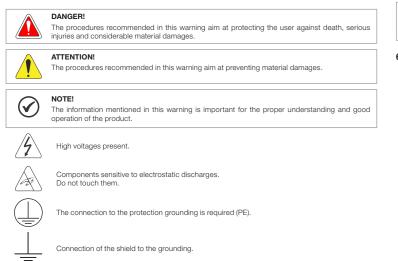
English 题 **Quick Installation Guide CFW500 Frequency Inverter**

1 SAFETY INSTRUCTIONS

This quick installation guide contains the basic information necessary to commission the CFW500. It has been written to be used by gualified personnel with suitable training or technical gualification for operating this type of equipment. The personnel shall follow all the safety instructions described in this manual defined by the local regulations. Failure to comply with the safety instructions may result in death, serious injury, and/or equipment damage.

2 SAFETY WARNINGS IN THIS GUIDE AND IN THE PRODUCT



3 PRELIMINARY RECOMMENDATIONS

DANGER! Always disconnect the general power supply before changing any electric component associated to the inverter. Many components may remain loaded with high voltages and/or moving (fans), even after the AC power supply input is disconnected or turned off. Wait for at least ten minutes in order to guarantee the full discharge of the capacitors. Always connect the grounding point of the inverter to the protection grounding.

NOTE! Frequency Inverter may interfere with other electronic equipment. Follow the precautions recommended in manual available for download on the website: www.weg.net.

NOTE \checkmark

It is not the intention of this guide to present all the possibilities for the application of the CFW500, as well as WEG cannot take any liability for the use of the CFW500 which is not based on this guide. For further information about installation, full parameter list and recommendations, visit the website www.weg.net

Do not execute any applied potential test on the inverter! If necessary, contact WEG.

ATTENTION

Electronic boards have components sensitive to electrostatic discharges Do not touch directly on components or connectors. If necessary, first touch the grounding point of the inverter, which must be connected to the protection earth (PE) or use a proper grounding strap.

DANGER

Crushing Hazard in order to ensure safety in load lifting applications, electric and/or mechanical devices must be installed outside the inverter for protection against accidental fall of load.

DANGER

This product was not designed to be used as a safety element. Additional measures must be taken so as to avoid material and personal damages. The product was manufactured under strict quality control, however, if installed in systems where

its failure causes risks of material or personal damages, additional external safety devices must ensure a safety condition in case of a product failure, preventing accidents.

ATTENTION

The operation of this equipment requires detailed installation and operation instructions provided in the user's manual, programming manual and communication manuals, available for download or the website: www.weg.net.

4 ABOUT THE CEW500

The frequency inverter CFW500 is a high-performance product which allows the speed and torque control of three-phase induction motors

5 NOMENCLATURE

Table 1: N Identification of the Model Frame Rated N° of Rated Brake Rate Conducted Emission Level Safety
 And
 Frame
 Rated
 N° of
 Mateu
 Mateu

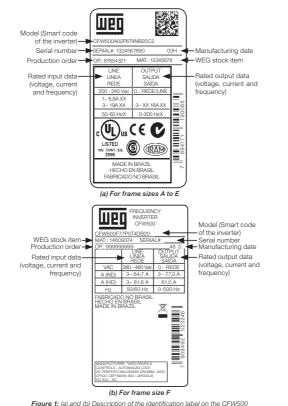
 Series
 Size
 Current
 Phases
 Voltage

 CFW500
 A
 02P6
 T
 4

 Refer to Table 2.2 to the CFW500
 Refer to Table 2.4 to the CFW500
 Nonload
 Version Function 20 safety on the website: www.weg.net without dynamic braking software Y2 = with DB = with dynamic braking lank = s safety functions (STO and lug-in module CFW500 20 = IP20 100 = without plua-i IEC/EN 61800-5-2 N1 = cabinet Nema1 (type 1 as per UL) (protection rate according to standard IEC IP20) ank = it does not mee vels of standard or C3 = as per category 2 (C2) or 3 (C3) of EC/EN 61800-3, with internal RFI filter

NOTE! \checkmark For models with a special software version (Sx in the smart code) and for specific applications, refer to the application manual available for download on **www.weg.net**.

6 IDENTIFICATION LABEL



7 RECEIVING AND STORAGE

The CFW500 is supplied in a cardboard package up to frame size E. Models with larger enclosures are packed in a wooden box. On this package, there is an identification label which is the same as the one attached to the side of the inverter

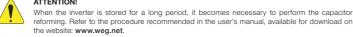
Follow the procedures below to open the package of models from frame size F up: Place the package on a table with the help of two people. Open the package.
 Remove the cardboard or styrofoam protection.

- The identification of the CFW500 matches the model purchased.
- Any damages occurred during transportation

Report any damage immediately to the carrier.

If the CFW500 is not installed soon, store it in a clean and dry location (temperature between -25 °C and 60 °C (-77 °F and 140 °F)), with a cover to prevent dust accumulation inside it.





8 INSTALLATION AND CONNECTION

8.1 Environmental Conditions:

- - Direct exposure to sunlight, rain, high humidity or sea-air.
 - Inflammable or corrosive liquids or gases. Excessive vibration
 - Dust, metallic particles or oil mist.

Environmental conditions permitted for the operation of the inverter:

- Temperature around the inverter from -10 °C (14 °F) to the nominal temperature.
 Inverters with frame sizes A to E: for temperatures surrounding the inverter higher than the specifications in Table B.4 in the user's manual CFW500, available for download on the website; www.weg.net, it is necessary to apply of 2 % of current derating for each Celsius degree, limited to an increase of 10 °C (50 °F). Inverters with frame size F: for temperatures around the inverter higher than the specification indicated in Table B.5
- in the user's manual, available for download on the website: **www.weg.net**, it is necessary to derate the current by 1 % for each degree Celsius up to 50 °C (122 °F) and by 2 % for each degree Celsius up to 60 °C (140 °F).

- Air relative humidity: 5 % to 95 % non-condensing.
 Maximum altitude: up to 1000 m (3.300 ft) nominal conditions.
 1000 m to 4000 m (3.300 ft to 13.200 ft) 1 % of current derating for each 100 m (328 ft) above 1000 m of altitude. From 2000 m to 4000 m (6.600 ft to 13.200 ft) above sea level - maximum voltage reduction (240 V for 20....240 V models, 480 V for 380...480 V models and 600 V for 500...600 V models) of 1.1 % for each 100 m (330 ft) above
- 2000 m (6.600 ft). Pollution degree: 2 (according to EN 50178 and UL 508C), with non-conductive pollution. Condensation must not originate conduction through the accumulated residues.
- 8.2 Positioning and Mounting

The external dimensions and the drilling for the mounting, as well as the net weight (mass) of the inverter are presented in Figure 2.

Mount the inverter in the upright position on a flat and vertical surface. First, put the screws on the surface where the inverter will be installed, install the inverter and then tighten the screws observing the maximum torque for the screws indicated in "Figure 2: Inverter dimensions for mechanical installation" on page 1

Allow the minimum clearances indicated in Figure 3, in order to allow the cooling air circulation. Do not install heat sensitive components right above the inverte

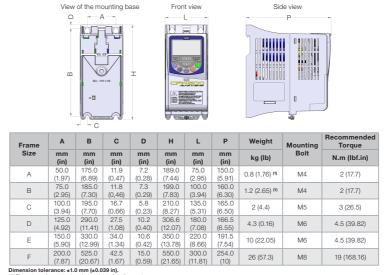
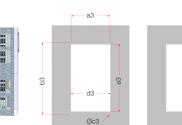


Figure 2: Inverter dimensions for mechanical installation







(c) Flange mounting - standard inverte



| | (a) within ventilation nee spaces | | | | | | | | | | | | | | |
|---------------|-----------------------------------|------------------|---------|------------------|------------------|--------------|--------------|-------------|-----------------|------------------------------|--|--|--|--|--|
| Frame Size | a3 | b3 | c3 | d3 | e3 | А | в | С | D | Torque Par ⁽¹⁾ | | | | | |
| | mm (in) | mm (in) | м | mm (in) | mm (in) | mm (in) | mm (in) | mm (in) | mm (in) | N.m. (lbf. in) | | | | | |
| A | - | - | - | - | - | 15.0 (0.59) | 40.0 (1.57) | 30.0 (1.18) | 10.0 (0.39) (2) | - | | | | | |
| В | - | - | - | - | - | 35.0 (1.38) | 50.0 (1.97) | 40.0 (1.57) | 15.0 (0.59) (2) | - | | | | | |
| С | - | - | - | - | - | 40.0 (1.57) | 50.0 (1.97) | 50.0 (1.97) | 30.0 (1.18) | - | | | | | |
| D | - | - | - | - | - | 40.0 (1.57) | 50.0 (1.97) | 50.0 (1.97) | 40.0 (1.57) | - | | | | | |
| E | - | - | - | - | - | 110.0 (4.33) | 130.0 (5.11) | 50.0 (1.97) | 40.0 (1.57) | - | | | | | |
| F | 275.0 (10.83) | 517.0 (20.35) | M8 | 288.0 (11.34) | 488.0 (19.21) | 110.0 (4.33) | 130.0 (5.11) | 10.0 (0.39) | 30.0 (1.18) | 20 (177) | | | | | |
| imension to | lerance: ±1 | .0 mm (±0.0 | 39 in). | | | | | | | | | | | | |

nce: ±1.0 mm (±0.39 m). torque for King the inverter (viali for c3). mount inverters side by side without lateral free space (D = 0), however with maximum ambient temperature of 40 °C (104 °F). Figure 3: (a) to (d) Mechanical installation data (surface mounting and minimum ventilation free espaces)



ATTENTION!

- When installing two or more inverters vertically, respect the minimum clearance A + B (as per Figure 3) and provide an air deflecting plate so that the heat rising up from the bottom inverte
- does not affect the top inverter. Provide independent conduits for the physical separation of signal, control, and power cables (refer to the Chapter 9 ELECTRICAL INSTALLATION).

9 ELECTRICAL INSTALLATION

DANGER

- The following information is merely a guide for proper installation. Comply with applicable local regulations for electrical installations.
- Make sure the power supply is disconnected before starting the installation.
- The CFW500 must not be used as an emergency stop device. Provide other devices for that purpose.



ATTENTION!

Integral solid state short circuit protection does not provide branch circuit protection. Branch circuit protection must be provided in accordance with applicable local codes.

9.1 Identification of the Power Terminals and Grounding Points

The power terminals can be of different sizes and configurations, depending on the model of the inverter, according to Table 2. The maximum torque of the power terminals and grounding points must be checked in Table 2.

Table 2: Power terminals, grounding points and recommended tightening torque

| - | | Recommended Torque | | | | | | | | | | |
|---------------|--------------|--------------------|-----------|-----------------|--------|--|--|--|--|--|--|--|
| Frame Size | Power Supply | Groundi | ng Points | Power Terminals | | | | | | | | |
| Size | | N.m | Lbf.in | N.m | Lbf.in | | | | | | | |
| А | 200240 V | 0.5 | 4.34 | 0.5 | 4.34 | | | | | | | |
| A | 380480 V | 0.5 | 4.34 | 0.5 | 4.34 | | | | | | | |
| в | 200240 V | 0.5 | 4.34 | 0.5 | 4.34 | | | | | | | |
| в | 380480 V | 0.5 | 4.34 | 0.5 | 4.34 | | | | | | | |
| | 200240 V | 0.5 | 4.34 | 1.7 | 15 | | | | | | | |
| С | 380480 V | 0.5 | 4.34 | 1.8 | 15.93 | | | | | | | |
| | 500600V | 0.5 | 4.34 | 1.0 | 8.68 | | | | | | | |
| D | 200240 V | 0.5 | 4.34 | 2.4 | 21.24 | | | | | | | |
| D | 380480 V | 0.5 | 4.34 | 1.76 | 15.57 | | | | | | | |
| - | 200240 V | 0.5 | 4.34 | 3.05 | 27 | | | | | | | |
| E | 380480 V | 0.5 | 4.34 | 3.05 | 27 | | | | | | | |
| F | 380480 V | 0.5 | 8.85 | 5.5 | 48.68 | | | | | | | |

cription of the power terminals

L/L1. N/L2 and L3 (R. S. T): AC power supply. Some models of voltage 200-240 V (see option of models in Table 5) can operate in 2 or 3 phases (single-phase) three-phase inverters) without deviating of the rated current. In this case, the AC power supply can be connected to two of the three input terminals without distinction. For the single-phase models only, the power voltage must be connected to L/L1 and N/L2. U, V, W: connection for the motor.

-UD: negative pole of the voltage of the DC Link.

+UD: positive pole of the voltage of the DC Link.
 +UD: positive pole of the voltage of the DC Link.
 BR: connection of the brake resistor.
 DCR: connection to the external DC Link inductor (optional). Only available for models 28 A, 33 A, 47 A and 56 A / 200-240 V and 24 A, 31 A, 39 A and 49 A / 380-480 V.

9.2 Power and Grounding Wiring, Circuit Breakers and Fuses



ATTENTION!

- Use proper cable lugs for the power and grounding connection cables. Refer to Table 5 for
- Keep sensitive equipment and wiring at a minimum distance of 0.25 m from the inverter and from the cables connecting the inverter to the motor. It is not recommended the use of mini circuit breakers (MDU). because of the actuation level
- of the magnet.



ATTENTION!

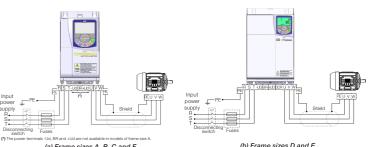
Residual Current Device (RCD):

- When installing an RCb guard against electrical shock, only devices with a trip current of 300 mA should be used on the supply side of the inverter.
 Depending on the installation (motor cable length, cable type, multimotor configuration, etc.),
- the RCD protection may be activated. Contact the RCD manufacturer for selecting the most appropriate device to be used with inverters.



- The wire gauges listed in Table 5 sare orientative values. Installation conditions and the maximum
- In order to meet UL requirements, use ultra fast (for frame sizes A, B and C), and use fuse type J or circuit breaker (for frame sizes D and E) fuses at the inverter supply with a current not higher than the values presented in Figure 5.

9.3 Power Connections



(a) Frame sizes A, B, C and F

Figure 4: (a) and (b) Power and grounding co nnections

9.3.1 Input Connections



 \bigcirc

Provide a disconnect device for the inverter power supply. This device must cut off the power supply whenever necessary (during maintenance for instance)

ATTENTION!

The power supply that feeds the inverter must have a grounded neutral. In case of IT networks, follow the instructions described in the user's manual, available for download on the website: www.weg.net.

NOTE!

 The input power supply voltage must be compatible with the inverter rated voltage.
 Power factor correction capacitors are not needed at the inverter input (L/L1, N/L2, L3 or R, S, T) and must not be installed at the output (U. V. W).

Power supply capacity

 Suitable for use in circuits capable of delivering not more than 30.000 Arms symmetrical (200 V, 480 V or 600 V), when protected by fuses as specified in Table 5.

9.3.2 Dynamic Braking

 \checkmark

NOTE! The dynamic braking is available from frame size B for the CFW500. For installation information, refer to Item 3.2.3.4 Dynamic Braking of the user's manual, available for download on the website: www.weg.net

9.3.3 Output Connections

- ATTENTION! The inverter has an electronic motor overload protection that must be adjusted according to the driven motor. When several motors are connected to the same inverter, install individual overload relays for each motor.
 - The motor overload protection available in the CFW500 is in accordance with the UL508C standard. Note the following information: 1. Trip current equal to 1.2 times the motor rated current (P0401). 2. When parameters P0156, P0157 and P0158 (Overload current at 100 %, 50 % and 5 % of the rated
 - speed, respectively) are manually set, the maximum value to meet the condition 1 is 1.1 x P0401.

ATTENTION

If a disconnect switch or a contactor is installed at the power supply between the inverter and the motor, never operate it with the motor turning or with voltage at the inverter output.

The characteristics of the cable used to connect the motor to the inverter, as well as its interconnection and routing. are extremely important to avoid electromagnetic interference in other equipment and not to affect the life cycle of windings and bearings of the controlled motors.

Keep motor cables away from other cables (signal cables, sensor cables, control cables, etc.), according to Item 9.3.6 Cable Separation Distance

Connect a fourth cable between the motor ground and the inverter ground

9.3.4 Grounding Connections

DANGER

- The inverter must be connected to a protection grounding (PE) Use grounding wiring with a gauge at least equal to that indicated in Table 5.
- The maximum tightening torque of the grounding connections is of 1.7 N.m (15 lbf.in).
 Connect the grounding points of the inverter to a specific grounding rod, or specific grounding
- point or to the general grounding point (resistance ≤ 10 Ω).
 The neuter conductor that powers up the inverter must be solidly grounded; however, this conductor must not be used to ground the inverter.
- Do not share the grounding wiring with other equipment that operate with high currents (e.g. high power motors, soldering machines, etc.).

9.3.5 Control Connections

The control connections (analog input/output, digital input/output and interface RS485) must be performed according to the specification of the connector of the plug-in module connected to the CFW500. Refer to the guide of the plug-in module in the package of the product. The typical functions and connections for the CFW500-IOS standard plug-in module are shown in Figure 5.

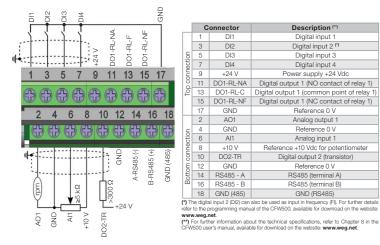


Figure 5: Signals of the connector of the CFW500-IOS plug-in module

For the correct connection of the control, use

- . Gauge of the cables: 0.5 mm² (20 AWG) to 1.5 mm² (14 AWG). Maximum torque: 0.5 N.m (4.50 lbf.in).
- 3. Wiring of the plug-in module connector with shielded cable and separated from the other wiring (power, command in 110 V / 220 Vac, etc), according to Item 9.3.6 Cable Separation Distance. 4. Relays, contactors, solenoids or coils of electromechanical brake installed close to the inverters may occasionally
- generate interference in the control circuitry. To eliminate this effect, RC suppressors (with AC power supply) or
- freewheel diodes (with DC power supply) must be connected in parallel to the coils of these devices. 5. When using the external HMI, the cable that connects to the inverter must be separated from the other cables in the installation, keeping a minimum distance of 10 cm.
- When using analog reference (Al1) and the frequency oscillates (problem of electromagnetic interference), interconnect the GND of the connector of the plug-in module to the inverter grounding connection.

9.3.6 Cable Separation Distance

| Table 3: Cable separation distance | | | | | | | | | | | |
|------------------------------------|---------------------------|-------|--|--|--|--|--|--|--|--|--|
| rter Output ed Current | Length of the Cable(s) | Minim | | | | | | | | | |

um Separation

Distance

≥ 25 cm (9.84 in)

≥ 10 cm (3.94 in) ≥ 25 cm (9.84 in) ≥ 10 cm (3.94 in)

≤ 30 m (100 ft) ≥ 28 A > 30 m (100 ft)

Rated Cur

≤ 24 A

10 PREPARATION AND POWERING UP

| DANGER! |
|--------------------------------------------------------------------------|
| Always disconnect the general power supply before making any connection. |

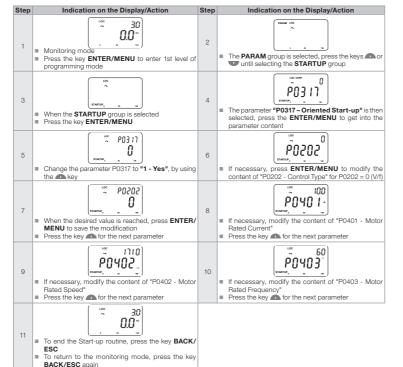
1. Check if the power, grounding and control connections are correct and firm. Remove all materials left from the inside of the inverter or drive.

- Check if the motor connections and if the motor current and voltage match the inverter.
 Mechanically uncouple the motor from the load. If the motor cannot be uncoupled, be sure that the turning in any direction (clockwise or counterclockwise) will not cause damages to the machine or risk of accidents.
 Close the covers of the inverters or drive.
- 6. Measure the voltage of the input power supply and check if it is within the permitted range, as presented in Chapter
 11 TECHNICAL SPECIFICATIONS.
- Power up the input: close the disconnecting switch.
 Check the success of the powering up: The display of the HMI indicates:



10.1 Startup

10.1.1 V/f Control Type (P0202 = 0)



11 TECHNICAL SPECIFICATIONS

11 1 Power Data

- Power Supply:
- Voltage Tolerance: -15 % to +10 % of nominal voltage.
 Frequency: 50/60 Hz (48 Hz to 62 Hz).
- Phase imbalance: ≤ 3 % of the rated phase-to-phase input voltage.
- Overvoltage according to Category III (IEC/EN 61010/UL 508C).
 Transient voltage according to Category III.
- Maximum of 10 connections (power up cycles ON/OFF) per hour (1 every 6 minutes). ■ Typical efficiency: ≥ 97 %.

12 CONSIDERED STANDARDS

Table 4: Considered standards

- UL 508C power conversion equipment.
 Note: Suitable for Installation in a compartment handling conditioned air. Safety UL 840 - insulation coordination including clearances and creepage distances for electrica

 - equipment. IEC/EN 61800-5-1 safety requirements electrical, thermal and energy.
 - EN 50178 electronic equipment for use in power installations IEC/EN 60204-1 - safety of machinery. Electrical equipment of machines. Part 1: general
 - requirements. Note: for the machine to comply with this standard, the manufacturer of the machine is responsible for installing an emergency stop device and equipment to disconnect the input
 - power supply.
 - IEC/EN 60146 (IEC 146) semiconductor converters
 - EC/EN 6180-2- adjustable speed electrical power drive systems part 2: general requirements
 rating specifications for low voltage adjustable frequency AC power drive systems.
- EC/CN 61800-3 adjustable speed electrical power drive systems part 3: EMC product standard including specific test methods. Electromagneti ility (EMC) tandards
 - CISPR 11 industrial, scientific and medical (ISM) radio-frequency equipment electromagnetic CISH-111 - industrial, scientific and medical (ISM) radio-trequency equipment - electromagnetic disturbance characteristics - limits and methods of measurement.
 IEC/EN 61000-4-2 - electromagnetic compatibility (EMC) - part 4: testing and measurement techniques - section 2: electrostatic discharge immunity test.
 IEC/EN 61000-4-3 - electromagnetic compatibility (EMC) - part 4: testing and measurement techniques - section 3: radiated, radio-frequency, electromagnetic field immunity test.

 - IEC/EN 61000-4-4 electromagnetic compatibility (EMC) part 4: testing and measurement techniques section 4: electrical fast transient/burst immunity test.
 IEC/EN 61000-4-5 electromagnetic compatibility (EMC) part 4: testing and measurement
 - techniques section 5: surge immunity test. IEC/EN 61000-4-6 electromagnetic compatibility (EMC)- part 4: testing and measurement techniques section 6: immunity to conducted disturbances, induced by radio-frequency fields.
- EN 60529 degrees of protection provided by enclosures (IP code)
 UL 50 enclosures for electrical equipment. Mechanica
- standards IEC/EN 60721-3-3 - classification of environmental conditions - part 3: classification of
 - groups of environmental parameters and their severities section 3: stationary use at weather protected locations level 3m4.

13 CERTIFICATIONS

| Certifications (*) | Notes |
|--------------------|---------|
| UL e cUL | E184430 |
| CE | |
| IRAM | |
| C-Tick | |
| FAC | |

(*) For updated information on certifications, please contact WEG.

14 LIST OF MODELS CFW500 SERIES

CF

CF CF CF

CF CF

CF CF

CF

| Inverter | e e | | | | | | Recom | mended Fuse | | | | | | Dynam | ic Bra | king | | |
|---------------|---------------------|-------------------------------|------------|----------------------------|------------------|-----------|---------------|-----------------------------------------|-------------|---------------------------------|---------------------|---------------------------------|----------------------------|-------------------------|------------------------|--------------------------------------|---------|--|
| | ber of Input Phases | Power Supply Rated Voltage | Frame Size | Output Rated Current | Maximum Motor | I²t [A²s] | Current [A] | Recommended WEG aR Fuse | | Circuit Breaker | Power Wire Size | Grounding Wire Size | Maximum Current | Recommended Resistor | Braking rms Current | Power Wire Size for DC+ and BR | | |
| | Number | [Vrms] | | HD [Arms] | HD [HP/ kW] | | | | [A] | WEG | mm² (AWG) | mm² (AWG) | (I _{max}) [A] | [Ω] | [A] | mm² (AWG) | | |
| FW500A01P6S2 | | | | 1.6 | 0.25/0.18 | 373 | 20 (2) | FNH00-20K-A | 5.5 | MPW18-3-D063 | 1.5 (16) | 2.5 (14) | | | | | | |
| FW500A02P6S2 | 1 | | . F | 2.6 | 0.5/0.37 | 373 | 20(2) | FNH00-20K-A | 9.0 | MPW18-3-U010 | 1.5 (16) | 2.5 (14) | l r | ynamio | brakir | a not | | |
| FW500A04P3S2 | 1 | | A | 4.3 | 1/0.75 | 373 | 25 (2) | FNH00-25K-A | 13.5 | MPW18-3-U016 | 1.5 (16) | 2.5 (14) | 1 - | | ailable | 3 | | |
| FW500A07P0S2 | | | | 7.0 | 2/1.5 | 800 | 40 (2) | FNH00-40K-A | 25 | MPW40-3-U025 | 4.0 (12) | 4.0 (12) | | | | | | |
| FW500B07P3S2 | | | | 7.3 | 2/1.5 | 450 | 40 (2) | FNH00-40K-A | 25 | MPW40-3-U025 | 2,5 (14) | 4.0 (12) | 10 | 39 | 7 | 2.5 (14) | | |
| FW500B10P0S2 | 1 | | B | 10 | 3/2.2 | 450 | 63 (2) | FNH1-63K-A | 32 | MPW40-3-U032 | 4.0 (12) | 4.0 (12) | 15 | 27 | 11 | 2.5 (14) | | |
| FW500A01P6B2 | | | | 1.6 | 0.25/0.18 | 680 | 20 (2) | FNH00-20K-A | 5,5/2,5(1) | MPW18-3-D063 / MPW18-3-D025 (1) | 1.5 (16) | 2.5 (14) | - | | | | | |
| FW500A02P6B2 | | | l a l | 2.6 | 0.5/0.37 | 680 | 20(2) | FNH00-20K-A | 9.0/4.0 (1) | MPW18-3-U010 / MPW18-3-U004 (*) | 1.5 (16) | 2.5 (14) | 1 0 |)ynamio | | .g not | | |
| FW500A04P3B2 | 1/3 | | | 1 | | 4.3 | 1/0.75 | 680 | 25/20(1)(2) | FNH00-25K-A / FNH00-20K-A (1) | 14/6.3(1) | MPW18-3-U016 / MPW18-3-D063 (1) | 1.5 (16) | 2.5 (14) | | av | ailable | |
| FW500B07P3B2 | | 220240 | | 7.3 | 2/1.5 | 450 | 40/20(1)(2) | FNH00-40K-A / FNH00-20K-A (1) | 25/12(1) | MPW40-3-U025 / MPW18-3-U016 (1) | 2.5/1.5 (14/16) (1) | 4.0 (12) | 10 | 39 | 7 | 2.5 (14) | | |
| FW500B10P0B2 | | | B | 10 | 3/2.2 | 450 | 63/25 (1) (2) | FNH1-63K-A / FNH00-25K-A ⁽¹⁾ | 32/16(1) | MPW40-3-U032 / MPW18-3-U016 (1) | 4.0/2.5 (12/14) (1) | 4.0 (12) | 15 | 27 | 11 | 2.5 (14) | | |
| FW500A07P0T2 | | | | 7.0 | 2/1.5 | 680 | 20(2) | FNH00-20K-A | 10 | MPW18-3-U010 | 1.5 (16) | 2.5 (14) | | Dynamio | | / | | |
| FW500A09P6T2 | | | A | 9.6 | 3/2.2 | 1250 | 25 (2) | FNH00-25K-A | 16 | MPW18-3-U016 | 2.5 (14) | 2.5 (14) | | | ailable | 91101 | | |
| FW500B16P0T2 | | | в | 16 | 5/3.7 | 1000 | 40 (2) | FNH00-40K-A | 25 | MPW40-3-U025 | 4.0 (12) | 4.0 (12) | 20 | 20 | 14 | 4.0 (12) | | |
| FW500C24P0T2 | | | C | 24 | 7.5/5.5 | 1000 | 63 (2) | FNH00-63K-A | 40 | MPW40-3-U040 | 6.0 (10) | 4.0 (12) | 26 | 15 | 13 | 6.0 (10) | | |
| FW500D28P0T2 | | | | 28 | 10/7.5 | 2750 | 63 (2) | FNH00-63K-A | 40 | MPW40-3-U040 | 10 (8) | 10 (8) | 38 | 10 | 18 | 10 (8) | | |
| FW500D33P0T2 | | | b | 33 | 12.5/9.2 | 2750 | 80 (3) | FNH00-80K-A | 50 | MPW65-3-U050 | 10 (8) | 10 (8) | 45 | 8.6 | 22 | 10 (8) | | |
| FW500D47P0T2 | | | - | 47 | 15/11 | 2750 | 100 (3) | FNH00-100K-A | 65 | MPW65-3-U065 | 10 (8) | 10 (8) | 45 | 8.6 | 22 | 10 (8) | | |
| FW500E56P0T2 | | | E | 56 | 20/15 | 6600 | 125 (3) | FNH00-125K-A | 80 | MPW80-3-U080 | 16 (6) | 16 (6) | 95 | 4.7 | 48 | 16 (6) | | |
| CFW500A01P0T4 | | | - | 1.0 | 0.25/0.18 | 450 | 20(2) | FNH00-20K-A | 1.6 | MPW18-3-D016 | 1.5 (16) | 2.5 (14) | 00 | | 10 | 10 (0) | | |
| FW500A01P6T4 | | | | 1.6 | 0.5/0.37 | 450 | 20(2) | FNH00-20K-A | 2.5 | MPW18-3-D025 | 1.5 (16) | 2.5 (14) | | | | | | |
| FW500A02P6T4 | | | | 2.6 | 1.5/1.1 | 450 | 20(2) | FNH00-20K-A | 4.0 | MPW18-3-U004 | 1.5 (16) | 2.5 (14) | Fre | | | tica não | | |
| FW500A04P3T4 | | | | 4.3 | 2/1.5 | 450 | 20(2) | FNH00-20K-A | 6.3 | MPW18-3-D063 | 1.5 (16) | 2.5 (14) | | dis | poníve | | | |
| FW500A06P1T4 | | | | 6.1 | 3/2.2 | 450 | 20(2) | FNH00-20K-A | 10 | MPW18-3-U010 | 1.5 (16) | 2.5 (14) | | | | | | |
| FW500B02P6T4 | | | \vdash | 2.6 | 1.5/1.1 | 450 | 20(2) | FNH00-20K-A | 4.0 | MPW18-3-U004 | 1.5 (16) | 2.5 (14) | 6 | 127 | 4.5 | 1.5 (16) | | |
| FW500B04P3T4 | 3 | | | 4.3 | 2/1.5 | 450 | 20(2) | FNH00-20K-A | 6.3 | MPW18-3-D063 | 1.5 (16) | 2.5 (14) | 6 | 127 | 4.5 | 1.5 (16) | | |
| FW500B06P5T4 | 1 | 380480 | B | 6.5 | 3/2.2 | 450 | 20(2) | FNH00-20K-A | 10 | MPW18-3-U010 | 1.5 (16) | 2.5 (14) | 8 | 100 | 5.7 | 2.5 (14) | | |
| FW500B10P0T4 | | | | 10 | 5/3.7 | 1000 | 25 (2) | FNH00-25K-A | 16 | MPW18-3-U016 | 2.5 (14) | 2.5 (14) | 16 | 47 | 11.5 | 2.5 (14) | | |
| FW500C14P0T4 | | | \vdash | 14 | 7.5/5.5 | 1000 | 35 (2) | FNH00-35K-A | 20 | MPW40-3-U020 | 4.0 (12) | 4.0 (12) | 24 | 33 | 14 | 6.0 (10) | | |
| FW500C16P0T4 | 1 | | C | 16 | 10/7.5 | 1000 | 35(2) | FNH00-35K-A | 25 | MPW40-3-U025 | 4.0 (12) | 4.0 (12) | 24 | 33 | 14 | 6.0 (10) | | |
| FW500D24P0T4 | | | \vdash | 24 | 15/11 | 1800 | 60 (3) | FNH00-63K-A | 40 | MPW65-3-U040 | 6.0 (12) | 6.0 (12) | 34 | 22 | 21 | 10 (8) | | |
| FW500D31P0T4 | 1 | | D | 31 | 20/15 | 1800 | 60 (3) | FNH00-63K-A | 50 | MPW65-3-U050 | 10 (8) | 10 (8) | 48 | 18 | 27 | 10 (8) | | |
| FW500E39P0T4 | 1 | | \vdash | 39 | 25/18.5 | 2100 | 80 (3) | FNH00-80K-A | 50 | MPW65-3-U050 | 10 (8) | 10 (8) | 78 | 8.6 | 39 | 10 (8) | | |
| FW500E49P0T4 | 1 | | E | 49 | 30/22 | 13000 | 100 (3) | FNH00-100K-A | 65 | MPW65-3-U065 | 10 (8) | 10 (8) | 78 | 8.6 | 39 | 10 (8) | | |
| FW500C01P7T5 | 1 | | | 1.7 | 1/0.75 | 495 | 20(2) | FNH00-20K-A | 2.5 | MPW18-3-D025 | 1.5 (16) | 2.5 (14) | 1.2 | 825 | 0.6 | 1.5 (16) | | |
| FW500C03P0T5 | | | | 3.0 | 2/1.5 | 495 | 20(2) | FNH00-20K-A | 4 | MPW18-3-U004 | 1.5 (16) | 2.5 (14) | 2.6 | 392 | 1.3 | 1.5 (10) | | |
| FW500C04P3T5 | 1 | | | 4.3 | 3/2.2 | 495 | 20(2) | FNH00-20K-A | 6.3 | MPW18-3-D063 | 1.5 (16) | 2.5 (14) | 4 | 249 | 2 | 1.5 (16) | | |
| FW500C07P0T5 | 1 | 500600 | C | 7.0 | 5/3.7 | 495 | 20(2) | FNH00-20K-A | 10 | MPW18-3-U010 | 2.5 (14) | 2.5 (14) | 6 | 165 | 3 | 1.5 (16) | | |
| FW500C10P0T5 | | | | 10 | 7.5/5.5 | 495 | 25 (2) | FNH00-20K-A | 16 | MPW18-3-U016 | 2.5 (14) | 2.5 (14) | 9 | 110 | 4.5 | 1.5 (10) | | |
| | | | | | | | | | | | | | | | | 1.0(10) | | |

mply with UL508C standard, use UL ultra fast fuses, for frame sizes A, B, and C. moly with UL508C standard, use fuses UL type J for frame sizes D and E.

| | es | ted | | | | Maximum Motor | | Recommended Fuse | | | | | | | Dy | namic I | Brakin | g |
|-----------------------------|---------------|-------------------------|----------|-------------------|-----------------------------------------------------------------------------------------|---------------|---------|------------------|-----------------|--------------|-----------------|------------|--------------------|------------------------|----------------------------|-----------------------|------------------------|------------------------------------------|
| Inverter | of Input Phas | er Supply Ra Voltage | ame Size | Output Rat | ted Current | | | l²t [A²s] | Current [A] | Recommended | Circuit Breaker | | Power Wire Size | Grounding Wire Size | Maximum Current | commended Resistor | Braking rms Current | /er Wire Size DC+ and BR Ferminals |
| | nber o | Powe | Fra | ND | HD | ND | HD | | | WEG aR Fuse | | | | | ΣŬ | Rec | B | Powe for D Te |
| | ž (| | | [Arms] | [Arms] | [HP/kW] | [HP/kW] | | | | [A] | WEG | mm² (AWG) | mm² (AWG) | (I _{max}) [A] | [Ω] | [A] | mm² (AWG) |
| CFW500F77P0T4 | 3 | | | 77 | 61 | 50/37 | 40/30 | 3050 | 100 | FNH00-100K-A | 80 | MDW-C80-3 | 25 (3) | 16 (4) | 66.7 | 12 | 43 | 10 (6) |
| CFW500F88P0T4 | 3 | 380480 | F | 88 | 73 | 60/45 | 50/37 | 3050 | 125 | FNH00-125K-A | 100 | MDW-C100-3 | 35 (2) | 16 (4) | 129 | 6.2 | 63 | 25 (4) |
| CFW500F0105T4 | 3 | | | 105 | 105 88 75/55 60/45 5200 160/125 ⁽¹⁾ FNH1-160K-A / FNH1-125K-A ⁽²⁾ | | 125 | ACW160H-U125-3 | 50/35 (1/2) (1) | 16 (4) | 129 | 6.2 | 63 | 25 (4) | | | | |
| (1) The first number refers | to ND ap | olication and the | seco | nd to HD applicat | ion. | | | | | | | | | 1 | | | | |

(2) The first number refers to the ND application (use 2 fuses in series per phase) and the second one to the HD application

Table 6: List of models of CFW500 series, main electrical specifications - frame size F