

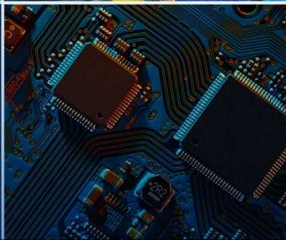
Drive and Soft Starter Overview



Driving efficiency and sustainability



Class: DS101
Date: 12/2024



Automation Training

Drives and Soft Starters



Complete Solutions to Increase the Productivity and Reliability of Your Processes



Why WEG Motor Control Solutions?

- Easy to Select, Easy to Apply, and Easy to Maintain
 - Similar Parameter Set / Programming
 - “Matched” with WEG Motors
- Designed for Rugged Duty
 - Heavy Duty Ratings Standard
 - Conformal Coating on All Circuit Boards
 - Outdoor and Washdown Solutions
- Robust Pre and Post Sale Support Platform
 - Free 24 / 7 / 365 Phone Support
 - Free Set-up and Programming Software
 - 200+ Local Sales Resources
 - Direct and Third-Party WEG Authorized Commissioning and Service

In this presentation, we will discuss WEG Motor Control Solutions, specifically focusing on drives and soft starters.

WEG offers complete solutions designed to increase the productivity and reliability of your processes. Let's delve into why WEG Motor Control Solutions stand out. These solutions are easy to select, apply, and maintain.

They feature a similar parameter set and programming, making them user-friendly.

Additionally, they are 'matched' with WEG motors, ensuring seamless integration and optimal performance.

WEG Motor Control Solutions are designed for rugged duty. They come with heavy-duty ratings as a standard and conformal coating on all circuit boards. WEG has a large number of drives suitable for outdoor and washdown environments, making them ideal for demanding applications where durability and reliability are crucial.

WEG provides a robust pre and post-sale support platform. This includes free 24/7/365 phone support, free setup and programming software, access to over 200 local sales resources, and both direct and third-party WEG-authorized commissioning

and service.

Soft Starter Family



Advanced Technology for Controlling and Protecting Electric Motors

	 SSW05	 SSW07	 SSW900	 SSW7000		
Industries and Applications	Pumps Fans / Blowers Compressors	Pumps Screw Compressors Fans / Blowers Wood Chipper Veneer Lathe Saws Conveyors	Pumps Fans / Blowers Mixers Grinders Compressors Conveyors	Centrifuges Crushers Ball and Hammer Mills	Pumps Fans / Blowers Compressors	
Voltage and Ratings	208V to 480V 10A to 85A	220V to 575V 17A to 412A	220V to 575V 10A to 1400A	2,300V to 13,800V 70A to 600A		
Enclosure	IP20	IP20 / IP00 NEMA 4 (Enclosed GPH2)	IP20 / IP00 UL 3R / 4 / 12 (Enclosed APS9)	NEMA12 NEMA3R		
I/O and Interfaces	(2) Digital Inputs (2) Relay Outputs Remote Keypad	(3) Digital Inputs (2) Relay Outputs Remote Keypad	(5) Digital Inputs (1) Thermistor Input (3) Relay Outputs (1) Analog Output Remote Keypad	(6) Digital Inputs (2) Analog Inputs (3) Digital Outputs (2) Analog Outputs Remote Keypad		
Available Communications	RS232	RS232 RS485	Modbus TCP / IP RS485 (Modbus RTU) CANopen DeviceNet USB	Ethernet / IP Profibus DP ProfiNet IO Bluetooth	Modbus TCP / IP RS485 (Modbus) RS232 (Modbus) DeviceNet	Ethernet / IP Profibus DP USB

Let's start by reviewing the WEG Soft Starter family. WEG has 4 soft start models, with each having different features and ratings. This chart gives you a quick comparison of WEG soft starters, but let's go over our four models in these product lines in more detail.

SSW05 Soft Starter



Low Cost and Easy to Apply

Common Features

- 300% rated current during 10 seconds, 4 starts per hour
- Controls and Monitors 2 of 3 Motor Phases
- Built-in by-pass contactor
- (2) Digital Inputs, (2) Relay Outputs
- RS-232 serial port for Remote Keypad connection
- Adjustable acceleration and deceleration ramps (1 - 20 seconds)
- Adjustable pedestal (starting) voltage (30 - 80% of line voltage)
- Protective features: Motor overload, over current and locked rotor, SCR overload, phase loss and phase sequence
- DIN Rail or Panel Mount
- 0 – 55 degrees Celsius (without derating), 3300ft altitude, 90% non-condensing humidity
- Conformal Coated Circuit Boards
- PC Programming and Monitoring via WEG SuperDrive Software

Range of Accessories

- Remote Keypad and Cables



SSW05

- 208 – 480V, 50/60Hz
- 3 – 85A



The SSW05 Soft Starter is a cost-effective and easy-to-use solution for starting motors.

The SSW05 Soft Starter is available in voltage ranges from 208 to 480V, supports both 50 and 60Hz frequencies, and comes in current ratings from 3 to 85A.

This SSW05 can handle 300% of the rated current for 10 seconds and allows for four starts per hour.

It controls and monitors 2 out of 3 motor phases, ensuring efficient operation. The built-in by-pass contactor helps reduce energy consumption and heat generation. The SSW05 Soft Starter includes two digital inputs and two relay outputs for versatile control options. It also has an RS-232 serial port for remote keypad connection, making it easy to operate from outside the panel.

The acceleration and deceleration ramps are adjustable between 1 to 20 seconds, providing smooth motor starts and stops.

The starting voltage is adjustable between 30% and 80% of the line voltage, allowing flexibility in different applications.

This device offers several protective features, such as motor overload, overcurrent and locked rotor protection, SCR overload, phase loss, and phase sequence protection.

It can be mounted on a DIN rail or a panel, offering installation flexibility.

The SSW05 operates in a temperature range of 0 to 55 degrees Celsius without derating, can function at altitudes up to 3300 feet. PC programming and monitoring can be done via WEG SuperDrive Software.

SSW07 Soft Starter



Full Featured General Purpose Solution

Common Features

- Standard (300%, 30s, 10 starts / hour) and Heavy Duty (450%, 30s, 4 starts / hour) Ratings
- Built-in run rated (AC1) By-pass contactor
- Easy operation, setup, maintenance & installation
- Simple setpoint programming through trim pots
- Operates in environments up to 55 degrees Celsius (without derating)
- Integral, electronic motor protection, built-in electronic thermal relay
- IP20 Enclosure (requires option kit for 130 – 200A), IP00 for ratings above 200A
- Conformal coated circuit boards
- PC Programming and Monitoring via WEG SuperDrive Software

Range of Accessories

- Remote Keypad and Cables
- RS232, RS485, and DeviceNet Communications Options
- Ventilation Kits frame 2 and 3
- IP20 Kits Frames 3 and 4
- PTC Type Thermistor Kit



SSW07

- 208 – 480V, 50/60Hz
- 17 – 412A



The SSW07 Soft Starter is a comprehensive and versatile solution designed by WEG for general-purpose applications.

The SSW07 operates within a voltage range of 208 to 480 Volts and a frequency of 50/60Hz, with current ratings from 17 to 412 Amps.

The SSW07 Soft Starter has standard and heavy-duty ratings, ensuring optimal performance under various conditions. It features a built-in run-rated by-pass contactor, simplifying operation, setup, maintenance, and installation. This makes it an ideal choice for various motor control applications.

One of the standout features of the SSW07 is its easy setpoint programming through trim pots, allowing for quick and straightforward adjustments. It can operate in environments with temperatures up to 55 degrees Celsius without derating, making it highly reliable even in challenging conditions.

It has integral electronic motor protection and a built-in electronic thermal relay, providing enhanced safety measures.

For added convenience, PC programming and monitoring can be done via WEG SuperDrive Software.

GPH2 Enclosed soft starter



Full Featured General Purpose Solution

Common Features

- Utilizes SSW07 Soft Starter with integrated AC1 by-pass
- Rated for 300% for 30 seconds, 450% available with derating
- NEMA 4 Enclosure Rating
- Wall-mounted enclosures for up to 125HP @ 230V, 250HP@480V
- Floor Mounted enclosure for up to 150 - 175HP @ 230V, 300 - 350HP @ 480V
- Circuit Breaker with Through Door Disconnect
- Control Power Transformer
- Start/Stop Pushbuttons
- Run/Fault Pilot Lights

Options

- AC3 By-pass Contactor with DOL Selector Switch
- Door Mounted Keypad



GPH2

- 230 and 480V, 50/60Hz
- 5 – 350HP



The GPH2 Enclosed Soft Starter is a full-featured general-purpose solution designed to meet a variety of industrial needs.

The GPH2 utilizes the SSW07 Soft Starter with an integrated AC1 by-pass, ensuring efficient and reliable performance. It is rated for 300% for 30 seconds, with 450% available with derating, offering robust capabilities for demanding applications.

This product features a NEMA 4 enclosure rating,

providing excellent protection against environmental factors. Wall-mounted enclosures can support up to 125 Horsepower at 230 Volts and 250 Horsepower at 480 Volts, while floor-mounted enclosures can handle up to 150 to 175 Horsepower at 230 Volts and 300-350 Horsepower at 480 Volts. This flexibility makes it suitable for a wide range of installations.

Key components include a circuit breaker with a through-door disconnect, a control power transformer, start and stop push buttons, and pilot lights for run and fault. These features ensure ease of use and enhanced safety for operators.

Optional features include an AC3 by-pass contactor with a DOL selector switch and a door-mounted keypad, providing additional customization to meet specific operational requirements.

SSW900 soft starter



Advanced Motor Control and Protection

Common Features

- Standard (300%, 30s, 10 starts / hour) and Heavy Duty (450%, 30s, 4 starts / hour) Ratings
- Built in AC1 bypass contactors for all models
- Bluetooth enable Graphic Keypad with USB port
- Real Time Clock with Event Log and Copy Functions
- Multiple configurable Starting and Motor Control Modes
- Advance System and Motor Protection Features
- IP20 (Frame A, B – C, D with Kit), IP00 (Frames E – G)
- 90 - 250VAC Control Voltage
- Conformal Coated Circuit Boards
- Rated 55°C or 40°C (frame dependent)
- Built-in SoftPLC Ladder Logic Programming
- PC Programming and Monitoring WEG WPS software & Mobile App

Range of Accessories

- Remote Keypad and Cables
- RS-485 (Modbus RTU), CANopen, DeviceNet, Profibus DP, Ethernet/IP, Modbus TCP/IP, ProfiNet IO Communication Options
- Ventilation Kits frame B and C, IP20 Kits Frames C and D
- SSW06 Mounting Adapter Plates



SSW900

- 220 - 575V, 50/60Hz
- 10 – 1400A



The SSW900 soft starter is designed to meet the demands of both standard and heavy-duty applications. It offers impressive ratings of 300% for 30 seconds with ten starts per hour and 450% for 30 seconds with four starts per hour. It comes equipped with built-in AC1 bypass contactors, ensuring seamless operation.

The SSW900 operates at 220 to 575V, 50/60Hz, and supports current ratings from 10 to 1400A, making it a versatile and powerful solution for various motor control applications.

The SSW900 features a Bluetooth-enabled graphic keypad with a USB port, allowing easy configuration and monitoring. It also includes a real-time clock with event log and copy functions. Users can benefit from multiple configurable starting and motor control modes as well as advanced system and motor protection features.

The SSW900 is built to withstand various environmental conditions; with the kit, frames A, B, C, and D have an IP20 rating, and frames E to G can have an IP00 rating.

The SSW900 also supports built-in SoftPLC ladder logic programming, enabling sophisticated control strategies. For added convenience, PC programming and monitoring can be performed using WEG WPS software and a mobile app.

To complement the SSW900, a range of accessories is available, including remote keypads and cables, RS-485 (Modbus RTU), CANopen, DeviceNet, Profibus DP, Ethernet/IP, Modbus TCP/IP, and Profinet IO communication options.

APS9 Enclosed soft starter



Advanced Motor Control and Protection

Common Features

- Utilizes SSW900 Soft Starter with integrated AC1 by-pass
- 65KA SCCR, Circuit Breaker, Through-Door Rotary Handle
- Service Entrance Rated
- Application Rated – able to be used for Normal Duty (350% for 30s 1.00 SF) or Heavy Duty (450% for 30s. 1.15 SF) based on Selection
- UL 3R/4/12 Heavy Duty Enclosure
- Compact Solution, Frames 1, 2 and 3 Wall Mountable (Optional Floor Mounting Kits Available)
- Full HP rated AC3 emergency bypass contactor with Class-30 overload relay helps to start and run
- “Soft Starter-off-Bypass” selector switch mounted inside an enclosure
- Fused Multi-tap Control Power Transformer (208/230/460VAC - 120VAC).
- Terminals for customer remote Start/Stop, External Interlock, “Motor running”, and “System Fault” Dry Contacts
- Enclosure door mounted Bluetooth Enabled Graphical Keypad and Extensive Array of Operators and Pilot Lights

Range of Accessories

- Floor Mounting Kits



APS9

- 208 – 460V, 50/60Hz
- 5 – 700HP



The APS9 Enclosed Soft Starter utilizes the SSW900 Soft Starter with an integrated AC1 bypass, ensuring efficient and reliable performance. It boasts a 65KA SCCR, a circuit breaker, and a through-door rotary handle, making it service entrance-rated.

It operates at 208 to 460 Volts and supports motor power from 5 to 700 Horsepower.

The APS9 is designed to handle both normal duty, with a rating of 350% for 30 seconds and a 1.00 service factor, and heavy-duty, with a rating of 450% for 30

seconds and a 1.15 service factor. The enclosure is UL 3R, 4, and 12 rated, providing robust protection in various environments. Frames 1, 2, and 3 are wall-mountable, with optional floor mounting kits available for added flexibility.

This soft starter includes a full horsepower-rated AC3 emergency bypass contactor with a Class-30 overload relay, ensuring smooth and reliable motor starting and running. You'll find a 'Soft Starter-off-Bypass' selector switch and a fused multi-tap control power transformer inside the enclosure. Terminals are provided for customer remote start/stop, external interlock, 'motor running,' and 'system fault' dry contacts. The enclosure door features a mounted Bluetooth-enabled graphical keypad, along with an extensive array of operators and pilot lights.

SSW7000 Soft Starter



Rugged, Reliable, and Safe Medium Voltage Motor Control and Protection

Common Features

- 4,160V and 2,300V models IN STOCK (NEMA 12 & NEMA 3R) up to 3,000HP
- Available up to 13.8kVAC, 16,300HP
- Service Entrance Rated
- UL 347 Listed
- Emergency DOL Bypass Capability
- Motor protections active in both DOL & RUN modes eliminating the need for expensive motor protection relays for backup protection
- Pump control utilizes a specific algorithm for centrifugal pumps designed to minimize water hammer and pressure overshoots
- Ground Fault Monitoring (standard)
- Fast and Easy Start Up utilizing WEG Oriented Start Up Capability
- Built-in SoftPLC Ladder Logic Programming
- PC Programming and Monitoring via WEG SuperDrive Software (license-free)
- Same keypad & 'plug-in-play' expansion cards as CFW11

Options

- PT100 monitoring (8x channels)
- Range of Communication Options
- FLASH Memory Module



SSW7000

- 2,300 – 13,800V
- 70 – 600A



The SSW7000 Soft Starter is a rugged, reliable, and safe solution for medium-voltage motor control and protection. It is available in voltage ranges from 2,300 to 13,800 Volt and current ratings from 70 to 600 Amp, making it versatile and powerful. The 4,160 Volt and 2,300 Volt models are typically in stock with NEMA 12 and 3R enclosures, up to 3,000 Horsepower.

Additionally, it can be configured for voltages up to 13.8kVAC and power ratings up to 16,300 Horsepower. The SSW7000 is service entrance rated and UL 347 listed, ensuring compliance with stringent safety standards.

One of the key features of the SSW7000 is its emergency DOL bypass capability, which provides an essential backup in critical situations. The motor protections are active in both DOL and RUN modes, eliminating the need for expensive motor protection relays for backup protection. This soft starter also includes a specific algorithm for centrifugal pumps, designed to minimize water hammer and pressure overshoots, ensuring smooth and efficient pump operation.

The SSW7000 comes standard with ground fault monitoring, enhancing safety and reliability. WEG's oriented start-up capability facilitates fast and easy start-up. Built-in

SoftPLC ladder logic programming allows for flexible and customizable control solutions. PC programming and monitoring can be done via WEG's SuperDrive software, which is license-free, providing a cost-effective solution for users.

The SSW7000 shares the same keypad and 'plug-in-play' expansion cards as the CFW11, ensuring compatibility and ease of use.

Variable Speed Drive Family



Complete Solutions to Increase Productivity and Reliability

	 CFW100	 CFW320	 CFW501	 MW500		
Industries and Applications	Food and Beverage Material Handling Fans and Centrifugal Pumps Sorting Conveyors Packaging Lines	Centrifugal Pumps Fans / Blowers Blenders / Mixers Centrifuges Compressors	Conveyors Roller Tables Granulators Dryers Rotary Filters	Centrifugal Pumps Fans / Blowers Cooling Towers Chillers and Compressors	Fans / Ventilators Blowers Conveyors Rollout Tables Mixers / Blenders	Commercial Dryers Agitators Outdoor Washdown / Food and Bev
Voltage and Ratings	120 or 240VAC 1-Phase Input 240VAC 3-Phase Output 1/4 - 1HP	120 or 240VAC 1-Phase and 240VAC or 460VAC 3-Phase Input 240VAC or 460VAC 3-Phase Output 1/4 - 10HP	240VAC or 480VAC 3-Phase Input and Output 1/3 - 25HP	240VAC 1-Phase and 480VAC 3-Phase Input 240and 480VAC 3-Phase Output 0.5 - 10HP		
Enclosure	IP20	IP20	IP20 / NEMA 1 with Kit	IP66 / NEMA 4X		
I/O and Interfaces	Up to (8) Digital Inputs Up to (3) Relay Outputs Up to (1) Analog Input Up to (1) Analog Output Encoder Feedback Remote Keypad	Up to (8) Digital Inputs Up to (4) Relay Outputs Up to (2) Analog Input Up to (2) Analog Outputs Up to (3) Pulse Inputs and Outputs Encoder Feedback Remote Keypad	(4) Digital Inputs (2) Relay Outputs (1) Digital Output (2) Analog Inputs (1) Analog Output Remote Keypad	Up to (4) Digital Inputs Up to (1) Relay Outputs Up to (1) Analog Inputs Up to (1) Analog Outputs Encoder Feedback Remote Keypad Safety Features		
Available Communications	RS485 (Modbus RTU) CANopen DeviceNet USB InfraRed	Dual Port Ethernet IP or Modbus TCP Profibus DP CANopen	BACnet (RS485) DeviceNet Modbus RTU (RS232 / RS485) USB InfraRed	(2) RS485 Ports (Modbus RTU, BACnet, Metasys N2)	EtherNet IP ProfiNet IO Profibus DP Modbus TCP	Modbus RTU (RS232 / RS485) CANopen

Let's go over WEG's low-voltage AC drive offerings at a high level. They all have their own advantages. I will be going over each line in detail, but want to go over some high-level items.

Micro or Mini drives CFW100 & CFW 320.

CFW501 is an HVAC solution drive, but is extremely similar to the CFW500.

The MW500 is specific to distributed applications. It can be mounted on the machine, the motor, or the wall.

Variable Speed Drive Family



Complete Solutions to Increase Productivity and Reliability

	CFW500 		CFW11 		CFW11M 		CFW900 	
Industries and Applications	Pumps Fans / Ventilators Blowers Conveyors Rollout Tables Washdown / Food and Bev		Pumps Fans/Blowers Conveyors Compressors Agitators Mixers Extruders	Feeders Centrifuges Cranes Hoists Rollout Tables Presses Saws	Pumps Fans/Blowers Conveyors Compressors Agitators Mixers Extruders	Feeders Centrifuges Cranes Hoists Rollout Tables Presses Saws	Pumps Fans / Blowers Conveyors Crushers Compressors Agitators and Mixers	Extruders Grizzly Feeders Centrifuges Cranes and Hoists Rollout Tables Presses Saws
Voltage and Ratings	240VAC 1-Phase, 240, 480, and 575VAC 3-Phase Input 240, 480, and 575VAC 3-Phase Output 1/3 – 175HP		240VAC 1-Phase, 240, 480, and 575VAC 3-Phase Input 240, 480, and 575VAC 3-Phase Output 2 – 1,000HP		480, 575, or 690VAC 3-Phase Input and Output 500 – 2,500HP		240VAC 1-Phase, 240, and 480VAC 3-Phase Input 240, and 480VAC 3-Phase Output 1.5 – 200HP (Additional voltages and ratings available soon)	
Enclosure	IP20 / NEMA 1 with Kit, IP66 / NEMA 4X		NEMA 1, NEMA 12 / IP55 NEMA 12 / 3R (EDP11 Enclosed)		NEMA 12 Filtered		IP20 (NEMA 1 available with additional kit) Integrated RFI Filter	
I/O and Interfaces	Up to (8) Digital Inputs Up to (4) Relay Outputs Up to (4) Digital Outputs Up to (3) Analog Inputs Up to (2) Analog Outputs Encoder Feedback Remote Keypad Safety Features		Up to (8) Digital Inputs Up to (3) Relay Outputs Up to (2) Digital Outputs Up to (4) Analog Inputs Up to (4) Analog Outputs Encoder Feedback Remote Keypad, Safety Features		Up to (8) Digital Inputs Up to (3) Relay Outputs Up to (2) Digital Outputs Up to (4) Analog Inputs Up to (4) Analog Outputs Encoder Feedback Remote Keypad, Safety Features		Embedded Safety and WEG Digital Solutions Functionality Up to 7 I/O option motions can be installed providing an extensive array of potential I/O configurations Encoder Feedback Remote Keypad	
Available Communications	EtherNet IP ProfiNet IO Profibus DP Modbus TCP	Modbus RTU (RS232 / RS485) CANopen BACnet (RS485)	EtherNet IP EtherCAT ProfiNet IO Profibus DP Modbus TCP	Modbus RTU (RS232 / RS485) CANopen DeviceNet RS485 BACnet	EtherNet IP EtherCAT ProfiNet IO Profibus DP Modbus TCP	Modbus RTU (RS232 / RS485) CANopen DeviceNet RS485 BACnet	Dual Ethernet Ports EtherCAT MQTT Protocol Bluetooth USB Port	Modbus-RTU / TCP IP CANopen DeviceNet Profibus-DP PROFINET IO

CFW500 is WEGs OEM category drive, but OEMS may use the other drives depending on the application.

The CFW11, CFW11M, and CFW900 are WEGs system drives and are the most feature-rich. The CFW900 is the newest system drive offering, but not available in the

Variable Speed Drive Family



Complete Solutions to Increase Productivity and Reliability

	MVW3000 		MVW01 	
Industries and Applications	Pumps Fans and Blowers Compressors Conveyors Mills		Pumps Gas Compressors Fans and Blowers Banbury Mixers Grinders and Chippers Winders Refiners	Forced and Induced Draft Fans Propulsion Thrusters Mills Centrifuges
Voltage and Ratings	1.5 – 13.8kVAC Up to 30,500HP		2.3 – 6.9kVAC 500 – 50,000HP	
Enclosure	NEMA 1 Filtered (Other Options Available)		NEMA 1 Filtered (Other Options Available)	
I/O and Interfaces	Up to (8) Digital Inputs Up to (5) Relay Outputs Up to (2) Digital Outputs Up to (4) Analog Inputs Up to (6) Analog Outputs Safety Features		Up to (8) Digital Inputs Up to (5) Relay Outputs Up to (2) Digital Outputs Up to (5) Analog Inputs Up to (8) Analog Outputs Encoder Feedback Safety Features	
Available Communications	Modbus RTU Ethernet IP Profinet IP	Profibus DP DeviceNet RS232 PTP	Modbus RTU Modbus TCP Ethernet IP	CANopen Profibus DP DeviceNet

We also offer two medium-voltage drives that have different features in voltage ranges. We will be going into more detail on these also.

CFW100 Variable Speed Drives



Compact Variable Speed Solution for OEMs



CFW100

- 120 or 240VAC 1-Phase Input, 240VAC 3-Phase Output
- 1/4 – 1HP

Common Features

- Compact Variable Speed Drive Solution, Zero Stacking, DIN Rail Mountable
- Rated for 150% Overload for 60 seconds
- 50 degrees Celsius with no derating
- Scalar (V/F) and Voltage Vector (VVV) Motor Control Options
- Up to (8) Digital Inputs, (3) Relay Outputs, (1) Analog Input, (1) Analog Output Depending on Options Selected
- Conformal Coated Circuit Boards
- Utilizes Common WEG Variable Speed Drives Parameter Set
- PID Controller and Configuration
- Built-in SoftPLC Ladder Logic Programming using WEG WPS Software

Range of Accessories

- USB, RS485 Modbus-RTU, CANopen, DeviceNet, and InfraRed Modules
- I/O Module Options - range of Input / Output Configurations
- Remote Keypad, Flash Memory, and Potentiometer Options



The CFW100 is designed to operate with either 120 or 240-volt single-phase input and provides a 240-volt three-phase output. It supports motor power ratings from 1/4 to 1 horsepower.

The CFW100 Variable Speed Drives are compact, easily mounted on a DIN rail, and allow zero stacking. They are rated for 150% overload for up to 60 seconds and can operate at temperatures up to 50 degrees Celsius without derating.

These drives support both Scale and Voltage Vector

motor control options, providing flexibility in motor control strategies. Additionally, depending on the selected IO modules, you can have up to eight digital inputs, three relay outputs, one analog input, and one analog output.

The CFW100 utilizes the common WEG Variable Speed Drives parameter set, making it easy to configure and integrate into existing systems. It includes a PID controller, configuration capabilities, and built-in SoftPLC ladder logic programming using WEG WPS software.

The CFW100 has various accessories, including RS485 Modbus-RTU, CANopen, and DeviceNet communication modules. I/O module options offer a variety of input and output configurations.

CFW320 Variable Speed Drives



High Performance and Compact OEM Solution



CFW320

- 120 or 240VAC 1-Phase and 240 or 480VAC 3-Phase Input
- 240 or 480VAC 3-Phase Output
- 1/4 – 10HP

Common Features

- Compact Variable Speed Drive Solution, Zero Stacking
- DIN Rail or Panel Mount
- Rated for 150% Overload for 60 seconds
- 50 degrees Celsius with no derating (480V Ratings are 40 degrees C)
- Scalar (V/F) and Voltage Vector (VFW) Motor Control Options
- (4) Digital Inputs, (1) Relay Output, (1) Analog Input Standard
- Conformal Coated Circuit Boards
- Integral Brake Chopper (Frame B only)
- Utilizes Common WEG Variable Speed Drives Parameter Set
- PID Controller and Configuration
- Built-in SoftPLC Ladder Logic Programming using WEG WPS Software

Range of Accessories

- Ethernet IP, Modbus TCP, USB, RS232 or RS485 Modbus-RTU, CANopen, DeviceNet, Profibus DP, BACnet, and InfraRed Modules
- I/O Module Options - range of Input / Output Configurations
- Pulse / Frequency Input and Option Options
- RFI Filters (1-Phase Ratings only)
- Remote Keypad, Flash Memory, and Potentiometer Options



The CFW320 Variable Speed Drives is a high-performance, compact solution explicitly designed for Original Equipment Manufacturers. These drives are versatile, supporting 120 or 240 Volts single-phase and 240 or 480 Volts three-phase inputs, with outputs of 240 or 480 Volts three-phase and power ratings ranging from 1/4 to 10 Horsepower.

The CFW320 drives are designed for easy installation, with options for DIN rail or panel mounting. They are robust, rated for 150% overload for 60 seconds, and can operate at 50 degrees Celsius without derating. Their 480-volt ratings apply up to 40 degrees Celsius. These drives offer scalar and voltage vector motor control options, ensuring flexibility in various applications.

Standard features include four digital inputs, one relay output, and one analog input. The circuit boards are conformally coated for enhanced durability. The integral brake chopper is available in Frame B models. The drives utilize a common WEG variable speed drives parameter set and include a PID controller for precise control and configuration. Additionally, the built-in SoftPLC ladder logic programming using WEG WPS software enhances functionality.

Many accessories are available, including Ethernet IP, Modbus TCP, USB, RS232 or RS485 Modbus-RTU, CANopen, DeviceNet, Profibus DP, BACnet, and InfraRed modules. Various I/O module options cater to different input and output configurations. Pulse/frequency input and option modules, RFI filters for single-phase ratings, and remote keypad, flash memory, and potentiometer options further extend the capabilities of the CFW320 drives.

CFW501 Variable Speed Drives



Variable Speed Drives for Buildings Applications



CFW501

- 240 or 480VAC 3-Phase
- 1/3 – 25HP

Common Features

- HVAC-R Application Specific Variable Frequency Drives
- Panel Mountable, IP20 Enclosure (NEMA 1 with Kit)
- UL94 / Plenum Rated with NEMA 1 Kit Installed
- Built-in RFI Filter
- Rated for 110% Overload for 60 seconds (Variable Torque)
- 50 degrees Celsius with no derating
- (4) Digital Inputs, (2) Relay Outputs, (1) Digital Output, (2) Analog Inputs, and (1) Analog Output
- Conformal Coated Circuit Boards
- Automatic Cooling Management maximizing Energy Efficiency
- Utilizes Common WEG Variable Speed Drives Parameter Set
- (2) RS485 Ports Standard (Modbus RTU, BACnet, Metasys N2)
- (2) PID Loops and Configuration Standard
- Built-in SoftPLC Ladder Logic Programming using WEG WPS Software

Range of Accessories

- NEMA 1 Conversion Kits
- Remote Keypad and Cables
- Flash Memory Module



The CFW501 Variable Speed Drives are specifically designed for building applications. They are tailored for heating, ventilation, air conditioning, and refrigeration applications and offer a range of features that enhance performance and efficiency.

The CFW501 operates at 240 or 480 volts of 3-phase power and supports a power range from one-third to 25HP.

The CFW501 drives are panel mountable and have an IP20 enclosure. A NEMA 1 kit is available that meets UL94 and is plenum-rated.

They come equipped with a built-in RFI filter and are rated for 110% overload for 60 seconds, ensuring reliable operation under variable torque conditions.

These drives operate efficiently up to 50 degrees Celsius without derating.

They include four digital inputs, two relay outputs, one digital output, two analog inputs, and one analog output. The conformal-coated circuit boards and automatic cooling management system maximize energy efficiency.

Utilizing a common WEG variable speed drives parameter set, the CFW501 also features two RS485 ports that support Modbus RTU, BACnet, and Metasys N2 protocols. Additionally, it includes two PID loops and configuration, along with built-in SoftPLC ladder logic programming using WEG WPS software.

The CFW501's accessories include NEMA 1 conversion kits, a remote keypad and cables, and a flash memory module. This comprehensive set of features makes the CFW501 Variable Speed Drives a versatile and efficient solution for various building applications.

MW500 Variable Speed Decentralized Drives



Variable Speed Drives for Decentralize Applications



MW500

- 240 or 480VAC 3-Phase
- 1 – 10HP

Common Features

- Decentralized Specific Variable Frequency Drives
- Wall mount or Motor Mount Options, IP66 / NEMA 4X Enclosure
- Available with or without a Built-In Switch-Disconnect
- Internal analog potentiometer
- Rated for 150% Overload for 60 seconds
- (4) Digital Inputs, (1) Relay Outputs, (1) Analog Inputs, and (1) Analog Output
- Conformal Coated Circuit Boards
- No external fan
- Utilizes Common WEG Variable Speed Drives Parameter Set
- Built-in SoftPLC Ladder Logic Programming using WEG WPS Software

Range of Accessories

- Remote Keypad and Cables
- Ethernet IP, Modbus TCP, RS232 or RS485 Modbus-RTU, CANopen, DeviceNet, and Profibus DP.
- Flash Memory Module
- Safety Functions (Safe Torque Off and Safe Stop 1)



The MW500 Variable Speed Decentralized Drives are designed specifically for decentralized VFD applications.

The MW500 drives operate on 240 or 480VAC 3-phase power and are available in a range of 1 to 10 horsepower.

The MW500 drives can be mounted on walls or motors and come with an IP66 / NEMA 4X enclosure, ensuring durability and protection against harsh environments. They are available with or without a built-in switch disconnect, providing flexibility in installation and operation.

The MW500 drives feature an internal analog potentiometer and are rated for 150% overload for 60 seconds, ensuring reliable performance under demanding conditions. They include four digital inputs, one relay output, one analog input, and one analog output. The conformal-coated circuit boards enhance durability, while the absence of an external fan reduces maintenance requirements.

These drives utilize a common WEG variable speed drive parameter set and include built-in SoftPLC ladder logic programming using WEG WPS software, simplifying

integration and programming. Accessories available for the MW500 include remote keypad and cables, Ethernet IP, Modbus TCP, RS232 or RS485 Modbus-RTU, CANopen, DeviceNet, and Profibus DP, as well as a flash memory module and safety functions such as Safe Torque Off and Safe Stop 1.

CFW500 Variable Speed Drives



Comprehensive General Purpose VFD Solution



CFW500

- 240VAC 1-Phase, 240, 480, and 575VAC 3-Phase Input
- 240, 480, and 575VAC 3-Phase Output
- 1/3 – 175HP

Common Features

- Panel Mountable, IP20 Enclosure (NEMA 1 with Kit)
- Heavy Duty Rated for 150% Overload for 60 seconds
- Up to 50 degrees Celsius (derating required depending on frame)
- Automatic Cooling Management maximizing Energy Efficiency
- RS485 Port Standard (Modbus RTU or BACnet)
- Scalar (V/F) and Voltage Vector (VVW) Motor Control Options
- Adjustable Switching Frequency (up to 15 kHz with Derating)
- Extensive Range of Standard and Optional Inputs and Outputs
- Conformal Coated Circuit Boards
- Optional Integral Brake Chopper
- WEG Pump Genius (Simplex, Multiplex up to three Pumps)
- Utilizes Common WEG Variable Speed Drives Parameter Set
- PID Controller and Configuration
- Built-in SoftPLC Ladder Logic Programming using WEG WPS Software

Range of Accessories

- Complete Range of Communications Options
- I/O Module Options - range of Input / Output Configurations
- Safety Module for STO / Safe Stop SIL 3, PL e
- Remote Keypad, Cables, and Flash Memory Options
- NEMA 1 Kits and Cable Shield Clamp Kits



The CFW500 Variable Speed Drives is a comprehensive, general-purpose VFD solution that meets various industrial needs.

These drives operate on 240-volt single-phase or 240, 480, and 575-volt three-phase inputs, with outputs of 240, 480, and 575 Volts three-phase. They support motor power ratings from 1/3 to 175 horsepower.

The CFW500 drives are panel mountable with an IP20 enclosure, and with the NEMA 1 kit installed, they meet UL94 and plenum ratings. These drives are

heavy-duty, rated for 150% overload for 60 seconds, and can operate efficiently up to 50 degrees Celsius, depending on the frame. They feature automatic cooling management, maximize energy efficiency, and have a standard RS485 port supporting Modbus RTU or BACnet protocols.

These drives offer Scalar and Voltage Vector motor control options, with adjustable switching frequencies up to 15 kHz with derating. They include an extensive range of standard and optional inputs and outputs, conformal-coated circuit boards for enhanced durability, and an optional integral brake chopper. The CFW500 also utilizes the common WEG variable speed drives parameter set, featuring a PID controller and configuration, as well as built-in SoftPLC ladder logic programming using WEG WPS software.

The CFW500 drives are available with a range of accessories, including a complete range of communication options, I/O module options with various input/output configurations, a safety module, remote keypad, cables, flash memory options, NEMA 1 kits, and cable shield clamp kits.

CFW500 Variable Speed Drives



Comprehensive General Purpose VFD Solution



CFW500 NEMA 4X

- 240VAC 1-Phase, 240, 480, and 575VAC 3-Phase Input
- 240, 480, and 575VAC 3-Phase Output
- 1/3 – 25HP

Common Features

- Same Features and Capabilities as IP20 CFW500
- Rated NEMA 4X, IP66
- Suitable for Washdown and Outdoor Installation in Full Sunlight
- 40 degrees Celsius, No Derating Required
- Available With or Without Integral Motor Disconnect
- Brake Chopper Included
- Conformal Coated Circuit Boards
- WEG Pump Genius (Simplex, Multiplex up to three Parallel Pumps)
- Utilizes Common WEG Variable Speed Drives Parameter Set
- PID Controller and Configuration
- Built-in SoftPLC Ladder Logic Programming using WEG WPS Software

Range of Accessories

- Complete Range of Communications Options
- I/O Module Options - range of Input / Output Configurations
- Safety Module for STO / Safe Stop SIL 3, PL e
- Remote Keypad, Cables, and Flash Memory Options



There is also a Nema 4X version of the CFW500 Variable Speed Drives. These are very similar to the standard CFW500, but let's go over the differences.

This drive is available with 240-volt single-phase and 240-volt, 480-volt, and 575-volt three-phase inputs and outputs of 240-volt, 480-volt, and 575-volt three-phase. It supports motor power ratings from 1/3 to 25 horsepower.

These drives are suitable for washing down and installing outdoors in full sunlight. They are rated to 40 degrees Celsius without derating. They are available with or Without Integral Motor Disconnect, and a break chopper is included.

CFW11 Variable Speed Drives



Advance Process and Motor Control



CFW11

- 240VAC 1-Phase, 240, 480, and 575VAC 3-Phase Input
- 240, 480, and 575VAC 3-Phase Output
- 2 – 1,000HP

Common Features

- Panel Mountable NEMA 1 Enclosure
- Normal Duty (110% for 60 sec) and Heavy Duty (150% for 60 sec) Ratings
- Up to 50 degrees Celsius (derating required depending on frame)
- Intelligent Thermal Management maximizing Up-Time
- Dual DC Link Inductors Standard on All Ratings
- Scalar (V/F) and Voltage Vector (VVW) Motor Control Options
- Extensive Range of Standard and Optional Inputs and Outputs
- Conformal Coated Circuit Boards
- Optional Brake Chopper and Safety Features
- WEG Pump Genius Available (Simplex, Multiplex up to Five Parallel Pumps)
- Utilizes Common WEG Variable Speed Drives Parameter Set
- PID Controller and Configuration
- Built-in SoftPLC Ladder Logic Programming using WEG WPS Software

Range of Accessories

- Extensive Range of Communications Options
- I/O Module Options - range of Input / Output Configurations
- Temperature / Thermistor Interface Modules
- Remote Keypad, Cables, and Flash Memory Options
- Advance PLC Function Option Modules



The CFW11 Variable Speed Drives are a cutting-edge solution for advanced processes and motor control.

The CFW11 is available with various input and output options, including 240-volt 1-phase, 240-volt, 480-volt, and 575-volt 3-phase input, and 240-volt, 480-volt, and 575-volt 3-phase output, with power ratings ranging from 2 to 1,000 horsepower.

This device is designed to be panel mountable with a NEMA 1 enclosure. It offers both normal-duty and heavy-duty ratings, making it versatile for various applications. The CFW11 can operate in temperatures up to 50 degrees Celsius, with derating required depending on the frame size, and features intelligent thermal management to maximize uptime.

Dual DC link inductors are standard on all ratings, providing enhanced performance and reliability. The CFW11 supports both scalar and voltage vector motor control options, catering to a wide range of motor control needs. It boasts an extensive range of standard and optional inputs and outputs and conformal-coated circuit boards for added durability.

Brake chopper and safety features. The CFW11 utilizes a common WEG variable speed drives parameter set, simplifying configuration and operation. It includes a PID controller and configuration and supports built-in SoftPLC ladder logic programming using WEG WPS software.

A comprehensive range of accessories is available to enhance the functionality of the CFW11. These include an extensive range of communications options, I/O module options for various input and output configurations, temperature and thermistor interface modules, remote keypad, cables, flash memory options, and advanced PLC function option modules.

The CFW11 Variable Speed Drives by WEG are a powerful and versatile solution for motor control and process automation needs.

CFW11 Variable Speed Drives



Advance Process and Motor Control



CFW11 NEMA 12 / IP55

- 240 and 480VAC 3-Phase Input
- 240 and 480VAC 3-Phase Output
- 2 – 175HP

Common Features

- Same Features and Capabilities as NEMA 1 CFW11
- Rated NEMA 12, IP55, Integral Lockable Motor Disconnect
- 40 degrees Celsius, No Derating Required
- Intelligent Thermal Management maximizing Up-Time
- Dual DC Link Inductors Standard on All Ratings
- Conformal Coated Circuit Boards
- Optional Integral Brake Chopper, Optional Safety Features
- WEG Pump Genius Available (Simplex, Multiplex up to three Parallel Pumps)
- Utilizes Common WEG Variable Speed Drives Parameter Set
- PID Controller and Configuration
- Built-in SoftPLC Ladder Logic Programming with WEG WPS Software

Range of Accessories

- Extensive Range of Communications Options
- I/O Module Options - range of Input / Output Configurations
- Temperature / Thermistor Interface Modules
- Remote Keypad, Cables, and Flash Memory Options
- Advance PLC Function Option Modules



There is also a Nema 12 version of the CFW11 Variable Speed Drives. These are very similar to the standard CFW11, but let's go over the differences.

This drive is available with 240-volt and 480-volt three-phase inputs and outputs of 240-volt and 480-volt three-phase. It supports motor power ratings from 2 to 175 horsepower.

Integral Lockable Motor Disconnect is included.

They are rated to 40 degrees Celsius without derating.

EDP11 Variable Speed Drives



Advance Process and Motor Control

Common Features

- Same Features and Capabilities as NEMA 1 CFW11
- Flanged Mounted CFW11, Efficient Heat Dissipation, reduced thermal impact on Control Circuits inside the Enclosure
- Circuit Breaker with Door Mounted Rotary Disconnect
- Rated NEMA 12 at 40 degrees Celsius, No Derating Required
- 120V Secondary Control Circuit Transformer
- With or Without AC3 Rated (3) Contactor Bypass
- Door Mounted Remote Keypad and Cover
- Start-Stop Push Buttons, Run and Fault Pilot Lights
- Conformal Coated Circuit Boards
- WEG Pump Genius Available (Simplex, Multiplex up to three Parallel Pumps)
- Utilizes Common WEG Variable Speed Drives Parameter Set
- PID Controller and Configuration
- Built-in SoftPLC Ladder Logic Programming using WEG WPS Software

Options

- AC3 Rated (3) Contactor Bypass
- NEMA 3R version which includes Space Heater, Lightning Arrestor, and is Service Entrance Rated
- Hand-Off-Auto Selector Switch, Speed Potentiometer



EDP11

- 240 or 480VAC 3-Phase Rated
- 2 – 1,000HP



The EDP11 Variable Speed Drives, come equipped with the same features and capabilities as the NEMA 1 CFW11.

The EDP11 is rated for 240 or 480 Volt 3-phase and supports a power range of 2 to 1,000 horsepower.

The EDP11 ensures efficient heat dissipation through a flanged-mounted CFW11, which reduces the thermal impact on control circuits inside the enclosure.

The unit is designed with a circuit breaker with a door-mounted rotary disconnect and is rated NEMA 12 at 40 degrees Celsius, requiring no derating. Additionally, a 120 Volt secondary control circuit transformer is included, and the system can be configured with or without an AC3-rated contactor bypass.

The EDP11 features a door-mounted remote keypad, cover, start-stop push buttons, and run and fault pilot lights.

Optional features include a NEMA 3R version with a space heater and lightning arrestor, which is service entrance rated, and a hand-off auto selector switch with a

speed potentiometer.

CFW11M Variable Speed Drives



Advance Process and Motor Control



CFW11M

- 480, 575, and 690VAC, 3-Phase
- 500 – 2,500HP

Common Features

- Same Features and Capabilities as NEMA 1 CFW11
- 12-Pulse Configuration Standard
- Modular Design, Removable Inverter Modules Connected to a Single DC Bus
- Rated NEMA 12 Filtered Enclosure
- 40 degrees Celsius, No Derating Required
- Circuit Breaker with Through Door Disconnect
- Door Mounted Keypad, Operator Devices
- Conformal Coated Circuit Boards
- WEG Pump Genius Available (Simplex, Multiplex up to three Parallel Pumps)
- Utilizes Common WEG Variable Speed Drives Parameter Set
- PID Controller and Configuration
- Built-in SoftPLC Ladder Logic Programming

Options

- 18 Pulse Versions Available
- NEMA 3R Enclosure Option



The CFW11M Variable Speed Drives offer the same features and capabilities as the NEMA 1 CFW11, with a 12-pulse configuration standard. The modular design includes removable inverter modules connected to a single DC bus, housed in a NEMA 12 filtered enclosure that operates efficiently at 40 degrees Celsius without derating.

The CFW11M has a circuit breaker featuring a through-door disconnect, a door-mounted keypad, and operator devices. The circuit boards are conformally coated for added protection.

The CFW11M supports 480, 575, and 690 volts 3-phase power, ranging from 500 to 2,500 horsepower. Optional features include 18-pulse versions and a NEMA 3R enclosure option.

CFW900 Variable Speed Drives



Advance Process and Motor Control



CFW900

- 240VAC 1-Phase, 240 and 480VAC 3-Phase Input
- 240, and 480VAC 3-Phase Output
- 1.5 – 200HP
- More voltages and extended power range coming soon
- IP55 version planned

Common Features

- IP20 Enclosure Protection class (UL Type 1 with optional kit)
- Dual DC link inductors (no external reactor required)
- Conformal coating per Class 3C2 per IEC 60721-3-3
- Scalar, VVW (Voltage Vector WEG), Vector Control, VVW PM
- Smart Thermal Management adjusts to meet application requirements
- IoT - Ready with MQTT protocol, Motion Fleet Management enabled
- Up to 200M motor cable lengths without need for output filter
- Extensive I/O capability with up to 7 option expansion slots
- Bluetooth enabled Graphic Keypad, USB Port, Real-time clock, Oriented start-up, and online help
- RFI filter complies with EMC Directive 2004/108/EC
- Internal 24Vdc power supply (max. 800mA), ability to use external supply
- Dual Ethernet IP or Modbus TCP Ports and RS-485 (Modbus RTU)
- Integrated Safety functions meet SIL 3 and PLE / Category 4 requirements
- PID Controller and Configuration
- Built-in SoftPLC Ladder Logic Programming using WEG WPS Software

Range of Accessories

- Extensive range of I/O and Communication Options
- Remote keypad, mounting hardware, cables
- NEMA 1 and IP21 kits
- Encoder and Temperature Transducer Options



WEG's CFW900 Variable Speed Drives are designed for advanced process and motor control. These drives offer a range of features to ensure optimal performance and reliability.

The CFW900 series supports 240 Volt 1-phase, 240 and 480 Volt 3-phase input, and 240 and 480 Volt 3-phase output, with a power range of 1.5 to 200 horsepower.

The CFW900 series includes IP20 enclosure protection, with an optional kit for UL Type 1. It features dual DC link inductors, eliminating the need for an external reactor, and conformal coating. The drives support various control methods, including Scalar, and Vector Control. Smart Thermal Management adjusts to meet application requirements.

The CFW900 drives can handle motor cable lengths up to 200 meters without an output filter. They offer extensive I/O capability with up to seven option expansion slots, a Bluetooth-enabled graphic keypad, USB port, a real-time clock, and oriented start-up. The RFI filter complies with the EMC Directive, and the drives include an internal 24 Volt DC power supply with the ability to use an external supply. Dual Ethernet IP or Modbus TCP ports and RS-485 (Modbus RTU) are integrated, along

with safety functions that meet SIL 3 and PLE Category 4 requirements. The drives also feature a PID controller and configuration and built-in SoftPLC ladder logic programming using WEG WPS software.

A range of accessories is available, including extensive I/O and communication options, a remote keypad, mounting hardware, cables, NEMA 1 and IP21 kits, and encoder and temperature transducer options.

MVW3000 Variable Speed Drives



General Purpose Medium Voltage Drives



MVW3000

- Up to 13.8kVAC
- Up to 30,500HP

Common Features

- Voltage Source Inverter Design, Multi-level Cascaded H-Bridge Topology
- Input and Output Voltages 1.15 kV to 13.8 kV
- Output Ratings up to 1,140A, 30,500HP
- Near Sinusoidal Output Waveform
- Greater Than 95% Power Factor
- Fully Integrated Solution Including Input Disconnect, Fusing, and Multi-Pulse Transformer
- High-Efficiency Redundant Forced-Air Cooling
- Operation via User-Friendly 10" Door Mounted HMI Touch Screen
- Arc-Flash Detection System Standard
- Low Harmonic Design per IEEE 519, IEC 61800-3 and G5/4-1
- Easy to Maintain, All Power Components are Front-Accessible
- Power Cells Utilize Long-Life Plastic Film Capacitors

Options

- Extensive Range of Communications Options
- I/O Module Options - range of Input / Output Configurations
- Temperature / Thermistor Interface Modules
- Application Specific Software



The MVW3000 Variable Speed Drives are designed for general-purpose medium-voltage applications. These drives feature a voltage source inverter design with a multi-level cascaded H-bridge topology, supporting input and output voltages from 1.15 kV to 13.8 kV and output ratings up to 1,140 amps or 30,500 Horsepower. The drives produce a nearly sinusoidal output waveform and maintain a power factor greater than 95%.

The MVW3000 is a fully integrated solution, including input disconnect, fusing, and a multi-pulse transformer. It boasts high-efficiency redundant forced-air cooling and uses a user-friendly 10" door-mounted HMI touch screen. The standard arc-flash detection system enhances safety, and the low harmonic design complies with IEEE 519, IEC 61800 dash 3, and G5 4 dash 1 standards. Maintenance is straightforward, with all power components front-accessible, and the power cells utilize long-life plastic film capacitors.

Optional features include various communications options, I/O module configurations, temperature/thermistor interface modules, and application-specific software.

MVW01 Variable Speed Drives



High Performance Variable Speed Drives



MVW01

- Up to 6.9kVAC
- Up to 50,000HP

Common Features

- Voltage Source Inverter Design, Neutral Point Clamp Topology
- Input and Output Voltages 2.3kV to 6.9kV
- Output Ratings up to 50,000HP
- Greater than 98.5% Efficiency, Power Factor Greater Than 95%
- Flexible Design Allowing Separate Mounting of System Components
- Forced-Air or Liquid Cooled Versions Available
- Operation via User-Friendly 10" Door Mounted HMI Touch Screen
- Multi-Pulse (up to 36) input rectifier
- Easy to Maintain, All Power Components are Front-Accessible
- Scaler, Closed-Loop Vector, and Sensorless Vector Control Options
- Arc-Flash Detection System Standard
- Long-Life Plastic Film Capacitors

Options

- Extensive Range of Communications Options
- I/O Module Options - range of Input / Output Configurations
- Temperature / Thermistor Interface Modules
- Application Specific Software



The MVW01 Variable Speed Drives is designed for advanced motor control and efficiency. These drives feature a voltage source inverter design with a neutral point clamp topology, supporting input and output voltages from 2.3kV to 6.9kV and output ratings up to 50,000 Horsepower. With an efficiency greater than 98.5% and a power factor greater than 95%, these drives ensure optimal performance.

The MVW01 drives offer a flexible design that allows for separate mounting of system components and is available in forced-air or liquid-cooled versions. They are operated via a user-friendly 10" door-mounted HMI touch screen and feature a multi-pulse (up to 36) input rectifier. Maintenance is straightforward, with all power components front-accessible, and the drives include long-life plastic film capacitors.

Standard features include a scaler, closed-loop vector, sensorless vector control options, and an arc-flash detection system. Optional features include various communications options, I/O module configurations, temperature/thermistor interface modules, and application-specific software.

Pump Genius



Advanced Control for Pumping Applications



PUMP INTELLIGENCE TO YOUR SYSTEM

Pump Genius is a customizable feature of WEG Variable Speed Drives that enables them to become dedicated for pumping systems. It ensures accurate pressure / flow control throughout the processing cycle, starting with raw water and its usage, ending on wastewater treatment.

With an easy-to-use programming wizard, Pump Genius helps you to minimize downtime and maximize energy savings. Everything you need is selecting one of the three options that best fits to your application

Pump Genius Configurations

- Simplex – Single Pump / Drive System
- Multiplex – Multiple Pump / Multiple Drive System
- Multi-pump – Control Multiple Pumps with a Single Drive

Pump Genius is a customizable feature of WEG Variable Speed Drives designed to transform them into dedicated systems for pumping applications. This innovative solution ensures precise pressure and flow control throughout the entire processing cycle.

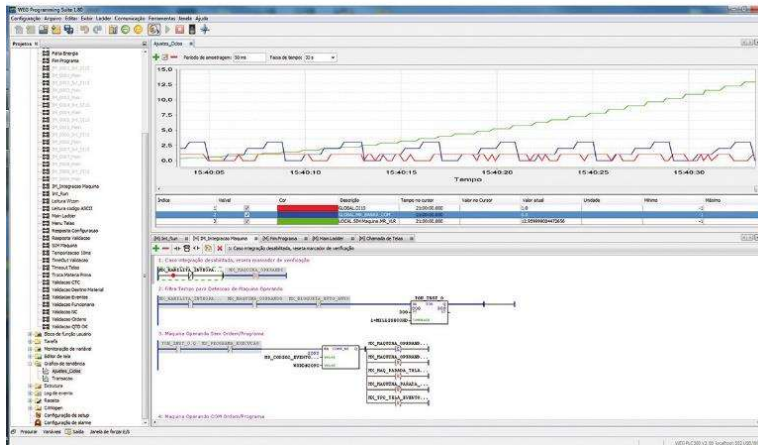
Pump Genius stands out with its user-friendly programming wizard, which simplifies the process, helping you minimize downtime and achieve significant energy savings. Whether you need a single pump/drive system, a multiple pump/multiple drive system, or a solution to control multiple pumps with a single drive, Pump Genius offers three distinct configurations to best fit your specific application needs.

Pump Genius is currently available on the CFW500 and the CFW11. It will be released for the CFW900 in 2025.

Software Tools



Programming and Monitoring Software from WEG



Sample screen shot of WEG WPS Software

Capabilities and Features

- Program Parameters and SoftPLC Logic on WEG VFDs, Soft Starters, and Smart Relays
- Includes the capability to download and back up configurations
- Utilize software to update firmware
- Includes I/O and Parameter monitoring
- Able to trend multiple data values
- Software is available from WEG via free download

WEG offers a comprehensive software suite for programming and monitoring all its VFDs and soft starters. This software enables you to program parameters and SoftPLC logic on WEG VFDs, Soft Starters, and Smart Relays with ease.

One of the standout features is the ability to download and back up configurations, ensuring your settings are always secure and easily retrievable. Additionally, the software allows for firmware updates, keeping your equipment up-to-date with the latest enhancements and improvements.

The monitoring capabilities are equally impressive, with options to monitor I/O and parameters and trend multiple data values. This provides a clear and detailed view of your system's performance, helping you make informed decisions and optimize operations.

Best of all, WEG's Software Tools are available for free download, making it accessible for all users.

Software Tools



Easy PLC Integration with Add-on Instructions



Overview

- Add-on instructions (AOIs) provide an easy way to integrate WEG Drives and Soft Starters into Automation Systems quickly.
- Initial release is for Rockwell Automation Studio 5000 Logix Designer®
- AOI Release Plans:
 - CFW900, CFW500, SSW900, CFW11- Available Now
 - CFW320, SSW7000, MVW01, MVW3000 – 2025 Release
- Possible future plans for CODESYS, Siemens S7, and Modicon integration solutions.

WEG has tools for easy PLC integration with add-on instructions. Add-on instructions, or AOIs, provide a seamless way to integrate WEG Drives and Soft Starters with Rockwell Automation Studio 5000 Logix Designer. This ensures a smooth and quick setup.

We currently have AOI released for the CFW900, CFW500, SSW900, and CFW11. In 2025, we will expand our offerings to include the CFW320, SSW7000, MVW01, and MVW3000. Furthermore, we are exploring future integration solutions for CODESYS, Siemens S7, and Modicon PLCs, broadening the scope of our compatibility and enhancing your automation capabilities.



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

Thank you for your
time and attention.



Transforming energy in solutions. www.weg.net



Thank you for attending the WEG overview of Drives and Soft Starter Products. Please make sure you take the test before continuing.