | E | 589 | 370 | 300 |
| VFD1320CP43B-21 | 132.0kW | three phase AC motor drive | E | 589 | 370 | 300 |
| VFD1600CP43A-21 | 160.0kW | three phase AC motor drive | F | 800 | 420 | 300 |
| VFD1850CP43B-21 | 185.0kW | three phase AC motor drive | F | 800 | 420 | 300 |
| VFD2200CP43A-21 | 220.0kW | three phase AC motor drive | G | 1000 | 500 | 397 |
| VFD2800CP43A-21 | 280.0kW | three phase AC motor drive | G | 1000 | 500 | 397 |

* Built-in EMC filter and braking chopper frame A, B, C up to 37kW, Larger sizes DC choke built-in

Accessories for C2000 and CP2000 series drives

| | | | |
|----------|-----------|--|----------|
| KPC-CC01 | keypad | with LCD display, parameters backup function | C/CP2000 |
| MKC-KPPK | bracket | remote panel adapter, (IP66) | C/CP2000 |
| EMC-D42A | 4DI / 2DO | digital I/O extension card, selectable NPN/PNP, DC 24V | |
| EMC-A22A | 2AI / 2AO | analog I/O extension card, selectable 0-10V/4-20mA | |
| EMC-R6AA | 6 relay | relay output extension card | |

Fieldbus modules for C2000 and CP2000 series drives (plugs into drive)

| | | | |
|-----------|-------------|----------------------------|----------------------------|
| CMC-EIP01 | Ethernet | plug-in communication card | supports EtherNet/IP |
| CMC-DN01 | DeviceNet | plug-in communication card | 125kbp / 250kpbs / 500kpbs |
| CMC-PD01 | Profibus-DP | plug-in communication card | 9.6kpbs - 12Mbps |
| EMC-COP01 | CANopen | plug-in communication card | 50kpbs - 1Mbps |
| CMC-EC01 | EtherCAT | plug-in communication card | 10/100 Mbps Auto-Defect |

Mounting accessories

Flange mount kits to permit the chassis mounting of drives with the heat-sink section protruding from the rear of the enclosure for improved cooling/heat dissipation of drives.

| | | | |
|---------|--------|--|-------------------|
| MKC-AFM | flange | mount kit for rear exposure of heat sink | for drive frame A |
| MKC-BFM | flange | mount kit for rear exposure of heat sink | for drive frame B |
| MKC-CFM | flange | mount kit for rear exposure of heat sink | for drive frame C |

Base mounting flange can be moved to central position to expose heat sinks for frames D, E, F.

Conduit boxes

| | | |
|-----------|-------|--|
| MKC-DN1CB | frame | Conduit box kit for frame D1 (not D01) |
| MKC-EN1CB | frame | Conduit box kit for frame E1 |
| MKC-FN1CB | frame | Conduit box kit for frame F1 |