

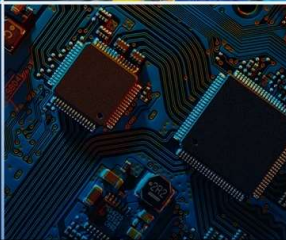
MW500-G2 The Decentralized Drive



Driving efficiency and sustainability



Class: MW501
Date: 01/2025



Automation Training

MW500-G2 - THE DECENTRALIZED DRIVE



APPLICATIONS

Pumps

Compressors

Fans

Extruders

Mixers

Conveyors

General Machines

Up to 50°C
When mounted
on the motor
(w/o Derating)



The WEG MW500 is a decentralized drive for industrial applications. This advanced drive is designed to operate efficiently in various environments, making it a versatile solution for your needs. Whether you're dealing with pumps, compressors, fans, extruders, mixers, conveyors, or many other applications, the MW500 is your go-to choice for a decentralized drive .

MW500-G2 - THE DECENTRALIZED DRIVE



FEATURES

- Power Ratings:
 - 0.5 to 2 HP @ 3/230VAC, 1/230VAC supply
 - 0.5 to 10 HP @ 3/460VAC, 3/460VAC Supply
- Three frames: Frame - A, B, & C
- NEMA4X / IP66 Encl., suitable Indoor and outdoor use (Not in direct sunlight)
- Suitable for applications where the drive is exposed to dust, moisture & water jets.
- Humidity: 5% to 90% non-condensing
- HD (Heavy Duty, 150% for one Minute, every ten minutes) overload class.
- No External cooling Fan
- Mounting: Suitable for Motor Mounting or Wall mounting with optional wall mounting kit
- Operating temperature:
 - Wall Mounting: From 0°C (32°F) to 40 °C (104°F) without current derating.
 - Self Ventilated Motor mounting: From 0°C (32°F) to 50 °C (122°F) without current derating.
- Built-in braking IGBT.
- Built-in Category-2 RFI filter.
- Models with or without disconnect switch.



The MW500 is designed to meet the demands of both indoor and outdoor applications, ensuring reliable performance even in challenging environments. With power ratings ranging from 0.5 to 2 horsepower at 3 phase 230 Volt AC with a single phase 230 Volt AC supply, and from 0.5 to 10 Horsepower at 3 phase 460 VAC with 3 phase 460 Volt AC supply.

Its NEMA4X IP66 enclosure ensures protection against dust, moisture, and water jets. The drive operates efficiently in humidity levels ranging from 5% to 90% non-condensing.

One of the standout features of the MW500-G2 is its

heavy-duty capability, with a 150% overload capacity for one minute every ten minutes. Additionally, the drive does not require an external cooling fan, simplifying installation and maintenance.

The MW500 offers flexible mounting options, suitable for motor mounting or wall mounting with an optional wall mounting kit. It operates within a temperature range of 32°F to 104°F for wall mounting and 32°F to 122°F for self-ventilated motor mounting without current derating. This ensures reliable operation in various environmental conditions.

Furthermore, the MW500 features a built-in braking IGBT and a built-in Category-2 RFI filter, enhancing its functionality and performance. It is also available with or without a disconnect switch, providing additional flexibility for different applications.

MW500-G2 - THE DECENTRALIZED DRIVE



FEATURES

- Control modes: Scaler (V/F) control, VVW, VVW PM (voltage vector control for permanent magnet motors) & Vector control (Sensorless and with encoder). VVW PM (voltage vector control for permanent magnet motors) - suitable for fan, Pump and compressor; not recommended for application which requires fast dynamic response or precise torque control – Dynamometers, overhead cranes, hoists, elevators, CNC machines.
- Modbus RTU / BACnet communication (Standard)
- Conformal Coating as standard 3C2 Classified
- STO and SS1 operational safety functions via Safety Module, CFW500-SFY2
- Accessory Flash Memory (external memory module)
- Fieldbus: Modbus-RTU, Modbus-TCP, CANopen, DeviceNet, Ethernet-IP, Profibus-DP and ProfiNet-IO
- Same plug-in modules as the CFW500 drives.
- SoftPLC storage in the Control Board.
- Compatible with the CFW500 Advanced Text keypad (HMI-01).
- Compatible with WLP & WPS.
- Future Firmware upgrade using WPS.



The MW500 is packed with advanced features, including multiple control modes, Scaler control, voltage vector control for permanent magnet motors, and Vector control. The voltage vector control for permanent magnet motors mode is perfect for fans, pumps, and compressors, ensuring efficient performance.

The drive comes standard Modbus RTU and BACnet protocols.

The drive also boasts a conformal coating, guaranteeing durability in various environments. Safety is paramount with STO and SS1 operational safety functions available via the Safety Module, CFW500-SFY2.

For added convenience, the MW500 includes an accessory flash memory module for external memory storage. It supports a wide range of fieldbus options, including Modbus-RTU, Modbus-TCP, CANopen, DeviceNet, Ethernet-IP, Profibus-DP, and ProfiNet-IO. The drive is compatible with the same plug-in modules as the CFW500 drives, allowing for easy integration and flexibility.

The drive has a SoftPLC and is compatible with the CFW500 Advanced Text keypad (HMI-01). Additionally, the drive is compatible with WLP and WPS, and future firmware upgrades can be easily managed through WPS.

MW500-G2 - THE DECENTRALIZED DRIVE



FEATURES



PULSE TRAIN INPUT / OUTPUT

- With this option, a pulse train signal can be read by the VFD and interpreted as a speed reference. It can be used on Master/Slave applications.
- All the plug-in modules accept pulse train signal on DI2/DO2.
- Operation range: 10 Hz up to 20 kHz.

One of the standout features of this drive is its Pulse Train Input/Output capability. With this option, the drive can read a pulse train signal and interpret it as a speed reference, making it ideal for Master/Slave applications. This ensures precise control and synchronization in complex systems.

Moreover, all plug-in modules for the MW500 are designed to accept pulse train signals on DI2/DO2, providing flexibility and ease of integration. The operational range of this feature spans from 10 Hz up to an impressive 20 kHz, catering to a wide variety of industrial needs.

MW500-G2 - THE DECENTRALIZED DRIVE



FEATURES



- **Braking IGBT**
The product coding brings DB on it, which is available for all frame sizes as standard.
- **Disconnect Switch**
Easy and safe machine maintenance for your load and motor, models with and without DS.
- **FI Filter**
It reduces electromagnetic interference. By using C2 in the coding, the VFD will comply with the IEC 61800 standard.

One of its standout features is the Braking IGBT, ensuring efficient braking across all frame sizes. The product coding includes DB, and is a standard feature.

Another key component is the Disconnect Switch, which simplifies machine maintenance for both load and motor. This feature is available in models with and without the Disconnect Switch. The Nation Electrical code Requires a disconnect within 50 feet and in line of sight. The MW500 has the ability to add these directly to the drive, eliminating the need for a second device.

Additionally, the FI Filter reduces electromagnetic interference. By incorporating C2 in the coding, the Variable Frequency Drive (VFD) complies with the IEC 61800 standard, ensuring high-quality performance and safety.

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HIGHLIGHTS



For those who prefer remote control, the Remote Keypad is both simple and intuitive. It allows for easy operation and monitoring from a distance, enhancing flexibility and convenience. The connector for the remote keypad uses a M8 connector and is IP66 and NEMA 4X rated.

There is an Analog Potentiometer Built-In eliminating the need for a keypad to operate the drive.

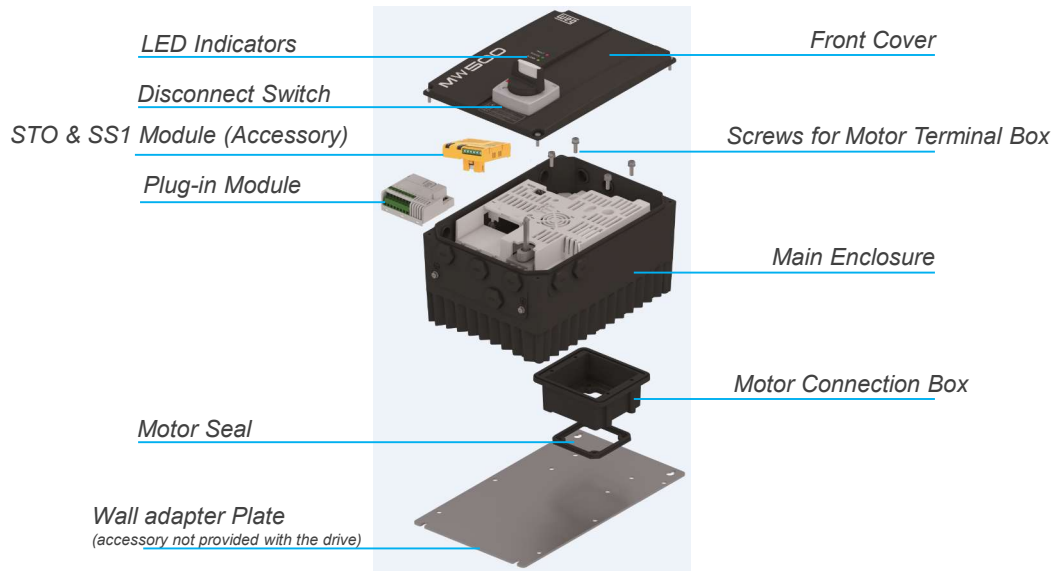
This drive uses no Fans which reduces maintenance costs by eliminating the need for fan replacements.

The drive also comes equipped with LED Indicators, providing clear and immediate status indications. These indicators help in quickly identifying the operational state of the drive, whether it's in fault or alarm mode.

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SIMPLICITY



The MW500 is engineered with simplicity in mind. The front cover can be effortlessly removed, allowing for easy attachment of wires to the motor terminal, integration of a plug-in module, or addition of a safety module. At the bottom of the unit, you have the flexibility to connect your motor connection box or install a wall plate adapter, ensuring seamless and efficient setup.

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MECHANICAL SIZING TABLE FOR MOTOR MOUNTING

NEMA Motors

MW500 Drive			NEMA Motor Frame (WEG W22 Motor)			
MW500 Drive Model	Frame Size	Terminal Box (mm)	143T/145T	182T/184T	213T/215T	254T/256T 284T/286T
			56 x 56	70 x 70		110 x 110
MW500A...56...	A	56 x 56	Yes	With "MW500-KAIM-A70"		No
MW500B...56...	B	56 x 56	Yes	With "MW500-KAIM-B70"		No
MW500C...	C	70 x 70 110 x 110	No	Yes		Yes



IEC Motors

MW500 Drive			IEC Motor Frame (WEG W22 Motor)						
MW500 Drive Model	Frame Size	Terminal Box (mm)	71	80	90	100	112	132	160 180
			56 x 56				70 x 70		110 x 110
MW500A...56...	A	56 x 56	Yes				With "MW500-KAIM-A70"	No	No
MW500B...56...	B	56 x 56	Yes				With "MW500-KAIM-B70"		No
MW500C...	C	70 x 70 110 x 110	No				Yes		Yes

Note: Motor frame size for W22 series:

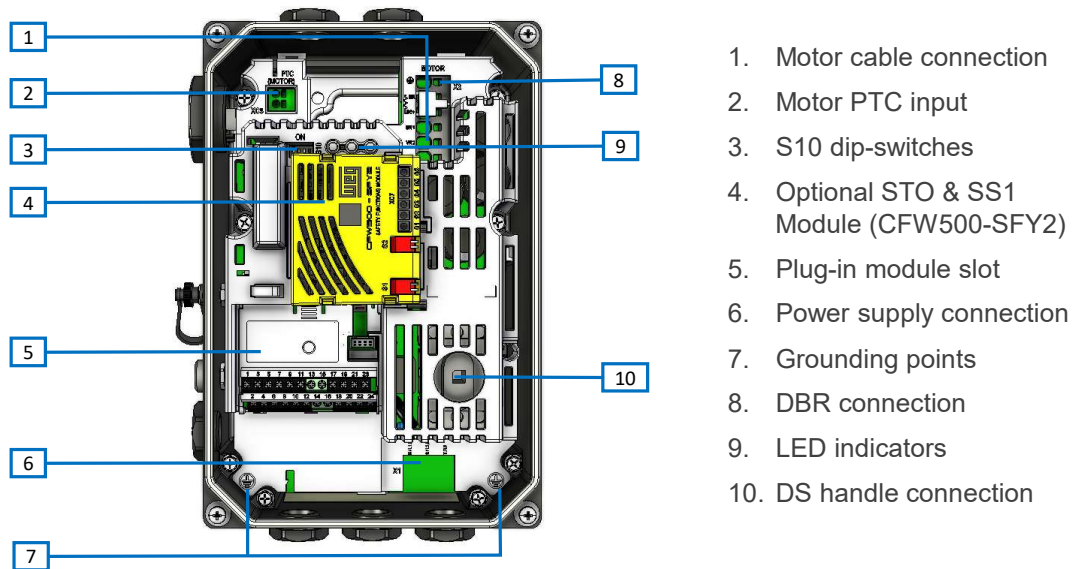
- Standard Efficiency (IE1)
- High Efficiency (IE2)
- Premium Efficiency (IE3)

This chart designed to assist you in determining whether your MW500 requires a motor frame adapter or if one is available for the WEG W22 motors.

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CONNECTIONS, FRAME-A



Upon removing the front cover of the MW500, you will observe ten key components. The motor cable connection point is item 1. Item 2 is the Positive Temperature Coefficient (PTC) input for integrating your PTC thermistor. Item 3 consists of dip switches for resetting factory defaults and other functions. Item 4 is the slot for plugging in the safety module. Item 5 is the area designated for adding plug-in modules. Item 6 is the connection point for incoming power. Item 7 includes the grounding points. Item 8 features the LED status indicators. Item 9 is the connection point for the disconnect handle, if applicable.

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PLUG-IN MODULES

MW500 Plug-in Module	INPUTS		OUTPUTS			Infrared	Encoder	USB	RS232 (Modbus RTU)	RS485 (Modbus RTU)	CANopen/ DeviceNet	Profibus-DP / DP V1	Modbus TCP	ProfiNet I/O	EtherNet I/P	Power Supply	
	Digital	Analog	Analog	Relay	Transistor											10V	24V
CFW500-IOS ¹	4	1	1	1	1	-	-	-	-	1	-	-	-	-	-	1	1
CFW500-IOD	8	1	1	1	4	-	-	-	-	1	-	-	-	-	-	1	1
CFW500-IOAD	6	3	2	1	3	-	-	-	-	1	-	-	-	-	-	1	1
CFW500-IOR / CFW500-IOR-B	5	1	1	4	1	1	-	-	-	1	-	-	-	-	-	1	1
CFW500-ENC	5	1	1	3	1	-	1	-	-	1	-	-	-	-	-	1	1
CFW500-CUSB	4	1	1	1	1	-	-	1	-	1	-	-	-	-	-	1	1
CFW500-CRS232	4	1	1	1	1	-	-	-	1	1	-	-	-	-	-	-	1
CFW500-CRS485-B	4	2	1	2	1	-	-	-	-	2	-	-	-	-	-	1	1
CFW500-CCAN	2	1	1	1	1	-	-	-	-	1	1	-	-	-	-	1	1
CFW500-CPDP	2	1	1	1	1	-	-	-	-	1	-	1	-	-	-	-	1
CFW500-CPDP2	2	1	1	1	1	-	-	-	-	1	-	1	-	-	-	-	1
CFW500-CEMB-TCP	2	1	1	1	1	-	-	-	-	1	-	-	1	-	-	-	1
CFW500-CEPN-IO	2	1	1	1	1	-	-	-	-	1	-	-	-	1	-	-	1
CFW500-CETH-IP	2	1	1	1	1	-	-	-	-	1	-	-	-	-	1	-	1
CFW500-CETH2	2	1	-	-	1	-	-	-	-	1	-	-	1	-	1	-	-

NOTES:

1) The MW500 drive comes standard with "CFW500-IOS" Module. To use any of the above-listed optional modules, the CFW500-IOS module needs to be removed from the drive. In that case, the number of I/Os will depend on the I/O or communication module being used.



The MW500 supports a variety of plug-in modules giving you flexibility in your installs. This includes IO and communication options. These are the same modules as the CFW500.

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PLUG-IN MODULES

Step by Step

1 - Remove cover →



2 - Insert accessory →



3 - Close cover →



Simple!

These plug in modules are as simple as remove the cover, insert the module, and close the cover.

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STO & SS1 SAFETY MODULE

Step by Step

1 - Remove cover



CFW500-SFY2



2 - Insert accessory



3 - Close cover



Simple!

The safety module is just as easy, but a different slot. Allowing you to use the safety card, with another plug-in module.

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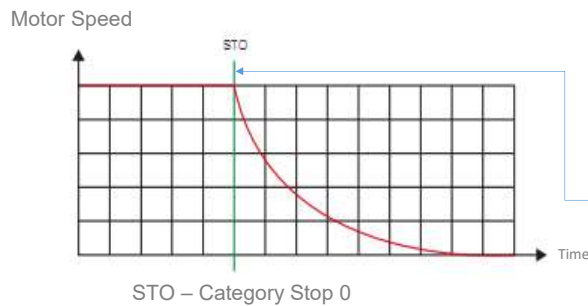


STO & SS1 SAFETY MODULE

STO – Safe Torque off

Once activated, STO immediately switches off the drive output to the motor, by means of disabling the supply of torque-generating energy.

STO is also used to prevent unexpected startups of machinery or for emergency stops, fulfilling stop category 0 (IEC 60204-1).



The Safe Torque Off or STO function is a critical safety feature that immediately switches off the drive output to the motor by disabling the supply of torque-generating energy. This function is essential for preventing unexpected startups of machinery and for emergency stops, fulfilling stop category 0 as per IEC 60204-1 standards.

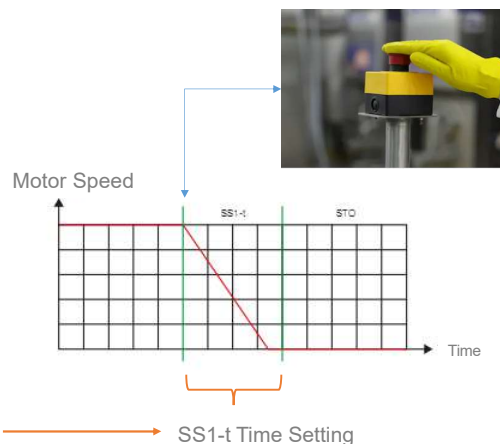
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STO & SS1 SAFETY MODULE

SS1-t – Safe Stop 1 (Time controlled)

Different than STO safety function, which, when active, must promptly ensure that there is no torque energy at the VFD output, the SS1-t will wait a predefined delay time before performing the STO, in order to allow the VFD to impose a deceleration ramp to the motor before removing the torque generating energy.



The SS1-t is especially useful in applications where loads need to be decelerated (forced break) before torque is removed from the motor.

Unlike the STO function, which immediately removes torque energy from the VFD output, the Safe Stop 1 or SS1 function introduces a predefined delay. This delay allows the VFD to impose a deceleration ramp to the motor, ensuring a controlled reduction in motor speed before removing the torque-generating energy. This feature is particularly useful in applications where loads need to be decelerated before torque is removed from the motor.

The accompanying graph illustrates the motor speed over time, showing the deceleration ramp during the SS1 time setting before the STO is activated.

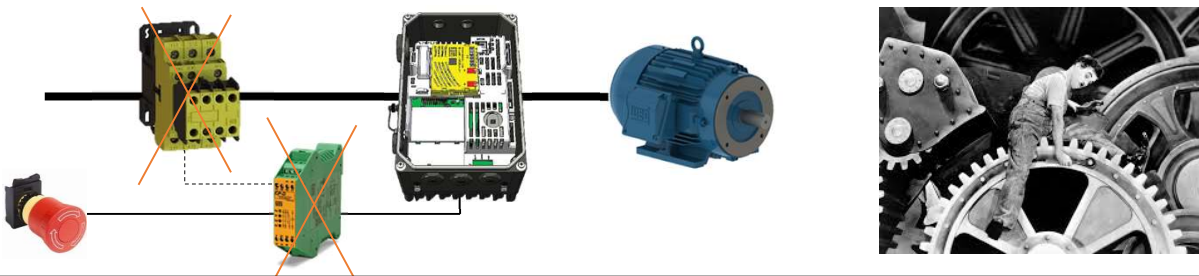
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STO & SS1 SAFETY MODULE

Main Benefits of using MW500 with Safety Module

- Safety functions integrated into the MW500 drive, making it easier to comply with the machine and application safety requirements.
- Less components, no need for additional wiring, saving space and installation costs.
- Easier installation, commissioning and maintenance.
- No electromechanical components, meaning faster responses and a higher degree of productivity.
- Due to the high safety performance level of SIL3 / PLe, the MW500 with the Safety module may avoid external safety relays for cables and emergency pushbuttons monitoring.



When using the MW500 with the safety module, you are providing a comprehensive solution for machine and application safety requirements. The integration of safety functions directly into the MW500 drive simplifies compliance with safety standards, reducing the need for additional components and wiring. This integration not only saves space and lowers installation costs but also facilitates easier installation, commissioning, and maintenance processes. The absence of electromechanical components in the MW500 drive ensures faster response times and enhances productivity. With a high safety performance level of SIL3 / PLe, the MW500 with the safety module can eliminate the need for external safety relays for cables and emergency pushbuttons monitoring, further streamlining safety management and improving overall efficiency.

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MEMORY CARD – CFW500-MMF



- Allows for download of drive parameters and PLC code (SoftPLC)
- Power supplied by internal batteries (3xAAA)
- There is no need to power up the VFD to use it
- Dip Switch selection to download/upload parameters and user program from/to MMF to/from the drive
- Password to access user program written in the Soft PLC
- Compatible with all plug-in modules
- LEDs for Status & Fault indications.

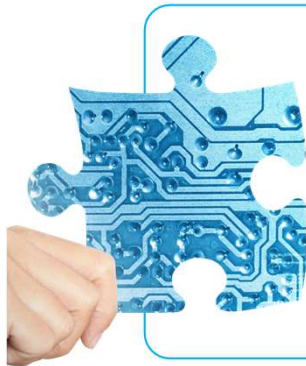
The Memory Card-MMF for MW500 is an essential tool for easily downloading drive parameters and PLC code. This device is powered by internal batteries, specifically three AAA batteries, which provide autonomy for a minimum of 5000 procedures. One of the key advantages of this memory card is that it eliminates the need to power up the VFD to use it.

The device features a dip switch selection that allows for the download and upload of parameters and user programs between the MMF and the drive. Additionally, it offers password protection to access user programs written in the Soft PLC, ensuring security and control over the data. The Memory Card-MMF is compatible with all plug-in modules and can store two different user programs, making it a versatile and valuable component for machinery drives.

MW500-G2 - THE DECENTRALIZED DRIVE



COMMUNICATIONS



CAN Interface [Accessory Plug-In]

- CANopen and DeviceNet communication available
- No communication speed limitation (1 Mbps)
- Configuration similar to CFW11 drives

Profibus DP Interface [Accessory Plug-In]

- Profibus DP available
- No communication speed limitation (12 Mbps)
- Configuration similar to CFW11 drives

The MW500 offers advanced communication capabilities.

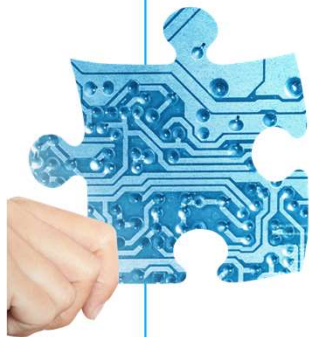
The CAN Interface supports both CANopen and DeviceNet communication, ensuring there is no communication speed limitation with a maximum speed of 1 megabits per second.

The Profibus DP Interface has no communication speed limitation, achieving speeds up to 12 megabits per second.

MW500-G2 - THE DECENTRALIZED DRIVE



COMMUNICATIONS



Ethernet – IP [Single or Dual Port; Accessory Plug-In]

- Allows up to 14 input and output words for cyclic data communication
- No communication speed limitation (10 or 100 Mbps)

Profinet - IO [Accessory Plug-In]

- Allows up to 14 input and output words for cyclic data communication
- No communication speed limitation (10 or 100 Mbps)

Modbus - TCP [Single or Dual Port; Accessory Plug-In]

- The server provides up to 4 simultaneous Modbus TCP connections
- No communication speed limitation (10 or 100 Mbps)

It supports Ethernet-IP with single or dual ports and an accessory plug-in, allowing up to 14 input and output words for cyclic data communication operating at either 10 or 100 megabits per second.

The Profinet-IO accessory plug-in also supports up to 14 input and output words for cyclic data communication, offering speeds of 10 or 100 megabits per second.

The Modbus-TCP option, available with single or dual ports and an accessory plug-in, provides up to 4 simultaneous Modbus TCP connections, again with no communication speed limitations at 10 or 100 megabits per second.

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NON-TEXT REMOTE KEYPAD: CFW500-HMIR

- Intuitive and easy to use keypad (functionalities and parameters similar to CFW500/11 series).
- Reading of three variables at the same time.
- Indication of engineering units and status of the VFD.
- 5 Digits resolution with 126 segments.
- Requires Remote keypad cable "CFW500-CCHMIR0xM" ("x" represents the cable lengths in meters) OR MW500-CCHMIR02M.
- IP54 Protection Rating.



The non-text remote keypad is designed to enhance the user experience with its intuitive and easy-to-use interface. This keypad shares functionalities and parameters similar to the CFW500 and CFW11 series, ensuring a seamless transition for users familiar with previous models.

The CFW500-HMIR allows for the simultaneous reading of three variables, providing real-time monitoring and control. It also displays engineering units and the status of the VFD, ensuring users are always informed of the system's performance. With a resolution of 5 digits and 126 segments, the keypad offers precise and detailed information.

MW500-G2 - THE DECENTRALIZED DRIVE



ADVANCED TEXT ALPHANUMERIC REMOTE KEYPAD: HMI-01



- Same as CFW11 Keypad.
- Graphic display with backlight.
- Soft Keys for easy operation.
- Parameters in the form of menus.
- Real-time clock (RTC).
- Copy/Paste Function.
- Language selection: English, Spanish and Portuguese
- Connected to RS485 serial Port and uses MW500 24VDC Power Supply.
- IP54 Protection Rating.

Requires

- Remote Keypad cable: CFW500-CCHMIR0xM ("x" represents the cable lengths in meters) or MW500-CCHMIR02M
- Mounting frame kit: CFW500-RHMIF

WEG also offers an Advanced Text remote HMI. This features a graphic display with a backlight, ensuring clear visibility in various lighting conditions.

The inclusion of soft keys allows for easy and intuitive operation, making it user-friendly for all operators. The real-time clock, provides accurate timekeeping for errors.

The parameters are presented in the form of menus, allowing for straightforward navigation and configuration.

Additionally, the device supports language selection, offering options in English, Spanish, and Portuguese, catering to a diverse range of users.

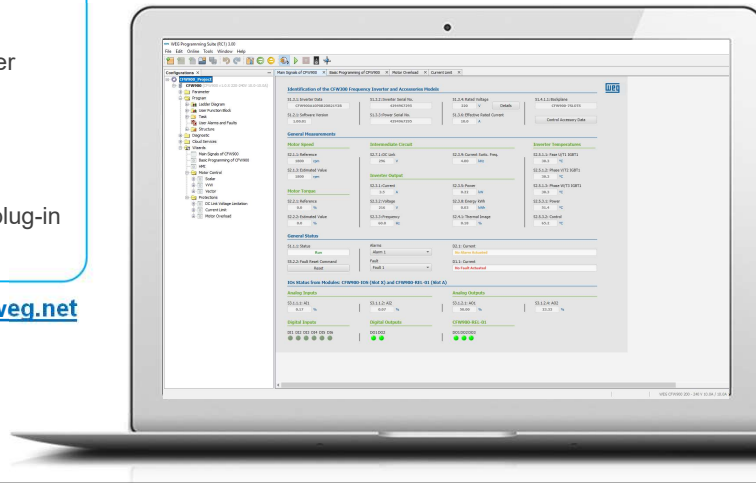
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WPS (WEG PROGRAMMING SUITE) SOFTWARE FOR PC

- Ladder programming language
- Real-time graphical monitoring
- Drive Parameter setting, parameter backup
- Fault, alarm and event log
- VFD firmware update
- Communication with MW500 via plug-in module RS232, RS485 or USB

Free software! Download at: www.weg.net

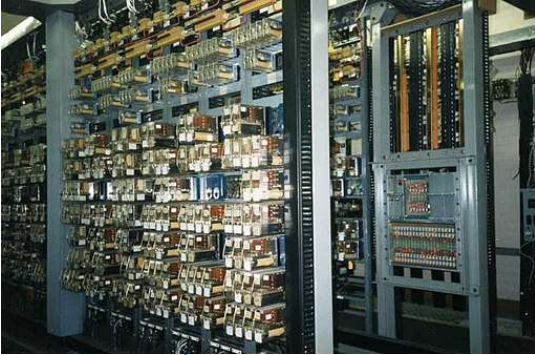


The MW500 can be configured, programmed, backed up, and monitored using WPS software, which is available for free at WEG.net.

MW500-G2 - THE DECENTRALIZED DRIVE



SOFTPLC FUNCTION



- SoftPLC: PLC functions built in the VFD.
- Programmable through WLP/WPS software, WPS is recommended for the SoftPLC program.
- Memory Capacity: 8k bytes (user program), 7788 bytes for the PLC code and 404 bytes to parameters
- Online user program transferring and monitoring via plug-in module RS232, RS485 or USB.
- Ladder language programming.
- 50 configurable user parameters.
- Access to all MW500 parameters, I/Os and keypad.

Free software! Download at: www.weg.net

The WPS software is also used to setup the soft PLC program that is supported by the drive. This soft program is programmed using ladder logic programming. It allowed up to 50 configurable user parameters and you have access to all the CFW500 parameters, IO, and keypad.

MW500-G2 - THE DECENTRALIZED DRIVE



CERTIFICATIONS



The MW500 is certified by multiple prestigious organizations, including Underwriters Laboratories, TÜV Rheinland, and more. These certifications ensure that the MW500 meets rigorous safety, quality, and performance standards, making it a reliable choice for various applications.

MW500-G2 - THE DECENTRALIZED DRIVE



MARKET POSITIONING



Let's go over the unique value proposition and differentiating factors of the MW500.

MW500-G2 - THE DECENTRALIZED DRIVE



MARKET POSITIONING

Flexible: Wide range of accessories and functions

Plug-in module

Advantages:

- The optional communication network and I/O modules are fast and easily installed, allowing adaptation of the standard VFD to each application.

Benefits:

- Time saving, standardization and optimized costs according to the necessity.

Flash memory module

Advantages:

- Within seconds, it is possible to download the SoftPLC program and parameters setup from a MW500 to others without powering them up.

Benefits:

- Fast, easy and reliable programming for manufacturers that produce machines in large scale.

The MW500 is designed to offer unparalleled flexibility, thanks to its wide range of accessories and functions.

The Plug-in module allows for the quick and easy installation of optional communication network and I/O modules. This feature enables the standard VFD to be tailored to various applications, saving time, standardizing, and optimizing costs according to specific needs.

The Flash memory module provides a seamless solution for downloading the SoftPLC program and parameter setup from one MW500 unit to others within seconds, without the need to power them up. This ensures fast, easy, and reliable programming, making it ideal for manufacturers producing machines on a large scale.

MW500-G2 - THE DECENTRALIZED DRIVE



MARKET POSITIONING

Flexible: Wide range of accessories and functions

SoftPLC

Advantages:

- Built-in PLC (SoftPLC), allowing the VFD, motor and application to work in an interactive way. It allows the user to implement customized logic and applications.

Benefits:

- It eliminates the necessity for an external PLC, reducing costs, optimizing space, and simplifying the system.

The MW500 features a built-in SoftPLC, enabling users to implement customized logic and applications without the need for an external PLC. As a result, the MW500 not only reduces costs but also optimizes space and simplifies the overall system.

MW500-G2 - THE DECENTRALIZED DRIVE



MARKET POSITIONING

Efficient: High performance for machines and processes

Functions to streamline operation and performance

Advantages:

- PID: process control.
- Sleep: disables the VFD automatically.
- Flying start: allows the starting of a motor that is running freely, accelerating it from the speed at which it is running.
- Ride through: keeps the VFD in operation during voltage dips.

Benefits:

- Energy saving.
- It allows fast operating response of the machine and prevents occasional mechanical breakdowns.
- It prevents machine stoppage and downtime.

The MW500 offers several Functions to streamline operation and performance.

The PID process control ensures precise regulation of system variables.

The sleep function automatically disables the VFD when not in use, conserving energy.

The flying start feature allows the motor to start smoothly from its current running speed, ensuring seamless operation.

Additionally, the ride-through capability maintains VFD operation during voltage dips, preventing interruptions.

The benefits of the MW500 are substantial. It promotes energy savings, contributing to lower operational costs. The drive enables fast operating responses, reducing the likelihood of mechanical breakdowns and ensuring the machine operates smoothly. Furthermore, it helps prevent machine stoppages and downtime, enhancing overall productivity and reliability.

MW500-G2 - THE DECENTRALIZED DRIVE



MARKET POSITIONING

Robust:
IP66/NEMA 4X
outdoor enclosure

Increasing the
ruggedness and
durability

Advantages:

- Complete protection against contact with internal live parts, avoiding the entrance of dust or water coming from jets.

Benefits:

- Panel not required, reducing the installation costs.

This drive is housed in a robust IP66/NEMA 4X outdoor enclosure, significantly enhancing its ruggedness and durability. The enclosure provides complete protection against contact with internal live parts and effectively prevents the entrance of dust or water from jets.

This ensures the drive's reliability and longevity in various environments.

Additionally, the MW500 does not require a panel, which reduces installation costs. This combination of features makes the MW500 a reliable and cost-effective solution for your needs.

MW500-G2 - THE DECENTRALIZED DRIVE



MARKET POSITIONING

Reliable: Same trustworthiness of WEG products

WEG quality

Advantages:

- 100% of the VFDs are tested with load at the factory under rated conditions.
- Protection against ground fault, short circuit, over temperature and others.
- Thermal protection of IGBTs based on manufacturer curve.
- Conformal Coating (Tropicalization) as Standard. Classified as 3C2 according to IEC 60721-3-3.

Benefits:

- High reliability.
- It prevents damage to the inverter, which can be caused by adverse situations, normally external factors.
- VFD lifetime is extended: protection against chemically active substances related to contamination from the atmosphere.

The WEG sets a new standard in reliability and quality. WEG products are renowned for their dependability, and the MW500 is no exception.

Each VFD undergoes rigorous testing under rated conditions at the factory, ensuring top-notch performance. The MW500 is equipped with robust protection features, including safeguards against ground faults, short circuits, and over-temperature conditions.

Additionally, it offers thermal protection of IGBTs and comes with a conformal coating.

The MW500 is designed to deliver high reliability, preventing damage to the inverter caused by adverse external factors. Its protection against chemically active substances related to atmospheric contamination extends the VFD's lifetime, making it a valuable investment for any operation.

MW500-G2 - THE DECENTRALIZED DRIVE



MARKET POSITIONING

Integrated:
Fieldbus
networks

Communication
networks

Advantages:

- CANopen, DeviceNet, Profibus-DP, Modbus-RTU, Modbus-TCP, Ethernet I/P (single or Dual Port) and Profinet I/O.

Benefits:

- Full integration with process network.

The MW500 can be integrated with multiple fieldbus networks. This includes compatibility with CANopen, DeviceNet, Profibus-DP, Modbus-RTU, Modbus-TCP, Ethernet I/P, and Profinet I/O. These features ensure seamless integration with various industrial communication protocols, enhancing operational efficiency and connectivity.

MW500-G2 - THE DECENTRALIZED DRIVE



MARKET POSITIONING

Decentralized:
Indoor or outdoor
applications

Motor or wall
assembly

Advantages:

- The MW500 can be assembled on a wall or by using the terminal box coupling directly over the W22 or W21 motors.

Benefits:

- It makes the commissioning easy, saving space and cabling, in other words, reducing the cost of all installations.

The MW500 offers versatile assembly options, allowing it to be mounted on a wall or directly over W22 or W21 motors using the terminal box coupling. This flexibility simplifies the commissioning process, saving space and reducing cabling requirements. Consequently, it lowers the overall cost of installations, making it a cost-effective solution for various applications.

MW500-G2 - THE DECENTRALIZED DRIVE



MARKET POSITIONING

Decentralized:
Indoor or outdoor
applications

MW500
Assembled on
Gear Motors

- Space saving & flexible solution
- Increased ruggedness
- Cost saving on cables
- Reduced Installation costs
- Easy commissioning
- Panel not required



The MW500 offers a space-saving and flexible solution that meets the demands of various environments. Its increased ruggedness ensures durability and reliability, making it a robust choice for any setting.

One of the standout benefits of the MW500 is its ability to save costs on cables, significantly reducing installation expenses. This drive can be assembled on gear motors, providing a streamlined and efficient setup. The ease of commissioning further enhances its appeal, allowing for quick and straightforward integration into existing systems. Notably, the MW500 eliminates the need for a panel, simplifying the overall installation process and reducing associated costs.



WEG Electric Corp
1 800 ASK 4WEG (275-4934)
info@weg.net

Thank you for your
time and attention.



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Thank you for learning about the MW500. Make sure to complete the test before going on to the next lesson.