WEG CFW100 Generation 2 Series AC Drives



WEG CFW100 Series AC Drives										
Motor Poting	hp	0.25	0.50	1						
Motor Rating	kW	0.18	0.37	0.75						
115VAC Single-Phase Inp 230VAC Three-Phase Out	1	√								
230VAC Single-Phase Inp 230VAC Three-Phase Out	1	✓	√							





WEG CFW100 Overview

The new generation of WEG CFW100 variable frequency drives – the smallest full featured VFDs on the market – offer impressive functions and features that provide energy cost savings and fast operating response while helping to prevent possible breakdowns or involuntary stoppages.

The CFW100 is a single-phase input, three phase output variable frequency drive (VFD) developed for simple applications ranging from 1/4 to 1hp (0.18 to 0.75 kW). It gives induction motors a selectable scalar (V/F) or voltage vector (VVW) control. Designed with HMI and plug-and-play in mind, the CFW100 opens the door for fast, easy installation and operation.

With its built-in PLC, the CFW100 enables the VFD, motor and application to work interactively. Users can easily implement customized logic for any application.

Purpose of AC Drives

AC drives are known by many different names: AC Drives, Adjustable Frequency Drives (AFDs), Variable Frequency Drives (VFDs), and Inverters. Drives are used primarily to vary the speed of three-phase AC induction motors. They also provide non-emergency start and stop control, acceleration and deceleration, and overload protection. By gradually accelerating the motor, drives can reduce inrush current during motor startup.

AC drives operate by rectifying incoming AC power to DC, which is then converted back into three-phase output power. The voltage and frequency of this converted output power is controlled by the drive in order to vary the speed of the three-phase AC induction motor.

A number of easily installed accessories for network communication and I/O expansion are available for the CFW100. These make it easy to adapt the CFW100 to a wide range of different applications.

Of special interest to machine manufacturers is the flash memory module which allows you to copy the settings from one CFW100 and download them to others in seconds, even with the inverters turned off.

WEG CFW100 Hardware and Firmware Enhancements

The new generation WEG CFW100 variable speed drives feature hardware and firmware enhancements over the first generation of this line. These include the following:

- A new plug-in module with potentiometer (exclusive for the G2)
- PID control function
- Fire mode function
- Modbus master function
- Energy saving function
- · Compatibility with WPS software
- · New color for the HMI membrane
- Maintains same dimensions and electrical connections as the first generation
- Compatible with all Generation 1 accessories

Features

- Output current 1.6 A, 2.6 A and 4.2 A (0.25; 0.5 and 1hp)
- Single-phase power supply (110/230 VAC)
- Operates in 50°C [122°F] ambient temperature without derating
- Withstands 150% overload for one minute every 10 minutes at an ambient temperature of 50°C [122°F].
- Vector (VVW) or Scalar (V/F) control
- · Plug-and-play functionality
- Built-in operating interface (HMI)
- Digital inputs
- Surface mounting (with PLMP accessory) or DIN rail mounting
- Degree of protection IP20

- Removable external fan (for Frames B and C)
- Fault or alarm diagnosis
- Electronic protection against motor overload
- Free software (WPS)
- Standard coating classified as 3C2 according to IEC 60721-3-3 on all versions for greater protection of the internal circuitry in harsh environments.

Connectivity (WPS)

- Free application software to program, control and monitor the CFW100
- Monitoring of operation status in lists, which can be saved as a computer file
- On-line parameter operation
- Transfer of parameters from a PC to the CFW100
- Off-line edition of parameters stored on the PC

Accessories

- RS-485 serial communication module (Modbus RTU)
- USB communication module
- I/O expansion modules including 1AI/1AO and 1AI/1RO
- Input expansion module (4 isolated [configurable] NPN or PNP digital inputs)
- Infrared remote control module
- Potentiometer module
- · Flash memory module
- HMI (remote)

Typical Applications

- Blenders / Mixers
- Granulators / Palletizers
- Rotary filters
- Roller tables
- Centrifugal pumps
- · Process dosing pumps
- Fans / Exhaust systems
- Dryers
- Centrifuges
- Commercial Dryers
- Compressors
- Conveyors

WEG CFW100 AC Drives – Selection Specifications



WEG CFW100 AC Drives	VEG CFW100 AC Drives Selection Specifications													
		Applicable Motor ^{1, 2}			Drive	Drive Output		Drive Input		otection	Drive			
		Maximum Power		Nominal	Nominal Rated		Nominal	Rated	Circuit		Power			
Drive Model #	FIIGE Phase / Land Phase / Phase / Land Phise 4	Loss	Weight Ib [kg]	Frame Size										
CFW100A01P6S120G2	\$150.00	0.25	0.18	3 / 230	1.6	3 / 230	1 / 115	7.1	10	20	20	1.05 [0.48]	А	
CFW100B02P6S120G2	\$164.00	0.50	0.37	3 / 230	2.6	3 / 230	1 / 115	11.5	16	20	30	1.25 [0.57]	В	
CFW100A01P6S220G2	\$134.00	0.25	0.18	3 / 230	1.6	3 / 230	1 / 230	3.5	6.3	20	20	1.05 [0.48]	А	
CFW100B02P6S220G2	\$145.00	0.50	0.37	3 / 230	2.6	3 / 230	1 / 230	5.7	10	20	30	1.25 [0.57]	В	
CFW100C04P2S220G2	\$154.00	1	0.75	3 / 230	4.2	3 / 230	1 / 230	9.2	16	20	40	1.34 [0.61]	С	

¹⁾ For use with three-phase motors only.

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²⁾ The power values for the maximum applicable motor shown are reference values and are valid for WEG three-phase, four-pole induction motors with power supply of 230VAC. The proper sizing of the CFW100 drive must be determined as a function of the rated current of the motor being used.

³⁾ Motor FLA may vary with speed and manufacturer. ALWAYS compare motor FLA to Nominal AMPS of drive.

⁴⁾ For UL508C compliance, use UL fuse type J. Type J provides 30kA high fault SCCR rating.

WEG CFW100 AC Drives – General

CFW100 General Sp	ecifications (Applicable to All I	Models)						
	Method	Scalar (V/F) or voltage vector (VVW) control modes						
Control	Output Frequency Range	0 to 400 Hz, control of 0.1 Hz						
Performance	V/Hz Control	Speed regulation: 1% of the rated speed (with slip compensation) Speed variation range: 1:20						
renomiance	VVW Control	Speed control: 1% of the rated speed Speed variation range: 1:30						
Inputs	Analog	Optional CFW100-IOAR (0-10 V or 0-20 mA or 4-20 mA. Maximum 30VDC)						
IIIputs	Digital	4 digital inputs included (NPN or PNP). Optional CFW-IOD module provides additional 4 isolated NPN or PNP digital inputs.						
Outputs	Relay	Optional CFW100-IOAR, 1 relay with NO contact						
Outputs	Power Supply	Maximum 240VAC Maximum current 0.5 A. Minimum current >1 uA						
Safety	Protection	Overcurrent/phase-phase short circuit in the output Overcurrent/phase-ground short circuit in the output Under/overvoltage Heatsink overheating Motor overload Power module (IGBTs) overload External fault/alarm Configuration error						
Keypad	Integral (HMI)	3 digit LCD display and 4 keys. Indication accuracy, current: 10% of rated current. Indication accuracy, speed resolution: 0.1 Hz.						
Rated/Default Carri	er Frequency	Standard 5kHz (selectable 2.5 to 15kHz)						
Input Voltage Range	?	Applicable to 2 models (110-127 VAC): -15% to +10%. Applicable to 3 models (200VAC to 240VAC): -15% to +10%.						
Input Frequency Ra	nge	50/60Hz (48 to 62 Hz)						
Allowable Input Pha	se Imbalance	Phase imbalance: ≤ 3% of the rated phase-to-phase input voltage						
Overload Capacity		150% overload for 1 minute every 10 minutes at an ambient temperature of 50°C [122°F]						
Braking		N/A						
Ambient Operating	Temperature	0°C-50°C [32°F-122°F]; up to 60°C [140°F] with current derating (2% per 1°C above 50°C [122°F], limited to 60°C [140°F])						
Altitude		0-3300ft (1000m); up to 13,200ft (4000m) with current derating (1% per 100m above 1000m); From 2000-4000m (6560ft-13123ft) above sea level, maximum voltage reduction of 1.1% for each 100m above 2000m						
Humidity		5 to 95% non-condensing						
Mounting		DIN rail or surface mounting with screws (PLMP adapter required for screw mounting)						
Mounting Orientation	n	Vertical, to provide for proper cooling						
Environmental Prote	ection Rating	IP20						
Agency Approvals *		UL 508C, UL 840, UL 50, EN61800-5-1, EN 50178, EN 60204-1, EN 60146 (IEC 146), EN 61800-2, EN 60529						

^{*} To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page.

In [mm]

WEG CFW100 AC Drives – Dimensions

Dimensions With Filter

[170.7] 2.16 [54.9] 5.08 1.08 [27.4] [129.0] CFW100Axxxxxxxxxxx AA MAA PA 1.40 [50.0] [35.5] 3.94 6.32 [160.5] [100.0]

* Optional modules add depth to dimension as follows:
CFW100-IOP adds 17mm [0.67 in]
CFW100-CRS-485, -IOAR,-IOA, and -IOD add 14mm [0.55 in]
CFW100-CUSB and -IOADR add 13mm [0.51 in]

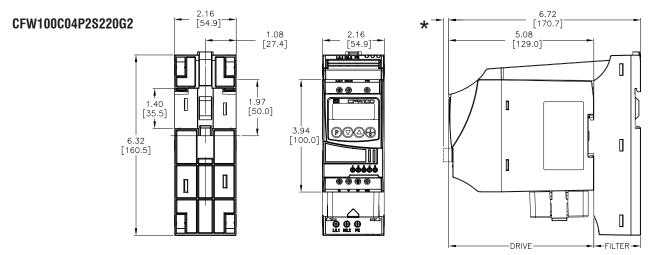
CFW100Bxxxxxxxxxxx 6.72 [170.7] 1.08 5.08 [27.4] [54.9] [129.0] **a** 1.40 [35.5] [50.0] 3.94 [100.0] 6.32 [160.5]

★ Optional modules add depth to dimension as follows:

CFW100-IOP adds 17mm [0.67 in]

CFW100-CRS-485, -IOAR,-IOA, and -IOD add 14mm [0.55 in]

CFW100-CUSB and -IOADR add 13mm [0.51 in]

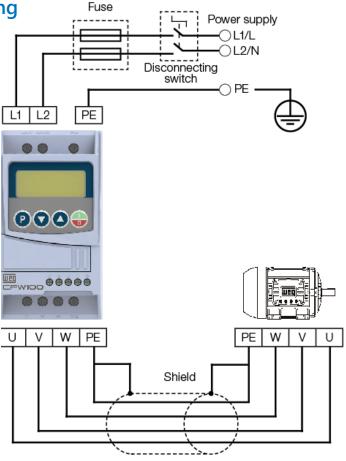


See our website (www.AutomationDirect.com) for complete engineering drawings.

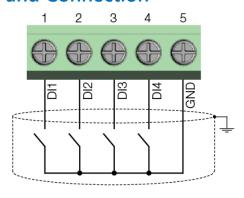
★ Optional modules add depth to dimension as follows: CFW100-IOP adds 17mm [0.67 in] CFW100-CRS-485, -IOAR,-IOA, and -IOD add 14mm [0.55 in] CFW100-CUSB and -IOADR add 13mm [0.51 in]

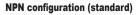
WEG CFW100 AC Drives

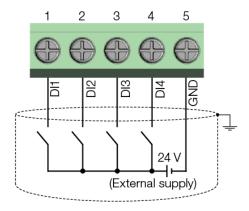
Power and Grounding Connections



Installation and Connection







PNP configuration

Conne	ector	Description				
1	D11	Digital Input 1				
2	D12	Digital Input 2				
3	D13	Digital Input 3				
4	D14	Digital Input 4				
5	GND	Reference 0V				

For further information, please reference additional diagrams available in the CFW100 User Manual.

WEG CFW100 AC Drives – Accessories Hardware resources that can be added to the CFW100

WEG CFW100 AC Drives A	lccessories		
Model #	Price	Description	Use With Drive #CFW
<u>CFW100-CRS485</u>	\$40.00	RS485 communication module, with Modbus Master function	CFW-100
CFW100-CUSB	\$42.50	USB communication module with 2m (6.56 ft) cable	CFW-100
CFW100-IOP	\$44.50	Potentiometer plug-in module	CFW-100
CFW100-IOA	\$48.50	I/O expansion module with 1 analog input and 1 analog output	CFW-100
CFW100-IOADR	\$101.00	I/O expansion and infrared remote control module ¹	CFW-100
CFW100-IOAR	\$39.50	I/O expansion module with 1 analog input and 1 relay output	CFW-100
<u>CFW100-IOD</u>	\$40.00	I/O expansion module with 4 isolated (configurable) NPN or PNP digital inputs	CFW-100
CFW100-KHMIR	\$125.00	CFW100 remote interface kit (CFW100-CRS485 with 1m (3.28 ft)cable included)	CFW-100
CFW100-KFABC-S1	\$62.00	Footprint ² radio frequency kit, category C2, for frames A, B or C (120V)	CFW-100 (120G2 models only)
CFW100-KFABC-S2	\$44.50	Footprint ² radio frequency kit, category C2, for frames A, B or C (220V)	CFW-100 (220G2 models only)
<u>PLMP</u>	\$1.00	Adapter kit for surface mounting, fastening with screws, set with two units	CFW-100

1) I/O expansion and infrared remote control module contains 1 NTC sensor with a 1m (3.28 ft) cable, 1 infrared (IR) remote control, 1 infrared receiver cable with a 1.5 m (4.92 ft) cable, 1 NTC sensor input, 1 analog current input (0-10 mA or 2-20 mA), 1 analog voltage input (0-10 VDC), and 3 NO digital outputs (240 VAC).

2) The footprint radio frequency filter is an external accessory on whose surface the VFD is mounted. The electrical connection between the filter and the CFW100 is made through the coupling guide that accompanies the filter. After being mounted on the filter surface, the set can be fastened to a DIN rail or mounted to a panel with screws. For mounting with screws, the PLMP Adapter Kit accessary is required. For further information refer to Chapter 7 of the user's manual; access the manual and accessories through www.automationdirect.com.







CFW100-CUSB



CFW100-IOP



CFW100-IOA



CFW100-IOAR



CFW100-IOD



CFW100-KFABC-S2



CFW100-KFABC-S1





CFW100-IOADR





CFW100-KHMIR

WEG AC Drives

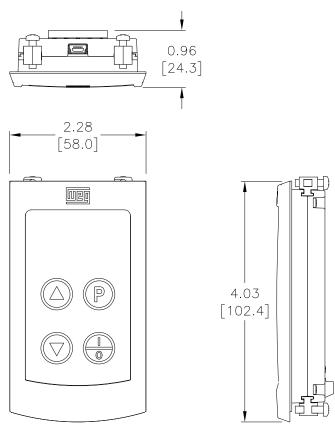
<u>PLMP</u>

WEG CFW100 AC Drives Accessories – Dimesions

Dimensions

mm [in]

CFW100-KHMIR



General Accessories Recommended for WEG CFW100 AC Drives

General Accessories Recommended for WEG CFW100 AC Drives											
AC Drive Part #	Power		Innut A/V	Line Reactor*	Load Reactor*	Output Filter**					
AC Drive Part #	hp	kW	Input Ø/V	1-Phase	3-Phase	3-Phase					
CFW100A01P6S120G2	0.25	0.18	1 Ø	LR2-10P2-1PH	LR2-20P5	VTF-46-DE					
CFW100B02P6S120G2	0.50	0.37	115VAC	LR2-10P5-1PH	LR2-21P0	VTF-246-CFG					
CFW100A01P6S220G2	0.25	0.18		LR2-20P2-1PH	LR2-20P5	VTF-46-DE					
CFW100B02P6S220G2	0.50	0.37	230VAC	LR2-20P2-1PH	LR2-20P7	VTF-246-CFG					
CFW100C04P2S220G2	1	0.75		LR2-21P0-1PH	LR2-21P0	VTF-24-FH					

* For Line Reactor technical information, please refer to "LR(2) Series Line Reactors" on page tDGA-1.

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^{**} For Drive Output Filter technical information, please refer to "Drive Output Filters - VTF Series - for Multiple AC Drives" on page tDGA-18.

WEG CFW300 Series AC Drives - Introduction



WEG CFW300 Series AC Drives											
Motor Poting	hp	0.25	0.5	1	1.5	2	3	5			
Motor Rating	kW	0.2	0.4	0.75	1.3	1.5	2.2	3.7			
115V Single-Phase Input / 230V Three-Phase Output	115V Single-Phase Input / 230V Three-Phase Output										
230V Single-Phase Input / 230V Three-Phase Output	✓	✓	✓	✓	✓	✓					
230V Three-Phase Input / 230V Three-Phase Output	✓	√	✓	✓	✓	✓	✓				

Purpose of AC Drives

AC drives are known by many different names: AC Drives, Adjustable Frequency Drives (AFDs), Variable Frequency Drives (VFDs), and Inverters. Drives are used primarily to vary the speed of three phase AC induction motors. They also provide non-emergency start and stop control, acceleration and deceleration, and overload protection. By gradually accelerating the motor, drives can reduce inrush current during motor startup.

AC drives operate by rectifying incoming AC power to DC, which is then inverted back into three-phase output power. The voltage and frequency of this inverted output power is controlled by the drive, in order to vary the speed of the three phase AC induction motor.

WEG CFW300 Overview

WEG CFW300 variable frequency drives are high-performance VFDs for three-phase induction motors. They are ideal for applications on machines or equipment that require precise variable-speed control with easy setup and operation.

The CFW300 series features compact size with contactor-style electrical connections (top in / bottom out). The CFW300's performance can be scaled to match the application by selecting WEG vector control (VVW) or scalar control (V/F).

CFW300s include built-in operator

interface (HMI) and SoftPLC with free WPS programming software for custom-tailored control schemes. A variety of plug-in option modules for additional I/O and communications protocols may be added to provide extended capabilities, making the CFW300 a flexible and cost effective solution for your variable-speed requirements.

Features

- Single-phase and three-phase voltage supply
- DIN rail (35mm) or surface mounting with screws
- Side-by-side mounting; no heat dissipation space required beside/between the drives
- · Voltage range:
- 1-phase models: 110–127 VAC & 200–240 VAC
- 3-phase models: 200–240 VAC
- Current/Power range: up to 15.2A/3.7kW (5hp)
- Control mode: Scalar (V/Hz) or Voltage Vector (VVW)
- Switching frequency: 2.5, 5, 10, or 15kHz
- Output frequency range: 0–400 Hz; 0.1Hz resolution
- Overload capacity: 150% for 60sec every 10min; 200% for 3 sec every 10min
- Degree of protection: IP20
- Operating temperature: 14 to 122°F (50°C); up to 140°F (60°C) with current derating (2% per 1°C above 50°C)
- Altitude: 0 to 3300ft (1000m); up to 13,200 ft (4000m) with current derating (1% per 100m above 1000m)

- Humidity: 5 to 95% non-condensing
- Integrated brake chopper for frame size B (not available for size A)
- Local keypad supplied as standard
- cULus, CE

Accessories

- Remote keypad with mounting kit and cable
- RS-232 serial communication module (Modbus RTU)
- RS-485 serial communication module (Modbus RTU)
- USB communication module and cable
- IODR expansion module Insulated inputs (NPN or PNP)
- IOAR expansion module (1AI, 1AO, and 3RO)
- IOADR expansion module (1 PTC, 3RO, and 1 infrared input)
- Incremental encoder module (A/A B/B)
- · Flash memory module and cable
- RFI Filter

Typical Applications

- Blenders / Mixers
- · Centrifugal pumps
- Centrifuges
- Commercial Dryers
- Compressors
- Conveyors
- Fans / Blowers
- Granulators
- Roller Tables
- · Rotary Filters

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WEG CFW300 AC Drives – Selection Specifications

CFW300 Drive Model Selection Tables

CFW300A (Frame Size A)

CFW300B (Frame Size B)



Zero-Stack Mounting (no side-to-side heat dissipation space required)



Modular design with easy-to-install accessories



		WE	G CFW	300 AC	Drives	Selection	on Spec	ificatio	ns				
		Applicable Motor 1) 2)			Drive Output		Drive I	nput	Input Pr	otection	Drive		
Drive Model #	Price	Maximu	m Power	Nominal	Rated	Nominal	Nominal	nal Rated	Circuit Euga 4)	Fuse ⁴⁾	Power		Frome
		(hp)	(kW)	Phase / Voltage	Current ³⁾ (A)	Phase / Voltage	Phase / Voltage	Current (A)	Breaker (A)	(A)	Loss (W)	Weight	Frame Size
CFW300A01P6S1NB20	\$126.00	0.25	0.18		1.6			7.1	10	20	30		
CFW300A02P6S1NB20	\$138.00	0.50	0.37		2.6		1Ø / 115VAC	11.5	16	20	45	0.90 kg [1.98 lb]	
CFW300A04P2S1NB20	\$147.00	1.00	0.75		4.2			17.7	20	35	60		
CFW300A06P0S1NB20	\$177.00	1.50	1.32		6.0			26.5	32	40	75		A
CFW300A01P6S2NB20	\$113.00	0.25	0.18		1.6			3.5	6.3	20	30		
CFW300A02P6S2NB20	\$122.00	0.50	0.37		2.6			5.7	10	20	35		
CFW300A04P2S2NB20	\$131.00	1.00	0.75		4.2		1Ø / 230VAC	9.2	16	20	50		
CFW300A06P0S2NB20	\$161.00	1.50	1.32	001	6.0			13.2	16	20	75		
CFW300A07P3S2NB20	\$189.00	2.00	1.50	3Ø / 230VAC	7.3	3Ø / 230VAC		16.1	20	25	90		
CFW300B10P0B2DB20 5)	\$226.00	3.00	2.20	2001710	10.0	2001710		22.0	25	35	100	1.34 kg	В
CFW300A01P6T2NB20	\$120.00	0.25	0.18		1.6			2.0	2.5	20	30	[2.95 lb]	В
CFW300A02P6T2NB20	\$131.00	0.50	0.37		2.6			3.1	6.3	20	35		
CFW300A04P2T2NB20	\$139.00	1.00	0.75		4.2		000	5.0	10	20	50	0.90 kg	Α
CFW300A06P0T2NB20	\$169.00	1.50	1.32		6.0		3Ø / 230VAC	7.2	10	20	75	[1.98 lb]	A
CFW300A07P3T2NB20	\$199.00	2.00	1.50		7.3		200 17 10	8.8	16	20	90	1	
CFW300B10P0B2DB20 5)	\$226.00	3.00	2.20		10.0			12.0	25	35	100	1.34 kg	В
CFW300B15P2T2DB20	\$276.00	5.00	3.70		15.2			18.2	25	35	160	[2.95 lb]	D

¹⁾ For Use With Three-Phase Motors Only.

²⁾ The power values for the maximum applicable motor shown are reference values and are valid for WEG three-phase, four-pole induction motors with power supply of 230VAC. The proper sizing of the CFW300 drive must be determined as a function of the rated current of the motor being used.

³⁾ Motor FLA may vary with speed and manufacturer. ALWAYS compare motor FLA to Nominal AMPS of drive.

⁴⁾ For UL508C compliance, use UL fuse type J.

⁵⁾ Model CFW300B10P0B2DB20 is capable of Single-Phase input without derating.

WEG CFW300 AC Drives – General Specifications

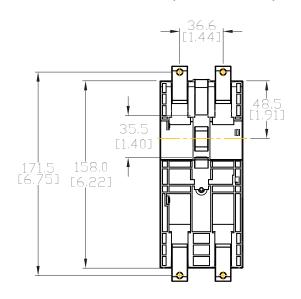
	CFW300	General Specifications (Applicable to All Models)							
0 - 1 - 1	Method	scaler (V/Hz) or voltage vector (VVW)							
Control	Output Frequency Range	0–400 Hz; 0.1Hz resolution							
Performance	V/Hz Control	Speed regulation: 1% of the rated speed (with slip compensation) Speed variation range: 1:20							
renonmance	VVW Control	Speed regulation: 1% of the rated speed Speed variation range: 1:30							
	Analog	1 insulated input; Levels: 0–10V or 0–20mA or 4–20mA Linearity error ≤ 0.25% Impedance: 100kΩ for voltage input; 500Ω for current input Programmable functions Maximum voltage permitted in the input: 30VDC							
Inputs	Digital	4 isolated inputs Programmable functions • active high (PNP): maximum low level of 10VDC minimum high level of 20VDC • active low (NPN): maximum low level of 5VDC minimum high level of 10VDC Maximum input voltage of 30VDC Input current: 11mA Maximum input current: 20mA							
Outputs	Relay	relay with NO/NC contact aximum voltage: 250VAC aximum current: 0.5A rogrammable functions							
	Power Supply	10VDC power supply; maximum capacity: 50mA							
Safety	Protection	Overcurrent/Phase-Phase short circuit in the output Under/Overvoltage Motor overload Overtemperature in the power module (IGBTs) Fault / External alarm Programming error							
Keypad	Integral (HMI)	4 keys: Start/Stop, Up arrow, Down arrow, and Programming LCD Display View/Edit all parameters Indication accuracy: • current: 5% of the rated current • speed resolution: 0.1Hz							
Rated/Default Carri	er Frequency	5kHz (selectable 2.5, 5, 10, or 15 kHz)							
Input Voltage Range	9	1-phase 115V models: 110–127 VAC (-15%, +10%) 1-phase & 3-phase 230V models: 200–240 VAC (-15%, +10%)							
Input Frequency Ra	nge	50/60Hz (48 to 62 Hz)							
Allowable Input Pha	se Imbalance	<3% of rated phase-to-phase input voltage							
Overload Capacity		150% for 60sec every 10min; 200% for 3 sec every 10min							
Braking		Frame size A models: Not available Frame size B models: Integrated brake chopper							
Ambient Operating	Temperature	14 to 122 °F (-10 to 50°C); up to 140°F (60°C) with current derating (2% per 1°C above 50°C)							
Altitude		0 to 3300ft (1000m); up to 13,200 ft (4000m) with current derating (1% per 100m above 1000m)							
Humidity		5 to 95% non-condensing							
Mounting		DIN rail or surface mounting with screws							
Mounting Orientatio	on	Vertical and upright; can be mounted side-to-side (zero stack)							
Environmental Prote	ection Rating	IP20							
Agency Approvals *		cUL _{us} [NMMS.E184430,NMMS7.E184430] (except CFW300-IOADR temperature combo module, CFW300-KFx-xx EMI Filters) CE (except CFW300-IOADR)							
* To obtain the most curre	ent agency approval information, see the	Agency Approval Checklist section on the specific part number's web page.							

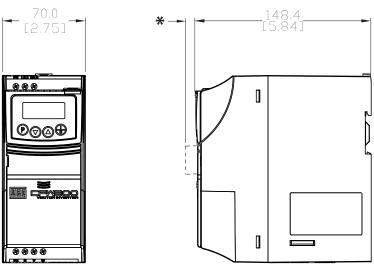
WEG CFW300 AC Drives – Dimensions

(mm [in])

See our website (www.AutomationDirect.com) for complete engineering drawings.

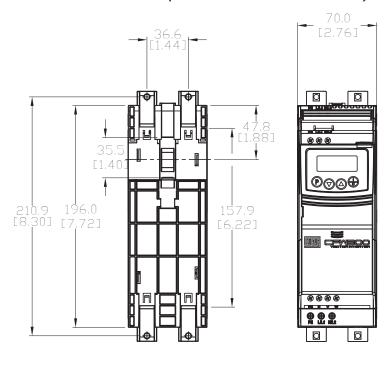
CFW300 Drive Frame Size A (without RFI Filter)

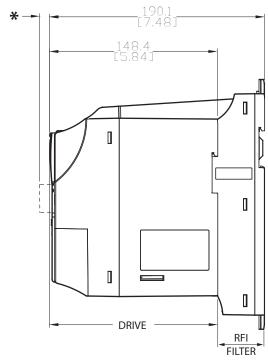




* Optional comm/HMI modules add to depth dimension as follows: CFW300-KHMIR, -RS232, or -RS485 adds: 21.2 [0.84] CFW300-CUSB adds: 14.6 [0.58]

CFW300 Drive Frame Size A (with RFI Filter CFW300-KFA-S1-S2)





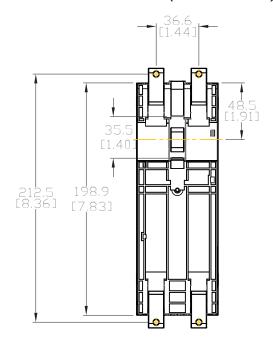
* Optional comm/HMI modules add to depth dimension as follows: CFW300-KHMIR, -RS232, or -RS485 adds: 21.2 [0.84] CFW300-CUSB adds: 14.6 [0.58]

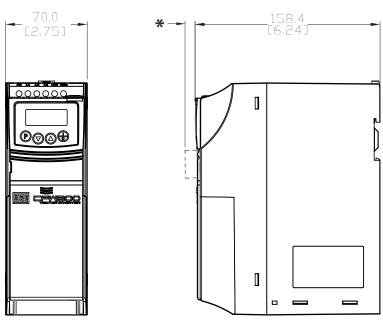
WEG CFW300 AC Drives – Dimensions

(mm [in])

See our website (www.AutomationDirect.com) for complete engineering drawings.

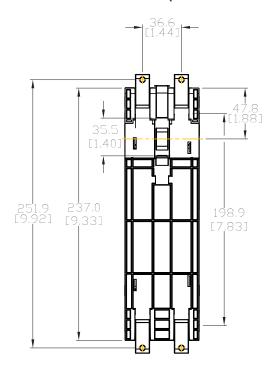
CFW300 Drive Frame Size B (without RFI Filter)



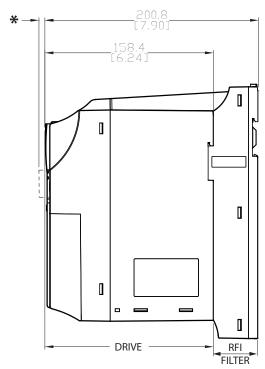


* Optional comm/HMI modules add to depth dimension as follows: CFW300-KHMIR, -RS232, or -RS485 adds: 21.2 [0.84] CFW300-CUSB adds: 14.6 [0.58]

CFW300 Drive Frame Size B (with RFI Filter CFW300-KFB-S2)







* Optional comm/HMI modules add to depth dimension as follows: CFW300-KHMIR, -RS232, or -RS485 adds: 21.2 [0.84] CFW300-CUSB adds: 14.6 [0.58]

WEG CFW300 AC Drives – Accessories

CFW300-CRS232



CFW300-CR\$485



CFW300-CUSB



CFW300-IOADR



CFW300-IOAENC



CFW300-IOAR



CFW300-IODR



CFW300-KFA-S1-S2



CFW300-KFB-S2



CFW300-KHMIR



<u>CFW100-CFW300-</u> <u>MMF</u>



CFW300-FAN-B



|--|



		WEG CFW300 AC Drives Accessories					
Model #	Price	Description	Use With Drive #CFW				
CFW300-CRS232 1)	\$41.50	RS-232 serial communication module (Modbus-RTU)					
CFW300-CRS485 1)	\$41.50	RS-485 serial communication module (Modbus-RTU)					
CFW300-CUSB 1)	\$44.00	USB communication module + 2m cable					
<u>CFW300-IOADR</u> ²⁾	\$105.00	WEG Electric CFW300 series temperature combo module with infrared remote control, thermistor, 1-channel input, 3-point output, 250 VAC, (3) Form A (SPST) relays. For use with WEG CFW300 series AC drives.					
CFW300-IOAENC 2)	\$73.00	WEG Electric CFW300 series encoder analog combo module, 400 kHz maximum switching frequency, 1-channel quadrature encoder input, Analog Input: 1-channel, Analog Output: 2-channel. For use with WEG CFW300 series AC drives.	all				
<u>CFW300-IOAR</u> ²⁾	voltage, Discrete Output: 3-point, relay, (3) Form A (SPST) relays. For use with WEG CFW300 series AC drives.						
<u>CFW300-IODR</u> ²⁾	\$55.00	VEG Electric CFW300 series discrete combo module, Input: 4-point, 24 VDC, sinking/sourcing, Output: 3-point, 250 VAC, relay, (3) Form A SPST) relays, 5A/point. For use with WEG CFW300 series AC drives.					
CFW300-KFA-S1-S2	\$46.00	WEG Electric EMI input filter, 1-phase, 7.3A, 35mm DIN rail mount, EMI/RFI filtering. For use with WEG CFW300Axxx 1-phase AC drives.	300A				
CFW300-KFB-S2	\$53.00	WEG Electric EMI input filter, 1-phase, 10A, 35mm DIN rail mount, EMI/RFI filtering. For use with WEG CFW300Bxxx 1-phase AC drives.	300B				
CFW300-KHMIR 1)	\$130.00	WEG Electric CFW300 series remote serial HMI, for use with WEG CFW300 series AC drives. (1) CFW300-CRS485 communication module, (1) 9.8ft/3m USB A to miniB-USB cable and installation hardware for optional panel mounting included.	all				
<u>CFW100-CFW300-</u> <u>MMF</u>	Retired	WEG Electric CFW300 series flash memory module, for use with WEG CFW300 series AC drives. (Requires three AAA batteries; not included.)					
CFW300-FAN-A	\$35.50	Spare/Replacement main cooling fan for CFW300 frame size A drives	300A				
CFW300-FAN-B	\$35.50	Spare/Replacement main cooling fan for CFW300 frame size B drives	300B				
1) Only one communication	or UMI mo	dula par driva: mauntad in unpar elat	•				

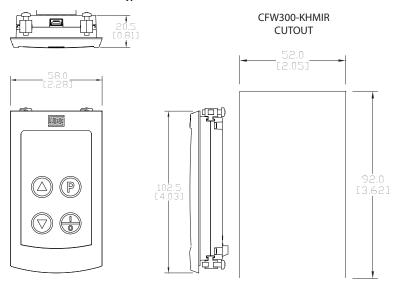
¹⁾ Only one communication or HMI module per drive; mounted in upper slot

²⁾ Only one I/O expansion module per drive; mounted in lower slot

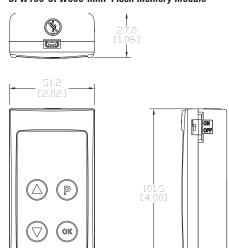
WEG CFW300 AC Drives Accessories -**Dimensions**

(mm [in])
See our website (<u>www.AutomationDirect.com</u>) for complete engineering drawings.

CFW300-KHMIR Remote Keypad



CFW100-CFW300-MMF Flash Memory Module



WEG CFW300 AC Drives – Accessories

		Add	litional Acc	essories	Rec	om	mende	d for WE	G CFW30) AC	Drive	<u>S</u>		
Drive Part #	I march	O/D	Motor Protector	1) 4)	Fuse	1) 4)					Fi	Iter		
CFW300	Input Ø/V	C/B Amp	WEG ^{1) 5)}	Fuji ⁴⁾	Amp	CI	ass J ¹⁾	Class J Holder	Class T ⁴⁾	Clas Hol		WEG EMI/RFI	Roxburgh EMI	
A01P6S1NB20		10	MPW40-3-U010	BM3RHB-013 BM3VHB-013	20	JHL2	<u>20</u> (<u>JHL20-1</u>)	JM60030-1CR	TJN20 (TJN20-1)	T3003	0-2SR			
A02P6S1NB20	1Ø 115VAC	16	MPW40-3-U016	BM3RHB-020 BM3VHB-020	20	JHL2	<u>20</u> (<u>JHL20-1</u>)	JM60030-1CR	TJN20 (TJN20-1)	T3003	0-2SR CI	FW300-KFA- S1-S2		
A04P2\$1NB20	TIOVAC	20	MPW40-3-U020 ²⁾	BM3RHB-025 BM3VHB-025	35	JHL3	85 (<u>JHL35-1</u>)	JM60060-1CR	<u>TJN35</u> <u>TJN35-1</u>)	T3006	0-2CR	51-52		
A06P0\$1NB20		32	MPW40-3-U032 3)	BM3VHB-040	35	JHL3	85 (<u>JHL35-1</u>)	JM60060-1CR	<u>TJN35</u> <u>TJN35-1</u>)	T3006	0-2CR			
A01P6S2NB20		6.3	MPW40-3-D063	BM3RHB-010 BM3VHB-010	20	JHL2	<u>20</u> (JHL20-1)	JM60030-2CR	TJN20 (TJN20-1)	T3003	0-2SR		,	
A02P6S2NB20		10	MPW40-3-U010	BM3RHB-013 BM3VHB-013	20	JHL2	<u>20</u> (JHL20-1)	JM60030-2CR	TJN20 (TJN20-1)	T3003	0-2SR		n/a	
A04P2S2NB20	1Ø	16	MPW40-3-U016	BM3RHB-020 BM3VHB-020	20	JHL2	<u>20</u> (<u>JHL20-1</u>)	JM60030-2CR	TJN20 (TJN20-1)	T3003	0-2SR	CFW300-		
A06P0S2NB20	230VAC	16	MPW40-3-U016	BM3RHB-020 BM3VHB-020	20	JHL2	<u>20</u> (<u>JHL20-1</u>)	JM60030-2CR	TJN20 (TJN20-1)	<u>T3003</u>	0-2SR	KFB-S2		
A07P3S2NB20		20	MPW40-3-U020 2)	BM3RHB-025 BM3VHB-025	25	JHL2	25 (JHL25-1)	JM60030-2CR	TJN25 (TJN25-1)	T3003	0-2SR			
B10P0B2DB20		25	MPW40-3-U025 ²⁾	BM3RHB-032 BM3VHB-032	35	JHL3	85 (JHL35-1)	JM60060-2CR	TJN35 TJN35-1)	T3006	0-2CR			
A01P6T2NB20		2.5	MPW40-3-D025	BM3RHB-004	20	JHL2	<u>20</u> (<u>JHL20-1</u>)	JM60030-3CR	TJN20 (TJN20-1)	<u>T3003</u>	0-3SR		KMF306A MIF310	
A02P6T2NB20		6.3	MPW40-3-D063	BM3RHB-010 BM3VHB-010	20	JHL2	<u>20</u> (<u>JHL20-1</u>)	JM60030-3CR	TJN20 (TJN20-1)	T3003	0-3SR		KMF310A MIF310	
A04P2T2NB20		10	MPW40-3-U010	BM3RHB-013 BM3VHB-013	20	JHL2	<u>20</u> (JHL20-1)	JM60030-3CR	TJN20 (TJN20-1)	T3003	0-3SR		KMF318A MIF316	
A06P0T2NB20	3Ø 230VAC	10	MPW40-3-U010	BM3RHB-013 BM3VHB-013	20	JHL2	<u>(JHL20-1)</u>	JM60030-3CR	TJN20 (TJN20-1)	<u>T30030-3SR</u>		n/a	KMF318A MIF316	
A07P3T2NB20		16	MPW40-3-U016	BM3RHB-020 BM3VHB-020	20	JHL2	<u>20</u> (<u>JHL20-1</u>)	JM60030-3CR	TJN20 (TJN20-1)	T3003	0-3SR	KMF31 MIF31		
B10P0B2DB20		25	MPW40-3-U025 ²⁾	BM3RHB-032 BM3VHB-032	35	JHL3	85 (JHL35-1)	JM60060-3CR	TJN35 TJN35-1)	T3006	0-3CR		KMF336A MIF330B	
B15P2T2DB20		25	MPW40-3-U025 2)	BM3RHB-032 BM3VHB-032	35	JHL3	85 (JHL35-1)	JM60060-3CR	TJN35 TJN35-1)) <u>T30060-3CR</u>			KMF336A MIF330B	
									Braking Resi	Braking Resistors ⁶⁾				
Drive Part # (same as above) CFW300	Input Ø/V	Input I	Line Reactor	Output Load F	Reacto	r	3-Phase 0 Filter	output dV/dT	Resistor (ADC)	Drive Rated A	Peak Braking Current I _{pk} (A)	Registor	Max Braking Current I _{rms} (A)	Max Braking Torque* (%)
A01P6S1NB20		L	R2-10P2-1PH	LR2-20	<u> </u>		VT	F-46-DE						
A02P6S1NB20	1Ø	L	R2-10P5-1PH	LR2-20)P5		VTF	-246-CFG						
A04P2\$1NB20	115VAC	L	R2-22P0-1PH	LR2-20	<u>)P5</u>		VT	F-24-FH						
A06P0\$1NB20		_	R2-11P5-1PH	LR2-2				F-24-FH	_					
A01P6S2NB20			R2-20P2-1PH	LR2-20				F-46-DE	n/a			n/a		
A02P6S2NB20			R2-20P5-1PH	LR2-20				-246-CFG	-					
A04P2\$2NB20 A06P0\$2NB20	1Ø 230VAC		R2-21P0-1PH R2-21P5-1PH		<u>1P0</u> 2P0			F-24-FH F-24-FH	-					
A007032NB20			R2-22P0-1PH	LR2-22				-246-GJJ	-					
B10P0B2DB20			P5 (1PH) / <u>LR-23P0</u>	LR-23				-246-HKL	GS-25P0-BR	10	11	39	10	110%
A01P6T2NB20			R2-20P2-1PH	LR2-20				F-46-DE	<u>00 201 0 BIX</u>	10		00	10	11070
A02P6T2NB20		_	LR2-20P5	LR2-20				-246-CFG	1					
A04P2T2NB20	3Ø		LR2-20P7	LR2-20				F-24-FH	n/a			n/a		
A06P0T2NB20	230VAC		LR2-20P7	LR2-20)P7		VT	F-24-FH	1					
A07P3T2NB20		L	R2-10P2-1PH	LR2-22	2P0		VTF	-246-GJJ	<u></u>					
B15P2T2DB20			LR-25P0	LR-25	P0		VT	F-24-JL	GS-25P0-BR	15	11	39	10	73%
0.14/50 1.0.1 1.000			(051.4)											

¹⁾ WEG published "High Fault" SCCR ratings (65kA) require the use of either the MPW40 motor protector or Class J fuses.

²⁾ For these MPW40 models, the CLT32 accessory is required for 65kA SCCR (without CLT32 current limiter, the SCCR maximum is 50kA).

³⁾ For this MPW40 model, the CLT32 accessory is required for 65kA SCCR (without CLT32 current limiter, the SCCR maximum is 42kA).

⁴⁾ The use of Fuji BM3RHB motor protectors or Class T fuses will lower the SCCR to the "Standard Fault" rating of 5kA.

⁵⁾ WEG MPW motor protectors and TCI KDR reactors are not currently sold by AutomationDirect.

⁶⁾ Max braking torque @ 10% duty cycle with maximum ON (braking) time of 10 seconds.



CFW320 Series AC Drives – Introduction



WEG CFW3	WEG CFW320 Series AC Drives														
Motor Poting	hp	0.25	0.5	1	1.5	2	3	5	7.5	10					
Motor Rating	kW	0.2	0.4	0.75	1.3	1.5	2.2	3.7	5.5	7.5					
115V Single-Phase Input / 230V Three-Phase Ou	ıtput	√	✓	✓	✓										
230V Single-Phase Input / 230V Three-Phase Oเ	ıtput	✓	✓	✓	✓	✓	✓								
230V Three-Phase Input / 230V Three-Phase Ou	tput	√	✓	✓	✓	✓	√	✓							
460V Three-Phase Input / 460V Three-Phase Ou	tput		✓	✓		✓	✓	✓	✓	✓					

WEG CFW320 Overview

WEG CFW320 variable frequency drives are high-performance VFDs for three-phase induction motors. They are ideal for applications on machines or equipment that require precise variable-speed control with easy setup and operation. The CFW320 series adds expanded capability above the CFW300, with 460V models up to 10HP and optional Ethernet communications connectivity.

The CFW320 series features compact size with contactor-style electrical connections (top in / bottom out). The CFW320's performance can be scaled to match the application by selecting WEG vector control (VVW) or scalar control (V/F).

CFW320s include built-in operator interface (HMI) and SoftPLC with free WPS programming software for custom-tailored control schemes. A variety of plug-in option modules for additional I/O and communications protocols are available to provide extended capabilities, making the CFW320 a flexible and cost effective solution for your variable-speed requirements.

Features

- Single-phase and three-phase voltage supply
- DIN rail (35mm) or surface mounting with screws
- Side-by-side mounting; no heat dissipation space required beside/between the drives
- Voltage range:
- 1-phase models, 120VAC and 230VAC
- 3-phase models: 230VAC and 460VAC
- Current/Power range: 230V up to 15.2A / 5HP. 460V up to 14A / 10HP
- Control mode: Scalar (V/Hz) or Voltage Vector (VVW)
- Switching frequency: 2.5, 5, 10, or 15kHz
- Output frequency range: 0–400 Hz; 0.1Hz resolution

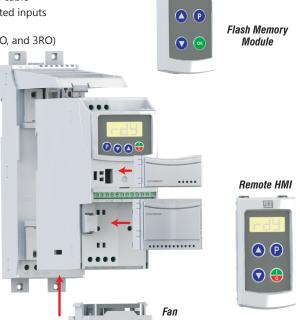
- Overload capacity: 150% for 60sec every 10min; 200% for 3sec every 10min
- Degree of protection: IP20
- Operating temperatures:
 120VAC & 230VAC models 32 to 122°F (0 to 50°C); up to 140°F (60°C) with current derating (2% per 1°C above 50°C)
 460VAC models 32 to 104°F (0 to 40°C); up to 122°F (50°C) with current derating (2% per 1°C above 40°C)
- Altitude: 0 to 3300ft (1000m); up to 13,200 ft (4000m) with current derating (1% per 100m above 1000m)
- Integrated dynamic braking available on select models. (All 460V & 230V B Frame)
- · Local keypad standard on all models.
- cULus, CE

Typical Applications

- Blenders / Mixers
- Centrifugal pumps
- Centrifuges
- Commercial Dryers
- Compressors
- Conveyors
- Fans / Blowers
- Granulators
- Roller Tables
- · Rotary Filters
- Great match with WEG S Series Rolled Steel AC Motors

Accessories

- Remote keypad with mounting kit and cable
- Ethernet communication module: dual port supports Modbus TCP and EtherNet/IP
- RS-232 serial communication module (Modbus RTU)
- RS-485 serial communication module (Modbus RTU)
- USB communication module and cable
- IODR expansion module Insulated inputs (NPN or PNP)
- IOAR expansion module (1AI, 1AO, and 3RO)
- IOAENC incremental encoder module (A/A - B/B) with additional analog IO
- MMF-UDRIVES flash memory module and cable
- IOP speed potentiometer
- RFI Filter



Modular design with easy-to-install accessories

FW320 AC Drives – Selection Specifications

CFW320 Drive Model Selection Tables CFW320A (Frame Size A) CFW320B (Frame Size B) CFW320B (Frame Size B)

CFW320C (Frame Size C)

Zero-Stack Mounting (no side-to-side heat dissipation space required)







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			WE	G CFW	320 AC	Drives	s Selec	ction S	pecific	cation	S				
		Applic	able Mot	or 1) 2)	Drive C	Output	Drive	Input	Input Pr	otection			Drive		
Drive Model #	Price	Maximur (hp)	n Power (kW)	Nominal Phase / Voltage	Rated Current ³⁾ (A)	Nominal Phase / Voltage	Nominal Phase / Voltage	Rated Current (A)	Circuit Breaker (A)	Fuse ⁴⁾ (A)	Power Loss (W)	Dynamic Braking	Weight	Frame Size	Drawing Link
CFW320A01P6S1NB20	\$185.00	0.25	0.18		1.6			7.1	10	20	30				PDF
CFW320A02P6S1NB20	\$201.00	0.5	0.50		2.6		1Ø /	11.5	16	20	45				PDF
CFW320A04P2S1NB20	\$215.00	1.0	0.75		4.2		120 VAC	17.7	20	35	60				PDF
CFW320A06P0S1NB20	\$259.00	1.5	1.32		6.0			26.5	32	40	75	1			PDF
CFW320A01P6S2NB20	\$165.00	0.25	0.18		1.6			3.5	6.3	20	30				PDF
CFW320A02P6S2NB20	\$178.00	0.5	0.50		2.6			5.7	10	20	35	1			PDF
CFW320A04P2S2NB20	\$190.00	1.0	0.75		4.2		1Ø / 230 VAC	9.2	16	20	50	No	0.90 kg	_	PDF
CFW320A06P0S2NB20	\$236.00	1.5	1.32		6.0		230 VAC	13.2	16	20	75	No	[1.98 lb]	A	PDF
CFW320A07P3S2NB20	\$277.00	2.0	1.50	3Ø /	7.3	3Ø /		16.1	20	25	90				PDF
CFW320A01P6T2NB20	\$175.00	0.25	0.18	230 VAC	1.6	230 VAC		2.0	2.5	20	30				PDF
CFW320A02P6T2NB20	\$192.00	0.5	0.50		2.6]		3.1	6.3	20	35				PDF
CFW320A04P2T2NB20	\$204.00	1.0	0.75		4.2		3Ø / 230 VAC	5.0	10	20	50				PDF
CFW320A06P0T2NB20	\$247.00	1.5	1.32		6.0		200 1/10	7.2	10	20	75				PDF
CFW320A07P3T2NB20	\$292.00	2.0	1.50		7.3			8.8	16	20	90				PDF
CFW320B10P0B2DB20	\$331.00	3.0	2.20		10.0		1Ø / 230 VAC	22.0 12.0	25	35	100	Yes	1.34 kg [2.95 lb]	В	PDF
CFW320B15P2T2DB20	\$404.00	5.0	3.70		15.2		3Ø / 230 VAC	18.2	25	35	160		[2.95 10]		PDF
CFW320A01P1T4NB20	\$238.00	0.5	0.55		1.1			1.3	1.6	20	26				PDF
CFW320A02P6T4NB20	\$247.00	1.0	1.10		2.6			3.1	4	20	42		0.90 kg		PDF
CFW320A03P5T4NB20	\$265.00	2.0		-	3.5			4.2	6.3	20	55	No	[1.98 lb]	A	PDF
CFW320A04P8T4NB20	\$326.00	3.0	2.20		4.8			5.8	10	20	69	-			PDF
CFW320B01P1T4DB20	\$249.00	0.5	0.55		1.1	-		1.3	1.6	20	26				PDF
CFW320B02P6T4DB20	\$262.00	1.0	1.10		2.6	1		3.1	4	20	42				PDF
CFW320B03P5T4DB20	\$289.00	2.0		3Ø /	3.5	3Ø /	3Ø /	4.2	6.3	20	55	Yes	1.34 kg		PDF
CFW320B04P8T4DB20	\$365.00	3.0	2.20	460 VAC	4.8	460 VAC	460 VAC	5.8	10	20	69	1	[2.95 lb]	В	PDF
CFW320B07P6T4DB20	\$436.00	F. 0	0 =0		7.0	1		0.1	16	25	111	1			PDF
CFW320B07P6T4NB20	\$413.00	5.0	3.70		7.6			9.1	16	25	111	No	1		PDF
CFW320C11P0T4DB20	\$493.00	7.5	F 50	1	44.0	1		40.0	20	25	164	Yes			PDF
CFW320C11P0T4NB20	\$469.00	7.5	5.50		11.0			13.2	20	25	164	No	1.50 kg		PDF
CFW320C14P0T4DB20	\$610.00	40.0	7.50	1	44.0	1		40.0	25	30	172	Yes	[3.30 lb]	С	PDF
CFW320C14P0T4NB20	\$580.00	10.0	7.50		14.0			16.8	25	30	172	No			PDF

¹⁾ For Use With 3-Phase Motors Only.

²⁾ The power values for the maximum applicable motor shown are reference values and are valid for WEG three-phase, four-pole induction motors with power supply of 230VAC. The proper sizing of the CFW320 drive must be determined as a function of the rated current of the motor being used.

³⁾ Motor FLA may vary with speed and manufacturer. ALWAYS compare motor FLA to Nominal AMPS of drive.

⁴⁾ For UL61800-5-1 compliance, use UL fuse type J for standard fault of 5kA.

⁵⁾ Model CFW320B10P0B2DB20 is capable of Single-Phase input without derating.

UPI CFW320 AC Drives – General Specifications

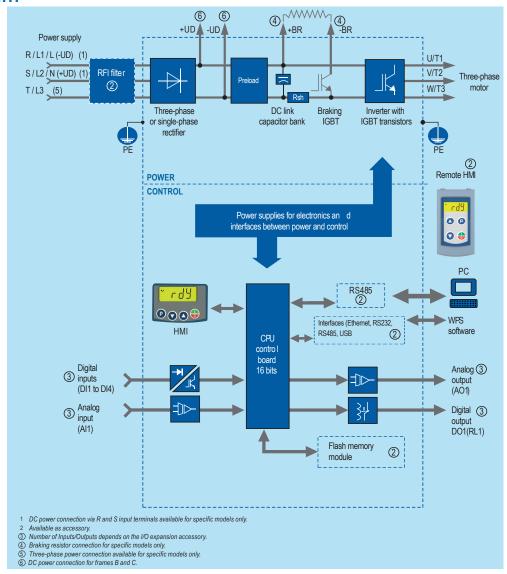
	CFW320	General Specifications (Applicable to All Models)
Control	Method	V/F (scalar) V/F (quadratic) VVW: voltage vector control PWM SVM (Space Vector Modulation)
	Output Frequency Range	0–400 Hz; 0.1Hz resolution
Performance	V/Hz Control	Speed regulation: 1% of the rated speed (with slip compensation) Speed variation range: 1:20
renonnance	VVW Control	Speed regulation: 1% of the rated speed Speed variation range: 1:30
	Analog	1 insulated input; Levels: 0–10V or 0–20mA or 4–20mA Linearity error ≤ 0.25% Impedance: 100kΩ for voltage input; 500Ω for current input Programmable functions Maximum input voltage allowed: 30VDC
Inputs	Digital	4 isolated inputs Programmable functions • active high (PNP): maximum low level of 10VDC minimum high level of 20VDC • active low (NPN): maximum low level of 5VDC minimum high level of 10VDC Maximum input voltage allowed: 30VDC Input current: 11mA Maximum input current: 20mA
Outputs	Relay	1 relay with NO/NC contacts Maximum voltage: 250VAC Maximum current: 0.5A Programmable functions
	Power Supply	10VDC power supply; maximum capacity: 50mA
Safety	Protection	Overcurrent/Phase-Phase short circuit in the output Under/Overvoltage Motor overload Overtemperature in the power module (IGBTs) Fault / External alarm Programming error
Keypad	Integral (HMI)	4 keys: Start/Stop, Up arrow, Down arrow, and Programming LCD Display View/Edit all parameters Indication accuracy: • current: 5% of the rated current • speed resolution: 0.1Hz
Rated/Default Carrie	er Frequency	5kHz (selectable 2.5, 5, 10, or 15 kHz)
Input Voltage Range	9	1-phase 120V models: 110–127 VAC (-15%, +10%) 1-phase & 3-phase 230V models: 200–240 VAC (-15%, +10%) 3-phase 460V: 380 - 480 VAC (-15%, +10%)
Input Frequency Rai	nge	50/60Hz (48 to 62 Hz)
Allowable Input Pha		≤3% of rated phase-to-phase input voltage
Overload Capacity		150% for 60sec every 10min; 200% for 3 sec every 10min
Braking		Integrated dynamic braking on select models: 230V: Frame B only (3HP & 5HP) 460V: Models offered for 0.5HP to 10HP
Ambient Operating	Temperature	120VAC & 230VAC models: 32 to 122°F (0 to 50°C); up to 140°F (60°C) with current derating (2% per 1°C above 50°C) 460VAC models: 32 to 104°F (0 to 40°C); up to 122°F (50°C) with current derating (2% per 1°C above 40°C)
Altitude		0 to 3300ft (1000m); up to 13,200 ft (4000m) with current derating (1% per 100m above 1000m)
Humidity		5 to 95% non-condensing
Mounting		35mm DIN rail or surface mounting with screws
Mounting Orientatio	n	Vertical and upright; can be mounted side-to-side (zero stack)
Environmental Prote	ection Rating	IP20
Agency Approvals *		cUL _{us} [NMMS.E184430,NMMS7.E184430] (except CFW320-KFx-xx EMI Filters), CE
* To obtain the most curre	ent agency approval information, see the	Agency Approval Checklist section on the specific part number's web page.

UEI CFW320 AC Drives

Part Number Breakdown

	CFW320 Part Number Breakdown														
Example Given: <u>CFW3</u>	mple Given: <u>CFW320A01P6S2NB20</u>														
Inverter / Smart		Model Ide	ntification		Internal	Protection	Hardware	Software							
Code	Size	Rated Output Current	Number of Phases	Rated Voltage	Dynamic Braking (IGBT)	Degree	Version	Version							
	Α	01P6	S	2	NB	20									
CFW320		& 3-Phase t dynamic braking (IGP) rnamic braking (IGB) hardware													

Block Diagram





CFW320 AC Drives – Accessories

		WEG CFW320 AC Drives Accessories	
Model #	Price	Description	Drawing Link
Accessory Modules			
CFW320-CETH	\$147.00	WEG Electric CFW320 series communication module, EtherNet/IP, Modbus TCP and webserver, 2 ports, (2) Ethernet (RJ45) port(s). For use with WEG CFW320 series AC drives.	PDF
CFW320-CRS232	\$44.00	WEG Electric CFW320 series communication module, Modbus RTU, 1 port, (1) RS-232 (5-pin terminal) port(s). For use with WEG CFW320 series AC drives.	PDF
CFW320-CRS485	\$44.00	WEG Electric CFW320 series communication module, Modbus RTU, 2 ports, (1) RS-485 (5-pin terminal) and (1) miniB-USB port(s). For use with WEG CFW320 series AC drives.	PDF
CFW320-CUSB	\$50.00	WEG Electric CFW320 series communication module, Modbus RTU, 1 port, (1) miniB-USB port(s). For use with WEG CFW320 series AC drives. (1) 6.5ft/2m USB A to miniB-USB cable included.	PDF
CFW320-IOAENC	\$76.00	WEG Electric CFW320 series encoder analog combo module, 400 kHz maximum switching frequency, 1-channel quadrature encoder input, Analog Input: 1-channel, Analog Output: 2-channel. For use with WEG CFW320 series AC drives.	PDF
CFW320-IOAR	\$75.00	WEG Electric CFW320 series relay/analog combo module, Analog Input: 1-channel, current/voltage, Analog Output: 1-channel, current/voltage, Discrete Output: 3-point, relay, (3) Form A (SPST) relays. For use with WEG CFW320 series AC drives.	PDF
CFW320-IODF	\$62.00	WEG Electric CFW320 series pulse combo module, 3 kHz maximum switching frequency, 3 high-speed input point(s), sinking, single-ended encoder input(s), 3 high-speed output point(s), sourcing, single-ended output(s).	<u>PDF</u>
CFW320-IODR	\$58.00	WEG Electric CFW320 series discrete combo module, Input: 4-point, 24 VDC, sinking/sourcing, Output: 3-point, 250 VAC, relay, (3) Form A (SPST) relays, 5A/point. For use with WEG CFW320 series AC drives.	PDF
<u>CFW320-IOP</u>	\$46.00	WEG Electric CFW320 series speed potentiometer module, enclosed, IP20, plastic housing. For use with WEG CFW320 series AC drives.	PDF
MMF-UDRIVES	\$112.00	WEG Electric CFW320 series flash memory module, for use with WEG CFW100, CFW300 and CFW320 series AC drives. (1) 3.2ft/1m miniB-USB cable included. (Requires three AAA batteries; not included.)	PDF
EMI Input Filters			
<u>CFW320-KFA-S1-S2</u>	\$48.00	WEG Electric EMI input filter, 1-phase, 7.3A, 35mm DIN rail mount, EMI/RFI filtering. For use with WEG CFW320AxxxSx 1-phase AC drives.	PDF
<u>CFW320-KFA-T2</u>	\$89.00	WEG Electric EMI input filter, 3-phase, 7.3A, 35mm DIN rail mount, EMI/RFI filtering. For use with WEG CFW320AxxxT2 3-phase AC drives.	<u>PDF</u>
CFW320-KFA-T4	\$89.00	WEG Electric EMI input filter, 3-phase, 4.8A, 35mm DIN rail mount, EMI/RFI filtering. For use with WEG CFW320AxxT4 3-phase AC drives.	<u>PDF</u>
CFW320-KFB-S2	\$56.00	WEG Electric EMI input filter, 1-phase, 10A, 35mm DIN rail mount, EMI/RFI filtering. For use with WEG CFW320B10P0B2DB20 AC drive with 1-phase input power only.	<u>PDF</u>
CFW320-KFB-T2	\$109.00	WEG Electric EMI input filter, 3-phase, 15.2A, 35mm DIN rail mount, EMI/RFI filtering. For use with WEG CFW320BxxxT2 3-phase AC drives.	PDF
CFW320-KFB-T4	\$109.00	WEG Electric EMI input filter, 3-phase, 8.2A, 35mm DIN rail mount, EMI/RFI filtering. For use with WEG CFW320BxxxT4 3-phase AC drives.	PDF
CFW320-KFC-T4	\$116.00	WEG Electric EMI input filter, 3-phase, 15A, 35mm DIN rail mount, EMI/RFI filtering. For use with WEG CFW320CxxxT4 3-phase AC drives.	PDF
Remote Keypad			
CFW320-KHMIR	\$136.00	WEG Electric CFW320 series remote serial HMI keypad, for use with WEG CFW320 series AC drives. (1) CFW320-CRS485 communication module, (1) 9.8ft/3m miniB-USB to miniB-USB cable and installation hardware for optional panel mounting included.	PDF
Cooling Fans			
CFW300-FAN-B-T4	\$27.00	WEG Electric CFW320 series main cooling fan, replacement, 50 x 50 x 15mm, 12 VDC. For use with WEG CFW320B4xx AC drives.	PDF
CFW300-FAN-A	\$35.50	WEG Electric CFW300 series main cooling fan, replacement, 50 x 50 x 15mm, 12 VDC. For use with WEG CFW300Axxx AC drives.	PDF
CFW300-FAN-B	\$35.50	WEG Electric CFW300 series main cooling fan, replacement, 50 x 50 x 15mm, 12 VDC. For use with WEG CFW300Bxxx AC drives.	PDF
CFW300-FAN-C	\$40.00	WEG Electric CFW320 series main cooling fan, replacement, 50 x 50 x 15mm, 12 VDC. For use with WEG CFW320C4xx AC drives.	PDF

CFW320-CUSB



CFW320-CETH



CFW320-IOAENC



CFW320-IODR



CFW320-KFA-T2



CFW300-FAN-C



CFW320-CRS485



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UPI CFW320 AC Drives – Accessories

CFW320A0FPS1NB20		Ad	ditio	nal Accesso	ories Recon	nmended fo	r WEG CFW	/320 AC Dri	ves	
Part		Innut	C/P	Motor Protector	1)	Fuse ¹⁾			Filter	
The control of the	Drive Part #			WEG 3) 4)	Fuji	Amp	Class J ²⁾	Class J Holder		Roxburgh EMI
CFW320A6P851M820 100 100 MP2M63-10002 893/99-9005 35 ML35	CFW320A01P6S1NB20		10	MPW40-3-U010		20	JHL20 JHL20-1	JM60030-1CR		n/a
CFW320A0FP251MB20	CFW320A02P6S1NB20	1Ø	16	MPW40-3-U016		20	JHL20 JHL20-1	JM60030-1CR		n/a
CFW320A0F952MB20	CFW320A04P2S1NB20	120VAC	20	MPW40-3-U020		35	JHL35 JHL35-1	JM60060-1CR		n/a
CFW320A0P25SMB20	CFW320A06P0S1NB20		32	MPW40-3-U032	BM3VHB-040	35	JHL35 JHL35-1	JM60060-1CR		n/a
10 MCMMQ-25-2008-20 240/AC 16 MCMMQ-3-1016 BMSMHB-000 15 MH-15 M-15-1 JM6000-2CR S1-52 Na S1-52	CFW320A01P6S2NB20		6.3	MPW40-3-D063		6	JHL6 JHL6-1	JM60030-2CR		n/a
CFW320A01PSSVB20 240VAC 16 MPYM0-3-LB16 BMSPH6-200 15 LBLS JBLS-1 JM00000-2CR CFW320AFFA Na CFW320A01PSSVB20 20 MPYM0-3-LB16 BMSPH6-200 20 LBLS JBLS-1 JM00000-2CR CFW320AFFA S1-S2 S1-S2 MPYM0-3-LB20 BMSPH6-200 20 LBLS JBLS-1 JM00000-2CR CFW320AFFA S1-S2 MPYM0-3-LB20 BMSPH6-200 20 LBLS JBLS-1 JM00000-3CR CFW320AFFA S1-S2 MPYM0-3-LB20 BMSPH6-200 20 LBLS JBLS-1 JM00000-3CR CFW320AFFA S1-S2 MPYM0-3-LB20 BMSPH6-200 20 LBLS JBLS-1 JM00000-3CR CFW320AFFA MF310 MF310 MF310 BMSPH6-200 20 LBLS JBLS-1 JM00000-3CR CFW320AFFA MF310 MF310 BMSPH6-200 20 LBLS JBLS-1 JM00000-3CR CFW320AFFA MF310 MF310 BMSPH6-200 20 LBLS JBLS-1 JM00000-3CR CFW320AFFA MF316 M	CFW320A02P6S2NB20		10	MPW40-3-U010		10	JHL10 JHL10-1	JM60030-2CR		n/a
The State of the Committee of the Comm	CFW320A04P2S2NB20		16	MPW40-3-U016		15	JHL15 JHL15-1	JM60030-2CR		n/a
DEM320A01P6T2NB20 25 Juli23 Juli25 Juli25 Juli25 Juli	CFW320A06P0S2NB20		16	MPW40-3-U016		20	JHL20 JHL20-1	JM60030-2CR		n/a
CFW320A0PPTANB20 CFW320A0PPTANB20 CFW320A0PPTANB20 CFW320A0PPTANB20 CFW320A0PPTANB20 CFW320A0PPTANB20 CFW320A0PPTANB20 CFW320A0PPTANB20 CFW320A0PPTANB20 10 MPW40-3-U010 BMSRHB-010 10 JHL10 JHL10-1 JM60030-3CR CFW320-KFA-T2 MMS136-MIS	CFW320A07P3S2NB20		20	MPW40-3-U020		25	JHL25 JHL25-1	JM60030-2CR		n/a
CFW320A0F2T2NB20	CFW320A01P6T2NB20		2.5	MPW40-3-D025	BM3RHB-004	6	JHL6 JHL6-1	JM60030-3CR	CFW320-KFA-T2	
CFW320AGP072NB20 240VAC 10 MFW40-3-U010 BMSPHB-013 15 JHL15 JHL15-1 JM60030-3CR CFW320-KFA-T2 MF316 MF316 BMSPHB-020 BMSPHB-020 25 JHL25 JHL25-1 JM60030-3CR CFW320-KFA-T2 CFW320-KFA-T2 MF316	CFW320A02P6T2NB20		6.3	MPW40-3-D063		10	JHL10 JHL10-1	JM60030-3CR	CFW320-KFA-T2	
10 MP-W4Q-3-U016 BM3/HB-032 20 HEL20 JHE20-1 JM60030-3CR CFW320-KFR-12 MF316	<u>CFW320A04P2T2NB20</u>		10	MPW40-3-U010		15	JHL15 JHL15-1	JM60030-3CR	CFW320-KFA-T2	
10 MPW40-3-U025 BM3VHB-020 25 JHL25 JHL25-1 JM60030-3CR CFW320-KFB-52 Dia DM3VHB-020 DM3VHB-032 DM3V	<u>CFW320A06P0T2NB20</u>		10	MPW40-3-U010		20	JHL20 JHL20-1	JM60030-3CR	CFW320-KFA-T2	
240VAC 25 MPW40-3-U026 BM3VHB-032 35 JHL35 JHL35-1 JM60060-3CR CFW320-KFB-T2 KMF336A KMF336B KMF330B K	<u>CFW320A07P3T2NB20</u>		16	MPW40-3-U016		25	JHL25 JHL25-1	JM60030-3CR	CFW320-KFA-T2	
25 MPW40.3-U025 BMSRHB-032 35 JHL35-1 JM60060-3CR CPW320-KFB-T2 MF330B BMSRHB-032 30 JHL30 JHL30-1 JM60030-3CR CFW320-KFB-T2 MF330B BMSRHB-032 30 JHL30 JHL30-1 JM60030-3CR CFW320-KFB-T2 MF330B JHL330B JHL31-1 JM60030-3CR CFW320-KFB-T2 MF330B JHL330B JHL32-1 JM60030-3CR CFW320-KFB-T2 MF330B JHL330B JHL3-1 JM60030-3CR CFW320-KFB-T4 MF330B JHL3-1 JHL10-1 JHL10-1 JM60030-3CR CFW320-KFB-T4 MF330B JHL3-1 JHL10-1 JM60030-3CR CFW320-KFB-T4 MF330B JHL	CEW320R10P0R2DR20		25	MPW40-3-U025		35	JHL35 JHL35-1	JM60060-3CR	CFW320-KFB-S2	<u>n/a</u>
CFW320A01P174NB20	OT WOZOB TOT OBEBBEO		25	MPW40-3-U025		35	JHL35 JHL35-1	JM60060-3CR	CFW320-KFB-T2	
1.6 MPW40.3-D016 BM3RHB-010 BM3RHB-010 BM3RHB-013 BM3RHB-0	CFW320B15P2T2DB20		25	MPW40-3-U025		30	JHL30 JHL30-1	JM60030-3CR	CFW320-KFB-T2	MIF330B
CFW320A03P5T4NB20	<u>CFW320A01P1T4NB20</u>		1.6	MPW40-3-D016	BM3RHB-2P5	3	JHL3 JHL3-1	JM60030-3CR	CFW320-KFA-T4	MIF330B
6.3 MPW40-3-U010 BM3RHB-013 15 JHL15 JHL15-1 JM60030-3CR CFW320-KFA-T4 KMF316A MF316 MFW40-3-U016 BM3RHB-013 BM3VHB-013 MFW40-3-U016 BM3RHB-010 MFW40-3-U016 BM3RHB-010 BM3RHB-010 MFW40-3-U016 BM3RHB-010 BM3RHB-010 MPW40-3-U016 BM3RHB-010 BM3RHB-010 MFW40-3-U016 BM3RHB-010 MPW40-3-U016 BM3RHB-010 MPW40-3-U016 BM3RHB-010 MPW40-3-U016 BM3RHB-010 MFW40-3-U016 BM3RHB-010 MFW40-3-U016 BM3RHB-010 MFW40-3-U016 BM3RHB-010 MFW40-3-U016 BM3RHB-010 MFW40-3-U016 MFW40-3-U0	<u>CFW320A02P6T4NB20</u>		4	MPW40-3-U004		6	JHL6 JHL6-1	JM60030-3CR	CFW320-KFA-T4	MIF310
15 MPW40-3-U010 BM3VHB-013 15 JHL15 JHL15-1 JM60030-3CR CFW320-KFB-T4 MF336A	<u>CFW320A03P5T4NB20</u>		6.3	MPW40-3-D063		10	JHL10 JHL10-1	JM60030-3CR	CFW320-KFA-T4	MIF310
1.6 MPW40-3-U016 BM3RHB-6P3 3 JHL3-H JM60030-3CR CFW320-KFB-T4 MIE330B	<u>CFW320A04P8T4NB20</u>		15	MPW40-3-U010		15	JHL15 JHL15-1	JM60030-3CR	CFW320-KFA-T4	MIF316
CFW320B03P5T4DB20	CFW320B01P1T4DB20		1.6	MPW40-3-D016	BM3RHB-2P5	3	JHL3 JHL3-1	JM60030-3CR	CFW320-KFB-T4	MIF330B
CFW320B03P5T4DB20	CFW320B02P6T4DB20		4	MPW40-3-U004	BM3RHB-6P3	6	JHL6 JHL6-1	JM60030-3CR	CFW320-KFB-T4	
To MPW40-3-U010 BM3VHB-013 T5 JHL15-1 JM60030-3CR CFW320-KFB-14 MIF316	CFW320B03P5T4DB20	240VAC	6.3	MPW40-3-D063	BM3VHB-010	10	JHL10 JHL10-1	JM60030-3CR	CFW320-KFB-T4	MIF310
The MPW40-3-U016 BM3VHB-013 25 JHL25 JHL25-1 JM60030-3CR CFW320-KFB-14 MIF316	CFW320B04P8T4DB20		10	MPW40-3-U010	BM3VHB-013	15	JHL15 JHL15-1	JM60030-3CR	CFW320-KFB-T4	MIF316
CFW320C11P0T4DB20 16 MPW40-3-U016 BM3VHB-020 25 JHL25 JHL25-1 JM60030-3CR CFW320-KFC-T4 MIF316 CFW320C11P0T4DB20 20 MPW40-3-U020 BM3RHB-025 BM3VHB-025 BM3VHB-025 25 JHL25 JHL25-1 JM60030-3CR CFW320-KFC-T4 KMF325A MIF323 CFW320C14P0T4DB20 25 MPW40-3-U025 BM3RHB-032 BM3VHB-032 BM3VHB-032 30 JHL30 JHL30-1 JM60030-3CR CFW320-KFC-T4 KMF336A MIF330B CFW320C14PDT4DB20 25 MPW40-3-U025 BM3RHB-032 BM3RHB-032 30 JHL30 JHL30-1 JM60030-3CR CFW320-KFC-T4 KMF336A KMF336A	CFW320B07P6T4DB20		16	MPW40-3-U016	BM3VHB-013	25	JHL25 JHL25-1	JM60030-3CR	CFW320-KFB-T4	MIF316
CFW320C11P0T4NB20 20 MPW40-3-U020 BM3VHB-025 25 JHL25 JHL25-1 JM60030-3CR CFW320-KFC-T4 MIF323 CFW320C11P0T4NB20 20 MPW40-3-U020 BM3RHB-025 BM3VHB-025 25 JHL25 JHL25-1 JM60030-3CR CFW320-KFC-T4 KMF325A MIF323 CFW320C14P0T4DB20 25 MPW40-3-U025 BM3RHB-032 BM3VHB-032 30 JHL30 JHL30-1 JM60030-3CR CFW320-KFC-T4 KMF336A MIF330B CFW320C14PDT4NB20 25 MPW40-3-U025 BM3RHB-032 30 JHL30 JHL30-1 JM60030-3CR CFW320-KFC-T4 KMF336A	CFW320B07P6T4NB20		16	MPW40-3-U016	BM3VHB-020	25	JHL25 JHL25-1	JM60030-3CR	CFW320-KFB-T4	MIF316
CFW320C14P0T4DB20 25 MPW40-3-U025 BM3VHB-025 25 JHL25 JHL25-1 JM60030-3CR CFW320-KFC-14 MIF323 CFW320C14P0T4DB20 25 MPW40-3-U025 BM3RHB-032 BM3VHB-032 30 JHL30 JHL30-1 JM60030-3CR CFW320-KFC-T4 KMF336A MIF330B CFW320C14PDT4NB20 25 MPW40-3-U025 BM3RHB-032 30 JHL30 JHL30-1 JM60030-3CR CFW320-KFC-T4 KMF336A	CFW320C11P0T4DB20		20	MPW40-3-U020	BM3VHB-025	25	JHL25 JHL25-1	JM60030-3CR	CFW320-KFC-T4	MIF323
CEW320C14P014DB20 25 MPW40-3-U022 BM3VHB-032 30 JHL30 JHL30-1 JM00030-3CR CFW320-RFC-14 MIF330B	CFW320C11P0T4NB20		20	MPW40-3-U020		25	JHL25 JHL25-1	JM60030-3CR	CFW320-KFC-T4	MIF323
	CFW320C14P0T4DB20		25	MPW40-3-U025		30	JHL30 JHL30-1	JM60030-3CR	CFW320-KFC-T4	MIF330B
<u> </u>	CFW320C14P0T4NB20		25	MPW40-3-U025	BM3RHB-032 BM3VHB-032	30	JHL30 JHL30-1	JM60030-3CR	CFW320-KFC-T4	KMF336A MIF330B

¹⁾ Only valid for standard fault rating of 5kA. For High Fault ratings (65kA), please use current limiter "CLT32MPW40" in addition to "MPW40-x-xxxx + LST25 + TSB".

²⁾ Only valid for standard fault rating of 5kA.

³⁾ LST25 For use with MPW40 series manual motor protectors. Required when using a MPW40 in a UL Type E application 32A and less.

⁴⁾ Optional TSB Short Circuit Alarm contact for MPW40 and MPW80 series motor protectors

UPI CFW320 AC Drives – Accessories

Addition	al Accessoi	ies Recommended fo	r WEG CFW320 AC D	rives - cont'd			
Drive Part #	Input Ø/V	ADC Input Line Reactor	ADC Output Line Reactor	3-Phase Output dV/dT Filter			
CFW320A01P6S1NB20		LR2-10P2-1PH-A	LR2-20P2	VTF-46-DE			
CFW320A02P6S1NB20	1Ø	LR2-10P5-1PH-A	LR2-20P2	VTF-246-CFG			
CFW320A04P2S1NB20	120VAC	LR2-11P5-1PH	LR2-20P5	VTF-24-FH			
CFW320A06P0S1NB20		LR2-20P5-1PH	LR2-20P7	VTF-24-FH			
CFW320A01P6S2NB20		LR2-20P5-1PH	LR2-20P2	VTF-46-DE			
CFW320A02P6S2NB20		LR2-20P5-1PH	LR2-20P2	VTF-246-CFG			
CFW320A04P2S2NB20	1Ø 230VAC	LR2-21P5-1PH-A	LR2-20P5	<u>VTF-24-FH</u>			
CFW320A06P0S2NB20	200 1110	LR2-22P0-1PH	LR2-20P7	VTF-24-FH			
CFW320A07P3S2NB20		LR2-23P0-1PH	LR2-20P7	VTF-246-GJJ			
CFW320A01P6T2NB20		LR2-20P2	LR2-20P2	VTF-46-DE			
CFW320A02P6T2NB20		<u>LR2-20P5</u>	LR2-20P2	VTF-246-CFG			
CFW320A04P2T2NB20	3Ø 230VAC	<u>LR2-20P7</u>	LR2-20P5	VTF-24-FH			
CFW320A06P0T2NB20		<u>LR2-20P7</u>	<u>LR2-20P7</u>	VTF-24-FH			
CFW320A07P3T2NB20		<u>LR2-21P0</u>	LR2-20P7	VTF-246-GJJ			
CFW320B10P0B2DB20	1Ø 230VAC	<u>LR-27P5</u>	LR2-21P5	VTF-246-HKL			
	3Ø	<u>LR2-23P0</u>					
CFW320B15P2T2DB20	230VAC	<u>LR-27P5</u>	<u>LR2-21P5</u>	VTF-24-JL			
CFW320A01P1T4NB20		<u>LR2-40P7</u>	<u>LR2-40P7</u>	VTF-46-DE			
CFW320A02P6T4NB20		<u>LR2-42P0</u>	<u>LR2-41P5</u>	VTF-246-CFG			
CFW320A03P5T4NB20		LR2-43P0	LR2-43P0	VTF-246-DGH			
CFW320A04P8T4NB20		<u>LR2-45P0</u>	<u>LR2-43P0</u>	VTF-24-FH			
CFW320B01P1T4DB20		LR2-40P7	LR2-40P7	VTF-46-DE			
CFW320B02P6T4DB20		<u>LR2-42P0</u>	<u>LR2-41P5</u>	VTF-246-CFG			
CFW320B03P5T4DB20	3Ø	LR2-43P0	LR2-43P0	VTF-246-DGH			
CFW320B04P8T4DB20	460 VA	<u>LR2-45P0</u>	LR2-43P0	VTF-24-FH			
CFW320B07P6T4DB20		<u>LR2-47P5</u>	LR2-47P5	VTF-246-HKL			
CFW320B07P6T4NB20		<u>LR2-47P5</u>	LR2-47P5	VTF-246-HKL			
CFW320C11P0T4DB20		<u>LR2-4010</u>	<u>LR2-4010</u>	VTF-246-HKL			
CFW320C11P0T4NB20		<u>LR2-4010</u>	<u>LR2-4010</u>	VTF-246-HKL			
CFW320C14P0T4DB20		<u>LR-4015</u>	<u>LR-4020</u>	VTF-24-JL			
CFW320C14P0T4NB20		<u>LR-4015</u>	LR-4020	VTF-24-JL			



Braking Resistors for WEG CFW320 AC Drives

Dynamic braking absorbs the motor regeneration energy when the motor is decelerated faster than it would if it was allowed to coast to a stop. The regeneration energy is dissipated by braking resistors. The drive models listed in the table below have the braking function built-in and do not require a separate dynamic braking unit. The recommended open type or NEMA 1 type brake resistors available at AutomationDirect for each drive model are listed in the table below.

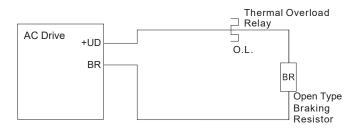
		WEG	CFW 3	320 A	C Drive	Brak	ing Co	10	nponent S	elec	tion*			
		Drive R	atings			ake Capa ax Torque			Open Type Bra	king R	esistors	NEMA1 Resistors		Thermal
Drive Part #	Input Voltage Phases	Input Voltage (VAC)	Drive Rated Amps (A)	Motor Power (hp)	Minimum Resistor (Ω)	Max Current (A)	Peak Power (kW)	Part #		Qty.	Total Brake Current (A)	Part #	Qty.	Total Brake Current (A)
CFW320B10P0B2DB20	1/3	230	10	3	39	11	4.7		<u>GS-BR-400W040</u>	1	9.8	BR-N1-280W50	1	7.8
CFW320B15P2T2DB20	3	230	15.2	5	39	"	4.7		<u>GS-BR-1K5W040</u>	1	9.0	BR-N1-1K5W40	1	9.8
CFW320B01P1T4DB20			1.6	0.5						1			1	
CFW320B02P6T4DB20			2.6	1	180	4.4	3.4		GS-BR-300W250	1	3.2	BR-N1-240W200	1	4.0
CFW320B03P5T4DB20			3.5	2						1			1	
CFW320B04P8T4DB20	3	460	4.8	3	82	9.8	7.8		GS-BR-500W100	1	7.9	BR-N1-500W130	1	6.1
CFW320B07P6T4DB20			7.6	4	68	11.8	9.4		GS-BR-750W140	1	5.6	BR-N1-720W85	1	9.3
CFW320C11P0T4DB20	1		11	7.5	39	20.5	16.3		00 DD 4VCW040	1	10.0	DD N4 4VCW40	1	10.0
CFW320C14P0T4DB20			14	10	39	20.5	10.3		<u>GS-BR-1K5W040</u>	1	19.8	<u>BR-N1-1K5W40</u>	1	19.8

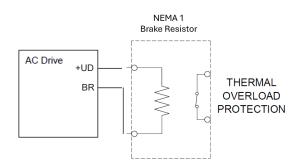
^{*}Note: Only the models listed are available with dynamic braking.

Brake Wiring

Use your drive's braking component selection table to determine the appropriate brake resistor model and configuration for your drive. Refer to the diagrams below for examples on how to wire each possible configuration.

Drive + 1 Resistor or NEMA1 Resistor:







CFW500 AC Drives – Introduction



Overview

The CFW500 is a high-performance VFD for applications that require speed and torque control of three-phase induction motors. The drive supports many methods of control including scaler V/ Hz, sensorless vector control, as well as closed-loop vector control which provides the ability to produce 100% torque at zero speed. It also has SoftPLC, which adds PLC (programmable logic controller) functions, safety functions (STO and SS1) making it easier to comply with machine and application safety requirements, and selectable plug-in modules that provide a flexible and optimized solution for any application.

CFW500 drives include built-in operator interface (HMI) with free WPS programming software for customtailored control schemes. A variety of plug-in option modules for additional I/O and communications protocols may be added to provide extended capabilities, making the CFW500 a flexible and cost effective solution for your variable-speed requirements.

Features

- · Single-phase and three-phase voltage supply
- DIN rail (35mm), A, B, and C frame, or surface mounting with screws
- Frame F/G flange mount capable and built-in dual DC bus chokes for harmonics reductions.
- Voltage range:
- 1-phase/3-phase models: 200–240 VAC
- 3-phase models: 200–240 VAC, 380–480 VAC
- Current/power range: up to 211A/112kW
- Control mode: Sensorless or closed loop vector control, VVW or Scalar V/F and permanent magnet motor control: VVW PM



- Switching frequency: 2.5, 5, 10, or 15kHz
- Output frequency range: 0–500 Hz; 0.1Hz resolution
- Overload Capacity (HD): 150% for 60sec every 10min; 200% for 3 sec every 10min

Environmental

- Degree of protection: IP20 or IP66 (NEMA4X)
- Operating temperature:

CFW500-IP20, Frame A to E: 14°F (-10°C) to 122°F (50°C) w/o derating. Up to 140°F (60°C) with derating.

CFW500-IP20, Frame F: 14°F (-10°C) to 104°F (40°C) w/o derating. Up to 140°F (60°C) with derating.

CFW500-IP20, Frame G: 14°F (-10°C) to 113°F (45°C) w/o derating. Up to 140°F (60°C) with derating.

CFW500-IP66: 14°F (-10°C) to 104 °F(40°C) w/o derating. Up to 122°F (50°C) with derating.

- Altitude: 0 to 3300ft (1000m); up to 13,200 ft (4000m) with current derating (1% per 100m above 1000m)
- Humidity: 5 to 95% non-condensing

Safety

- Integrated brake chopper (part numbers including "DB")
- Optional STO (Safe Torque Off) and SS1 (Safe Stop 1) fulfils requirements for safety performance SIL 3 / PL e, according to IEC 61800-5-2, EN ISO 13849-1, EN 6206, IEC 61508, and IEC 60204-1

Convenience

- · Local keypad supplied as standard
- Conformal Coating (Tropicalization) as standard, class 3C2 according to IEC 60721-3-3 and 3C3 as an option, to protect against corrosive gases in harsh environments
- cULus, TUV, CE

Keypads

- Remote keypad with mounting hardware
- Advanced text remote keypad with mounting hardware

Communication Modules

- RS-232 serial communication module (Modbus RTU)
- RS-485 serial communication module (Modbus RTU)
- USB communication module and cable
- Modbus TCP communication module
- EtherNet/IP communication module

Expansion Modules

- ĪOD expansion module (8 DI, 1 AI, 1 AO, 1 DOR, 4 DOT, 1 RS485, 10VDC, 24VDC)
- IOAD expansion module (6 DI, 3 AI, 2 AO, 1 DOR, 3 DOT, 1 RS485, 10VDC, 24VDC)
- IOR-B expansion module (5 DI, 1 AI, 1 AO, 4 DOR, 1 DOT, 1 RS485, 10VDC, 24VDC)
- Incremental encoder module (A/A B/B)
- Flash memory module

Typical Applications

- Blenders / Mixers
- Centrifugal pumps
- Centrifuges
- Commercial dryers
- Compressors
- Conveyors
- Fans / Blowers
- Granulators
- Roller tables
- Rotary filters

Accessories

			W	G	CFW	/500) Se	erie	s A	C D	riv	es										
Mater Peting	hp	0.25	0.33	0.5	0.75	1	1.5	2	3	5	7.5	10	15	20	25	30	40	50	60	75	100	150
Motor Rating kW		0.2	0.4	0.4	0.56	0.75	1.3	1.5	2.2	3.7	5.5	7.5	11.0	15.0	18.7	22.0	29.8	37.3	44.8			
230V 1-Phase Input / 230V 3-Phase Ou	tput	*		*		*	*	*	*													
230V 3-Phase Input / 230V 3-Phase Output		*		*		*	*	*	*	*	*	*	✓	✓	✓	✓	✓					
460V 3-Phase Input / 460V 3-Phase Ou	tput		*	×	√	√		*	*	*	*	*	*	*	✓	✓	✓	√	✓	✓	√	√

√ = IP20 model available

X = IP66 models available

★ = IP20 and IP66 models available



Selecting the Proper Drive Rating

Selecting the Proper Drive Rating

Determine Motor Voltage and Full-Load Amperage (FLA)

Motor voltage and FLA are specified on the nameplate of the motor.

NOTE: FLA of motors that have been rewound may be higher than stated.

Determine Motor Overload Requirements

Many applications experience temporary overload conditions due to starting requirements or impact loading. Most AC drives are designed to operate at 150% overload for 60 seconds. If the application requires an overload greater than 150% or longer than 60 seconds, the AC drive must be oversized.

NOTE: Applications that require replacement of existing motor starters with AC drives may require up to 600% overload.

Determine Application Type: Constant Torque or Variable Torque

This torque requirement has a direct effect on which drive to select. Variable Torque applications are generally easier to start (typically fans and pumps). Most other applications outside fans and pumps fall into the Constant Torque category (machine control, conveyors, etc.). If you are unsure of the application, assume Constant Torque. The specification, derating, and selection tables are generally segregated by Constant Torque and Variable Torque.

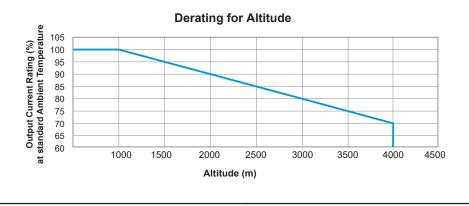
Installation Altitude

AC drives rely on air flow for cooling. As the altitude increases, the air becomes less dense, and this drop in air density decreases the cooling properties of the air. Therefore, the AC drive must be oversized to compensate for the decrease in cooling. WEG CFW500 drives are designed to operate at 100% capacity at altitudes up to 1000 meters [3281ft].

NOTE: For use above 1000m [3281ft], the AC drive must be derated as described below.

Derate Output Current Based on Altitude Above 1000 Meters [3281 feet]

- If the AC drive is installed at an altitude of 0–1000m [3281ft], follow normal operation restrictions.
- If installed at an altitude of 1000–4000m [3281–13123 ft], decrease 1% of the rated voltage (240V for 200–240V models, 480V for 380–480V models, and 600V for 500–600V models) for every 100m [328ft] increase in altitude.
- Maximum altitude is 4000m [13123ft]. If installation at an altitude higher than 4000m [13123ft] is required, please contact AutomationDirect.





CFW500 AC Drives – Selection

Selecting the Proper Drive Rating, continued

Determine Maximum Enclosure Internal Temperature

AC drives generate a significant amount of heat and can cause the internal temperature of an enclosure to exceed the rating of the WEG CFW500 drive, even when the ambient temperature is less than 104°F [40°C]. Enclosure ventilation and/or cooling may be required to reduce maximum internal temperature to 104°F [40°C] or less. Ambient temperature measurements/calculations should be made for the maximum expected temperature.

NOTE: For use above 104°F [40°C], the AC drive must be derated as described below.

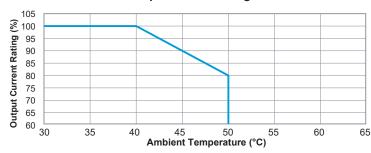
For IP20, Frame A to Frame E (side-by-side mounting), NEMA1 Kit, or IP66 Drives, Derate Output Current Based on Temperature Above 104°F [40°C]

Drive Derating by Temperature

Derating

When the WEG CFW500 drive is operating at rated current, the ambient temperature has to be between -10°C and +40°C [14°F and 104°F]. When ambient temperature exceeds 40°C [104°F], decrease the rated current by 2% for every 1°C [1.8°F] temperature increase. Maximum allowable temperature is 50°C [122°F].

Ambient Temperature Derating for Frame A-E



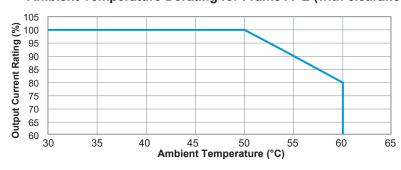
For IP20, Frame A to Frame E (with minimum clearance), Derate Output Current Based on Temperature Above 122°F [50°C]

Drive Derating by Temperature

Derating

When the WEG CFW500 IP20 frame size A-E (with proper clearance) drive is operating at rated current, the ambient temperature has to be between -10°C and +50°C [14°F and 122°F]. When ambient temperature exceeds 50°C [122°F], decrease the rated current by 2% for every 1°C [1.8°F] temperature increase up to 60°C [140°F].

Ambient Temperature Derating for Frame A-E (with clearance)





CFW500 AC Drives – Selection

Selecting the Proper Drive Rating, continued

Determine Maximum Enclosure Internal Temperature

AC drives generate a significant amount of heat and can cause the internal temperature of an enclosure to exceed the rating of the WEG CFW500 drive, even when the ambient temperature is less than 104°F [40°C]. Enclosure ventilation and/or cooling may be required to reduce maximum internal temperature to 104°F [40°C] or less. Ambient temperature measurements/calculations should be made for the maximum expected temperature.

NOTE: For use above 104°F [40°C], the AC drive must be derated as described below.

For Frame F, Derate Output Current Based on Temperature Above 104°F [40°C] or 122°F [50°C] For Frame G, Derate Output Current Based on Temperature Above 113°F [45°C] or 122°F [50°C]

Drive Derating by Temperature

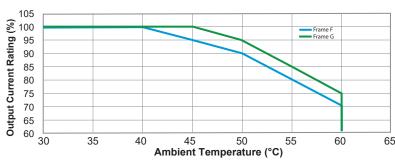
Derating

When WEG CFW500 frame size F drives are operating at rated current, the ambient temperature has to be between -10°C and +40°C [14°F and 104°F]. When ambient temperature exceeds 40°C [104°F], decrease the rated current by 1% for every 1°C [1.8°F] temperature increase up to 50°C [122°F].

When WEG CFW500 frame size G drives are operating at rated current, the ambient temperature has to be between -10°C and +45°C [14°F and 113°F]. When ambient temperature exceeds 45°C [113°F], decrease the rated current by 1% for every 1°C [1.8°F] temperature increase up to 50°C [122°F].

For both Frame F and G, when ambient temperature exceeds 50°C [122°F], decrease the rated current by 2% for every 1°C [1.8°F] temperature increase. Maximum allowable temperature is 60°C [140°F].

Ambient Temperature Derating for Frame F-G





Selecting the Proper Drive Rating, continued

Derate Output Current Based on Carrier Frequency (if necessary)

Carrier Frequency Effects

AC Drives rectify the incoming 50 or 60Hz line power resulting in DC power at 0Hz. The resulting DC power is then pulse-width modulated and supplied to the motor by the drive's power electronics. IGBTs invert the DC power, simulating a sine wave at the desired frequency (that's what allows variable speed in AC induction motors). The speed at which the IGBTs are turned ON and OFF is called the Carrier Frequency. In WEG CFW500 drives, the Carrier Frequency can range from 2kHz to 15kHz. Though Carrier Frequency can be adjusted, there are trade-offs between high Carrier Frequencies and low Carrier Frequencies.

Benefits of Higher Carrier Frequencies:

- · Better efficiency (lower harmonic losses) in the motor
- · Lower audible noise

Benefits of Lower Carrier Frequencies:

- Better efficiency in the drive
- · Lower EMI (electrical noise)
- · Reduced reflective wave peak voltage

As a general rule, the Carrier Frequency should be set as low as possible without creating unacceptable audible noise in the motor. Smaller systems can have higher Carrier Frequencies, but larger drives (>20 or 30hp) should not have Carrier Frequencies set higher than 6kHz. Heavy duty applications typically run around 2–4 kHz

Derating Tables

The table below shows the derating values for each model of WEG CFW500 drive.

	cy Derating, IP20 Drives, A–E Fra		0.5.111	50111	40.0111	45.0111
WEG MAT #	Model #	Frame	2.5 kHz	5.0 kHz	10.0 kHz	15.0 kHz
<u>15570800</u>	CFW500A01P6B2NB20G2	A	1.6 A	1.6 A	1.6 A	1.6 A
<u>15571879</u>	CFW500A02P6B2NB20G2	Α	2.6 A	2.6 A	2.6 A	2.6 A
<u>15571881</u>	CFW500A04P3B2NB20G2	Α	4.3 A	4.3 A	3.5 A	2.8 A
<u>15572625</u>	CFW500A07P0T2NB20G2	Α	7A	7A	5.8 A	4.9 A
<u>15572689</u>	CFW500A09P6T2NB20G2	Α	9.6 A	9.6 A	8A	6.7 A
<u>15574655</u>	CFW500B07P3B2DB20G2	В	7.3 A	7.3 A	6.1 A	5.1 A
<u>15575067</u>	CFW500B10P0B2DB20G2	В	10A	10A	8A	6.5 A
<u>15575202</u>	CFW500B16P0T2DB20G2	В	16A	16A	12.7 A	10.1 A
<u>15575701</u>	CFW500C24P0T2DB20G2	С	24A	25A	19A	16A
<u>15575716</u>	CFW500D28P0T2DB20G2	D	28A	28A	22A	18A
<u>15576540</u>	CFW500D47P0T2DB20G2	D	47A	47A	36A	30A
15577077	CFW500E56P0T2DB20G2	Е	56A	56A	43A	33A
15572819	CFW500A01P0T4NB20G2	Α	1A	1A	1A	1A
15572908	CFW500A01P6T4NB20G2	Α	1.6 A	1.6 A	1.6 A	1.6 A
15573714	CFW500A02P6T4NB20G2	Α	2.6 A	2.6 A	2.6 A	2A
<u>15573819</u>	CFW500A04P3T4NB20G2	Α	4.3 A	4.3 A	2.9 A	2A
15573823	CFW500A06P1T4NB20G2	Α	6.1 A	6.1 A	4.3 A	3.1 A
<u>15575568</u>	CFW500B02P6T4DB20G2	В	2.6 A	2.6 A	2.6 A	2A
<u>15575577</u>	CFW500B04P3T4DB20G2	В	4.3 A	4.3 A	2.9 A	2A
<u>15575665</u>	CFW500B06P5T4DB20G2	В	6.5 A	6.5 A	4.5 A	3.3 A
<u>15575699</u>	CFW500B10P0T4DB20G2	В	10A	10A	6.5 A	4.3 A
<u>15575707</u>	CFW500C14P0T4DB20G2	С	14A	14A	10A	7A
<u>15575711</u>	CFW500C16P0T4D820G2	С	16A	16A	10A	7A
<u>15576919</u>	CFW500D24P0T4DB20G2	D	24A	24A	15A	12A
<u>15577021</u>	CFW500D31P0T4DB20G2	D	31A	31A	16A	13A
<u>15577211</u>	CFW500E39P0T4DB20G2	Е	39A	39A	30A	19A
15577452	CFW500E49P0T4DB20G2	Е	49A	49A	30A	20A

Carrier Frequency Derating, IP20 Drives, F-G Frame

WEG MAT #	Model #	Frame	2.5	kHz	4.0	kHz	5.0	kHz	10.0 kHz	
WEG INAI #	inouel #	FIAIIIE	ND	HD	ND	HD	ND	HD	ND	HD
15342437	CFW500F77P0T2DB20G2	F	77A	64A	77A	64A	_	_	42.3 A	36.6 A
<u>15342760</u>	CFW500F88P0T2DB20G2	F	88A	75A	88A	75A	_	_	52.6 A	43.7 A
<u>15342909</u>	CFW500F0105T2DB20G2	F	105A	88A	88A	73A	_	_	52.6 A	43.7 A
15733937	CFW500F77P0T4DB20G2	F	77A	61A	77A	61A	_	_	42.3 A	36.6 A
<u>15734064</u>	CFW500F88P0T4DB20G2	F	88A	73A	88A	73A	_	_	52.6 A	43.7 A
<u>15734119</u>	CFW500F0105T4DB20G2	F	105A	88A	88A	73A	_	_	52.6 A	43.7 A
<u>15448371</u>	CFW500G0142T4DB20G2	G	142A	115A	_	-	111A	90A	_	-
15448372	CFW500G0180T4DB20G2	G	180A	142A	_	-	140A	111A	_	-
<u>15448373</u>	CFW500G0211T4DB20G2	G	211A	180A	_	_	164A	140A	_	-



Selecting the Proper Drive Rating, continued

rating Tables, conti The table below show	ws the derating values for each model of	WEG CEW500 driv	e		
	Derating, IP66 Drives with Disconne		<u>. </u>		
WEG MAT #	Model #	2.5 kHz	5.0 kHz	10.0 kHz	15.0 kHz
14990863	CFW500A01P6B2DB66DSG2	1.6 A	1.6 A	1.6 A	1.6 A
14991103	CFW500A02P6B2DB66DSG2	2.6 A	2.6 A	2.6 A	2.6 A
14991753	CFW500A04P3B2DB66DSG2	4.3 A	4.3 A	3.5 A	2.8 A
14938005	CFW500A07P3B2DB66DSG2	7.3 A	7.3 A	6.1 A	5.1 A
14938047	CFW500A10P0B2DB66DSG2	10A	10A	8A	6.7 A
14938113	CFW500A16P0T2DB66DSG2	16A	16A	12.7 A	10.1 A
14975838 *	CFW500B24P0T2DB66DSG2	24A	24A @ 4.0 kHz	19A	16A
14938655	CFW500B28P0T2DB66DSG2	28A	28A	22A	18A
14991953	CFW500A01P0T4DB66DSG2	1A	1A	1A	1A
14992148	CFW500A01P6T4DB66DSG2	1.6 A	1.6 A	1.6 A	1.6 A
14976517	CFW500A02P6T4DB66DSG2	2.6 A	2.6 A	2.6 A	2A
14976809	CFW500A04P3T4DB66DSG2	4.3 A	4.3 A	2.9 A	2A
14977065	CFW500A06P5T4DB66DSG2	6.5 A	6.5 A	4.5 A	3.3 A
14977266	CFW500A10P0T4DB66DSG2	10A	10A	6.5 A	4.3 A
14977397	CFW500B14P0T4DB66DSG2	14A	14A	10A	7A
<u>14977556</u>	CFW500B16P0T4DB66DSG2	16A	16A	10A	7A
<u>14978365</u>	CFW500B24P0T4DB66DSG2	24A	24A	15A	12A
14978573	CFW500B31P0T4DB66DSG2	31A	31A	16A	13A
Carrier Frequency	Derating, IP66 Drives, No Disconned	et			
WEG MAT #	Model #	2.5 kHz	5.0 kHz	10.0 kHz	15.0 kHz
<u>14989840</u>	CFW500A01P6B2DB66G2	1.6 A	1.6 A	1.6 A	1.6 A
14990985	CFW500A02P6B2DB66G2	2.6 A	2.6 A	2.6 A	2.6 A
<u>14991517</u>	CFW500A04P3B2DB66G2	4.3 A	4.3 A	3.5 A	2.8 A
14937890	CFW500A07P3B2DB66G2	7.3 A	7.3 A	6.1 A	5.1 A
14938041	CFW500A10P0B2DB66G2	10A	10A	8A	6.7 A
<u>14938111</u>	CFW500A16P0T2DB66G2	16A	16A	12.7 A	10.1 A
<u>14975783</u> *	CFW500B24P0T2DB66G2	24A	24A @ 4.0 kHz	19A	16A
14938547	CFW500B28P0T2DB66G2	28A	28A	22A	18A
<u>14991899</u>	CFW500A01P0T4DB66G2	1A	1A	1A	1A
<u>14992113</u>	CFW500A01P6T4DB66G2	1.6 A	1.6 A	1.6 A	1.6 A
<u>14975888</u>	CFW500A02P6T4DB66G2	2.6 A	2.6 A	2.6 A	2A
<u>14976683</u>	CFW500A04P3T4DB66G2	4.3 A	4.3 A	2.9 A	2A
<u>14976814</u>	CFW500A06P5T4DB66G2	6.5 A	6.5 A	4.5 A	3.3 A
<u>14977261</u>	CFW500A10P0T4DB66G2	10A	10A	6.5 A	4.3 A
<u>14977391</u>	CFW500B14P0T4DB66G2	14A	14A	10A	7A
<u>14977552</u>	CFW500B16P0T4DB66G2	16A	16A	10A	7A
14977629	CFW500B24P0T4DB66G2	24A	24A	15A	12A

CFW500 AC Drives – Selection

WEG CFW500 Drive Model Selection Tables

NOTE: For all model specifications, HD = Heavy Duty, ND = Normal Duty

	W	EG CFV	V500	IP20	240V	AC Driv	res Se	ection	Speci	ficatio	ns				
			Applicable Motor ^{1,2}		lotor ^{1,2}	Drive (Output	Drive	Input	Inpo Protec		Dri	ive	king	
WEG MAT #	Model #	Price	Maximum Power		Nominal Phase /	Rated Current ³	Nominal Phase /	Nominal Phase /	Rated Circuit Current Breaker	Fuse ⁴	Weight	Frame	Dynamic Braking	Drawing Link	
			(hp)	(kW)	Voltage	(A)	Voltage	Voltage	(A)	(A)	(A)	(kg) [lb]	Size	Dynai	
<u>15570800</u>	CFW500A01P6B2NB20G2	\$232.00	0.25	0.18		1.6			4.0/2.05	5.5/2.5	20	0.8 [1.76]		N	PDF
<u>15571879</u>	CFW500A02P6B2NB20G2	\$238.00	0.50	0.37		2.6			6.5/3.15	9.0/4.0	20	0.8 [1.76]	Α	N	PDF
<u>15571881</u>	CFW500A04P3B2NB20G2	\$258.00	1	0.75		4.3		1Ph or 3Ph/ 230VAC	10.5/5.25	14/6.3	25/20	0.8 [1.76]		N	PDF
<u>15574655</u>	CFW500B07P3B2DB20G2	\$346.00	2	1.50		7.3		230VAC	17/8.6 ⁵	25/12	40/20	1.2 [2.65]	В -	Υ	PDF
15575067	CFW500B10P0B2DB20G2	\$403.00	3	2.20		10	. 3Ph/		25/12 ⁵	25/16	60/25	1.2 [2.65]		Υ	PDF
<u>15572625</u>	CFW500A07P0T2NB20G2	\$321.00	2	1.50		7			8.5 ⁵	10	20	0.8 [1.76]	Α	N	PDF
<u>15572689</u>	CFW500A09P6T2NB20G2	\$394.00	3	2.20		9.6			11.7 ⁵	16	25	0.8 [1.76]	A	N	PDF
15575202	CFW500B16P0T2DB20G2	\$430.00	5	3.70	3Ph/	16			19.5 ⁵	25	40	1.2 [2.65]	В	Υ	PDF
<u>15575701</u>	CFW500C24P0T2DB20G2	\$728.00	7.5	5.50	230VAC	24	230VAC		295	32	60	2.0 [4.4]	С	Υ	PDF
<u>15575716</u>	CFW500D28P0T2DB20G2	\$907.00	10	7.50		28			34.2	40	60	4.3 [9.47]	_	Υ	PDF
<u>15576540</u>	CFW500D47P0T2DB20G2	\$1,484.00	15	11.00		47		3Ph/ 230VAC	57.3	65	60	4.3 [9.47]	D	Υ	PDF
<u>15577077</u>	CFW500E56P0T2DB20G2	\$1,724.00	20	15.00		56		200 1710	68.32	80	125	10 [22.05]	Е	Υ	PDF
<u>15342437</u>	CFW500F77P0T2DB20G2	\$2,117.00	20 (25- ND)	15 (18.65- ND)		64 (77-ND)			61.44 (73.92- ND)	125	125	26 [57.3]		Υ	<u>PDF</u>
<u>15342760</u>	CFW500F88P0T2DB20G2	\$2,652.00	25 (30- ND)	18.65 (22- ND)		75 (88-ND)			72 (84.48- ND)	150	125	26 [57.3]	F	Υ	<u>PDF</u>
<u>15342909</u>	CFW500F0105T2DB20G2	\$3,596.00	30 (40- ND)	22 (30- ND)		88 (105-ND)			84.48 (100.8- ND)	200	125	26 [57.3]		Υ	<u>PDF</u>

¹⁾ For use with three-phase motors only.

²⁾ The power values for the maximum applicable motor shown are reference values and are valid for WEG three-phase, four-pole induction motors with power supply of 230VAC. The proper sizing of the CFW500 drive must be determined as a function of the rated current of the motor being used.

³⁾ Motor FLA may vary with speed and manufacturer. ALWAYS compare motor FLA to Nominal AMPS of drive.

⁴⁾ For UL508C compliance, use UL fuse type J.
5) UL Type E Starter consisting of WEG MPW40 (Manual Motor Protector) + CLT (current Limiter) + LST (line side Terminal block) + TSB (Trip indicating unit)

WEG CFW500 Drive Model Selection Tables, continued

NOTE: For all model specifications, HD = Heavy Duty, ND = Normal Duty

	W	EG CF	W500	IP20	480V	AC Driv	res Se	lection	Spec	ificatio	ns				
			Appl	icable M	lotor ^{1,2}	Drive Out	tput (HD)	Drive	Input	Input Pro	tection	Dri	ve	ing	
WEG MAT #	Model #	Price	Poi	mum wer	Nominal Phase / Voltage	Rated Current ³ (A)	Nominal Phase / Voltage	Nominal Phase / Voltage	Rated Current (A)	Circuit Breaker (A)	Fuse ⁴ (A)	Weight (kg) [lb]	Frame Size	Dynamic Braking	Drawing Link
			(hp)	(kW)	Voltage	(A)	vonaye	Voltage	(11)	(A)		[III]		Dyn	
<u>15572819</u>	CFW500A01P0T4NB20G2	\$297.00	0.33	0.18		1			1.2	1.6 ⁵	20	0.8 [1.76]		N	PDF
<u>15572908</u>	CFW500A01P6T4NB20G2	\$308.00	0.75	0.37		1.6			1.9	2.55	20	0.8 [1.76]		N	PDF
<u>15573714</u>	CFW500A02P6T4NB20G2	\$331.00	1	0.75		2.6			3.2	45	20	0.8 [1.76]	Α	N	PDF
<u>15573819</u>	CFW500A04P3T4NB20G2	\$408.00	2	1.5		4.3			5.2	6.35	20	0.8 [1.76]		N	PDF
<u>15573823</u>	CFW500A06P1T4NB20G2	\$501.00	3	2.2		6.1			7.4	10 ⁵	20	0.8 [1.76]		N	PDF
<u>15575568</u>	CFW500B02P6T4DB20G2	\$361.00	1	0.75		2.6			3.2	45	20	1.2 [2.65]	В	Υ	PDF
<u>15575577</u>	CFW500B04P3T4DB20G2	\$455.00	2	1.5		4.3			5.2	6.3 ⁵	20	1.2 [2.65]		Υ	PDF
<u>15575665</u>	CFW500B06P5T4DB20G2	\$544.00	3	2.2		6.5	3PH/ 480VAC		7.8	10 ⁵	20	1.2 [2.65]		Υ	PDF
<u>15575699</u>	CFW500B10P0T4DB20G2	\$615.00	5	3.7		10			12.0	16 ⁵	25	1.2 [2.65]		Υ	PDF
<u>15575707</u>	CFW500C14P0T4DB20G2	\$763.00	7.5	5.5		14		3PH/ 480VAC	17.1	20 ⁵	35	2.0 [4.4]	С	Υ	PDF
<u>15575711</u>	CFW500C16P0T4DB20G2	\$826.00	10	7.5	3PH/ 480VAC	16			19.5	25	35	2.0 [4.4]	С	Υ	PDF
<u>15576919</u>	CFW500D24P0T4DB20G2	\$1,137.00	15	11		24			29.3	40	60	4.3 [9.47]	D	Υ	PDF
<u>15577021</u>	CFW500D31P0T4DB20G2	\$1,420.00	20	15		31			37.8	50	60	4.3 [9.47]		Υ	PDF
<u>15577211</u>	CFW500E39P0T4DB20G2	\$1,707.00	25	18.5		39			47.6	50	80	10 [22.05]	Е	Υ	PDF
<u>15577452</u>	CFW500E49P0T4DB20G2	\$2,149.00	30	22		49			59.8	65	100	10 [22.05]	E	Υ	PDF
<u>15733937</u>	CFW500F77P0T4DB20G2	\$2,907.00	40	30		6)			64.66	80	125	26 [57.3]		Υ	PDF
15734064	CFW500F88P0T4DB20G2	\$3,723.00	50	37		73			77.38	100	125	26 [57.3]	F	Υ	PDF
<u>15734119</u>	CFW500F0105T4DB20G2	\$4,539.00	60	45		88			93.28	125	125	26 [57.3]		Υ	PDF
<u>15448371</u>	CFW500G0142T4DB20G2	\$5,349.00	75	55		115			110.4	175	300	52 [114.64]		Υ	PDF
15448372	CFW500G0180T4DB20G2	\$6,554.00	100	75		142		,	136.3	225	300	52 [114.64]	G	Υ	PDF
<u>15448373</u>	CFW500G0211T4DB20G2	\$7,603.00	150	110		180			172.8	250	300	52 [114.64]		Υ	PDF

¹⁾ For use with three-phase motors only.

²⁾ The power values for the maximum applicable motor shown are reference values and are valid for WEG three-phase, four-pole induction motors with power supply of 230VAC. The proper sizing of the CFW500 drive must be determined as a function of the rated current of the motor being used.

³⁾ Motor FLA may vary with speed and manufacturer. ALWAYS compare motor FLA to Nominal AMPS of drive.

⁴⁾ For UL508C compliance, use UL fuse type J.

⁵⁾ UL Type E Starter consisting of WEG MPW40 (Manual Motor Protector) + CLT (current Limiter) + LST (line side Terminal block) + TSB (Trip indicating unit)

WEG CFW500 Drive Model Selection Tables, continued

NOTE: For all model specifications, HD = Heavy Duty, ND = Normal Duty

	WEG (CFW500				VAC E)rives	Selecti	ion Sp	ecifica	itions					
			Appl	icable i	Motor ^{1,2}	Drive	Output	Drive	Input	Input Pro	tection	Dri	ve	ing	4.	٠.
WEG MAT #	Model #	Price		imum wer (kW)	Nominal Phase / Voltage	Rated Current ³ (A)	Nominal Phase / Voltage	Nominal Phase / Voltage	Rated Current (A)	Circuit Breaker (A)	Fuse ⁴ (A)	Weight (kg) [lb]	Frame Size	Dynamic Braking	Disconnects	Drawing Link
				I/A	ith Integra	ited Locka	hle Discon	nect						0		
14990863	CFW500A01P6B2DB66DSG2	\$492.00	0.25	0.18	lin mogre	1.6	Diocon	17001	1.6	5.5/2.5 ⁵	40/20	22		Ι		PDF
14991103	CFW500A02P6B2DB66DSG2	\$506.00	0.25	0.37		2.6	_		2.6	9.0/4.05	40/20	22				PDF
14991753	CFW500A04P3B2DB66DSG2	\$539.00	1	0.75	-	4.3	-	1Ph or 3Ph/	4.3	14/6.35	40/20	22				PDF
14938005	CFW500A07P3B2DB66DSG2	\$644.00	2	1.5	3Ph/	7.3	3Ph/	230VAC	7.3	25/12 ⁵	40/20	22	Α			PDF
14938047	CFW500A10P0B2DB66DSG2	\$691.00	3	2.2	230VAC	10	230VAC	3Ph/	10.0	25/16 ⁵	40/20	22				PDF
14938113	CFW500A16P0T2DB66DSG2	\$856.00	5	3.7		16			16.0	255	40	22				PDF
14975838	CFW500B24P0T2DB66DSG2	\$1,234.00	7.5	5.5	1	24	-		24.0	325	60	26.5	В	$\frac{1}{2}$		PDF
14938655	CFW500B28P0T2DB66DSG2	\$1,441.00	10	7.5	1	28	1	230VAC	28.0	40	60	26.5				PDF
14991953	CFW500A01P0T4DB66DSG2	\$602.00	0.33	0.25		1			1.0	1.65	20	22		-		PDF
14992148	CFW500A01P6T4DB66DSG2	\$619.00	0.5	0.37	-	1.6	-		1.6	2.55	20	22	A	Υ	Υ	PDF
14976517	CFW500A02P6T4DB66DSG2	\$627.00	1	0.75		2.6			2.6	45	20	22				PDF
14976809	CFW500A04P3T4DB66DSG2	\$743.00	2	1.4	3Ph/ 480VAC	4.3			4.3	6.35	20	22				PDF
14977065	CFW500A06P5T4DB66DSG2	\$885.00	3	2.2		6.5	3Ph/	3Ph/	6.5	105	20	22				PDF
14977266	CFW500A10P0T4DB66DSG2	\$1,045.00	5	3.7		10	480VAC	480VAC	10.0	16 ⁵	25	22				PDF
14977397	CFW500B14P0T4DB66DSG2	\$1,298.00	7.5	5.5		14			14.0	205	35	26.5			ľ	PDF
14977556	CFW500B16P0T4DB66DSG2	\$1,415.00	10	7.5		16	-		19.5	25	35		_			PDF
14978365	CFW500B24P0T4DB66DSG2	\$1,914.00	15	11		24			24.0	40	60	26.5	В			PDF
14978573	CFW500B31P0T4DB66DSG2	\$2,310.00	20	15	-	31	-		31.0	50	60	26.5				PDF
			l		I	lo Disconn	ect						l			
14989840	CFW500A01P6B2DB66G2	\$427.00	0.25	0.18		1.6			1.6	5.5/2.5 ⁵	40/20	22				PDF
14990985	CFW500A02P6B2DB66G2	\$440.00	0.5	0.37	-	2.6		1Ph or	2.6	9.0/4.05	40/20	22				PDF
14991517	CFW500A04P3B2DB66G2	\$468.00	1	0.75		4.3		3Ph/	4.3	14/6.3 ⁵	40/20	22				PDF
14937890	CFW500A07P3B2DB66G2	\$558.00	2	1.5	3Ph/	7.3	3Ph/	230VAC	7.3	25/12 ⁵	40/20	22	A			PDF
14938041	CFW500A10P0B2DB66G2	\$602.00	3	2.2	230VAC	10	230VAC		10.0	25/16 ⁵	40/20	22				PDF
14938111	CFW500A16P0T2DB66G2	\$743.00	5	3.7	1	16	1		16.0	255	40	22				PDF
14975783	CFW500B24P0T2DB66G2	\$1,073.00	7.5	5.5	1	24	1	3Ph/ 230VAC	24.0	325	60	26.5	_	1		PDF
14938547	CFW500B28P0T2DB66G2	\$1,252.00	10	7.5	1	28	1	230VAC	28.0	40	60	26.5	В			PDF
14991899	CFW500A01P0T4DB66G2	\$523.00	0.33	0.25		1			1.0	1.6 ⁵	20	22		1,,	,	PDF
14992113	CFW500A01P6T4DB66G2	\$537.00	0.5	0.37	1	1.6	1		1.6	2.5 ⁵	20	22		Υ	N	PDF
14975888	CFW500A02P6T4DB66G2	\$545.00	1	0.75	1	2.6	1		2.6	45	20	22	1			PDF
14976683		\$647.00	2	1.5	1	4.3	1		4.3	6.3 ⁵	20	22	A			PDF
14976814	CFW500A06P5T4DB66G2	\$770.00	3	2.2	3Ph/	6.5	3Ph/	3Ph/	6.5	10 ⁵	20	22				PDF
14977261	CFW500A10P0T4DB66G2	\$908.00	5	3.7	480VAC	10	480VAC	480VAC	10.0	16 ⁵	25	22				PDF
14977391	CFW500B14P0T4DB66G2	\$1,128.00	7.5	5.5	1	14	1		14.0	205	35	26.5		1		PDF
14977552	CFW500B16P0T4DB66G2	\$1,229.00	10	7.5	1	16	1		19.5	25	35					PDF
14977629	CFW500B24P0T4DB66G2	\$1,664.00	15	11	1	24	1		24.0	40	60	26.5	В			PDF
14978548	CFW500B31P0T4DB66G2	\$2,008.00	20	15	1	31	1		31.0	50	60	26.5				PDF

¹⁾ For use with three-phase motors only.

²⁾ The power values for the maximum applicable motor shown are reference values and are valid for WEG three-phase, four-pole induction motors with power supply of 230VAC. The proper sizing of the CFW300 drive must be determined as a function of the rated current of the motor being used.

³⁾ Motor FLA may vary with speed and manufacturer. ALWAYS compare motor FLA to Nominal AMPS of drive.

⁴⁾ For UL508C compliance, use UL fuse type J.

⁵⁾ UL Type E Starter consisting of WEG MPW40 (Manual Motor Protector) + CLT (current Limiter) + LST (line side Terminal block) + TSB (Trip indicating unit)

WEG CFW500 Drive Model Selection Tables, continued

		CFW500	General Specifications (Applicable to All Models)						
Control	Method		V/f (Scalar), VVW (Voltage Vector Control), Vector control with encoder, SVC (Sensorless Vector Control) without encoder, PWM SVM (Space Vector Modulation)						
	Output Freque	ncy Range	0–500 Hz; 0.015 Hz resolution						
		V/f (Scalar)	Regulation (with slip compensation): 1% of the rated speedSpeed variation range: 1:20						
		VVW	 Regulation: 1% of the rated speed Speed variation range: 1:30 						
	Speed Control	VVW PM	Regulation: 0.1% of the rated speed Speed variation range: 1:20						
Performance		Sensorless	Regulation: 0.5% of the rated speed Speed variation range: 1:100						
		Vector w/ Encoder	Regulation 0.1% of the rated speed with a digital reference (keypad, serial, fieldbus, electronic potentiometer, multispeed)						
	Torque Control		Range: 10 to 180%, regulation: ±5% of the rated torque (with encoder) Range: 20 to 180%, regulation ±10% of the rated torque (sensorless above 3 Hz)						
	Analog		 1 insulated input, levels: (0 to 10) V or (0 to 20) mA or (4 to 20) mA Linearity error ≤ 0.25% Impedance: 100kΩ for voltage input, 500Ω for current input Programmable functions 						
			Maximum voltage permitted in the input: 30VDC						
nputs	Digital		 4 insulated inputs Programmable functions: active high (PNP) with maximum low of 15VDC and minimum high of 20VDC, or active low (NPN) with maximum low of 5VDC and minimum high of 9VDC Maximum input voltage: 30VDC Input current: 4.5 mA Maximum input current: 5.5 mA 						
	Analog		 1 insulated output, levels: (0 to 10) V or (0 to 20) mA or (4 to 20) mA Linearity error ≤ 0.25% Programmable functions R_L ≥ 10kΩ (0 to 10) V or R_L ≤ 500Ω (0 to 20 mA / 4 to 20 mA) 						
Outputs	Relay		1 relay with NA/NF contact Maximum voltage: 240VAC Maximum current: 0.5 A Programmable functions						
	Transistor		 1 insulated digital output open sink (uses as reference the 24VDC power supply) Maximum current 150 mA** (maximum capacity fo the 24VDC power supply) Programmable functions Note: When the digital output load is fed by an external power supply, the output status remains indefinite until the internal 24V power supply is stable. 						
	Power Supply		24VDC ± 20% power supply. Maximum capacity: 150mA 10VDC power supply. Maximum capacity: 2mA						
Communication	Interface RS48	35	Insulated RS485 Modbus-RTU/BACnet protocol with maximum communication of 38.4 kbps						
Safety	Protection		Overcurrent/phase-phase short circuit in the output Overcurrent/phase-ground short circuit in the output Under/overvoltage Overtemperature in the heatsink Overload in the motor Overload in the power module (IGBTs) External alarm/fault Setting error						
Keypad	Integral (HMI)		9 keys: Start/Stop, Up arrow, Down arrow, Direction of Rotation, Jog, Local/Remote, BACK/ESC, and ENTER/MENU LCD display View/edition of all parameters Indication accuracy: -Current: 5% of the rated current -Speed resolution: 0.1 Hz						
	IP20		Available models in frame size A, B, C, D, E, F, and G						
	NEMA1/IP20		Available models in frame size A, B, C, D, E, F, and G with NEMA1 kit						
Enclosure	NEMA 12								
	NEMA 4X Indoo	or/Outdoor	Enclosed models available in frame size A and B						



WEG CFW500 Drive Model Selection Tables, continued

CFW500 Genera	al Specifications, <i>continued</i> (Applicable to All Models)
Input Voltage Range	1-phase & 3-phase 230V models: 200–240 VAC (-15%, +10%) 3-phase 460V models: 380–480 VAC (-15%, +10%)
Input Frequency Range	50/60Hz (48 to 62 Hz)
Allowable Input Phase Imbalance	≤3% of rated phase-to-phase input voltage
Overvoltage	Category III (IEC/EN 61010/UL 508C)
Ambient Operating Temperature	 CFW500-IP20, Frame A to E (with minimum clearance on each side): 14°F (-10°C) to 122°F (50°C) w/o derating. Up to 140°F (60°C) with derating. CFW500-IP20, Frame F: 14°F (-10°C) to 104 °F (40°C) w/o derating. Up to 140°F (60°C) with derating. CFW500-IP20, Frame G: 14°F (-10°C) to 113 °F (45°C) w/o derating. Up to 140°F (60°C) with derating. CFW500-IP66 Drives: 14°F (-10°C) to 104 °F (40°C) w/o derating. Up to 122°F (50°C) with derating.
Altitude	0 to 3300ft [1000m]; up to 13,200 ft [4000m] with current derating (1% per 100m above 1000m)
Humidity	5 to 95% non-condensing
Mounting	DIN rail or surface mounting with screws
Mounting Orientation	Vertical and upright; can be mounted side-to-side (zero stack)
Environmental Protection Rating	IP20 or IP66
Agency Approvals	_C UL _{US} , TUV, CE

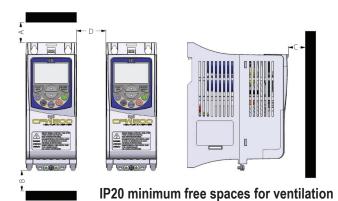
DRIVE SETUP AND PROGRAMMING NOTE:

If drive parameter setup and programming is necessary when rated input voltage is not available the following method can be used to power up the drive LED and control board. The 460VAC & 230VAC, CFW500, Frame-A to E can be powered up using single phase 120VAC, strictly for programming purposes. Wire the AC Line and Neutral to the L1 and L2 terminals. This will power up the drive LED display and allow communication to WPS software.



WARNING: IF USING 120VAC INPUT FOR DRIVE SETUP AND PROGRAMMING, BE SURE TO REMOVE 120VAC POWER BEFORE RATED INPUT VOLTAGE IS APPLIED.

Minimum Clearances and Air Flow for WEG CFW500 IP20 Series Drives



CFW500 IP20	Minimu	m Mount	ing Clea	rances*
Frame Size	A mm [in]	B mm [in]	C mm [in]	D mm [in]
Α	15 [0.59]	40 [1.57]	30 [1.18]	10 [0.39]
В	35 [1.38]	50 [1.97]	40 [1.57]	15 [0.59]
С	40 [1.57]	50 [1.97]	50 [1.97]	30 [1.18]
D	40 [1.57]	50 [1.97]	50 [1.97]	40 [1.57]
Ε	110 [4.33]	130 [5.11]	50 [1.97]	40 [1.57]
F	110 [4.33]	130 [5.11]	10 [0.39]	30 [1.18]
G	150 [5.91]	250 [9.844]	20 [0.78]	80 [3.15]

^{*} Failure to follow the minimum mounting clearances may cause the fan to malfunction and cause a heat dissipation problem.

			CFW	500 IP	20 Lo	ss Ratir	gs and Tempera	atures			
WEG MAT			Output Rated	Over Curr	load	Rated Carrier	Nominal Drive Surrou		Input Rated	Drive Pow	ver Losses
WEG MAI #	Model #	Duty	Current [A _{rms}]	1 min [A _{rms}]	3s [A _{rms}]	Frequency [kHz]	IP20 with Min. Free Space [°C/°F]	Side-by-side IP20 or Type 1 [°C/°F]	Current [A _{rms}]	Surface Mounting [W]	Flange Mounting [W]
<u>15570800</u>	CFW500A01P6B2NB20G2		1.6	2.4	3.2	5	50 / 122	40 / 104	4.0 / 2.0*	18	
<u>15571879</u>	CFW500A02P6B2NB20G2		2.6	3.9	5.2	5	50 / 122	40 / 104	6.5 / 3.1*	30	
<u>15571881</u>	CFW500A04P3B2NB20G2		4.3	6.5	8.6	5	50 / 122	40 / 104	10.5 / 5.2*	49	
<u>15574655</u>	CFW500B07P3B2DB20G2		7.3	11	14.6	5	50 / 122	40 / 104	17 / 8.6*	84	
<u>15575067</u>	CFW500B10P0B2DB20G2		10	15	20	5	50 / 122	40 / 104	25 / 12*	115	
<u>15572625</u>	CFW500A07P0T2NB20G2		7.0	10.5	14	5	50 / 122	40 / 104	8.5	80	
<u>15572689</u>	CFW500A09P6T2NB20G2		9.6	14.5	19.2	4	45 / 113	40 / 104	11.7	115	
<u>15575202</u>	CFW500B16P0T2DB20G2		16	24	32	5	50 / 122	40 / 104	19.5	185	
<u>15575701</u>	CFW500C24P0T2DB20G2		24	36	48	4	40 / 104	40 / 104	29	275	
<u>15575716</u>	CFW500D28P0T2DB20G2		28	42	56	5	50 / 122	40 / 104	34.2	320	
<u>15576540</u>	CFW500D47P0T2DB20G2		47	70.5	94	5	50 / 122	40 / 104	57.3	500	
<u>15572819</u>	CFW500A01P0T4NB20G2		1.0	1.5	2.0	5	50 / 122	40 / 104	1.2	20	
<u>15572908</u>	CFW500A01P6T4NB20G2	_	1.6	2.4	3.2	5	50 / 122	40 / 104	1.9	25	_
<u>15573714</u>	CFW500A02P6T4NB20G2		2.6	3.9	5.2	5	50 / 122	40 / 104	3.2	45	
<u>15573819</u>	CFW500A04P3T4NB20G2		4.3	6.5	8.6	5	50 / 122	40 / 104	5.2	65	
<u>15573823</u>	CFW500A06P1T4NB20G2		6.1	9.2	12.2	5	50 / 122	40 / 104	7.4	105	
<u>15575568</u>	CFW500B02P6T4DB20G2		2.6	3.9	5.2	5	50 / 122	40 / 104	3.2	45	
<u>15575577</u>	CFW500B04P3T4DB20G2		4.3	6.5	8.6	5	50 / 122	40 / 104	5.2	65	
<u>15575665</u>	CFW500B06P5T4DB20G2		6.5	9.8	13	5	50 / 122	40 / 104	7.8	105	
<u>15575699</u>	CFW500B10P0T4DB20G2		10	15	20	5	50 / 122	40 / 104	12	170	
<u>15575707</u>	CFW500C14P0T4DB20G2		14	21	28	5	50 / 122	40 / 104	17.1	220	
<u>15575711</u>	CFW500C16P0T4DB20G2		16	24	32	5	50 / 122	40 / 104	19.5	270	
<u>15576919</u>	CFW500D24P0T4DB20G2		24	36	48	5	50 / 122	40 / 104	29.3	405	
<u>15577021</u>	CFW500D31P0T4DB20G2		31	46.5	62	5	50 / 122	40 / 104	37.8	500	
					C	ontinued on i	next page				

 $^{^\}star A_{rms}$ values noted with an asterisk are for 3-phase installations of 1-phase/3-phase capable drives.

Minimum Clearances and Air Flow for WEG CFW500 IP20 Series Drives

			CFW	500 IP	20 Lo	ss Ratir	igs and Tempera	atures				
WEG MAT	Model #		Output Rated	Over Curr	load	Rated Carrier	Nominal Drive Surrou		Input Rated	Drive Pow	ver Losses	
WEG MAI #		Duty	Current [A _{rms}]	1 min [A _{rms}]	3s [A _{rms}]	Frequency [kHz]	IP20 with Min. Free Space [°C/°F]	Side-by-side IP20 or Type 1 [°C/°F]	Current [A _{rms}]	Surface Mounting [W]	Flange Mounting [W]	
Continued from previous page												
15577077	CFW500E56P0T2DB20G2	ND	70	77	105	5	40 / 104	40 / 104	74.9	795		
15577077	CFW000E00P012DB20G2	HD	56	84	112	5	50 / 122	40 / 104	68.32	600	_	
45242427	CFW500F77P0T2DB20G2	ND	77	84.7	115.5	4	40 / 104	40 / 104	73.92	900	150	
<u>15342437</u>	CFW500F77P012DB20G2	HD	64	96	128	4	40 / 104	40 / 104	61.44	730	110	
45040760	CEMEOOEOODOTODDOOO	ND	88	96.8	132	4	40 / 104	40 / 104	84.48	1000	160	
<u>15342760</u>	CFW500F88P0T2DB20G2	HD	75	112.5	150	4	40 / 104	40 / 104	72	860	120	
15342909	2909 CFW500F0105T2DB20G2	ND	105	115.5	157.5	2.5	40 / 104	40 / 104	100.8	1200	180	
15342909	CFW300F010312DB20G2	HD	88	132	176	2.5	40 / 104	40 / 104	84.48	1000	140	
15577211	CFW500E39P0T4DB20G2	ND	45	49.5	67.5	5	40 / 104	40 / 104	48.2	810		
13377211	CI W300L33F014DB20G2	HD	39	58.5	78	5	50 / 122	40 / 104	47.58	650	_	
<u>15577452</u>	CFW500E49P0T4DB20G2	ND	58.5	64.4	87.8	5	40 / 104	40 / 104	62.6	985		
13311432	CI W300L43F014DB20G2	HD	49	73.5	98	5	50 / 122	40 / 104	59.78	750	_	
15733937	CFW500F77P0T4DB20G2	ND	77	84.7	115.5	4	40 / 104	40 / 104	81.62	1050	170	
10100001	OI W3001 771 014DB2002	HD	61	91.5	122	4	40 / 104	40 / 104	64.66	830	130	
15734064	CFW500F88P0T4DB20G2	ND	88	96.8	132	4	40 / 104	40 / 104	93.28	1200	180	
107 34004	O1 W3001 001 014DB2002	HD	73	109.5	146	4	40 / 104	40 / 104	77.38	1000	140	
15734119	CFW500F0105T4DB20G2	ND	105	115.5	157.5	2.5	40 / 104	40 / 104	111.30	1430	200	
10/04/10	OI W3001 010314DB2002	HD	88	132	176	2.5	40 / 104	40 / 104	93.28	1200	160	
15448371	CFW500G0142T4DB20G2	ND	142	156.2	213	2.5	45 / 113	45 / 113	136.32	1680	210	
100770071	01 110000017217002002	HD	115	172.5	230	2.5	45 / 113	45 / 113	110.4	1290	200	
15448372	CFW500G0180T4DB20G2	ND	180	198	270	2.5	45 / 113	45 / 113	172.8	2050	360	
Z	5. 110000010014DB2002	HD	142	213	284	2.5	45 / 113	45 / 113	136.32	1570	350	
15448373	CFW500G0211T4DB20G2	ND	211	232.1	316.5	2.5	45 / 113	45 / 113	202.56	2330	360	
10110010	0.110000021114002002	HD	180	270	360	2.5	45 / 113	45 / 113	172.8	1940	350	

^{*} A_{rms} values noted with an asterisk are for 3-phase installations of 1-phase/3-phase capable drives.



CFW500 AC Drives – Specifications

Minimum Clearances and Air Flow for WEG CFW500 IP66 Series Drives



CFW500 IP66	Minimu	n Mount	ing Clea	rances*
Frame Size	A mm [in]	B mm [in]	C mm [in]	D mm [in]
Α	36 [1.38]	15 [0.59]	50 [1.97]	50 [1.97]
В	50 [1.97]	40 [1.57]	60 [2.36]	50 [1.97]

^{*} Failure to follow the minimum mounting clearances may cause the fan to malfunction and cause a heat dissipation problem.

IP66 minimum	free snaces	for ventilation
IPOU IIIIIIIIIIIIIII	lite Spaces	ioi ventiliation

		CFW500	P66 Lo	ss Rat	ings and Tem	peratures		
	Model #	Output Rated	Overload	Currents	Rated Carrier	Nominal Drive Surrounding	Input Rated	Drive Power Losses
WEG MAT #	(CFW500+)	Current [A _{rms}]	1 min [A _{rms}]	3s [A _{rms}]	Frequency [kHz]	Temperature [°C/°F]	Current [A _{rms}]	Surface Mounting [W]
<u>14989840</u>	CFW500A01P6B2DB66G2	1.6	2.4	3.2	5	40 / 104	3.5 / 2.0*	18
14990863	CFW500A01P6B2DB66DSG2	1.6	2.4	3.2	5	40 / 104	3.5 / 2.0*	18
14990985	CFW500A02P6B2DB66G2	2.6	3.9	5.2	5	40 / 104	5.7 / 3.1*	30
14991103	CFW500A02P6B2DB66DSG2	2.6	3.9	5.2	5	40 / 104	5.7 / 3.1*	30
14991517	CFW500A04P3B2DB66G2	4.3	6.5	8.6	5	40 / 104	10.5 / 5.2*	49
14991753	CFW500A04P3B2DB66DSG2	4.3	6.5	8.6	5	40 / 104	10.5 / 5.2*	49
14937890	CFW500A07P3B2DB66G2	7.3	11	14.6	5	40 / 104	16 / 8.6*	84
14938005	CFW500A07P3B2DB66DSG2	7.3	11	14.6	5	40 / 104	16 / 8.6*	84
14938041	CFW500A10P0B2DB66G2	10	15	20	5	40 / 104	22.1 / 12*	115
14938047	CFW500A10P0B2DB66DSG2	10	15	20	5	40 / 104	22.1 / 12*	115
14938111	CFW500A16P0T2DB66G2	16	24	32	5	40 / 104	19.5	185
14938113	CFW500A16P0T2DB66DSG2	16	24	32	5	40 / 104	19.5	185
14975783	CFW500B24P0T2DB66G2	24	36	48	4	40 / 104	29	275
14975838	CFW500B24P0T2DB66DSG2	24	36	48	4	40 / 104	29	275
14938547	CFW500B28P0T2DB66G2	28	42	56	5	40 / 104	34.0	320
14938655	CFW500B28P0T2DB66DSG2	28	42	56	5	40 / 104	34.0	320
14991899	CFW500A01P0T4DB66G2	1	1.5	2	5	40 / 104	1.2	20
14991953	CFW500A01P0T4DB66DSG2	1	1.5	2	5	40 / 104	1.2	20
14992113	CFW500A01P6T4DB66G2	1.6	2.4	3.2	5	40 / 104	1.9	25
14992148	CFW500A01P6T4DB66DSG2	1.6	2.4	3.2	5	40 / 104	1.9	25
14975888	CFW500A02P6T4DB66G2	2.6	3.9	5.2	5	40 / 104	3.2	45
14976517	CFW500A02P6T4DB66DSG2	2.6	3.9	5.2	5	40 / 104	3.2	45
14976683	CFW500A04P3T4DB66G2	4.3	6.5	8.6	5	40 / 104	5.2	65
14976809	CFW500A04P3T4DB66DSG2	4.3	6.5	8.6	5	40 / 104	5.2	65
14976814	CFW500A06P5T4DB66G2	6.5	9.8	13	5	40 / 104	7.8	105
14977065	CFW500A06P5T4DB66DSG2	6.5	9.8	13	5	40 / 104	7.8	105
14977261	CFW500A10P0T4DB66G2	10	15	20	5	40 / 104	12	170
14977266	CFW500A10P0T4DB66DSG2	10	15	20	5	40 / 104	12	170
14977391	CFW500B14P0T4DB66G2	14	21	28	5	40 / 104	17.1	220
14977397	CFW500B14P0T4DB66DSG2	14	21	28	5	40 / 104	17.1	220
14977552	CFW500B16P0T4DB66G2	16	24	32	5	40 / 104	19.5	270
14977556	CFW500B16P0T4DB66DSG2	16	24	32	5	40 / 104	19.5	270
14977629	CFW500B24P0T4DB66G2	24	36	48	5	40 / 104	29.3	405
14978365	CFW500B24P0T4DB66DSG2	24	36	48	5	40 / 104	29.3	405
14978548	CFW500B31P0T4DB66G2	31	46.5	62	5	40 / 104	34.0	500
14978573	CFW500B31P0T4DB66DSG2	31	46.5	62	5	40 / 104	34.0	500

^{*}A_{rms} values noted with an asterisk are for 3-phase installations of 1-phase/3-phase capable drives.

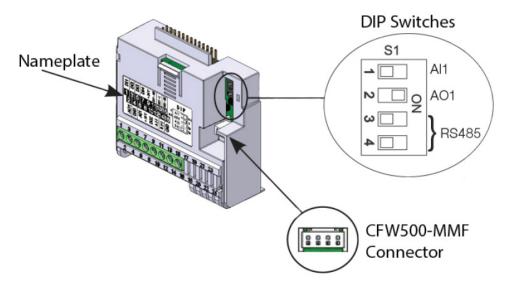


CFW500 Drives – Control Connections

Installation and Connection (Default CFW500-IOS Module)

The location of the plug-in module and DIP switches to select the type of analog input and output signal and the termination of the RS485 network is shown below.

The CFW500 drives are supplied with the digital inputs configured as active low (NPN), analog input and output configured for signal in voltage 0–10 V and with termination resistor of the RS485 set to OFF.





Note: To use the analog inputs and/or outputs with signal in current, you must set the switch S1 and the related parameters per the table below. For further information, please refer to the WEG CFW500 programming manual.



Note: To modify the digital inputs from active low to active high, check the use of parameter P0271 in the WEG CFW500 programming manual.

CFW500 Switch Configuration									
Input/Output	Signal	Setting of Switch S1	Signal Range	Parameter Setting					
	Voltage	S1.1 = OFF	0–10 V	P233 = 0 (direct reference) or 2 (inverse reference)					
AI1	Current	S1.1 = ON	0–20 mA	P233 = 0 (direct reference) or 2 (inverse reference)					
			4-20 mA	P233 = 1 (direct reference) or 3 (inverse reference)					
	Voltage	S1.2 = ON	0–10 V	P253 = 0 (direct reference) or 3 (inverse reference)					
A01	Comment	S1.2 = OFF	0–20 mA	P253 = 1 (direct reference) or 4 (inverse reference)					
	Current	\$1.2 = OFF	4–20 mA	P253 = 2 (direct reference) or 5 (inverse reference)					

Switch Settings for RS485							
Communication	Communication Switch Switch Setting Option						
RS485	S1	S1.3 = OFF and S1.4 = OFF	RS485 terminal OFF				
		S1.3 = ON and S1.4 = ON	RS485 terminal ON				

For the correct connection of the control, use:

- Cable gauge: 0.5 mm² [20 AWG] to 1.5 mm² [14 AWG]
- Maximum torque: 0.5 N·m [4.50 lbf·in]
- Wire the plug-in module connector with shielded cable and separate from the other wiring (power, command in 110V/220VAC, etc.) according to the table below. If those cables must cross other cables, run them perpendicularly, maintaining a minimum spacing of 5cm [1.97 in] at the crossing point.

Cable Separation Distance							
Drive Output Rated Current Length of the Cable Minimum Separation Distance							
≤ 24A	≤ 100m [330ft]	≥ 10cm [3.94 in]					
≥ 24A	> 100m [330ft]	≥ 25cm [9.84 in]					
≥ 28A	≤ 30m [100ft]	≥ 10cm [3.94 in]					
< 20A	> 30m [100 ft]	≥ 25cm [9.84 in]					



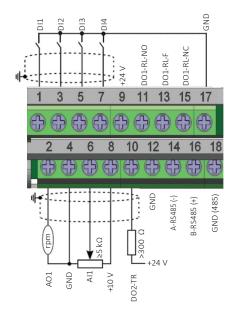
CFW500 Drives- Control Connections

Control Connections

The control connections (analog input/output, digital input/output, and RS485 interface) must be configured according to the specification of the plug-in module's connector. Refer to the plug-in module's instructions. The typical functions and connections for the CFW500-IOS standard plug-in module are shown below. For additional details about the specifications of the connector signals, please see Chapter 8, Technical Specifications, of the WEG CFW500 User Manual.



Note: The connections below are specific to the CFW500-IOS module that comes standard with the WEG CFW500 drive.



CFW500-IOS Connectors						
	Connector	Description				
1	DI1	Digital Input 1				
3	DI2	Digital Input 2				
5	DI3	Digital Input 3				
7	DI4	Digital Input 4				
9	+24V	Power supply +24VDC				
11	DO1-RL-NO	Digital Output 1 (NO contact for Relay 1)				
13	DO1-RL-C	Digital Output 1 (Common point for Relay 1)				
15	DO1-RL-NC	Digital Output 1 (NC contact of Relay 1)				
17	GND	Reference 0V				
2	AO1	Analog Output 1				
4	GND	Reference 0V				
6	Al1	Analog Input 1				
8	+10V	Reference +10VDC for potentiometer				
10	DO2-TR	Digital Output 2 (Transistor)				
12	GND	Reference 0V				
14	RS485-A	RS485 (Terminal A)				
16	RS485-B	RS485 (Terminal B)				
18	GND (485)	RS485 (Ground)				

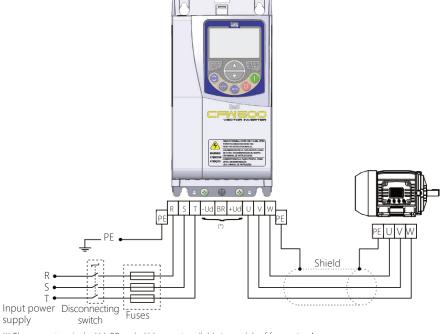
		CFW500-IOS Connection Specifications
Туре	Terminal	Description
Inputs	AI1	 1 insulated input, levels: 0–10 V or 0–20 mA or 4–20 mA Linearity error ≤ 0.25% Impedance: 100kΩ for voltage input, 500Ω for current input Programmable functions Maximum voltage permitted in the input: 30VDC
	DI1 – DI4*	4 insulated inputs Programmable functions: active high (PNP) with maximum low of 15VDC and minimum high of 20VDC, or active low (NPN) with maximum low of 5VDC and minimum high of 9VDC Maximum input voltage: 30VDC Input current: 4.5 mA Maximum input current: 5.5 mA
	A01	 1 insulated output, levels: 0–10 V or 0–20 mA or 4–20 mA Linearity error ≤ 0.25% Programmable functions R_L ≥ 10 kΩ (0–10 V) or R_L ≤ 500Ω (0–20 mA / 4–20 mA)
Outputs	DO1-RL-NO DO1-RL-F DO1-RL-NC	1 relay with NA/NF contact Maximum voltage: 240VAC Maximum current: 0.5 A Programmable functions
	DO2-TR	1 insulated digital output open sink (uses as reference the 24VDC power supply) Maximum current 150 mA (maximum capacity fo the 24VDC power supply) Programmable functions Note: When the digital output load is fed by an external power supply, the output status remains indefinite until the internal 24V power supply is stable.
	"+24V" "+10V"	24VDC ± 20% power supply. Maximum capacity: 150mA** 10VDC power supply. Maximum capacity: 2mA
Communication	A-RS485(-) B-RS485(+) GND(485)	Insulated RS485 Modbus-RTU/BACnet protocol with maximum communication of 38.4 kbps

^{*} When using digital inputs active high (PNP), source voltage from +24V, terminal 9.



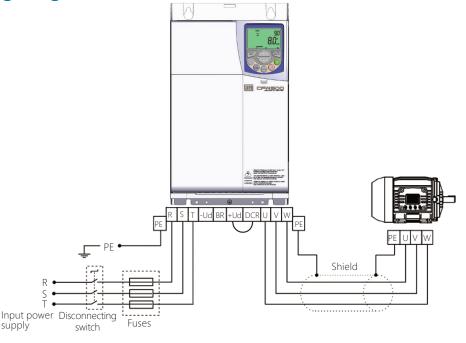
CFW500 Drives – Basic Wiring Diagrams

Circuit Wiring Diagram: Frame A, B, C, and F Models



(*) The power terminals -Ud, BR and +Ud are not available in models of frame size A.

Circuit Wiring Diagram: Frame D and E Models





WARNING! PROVIDE A DISCONNECT DEVICE FOR THE DRIVE POWER SUPPLY. THIS DEVICE MUST TURN OFF THE POWER SUPPLY WHENEVER NECESSARY (DURING MAINTENANCE, FOR INSTANCE).



WARNING! THE POWER SUPPLY THAT FEEDS THE DRIVE MUST HAVE A GROUNDED NEUTRAL. IN CASE OF IT NETWORKS, REFER TO THE INSTRUCTIONS IN SECTION 3.2.3.3 OF THE WEG CFW500 USER MANUAL.

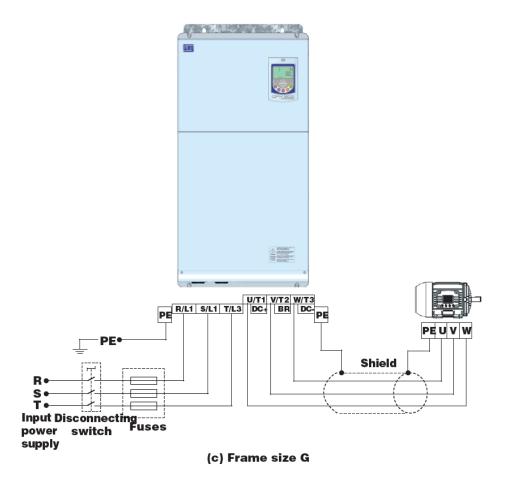


Note: The input power supply voltage must be compatible with the drive rated voltage. Power factor correction capacitors are not needed at the drive input (L/L1, N/L2, L3, or R, S, T) and must not be installed at the output (U, V, W).



CFW500 Drives – Basic Wiring Diagrams

Circuit Wiring Diagram: Frame G Models





WARNING! PROVIDE A DISCONNECT DEVICE FOR THE DRIVE POWER SUPPLY. THIS DEVICE MUST TURN OFF THE POWER SUPPLY WHENEVER NECESSARY (DURING MAINTENANCE, FOR INSTANCE).



WARNING! THE POWER SUPPLY THAT FEEDS THE DRIVE MUST HAVE A GROUNDED NEUTRAL. IN CASE OF IT NETWORKS, REFER TO THE INSTRUCTIONS IN SECTION 3.2.3.3 OF THE WEG CFW500 USER MANUAL.



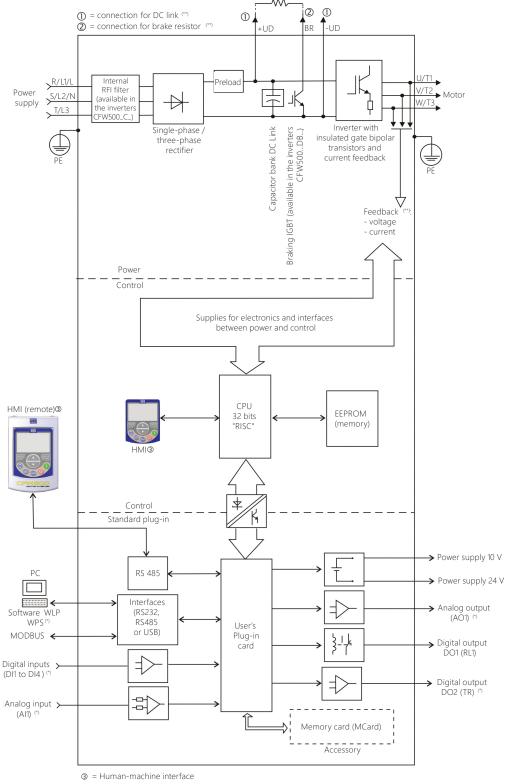
Note: The input power supply voltage must be compatible with the drive rated voltage. Power factor correction capacitors are not needed at the drive input (L/L1, N/L2, L3, or R, S, T) and must not be installed at the output (U, V, W).

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CFW500 Drives – Basic Wiring Diagrams

Control Wiring Diagram: Full I/O

Note: Users MUST connect wiring according to the circuit diagram shown below. (Refer to WEG CFW500 user manual for additional specific wiring information.)



(*) The number of analog/digital inputs/outputs, as well as other resources, may vary according to the plug-in module used. For further information, refer to the guide supplied with the accessory.

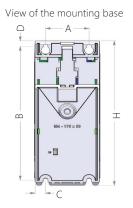
(**) Not available in frame size A.



WEG CFW500 IP20 Drive Positioning and Mounting

Mount the drive in the upright position on a flat and vertical service. Install and tighten the screws per the maximum torque values in the table below.

Allow the minimum clearances described in the specifications section to allow proper ventilation for cooling. Do not install heat sensitive components directly above the drive.

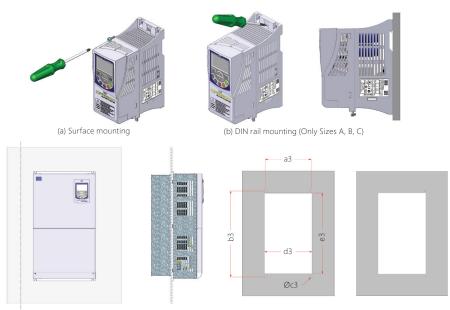






	WEC	G CFW	500 II	P20 S	eries l	Drive	Mount	ing Red	uireme	nts
Frame Size	А	В	С	D	Н	L	P	Weight	Mounting	Recommended Torque
SIZE				mm [in]				kg [lb]	Bolt	N·m [lbf·in]
А	50.0 [1.97]	175.0 [6.89]	11.9 [0.47]	7.2 [0.28]	189.0 [7.44]	75.0 [2.95]	150.0 [5.91]	0.8 [1.76]	M4	2 [17.7]
В	75.0 [2.95]	185.0 [7.30]	11.8 [0.46]	7.3 [0.29]	199.0 [7.83]	100.0 [3.94]	160.0 [6.30]	1.2 [2.65]	M4	2 [17.7]
С	100.0 [3.94]	195.0 [7.70]	16.7 [0.66]	5.8 [0.23]	210.0 [8.27]	135.0 [5.31]	165.0 [6.50]	2 [4.4]	M5	3 [26.5]
D	125.0 [4.92]	290.0 [11.41]	27.5 [1.08]	10.2 [0.40]	306.6 [12.07]	180.0 [7.08]	166.5 [6.55]	4.3 [9.48]	M6	4.5 [39.82]
Е	150.0 [5.90]	330.0 [12.99]	34.0 [1.34]	10.6 [0.42]	350.0 [13.78]	220.0 [8.66]	191.5 [7.54]	10 [22.05]	M6	4.5 [39.82]
F	200.0 [7.87]	525.0 [20.67]	42.5 [1.67]	15.0 [0.59]	550.0 [21.65]	300.0 [11.81]	254.0 [10]	26 [57.3]	M8	19 [168.16]
G	200.0 [7.87]	650 [25.59]	57 [2.24]	15 [0.59]	675 [26.57]	335.3 [13.2]	314 [12.36]	52 [114.64]	M8	20 [177.0]

Figure 2: Drive dimensions for mechanical installation



(c) Flange mounting - standard drive (only for Frame size F/G. See User Manual Appendix B Figure B.3 for dimensions)



CFW500 AC Drives – Drive Mounting

WEG CFW500 IP66 Drive Positioning and Mounting

Mount the drive in the upright position on a flat and vertical service. Install and tighten the screws per the maximum torque values in the table below.

Allow the minimum clearances described in the specifications section to allow proper ventilation for cooling. Do not install heat sensitive components directly above the drive.

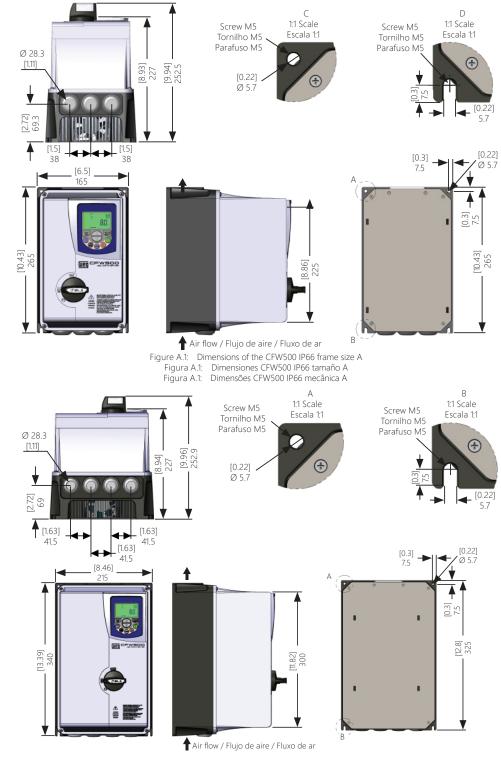


Figure A.2: Dimensions of the CFW500 IP66 frame size B Figura A.2: Dimensiones CFW500 IP66 tamaño B Figura A.2: Dimensões CFW500 IP66 mecânica B

UPI CFW500 AC Drives – Accessories

WEG CFW500 Accessory Setup and Compatibility

Optional accessories for the WEG CFW500 series drives can be easily installed using the "plug and play" method. Installed accessories are automatically recognized by the drive, and the code for the connected part is added to parameter P027.

All accessories must be installed or modified with power disconnected from the drive.

Reference the table to the right to determine which accessories are compatible with each drive type.

Refer to the following pages for details about each accessory.

WEG CFW500 Available Accessories										
NEG MAT #	Model #	Description	IP20 Series Drives	IP66 Series Drives						
<u>4741859</u>	CFW500-IOS	Standard plug-in module, replacement	√	√						
4742006	CFW500-IOD	Digital input and output plug-in module (I/O)	✓	✓						
4742129	CFW500-IOAD	Digital and analog input and output plug-in module (I/O)	✓	✓						
<u>4968050</u>	CFW500-IOR-B	Digital output commuincation plug-in module	✓	✓						
<u>4742001</u>	CFW500-CUSB	USB communication plug-in module	✓	✓						
<u>4742005</u>	CFW500-CRS232	RS232 communication plug-in module	✓	✓						
<u>5353140</u>	CFW500-CRS485-B	RS485 communication plug-in module	✓	✓						
<u> 2619000</u>	CFW500-ENC	Encoder input module	✓	✓						
<u> 2892814</u>	CFW500-CETH-IP	EtherNet/IP communication plug-in module	✓	✓						
289281 <u>5</u>	CFW500-CEMB-TCP	Modbus TCP communication plus-in module	✓	✓						
5560296	CFW500-SFY2	Safety function module (STO and SS1-t)*	✓	✓						
1636485	CFW500-MMF	Flash memory module	✓	✓						
1833992	CFW500-HMIR	Serial remote keypad (non-text)	✓	✓						
<u>5578295</u>	HMI-01	Advanced remote keypad (text)	✓	✓						
5578297	CFW500-RHMIF	Mounting frame for HMI-01 keypad	✓	✓						
2330016	CFW500-CCHMIR01M	1m serial remote keypad cable kit	√	✓						
2330460	CFW500-CCHMIR03M	3m serial remote keypad cable kit	✓	✓						
2330461	CFW500-CCHMIR05M	5m serial remote keypad cable kit	√	√						
2330463	CFW500-CCHMIR10M	10m serial remote keypad cable kit	√	√						
1527460	CFW500-KN1A	NEMA1 kit for frame size A (standard for option N1)	√	_						
1527459	CFW500-KN1B	NEMA1 kit for frame size B (standard for option N1)	√	_						
2133824	CFW500-KN1C	NEMA1 kit for frame size C (standard for option N1)	√	_						
2692970	CFW500-KN1D	NEMA1 kit for frame size D (standard for option N1)	√	_						
3104601	CFW500-KN1E	NEMA1 kit for frame size E (standard for option N1)	√	_						
4601107	CFW500-KN1F	NEMA1 kit for frame size F (standard for option N1)	√	_						
5461789	CFW500-KN1G	NEMA1 kit for frame size G (standard for option N1)	√							
1951056	CFW500-KPCSA	Kit for power cables clamping, frame size A**	√	_						
1951108	CFW500-KPCSB	Kit for power cables clamping, frame size B**	√	_						
2133826	CFW500-KPCSC	Kit for power cables clamping, frame size C**	√	_						
2692971	CFW500-KPCSD	Kit for power cables clamping, frame size D**	√	_						
3055389	CFW500-KPCSE	Kit for power cables clamping, frame size E**	√	_						
4601158	CFW500-KPCSF	Kit for power cables clamping, frame size F**	√	_						
5461788	CFW500-KPCSG	Kit for power cables clamping, frame size G**	√							
4391148	CFW50X-FAN-A	Main cooling fan, replacement, 60x60x15 mm	√	_						
2350492	CFW50X-FAN-BC	Main cooling fan, replacement, 70x70x15 mm	√	_						
4391151	CFW50X-FAN-D1	Main cooling fan, replacement, 60x60x25.4 mm	√	_						
2852366	CFW50X-FAN-D2	Main cooling fan, replacement, 60x60x38 mm	√	_						
4391152	CFW50X-FAN-D3	Main cooling fan, replacement, 60x60x25.4 mm	<u>√</u>	_						
2852367	CFW50X-FAN-D4	Main cooling fan, replacement, 60x60x38 mm	<u>√</u>	_						
3770165	CFW50X-FAN-E	Main cooling fan, replacement, 80x80x38 mm	─ ✓	_						
5245117	CFW50X-FAN-F1	Main cooling fan, replacement,80x80x38 mm	<u>√</u>	_						
2295730	CFW50X-FAN-G1	Main cooling fan, replacement, 15x172x51 mm, 24 VDC	✓	_						
2295732	CFW50X-FAN-G2	Main cooling fan, replacement, 15x172x51 mm, 48 VDC	✓							

^{*} The STO module cannot be used in conjuction with a NEMA1 kit for IP20 Frames A-E.

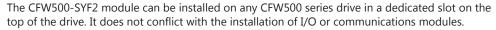
^{**} The power cable clamping kits cannot be used in conjuction with a NEMA1 kit.

UPI CFW500 AC Drives – Accessories

WEG CFW500 Safety Module

The CFW500-SYF2 is a safety module capable of providing STO (Safe Torque Off) and SS1-t (Safe Stop 1 Time Controlled) safety operations.

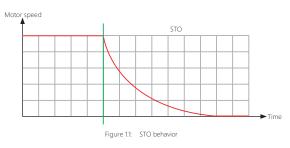
- The STO function disables torque-generating power to the motor. This method of disabling the motor
 is very reliable against unexpected motor starts, even under a fault condition. When activated, the
 STO safety function blocks power from the drive's output electronic circuit, causing the motor to coast
 to a stop.
- The SS1-t function also disables torque-generating power to the motor but waits a predetermined period of time to allow the drive to impose a deceleration ramp before removing torque. This is especially useful in situations where inertial loads need to be decelerated before torque is removed from the motor.

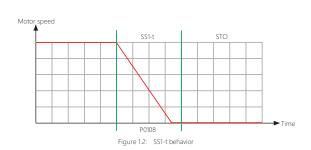




	WEG CFW500 Safety Module								
WEG MAT #	Model #	Price	Description	Features/Specifications			CFW500 Drive		
					Safety functions	Safe torque off (STO) according to IEC/EN 61800-6-2 or stop category 0 according to IEC/EN 60204-1 Safe stop 1 time controlled (SS1-t) according to IEC/EN 61800-6-2 or stop category 1 according to IEC/EN 60204-1			
			Safety category	SIL 3, per IEC 61508 / IEC 62061 / IEC 61800-5-2 PL e, category 4, as pwer EN ISO 13849-1	-				
				PFD _{avq}	< 2.74 x 10 ⁻⁴				
				PFH (1/h)	<3.13 x 10 ⁻⁹]			
			$MTTF_d(y)$	> 1600 years					
				DC _{avg}	93%	PDF	All		
15560296	CFW500-SFY2	\$72.00	Safety function module (STO and	Proof test interval	20 years				
13300290	01 77300-31 12	- γ/2.00	SS1-t)*	Response/reaction time	<100ms				
				OSSD test pulses	Pulse duration: <1ms Interval between pulses on same channel: >8ms Interval between pulses on different channels: >4ms				
				Safety input signals	ON: 15VDC – 30 VDC				
				Maximum discrepancy time between safety input signals	1s				
				Safety power supply	+24VDC ± 15% SELV type according to IEC 60950-1 PELV type according to IEC 60204-1				







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WEG AC Drives



WEG CFW500 Optional Input/Output Accessories

Each WEG CFW500 drive comes with a CFW500-IOS (p/n 14741859) pre-installed, but other modules are available as optional accessories.

To use any of the optional modules, the existing module must be removed and replaced with the new module.

The first table below shows the I/O modules that are available for WEG CFW500 drives. The second table provides their I/O configurations

	WEG CFW500 Input/Output (I/O) Modules									
WEG MAT #	Model #	Price	Description	Features/Specifications	Drawing Link	CFW500 Drive				
<u>14741859</u>	CFW500-IOS	\$56.00	Standard plug-in module, replacement	Replacement for CFW500-IOS module that comes standard with all WEG CFW500 drives. • Analog input: 1-channel, current/voltage • Analog output: 1-channel, current/voltage • Discrete input: 4-point, sourcing • Discrete output: 2-point, relay • (1) Form C (SPDT) relady	<u>PDF</u>	All				
<u>14742006</u>	CFW500-IOD	\$72.00	Digital input and output plug-in module (I/O)	WEG Electric CFW500 series relay/analog combo module. • Analog input: 1-channel, current/voltage • Analog output: 1-channel, current/voltage • Discrete input: 8-point, sourcing • Discrete output: 5-point, relay • (1) Form C (SPDT) relay	PDF	All				
<u>14742129</u>	CFW500-IOAD	\$93.00	Digital and analog input and output plug-in module (I/O)	WEG Electric CFW500 series relay/analog combo module. • Analog input: 3-channel, current/voltage • Analog output: 2-channel, current/voltage • Discrete input: 6-point, sourcing • Discrete output: 4-point, relay • (1) Form C (SPDT) relay	PDF	All				
<u>14968050</u>	CFW500-IOR-B	\$63.00	Digital output communication plug-in module	WEG Electric CFW500 series relay/analog combo module. • Analog input: 1-channel, current/voltage • Analog output: 1-channel, current voltage • Discrete input: 5-point, sinking/sourcing • Discrete output: 5-point relay • (3) Form A (SPST) relays, (1) Form C (SPDT) relay	PDF	All				
<u>12619000</u>	CFW500-ENC	\$107.00	Encoder input module	WEG Electric CFW500 series encoder analog combo module. • 400kHz maximum switching frequency • 1-channel quadrature encoder input • Analog input: 1-channel • Analog Output: 1-channel	PDF	All				

	WEG CFW500 I/O Module Configurations											
	Functions											
WEG MAT #	Model #	Inp	uts	Encoder		Outputs	S	Fieldbus Networks	Sup	ply		
		Digital	Analog	Inputs	Analog	Digital Relay	Digital Transistor	R\$485	10V	24V		
<u>14741859</u>	CFW500-IOS	4	1	_	1	1	1	1	1	1		
14742006	CFW500-IOD	8	1	_	1	1	4	1	1	1		
14742129	CFW500-IOAD	6	3	-	2	1	3	1	1	1		
<u>14968050</u>	CFW500-IOR-B	5	1	_	1	4	1	1	1	1		
<u>12619000</u>	CFW500-ENC	5	1	1	1	3	1	1	-	1		







14741859 14968050

12619000



WEG CFW500 Optional Communication Modules

Each WEG CFW500 drive comes with a CFW500-IOS (p/n 14741859) pre-installed, but other modules are available as optional accessories.

To use any of the optional modules, the existing module must be removed and replaced with the new module.

The following communication modules are available for WEG CFW500 drives:

			WEG CF	W500 Communication Modules		
WEG MAT #	Model #	Price	Description	Features/Specifications	Drawing Link	CFW500 Drive
<u>14742001</u> *	CFW500-CUSB	\$107.00	USB communication plug-in module	WEG Electric CFW500 series communication module, Modbus RTU and BACnet. • (1) RS-485 (3-pin terminal) port • (1) miniB-USB port	<u>PDF</u>	All
<u>14742005</u>	CFW500-CRS232	\$71.00	RS232 communication plug-in module	WEG Electric CFW500 series communication module, Modbus RTU and BACnet. • (1) RS-232 (3-pin terminal) port • (1) RS-485 (3-pin terminal) port	PDF	All
<u>15353140</u>	CFW500-CRS485-B	\$73.00	RS485 communication plug-in module	WEG Electric CFW500 series communication module, Modbus RTU and BACnet. • (2) RS-485 (3-pin terminal) ports	<u>PDF</u>	All
<u>12892814</u>	CFW500-CETH-IP	\$255.00	EtherNet/IP communication plug-in module	WEG Electric CFW500 series communication module, EtherNet/IP, Modbus RTU, and BACnet. • (1) Ethernet (RJ45) port • (1) RS-485 (3-pin terminal) port	<u>PDF</u>	All
<u>12892815</u>	CFW500-CEMB-TCP	\$255.00	Modbus TCP communication plus-in module	WEG Electric CFW500 series communication module, Modbus TCP, Modbus RTU, and BACnet. • (1) Ethernet (RJ45) port • (1) RS-485 (3-pin terminal) port	<u>PDF</u>	All

^{*} The USB plug-in module (14742001) requires a Virtual Com Port driver. This driver can be found at http://www.ftdichip.com/Drivers/VCP.htm

	WEG CFW500 Communication Module Configurations												
	Functions												
WEG MAT #	Model #	Inp	outs		Output	's	USB		Fieldbus	s Networks		Sup	ply
WEG MAI #	mouti #	Digital	Analog	Analog	Digital Relay	Digital Transistor	Port	RS232	R\$485	EtherNet/ IP	Modbus- TCP	10V	24V
14742001	CFW500-CUSB	4	1	1	1	1	1	-	1	-	-	1	1
14742005	CFW500-CRS232	2	1	1	1	1	-	1	1	_	-	-	1
<u>15353140</u>	CFW500-CRS485-B	4	2	1	2	1	-	-	2	-	-	1	1
<u>12892814</u>	CFW500-CETH-IP	2	1 1 1 1 1 1										1
12892815	CFW500-CEMB-TCP	2	1	1	1	1	_	-	1	-	1	-	1







14742001 14742005 12892814

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CFW500 AC Drives – Accessories

WEG CFW500 HMI Accessories and Cables

The WEG CFW500 has several optional HMI accessories. Two remote keypads (standard and advanced) along with connecting cables, a NEMA12 mounting frame, and a flash memory module for transferring parameters and user data are available. All of these modules can work in conjuction with any other installed optional accessories.

			WEG (CFW500 HMI Accessories		
WEG MAT #	Model #	Price	Description	Features/Specifications	Drawing Link	CFW500 Drive
<u>11833992</u>	CFW500-HMIR	\$86.00	Serial remote keypad	WEG Electric CFW500 series remote serial HMI keypad. Mounting hardware included. HMI cable kit required.	<u>PDF</u>	All
<u>15578295</u>	HMI-01	\$104.00	Advanced remote keypad	WEG Electric CFW500 series remote advanced text HMI keypad. Mounting hardware included. HMI cable kit required.	<u>PDF</u>	All
<u>15578297</u>	CFW500-RHMIF	\$13.00	Frame for Advanced keyapd	WEG Electric CFW500 series frame assembly, NEMA12. For use with the remote advanced text keypad (HMI-01). Mounting hardware included.	PDF	All
12330016	CFW500-CCHMIR01M	\$12.00	1m serial remote keypad cable kit	WEG Electric CFW500 series keypad mounting cable, cable length 3.2 ft [1m].	<u>PDF</u>	All
<u>12330460</u>	CFW500-CCHMIR03M	\$21.00	3m serial remote keypad cable kit	WEG Electric CFW500 series keypad mounting cable, cable length 9.8 ft [3m].	<u>PDF</u>	All
<u>12330461</u>	CFW500-CCHMIR05M	\$26.00	5m serial remote keyapd cable kit	WEG Electric CFW500 series keypad mounting cable, cable length 16.4 ft [5m].	<u>PDF</u>	All
<u>12330463</u>	CFW500-CCHMIR10M	\$37.00	10m serial remote keypad cable kit	WEG Electric CFW500 series keypad mounting cable, cable length 32.8 ft [10m].	<u>PDF</u>	All
<u>11636485</u>	CFW500-MMF	\$97.00	Flash memory module	WEG Electric CFW500 series flash memory module. • Allows data transfer such as user parameters and SoftPLC user programs • Battery powered, drive should be disconnected from power during data transfer • DO NOT USE when the drive is powered on	<u>PDF</u>	All



11833992



1233 series cable



11636485



15578295

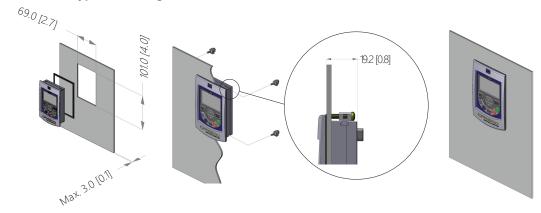


15578297

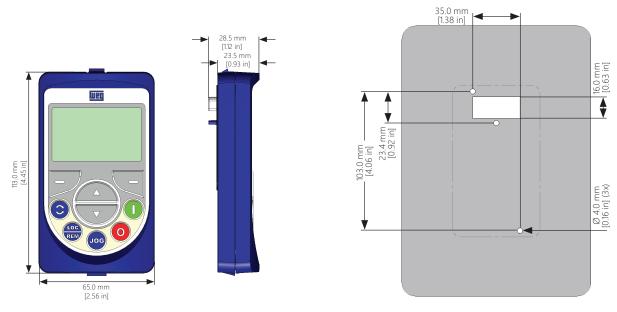
UPI CFW500 AC Drives – Accessories

WEG CFW500 HMI Accessories Mounting and Installation

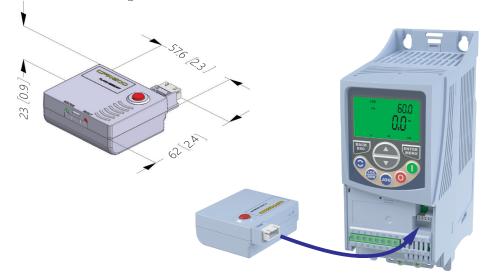
Standard Remote Keypad Mounting



Advanced Remote Keypad Mounting



Flash Module Mounting







WEG CFW500 Optional NEMA1 Frame Kits

NEMA1 frame kits are available for all CFW500 series IP20 rated drives. These kits will upgrade the drive enclosure to the NEMA1 standard. Note that the NEMA1 frame kits are NOT compatible with the CFW500 series IP66 rated drives.



Note: The NEMA1 frame kits cannot be used with the CFW500 series cable clamps - these two accessories are mutually exclusive.

			WEG	CFW500 NEMA1 Frame Kits		
WEG MAT #	Model #	Price	Description	Features/Specifications	Drawing Link	CFW500 Drive
<u>11527460</u>	CFW500-KN1A	\$14.00	NEMA1 kit for frame size A (standard for option N1)	WEG Electric CFW500 series conduit box, NEMA1. For use with WEG CFW500 series A Frame AC drives. Mounting hardware included.	PDF	IP20
<u>11527459</u>	CFW500-KN1B	\$16.50	NEMA1 kit for frame size B (standard for option N1)	WEG Electric CFW500 series conduit box, NEMA1. For use with WEG CFW500 series B Frame AC drives. Mounting hardware included.	PDF	IP20
<u>12133824</u>	CFW500-KN1C	\$22.50	NEMA1 kit for frame size C (standard for option N1)	WEG Electric CFW500 series conduit box, NEMA1. For use with WEG CFW500 series C Frame AC drives. Mounting hardware included.	PDF	IP20
<u>12692970</u>	CFW500-KN1D	\$30.00	NEMA1 kit for frame size D (standard for option N1)	WEG Electric CFW500 series conduit box, NEMA1. For use with WEG CFW500 series D Frame AC drives. Mounting hardware included.	PDF	IP20
<u>13104601</u>	CFW500-KN1E	\$33.00	NEMA1 kit for frame size E (standard for option N1)	WEG Electric CFW500 series conduit box, NEMA1. For use with WEG CFW500 series E Frame AC drives. Mounting hardware included.	PDF	IP20
14601107	CFW500-KN1F	\$84.00	NEMA1 kit for frame size F (standard for option N1)	WEG Electric CFW500 series conduit box, NEMA1. For use with WEG CFW500 series F Frame AC drives. Mounting hardware included.	PDF	IP20
<u>15461789</u>	CFW500-KN1G	\$106.00	NEMA1 kit for frame size G (standard for option N1)	WEG Electric CFW500 series conduit box, NEMA1. For use with WEG CFW500 series G Frame AC drives. Mounting hardware included.	PDF	IP20





WEG CFW500 Optional Cable Clamps

The optional cable clamps can be used to provide strain relief for the cabling connected to the drive. The clamps hold the cable by the outer jacket so that the drive connection is not providing the main support to the cable. This protects the individual conductors attached to the terminals of the drive.



Note: The NEMA1 frame kits cannot be used with the CFW500 sries cable clamps - these two accessories are mutually exclusive.

			WE	G CFW500 Cable Clamp Kits		
WEG MAT #	Model #	Price	Description	Features/Specifications	Drawing Link	CFW500 Drive
<u>11951056</u>	CFW500-KPCSA	\$21.00	Kit for power cables clamping, frame size A	WEG Electric CFW500 series cable clamp. • Allows for strain relief clamping of power and motor leads at the drive. • For use with CFW500 series A Frame AC drives.	<u>PDF</u>	IP20
<u>11951108</u>	CFW500-KPCSB	\$22.50	Kit for power cables clamping, frame size B	WEG Electric CFW500 series cable clamp. • Allows for strain relief clamping of power and motor leads at the drive. • For use with CFW500 series B Frame AC drives.	<u>PDF</u>	IP20
<u>12133826</u>	CFW500-KPCSC	\$23.50	Kit for power cables clamping, frame size C	WEG Electric CFW500 series cable clamp. • Allows for strain relief clamping of power and motor leads at the drive. • For use with CFW500 series C Frame AC drives.	<u>PDF</u>	IP20
<u>12692971</u>	CFW500-KPCSD	\$26.00	Kit for power cables clamping, frame size D	WEG Electric CFW500 series cable clamp. • Allows for strain relief clamping of power and motor leads at the drive. • For use with CFW500 series D Frame AC drives.	PDF	IP20
<u>13055389</u>	CFW500-KPCSE	\$33.00	Kit for power cables clamping, frame size E	WEG Electric CFW500 series cable clamp. • Allows for strain relief clamping of power and motor leads at the drive. • For use with CFW500 series E Frame AC drives.	PDF	IP20
<u>14601158</u>	CFW500-KPCSF	\$72.00	Kit for power cables clamping, frame size F	WEG Electric CFW500 series cable clamp. • Allows for strain relief clamping of power and motor leads at the drive. • For use with CFW500 series F Frame AC drives.	PDF	IP20
<u>15461788</u>	CFW500-KPCSG	\$89.00	Kit for power cables clamping, frame size G	WEG Electric CFW500 series cable clamp. • Allows for strain relief clamping of power and motor leads at the drive. • For use with CFW500 series G Frame AC drives.	PDF	IP20



CFW500 Cable Clamp

UPI CFW500 AC Drives – Accessories

WEG CFW500 Replacement Cooling Fans

Replacement cooling fans are available for all IP20 models of the CFW500 AC Drive. Simply remove the old fan and install the replacement part.

	V	VEG C	FW500 R	eplacement Fan Kits		
WEG MAT #	Model #	Price	Description	Features/Specifications	Drawing Link	CFW500 Drive
14391148	CFW50X-FAN-A	\$65.00	Replacement cooling fan	WEG Electric CFW500 series main cooling fan, replacement. • 60 x 60 x 15 mm • 24 VDC • For use with CFW500 series A Frame AC drives	PDF	IP20, Frame A
<u>12350492</u>	CFW50X-FAN-BC	\$62.00	Replacement cooling fan	WEG Electric CFW500 series main cooling fan, replacement. • 70 x 70 x 15 mm • 12 VDC • For use with CFW500 series B and C Frame AC drives	<u>PDF</u>	IP20, Frame B and C
<u>14391151</u>	CFW50X-FAN-D1	\$65.00	Replacement cooling fan	WEG Electric CFW500 series main cooling fan, replacement. • 60 x 60 x 25.4 mm • 24 VDC • For use with CFW500 series drive # 15575716	<u>PDF</u>	15575716
<u>12852366</u>	CFW50X-FAN-D2	\$283.00	Replacement cooling fan	WEG Electric CFW500 series main cooling fan, replacement. • 60 x 60 x 38 mm • 24 VDC • For use with CFW500 series drive # 15576540	<u>PDF</u>	15576540
<u>14391152</u>	CFW50X-FAN-D3	\$65.00	Replacement cooling fan	WEG Electric CFW500 series main cooling fan, replacement. • 60 x 60 x 25.4 mm • 24 VDC • For use with CFW500 series drive # 15576919	<u>PDF</u>	15576919
12852367	CFW50X-FAN-D4	\$215.00	Replacement cooling fan	WEG Electric CFW500 series main cooling fan, replacement. • 60 x 60 x 38 mm • 24 VDC • For use with CFW500 series drive # 15577021	PDF	15577021
<u>13770165</u>	CFW50X-FAN-E	\$257.00	Replacement cooling fan	WEG Electric CFW500 series main cooling fan, replacement. • 80 x 80 x 38 mm • 24 VDC • For use with CFW500 series E Frame AC drives	<u>PDF</u>	IP20, Frame E
			Continue	d on next page		



Frame A Replacement Fan



Frame B and C Replacement Fan



Frame D (dual fan model) Replacement Fan



Frame E Replacement Fan

UPI CFW500 AC Drives – Accessories

WEG CFW500 Replacement Cooling Fans, continued

	V	VEG C	FW500 R	eplacement Fan Kits		
WEG MAT #	Model #	Price	Description	Features/Specifications	Drawing Link	CFW500 Drive
<u>15245117</u>	CFW50X-FAN-F1	\$247.00	Replacement cooling fan	WEG Electric CFW500 series main cooling fan, replacement. • 80 x 80 x 38 mm • 24VDC • For use with CFW500 series F Frame AC drives	<u>PDF</u>	IP20, Frame F
12295730	FAN 24VDC CAB 40mm	\$334.00	Replacement cooling fan	WEG Electric CFW500 series main cooling fan, replacement. • 150 x 172 x 51 mm • 24VDC • For use with CFW500 series G frame 75hp AC drives	PDF	IP20, Frame G
12295732	FAN 48VDC CAB 60mm	\$596.00	Replacement cooling fan	WEG Electric CFW500 series main cooling fan, replacement. • 150 x 172 x 51 mm • 48VDC • For use with CFW500 series G frame 100 and 150 hp AC drives	<u>PDF</u>	IP20, Frame G
15746587	CFW500-66- FAN-AB	\$62.00	Replacement cooling fan	WEG Electric CFW500 series main cooling fan, replacement. • 60 x 60 x 25 mm • 12VDC • For use with CFW500 series IP66 230VAC 7.5 hp and below, 480VAC 10hp and below AC drives	PDF	IP66, Frame A & B
<u>15746630</u>	CFW500-66- FAN-B	\$106.00	Replacement cooling fan	WEG Electric CFW500 series main cooling fan, replacement. • 60 x 60 x 38 mm • 24VDC • For use with CFW500 series IP66 230VAC 10hp, 480VAC 15 and 20 hp AC drives	<u>PDF</u>	IP66 Frame B



Frame F Replacement Fan



Frame G Replacement Fan



Fuses and Circuit Breakers for WEG CFW500 AC Drives

Protection devices are essential to prevent damage to your WEG CFW500 drive and application equipment. Please use the fuse specification chart below to select fuses that are applicable to your WEG CFW500 drive. Only use UL-certified fuses which comply with your local regulations.

					Fuse		
WEG MAT #	Model #	Input Voltage	Amps	CI	ass J ¹	Class	J Holder
		voitage		1-Phase	3-Phase	1-Phase	3-Phase
<u>'</u>		•		IP20 Drives			
15570800	CFW500A01P6B2NB20G2		20	JHL20 (JHL20-1)	JHL20 (JHL20-1)	JM60030-2CR	JM60030-3CR
15571879	CFW500A02P6B2NB20G2	1-phase or	20	JHL20 (JHL20-1)	JHL20 (JHL20-1)	JM60030-2CR	JM60030-3CR
<u>15571881</u>	CFW500A04P3B2NB20G2	3-phase /	25	JHL25 JHL25-1)	JHL20 (JHL20-1)	JM60030-2CR	JM60030-3CR
<u>15574655</u>	CFW500B07P3B2DB20G2	230VAC	40	JHL40 (JHL40-1)	JHL20 (JHL20-1)	JM60060-2CR	JM60030-3CR
15575067	CFW500B10P0B2DB20G2		60	JHL60 (JHL60-1)	JHL25 JHL25-1)	JM60060-2CR	JM60030-3CR
<u> 15572625</u>	CFW500A07P0T2NB20G2		20		JHL20 (JHL20-1)		JM60030-3CR
<u>15572689</u>	CFW500A09P6T2NB20G2		25		JHL25 JHL25-1)		JM60030-3CR
15575202	CFW500B16P0T2DB20G2		40		JHL40 (JHL40-1)		JM60060-3CR
<u>15575701</u>	CFW500C24P0T2DB20G2		60		JHL60 (JHL60-1)		JM60060-3CR
<u>15575716</u>	CFW500D28P0T2DB20G2	3-phase /	60		JHL60 (JHL60-1)		JM60060-3CR
<u>15576540</u>	CFW500D47P0T2DB20G2	230VAC	60		<u>JHL100</u>		JM60100-1MW14-3
<u>15577077</u>	CFW500E56P0T2DB20G2		125		<u>JHL125</u>		JM60200-1MW16-3
<u>15342437</u>	CFW500F77P0T2DB20G2		125		Mersen A100P125-4 ³		Mersen P266L ³
<u>15342760</u>	CFW500F88P0T2DB20G2		125		Mersen A100P125-4 ³		Mersen P266L ³
<u>15342909</u>	CFW500F0105T2DB20G2		125		Mersen A100P125-4 3		Mersen P266L ³
<u>15572819</u>	CFW500A01P0T4NB20G2		20		JHL20 (JHL20-1)		JM60030-3CR
<u>15572908</u>	CFW500A01P6T4NB20G2		20		JHL20 (JHL20-1)		JM60030-3CR
<u>15573714</u>	CFW500A02P6T4NB20G2		20		JHL20 (JHL20-1)		JM60030-3CR
<u>15573819</u>	CFW500A04P3T4NB20G2		20		JHL20 (JHL20-1)		<u>JM60030-3CR</u>
<u>15573823</u>	CFW500A06P1T4NB20G2		20		JHL20 (JHL20-1)		JM60030-3CR
<u>15575568</u>	CFW500B02P6T4DB20G2		20	_	JHL20 (JHL20-1)	_	JM60030-3CR
<u>15575577</u>	CFW500B04P3T4DB20G2		20		JHL20 (JHL20-1)		JM60030-3CR
<u>15575665</u>	CFW500B06P5T4DB20G2		20		JHL20 (JHL20-1)		JM60030-3CR
<u>15575699</u>	CFW500B10P0T4DB20G2		25		JHL25 JHL25-1)		JM60030-3CR
<u>15575707</u>	CFW500C14P0T4DB20G2		35		JHL35 (JHL35-1)		JM60060-3CR
<u>15575711</u>	CFW500C16P0T4DB20G2	3-phase / 480VAC	35		JHL35 (JHL35-1)		JM60060-3CR
<u>15576919</u>	CFW500D24P0T4DB20G2	400 0/10	60		JHL60 (JHL60-1)]	JM60060-3CR
<u>15577021</u>	CFW500D31P0T4DB20G2		60		JHL60 (JHL60-1)		JM60060-3CR
<u>15577211</u>	CFW500E39P0T4DB20G2		80		JHL80		JM60100-1MW14-3
<u>15577452</u>	CFW500E49P0T4DB20G2		100		JHL100		JM60100-1MW14-3
<u>15733937</u>	CFW500F77P0T4DB20G2		125		JHL125]	JM60200-1MW16-3
<u>15734064</u>	CFW500F88P0T4DB20G2		125		JHL125		JM60200-1MW16-3
<u>15734119</u>	CFW500F0105T4DB20G2		125		JHL125		JM60200-1MW16-3
<u>15448371</u>	CFW500G0142T4DB20G2		300		Mersen A100P300-4 3]	3 x Mersen P266L3
<u>15448372</u>	CFW500G0180T4DB20G2		300		Mersen A100P300-4 ³		3 x Mersen P266L3
15448373	CFW500G0211T4DB20G2		300		Mersen A100P300-4 3]	3 x Mersen P266L3

- 1 Per UL standard
- 2 Non UL standard
- 3 Not available at AutomationDirect



Fuses and Circuit Breakers, continued

	Fuse Specific	cation Ch	art WE0	G CFW500	Drives, con	tinued	
					Fu	se	
WEG MAT #	Model #	Input Voltage	Amps	Clas	ss J ¹	Class J	Holder
		vollage		1-Phase	3-Phase	1-Phase	3-Phase
		Table	continued fro	m previous page			
			IP66 D	rives			
14990863	CFW500A01P6B2DB66DSG2		20	JHL20 (JHL20-1)	JHL20 (JHL20-1)	JM60030-2CR	JM60030-3CR
14991103	CFW500A02P6B2DB66DSG2	1-phase or	20	JHL20 (JHL20-1)	JHL20 (JHL20-1)	JM60030-2CR	JM60030-3CR
14991753	CFW500A04P3B2DB66DSG2	3-phase /	25	JHL25 JHL25-1)	JHL20 (JHL20-1)	JM60030-2CR	JM60030-3CR
14938005	CFW500A07P3B2DB66DSG2	230VAC	40	JHL40 (JHL40-1)	JHL20 (JHL20-1)	JM60060-2CR	JM60030-3CR
14938047	CFW500A10P0B2DB66DSG2		60	JHL60 (JHL60-1)	JHL25 JHL25-1)	JM60060-2CR	JM60030-3CR
14938113	CFW500A16P0T2DB66DSG2		40		JHL40 (JHL40-1)		JM60060-3CR
14975838	CFW500B24P0T2DB66DSG2	3-phase /	60	_	JHL60 (JHL60-1)	_	JM60060-3CR
14938655	CFW500B28P0T2DB66DSG2	230VAC	60		JHL60 (JHL60-1)		JM60060-3CR
14991953	CFW500A01P0T4DB66DSG2		20		JHL20 (JHL20-1)		JM60030-3CR
14992148	CFW500A01P6T4DB66DSG2		20		JHL20 (JHL20-1)		JM60030-3CR
14976517	CFW500A02P6T4DB66DSG2		20		JHL20 (JHL20-1)		JM60030-3CR
14976809	CFW500A04P3T4DB66DSG2		20		JHL20 (JHL20-1)		JM60030-3CR
14977065	CFW500A06P5T4DB66DSG2	3-phase /	20	_	JHL20 (JHL20-1)	_	JM60030-3CR
14977266	CFW500A10P0T4DB66DSG2	480VAC	25		JHL25 JHL25-1)		JM60030-3CR
14977397	CFW500B14P0T4DB66DSG2		35		JHL35 (JHL35-1)		JM60060-3CR
14977556	CFW500B16P0T4DB66DSG2		35		JHL35 (JHL35-1)		JM60060-3CR
14978365	CFW500B24P0T4DB66DSG2		60		JHL60 (JHL60-1)		JM60060-3CR
14978573	CFW500B31P0T4DB66DSG2		60		JHL60 (JHL60-1)		JM60060-3CR
14989840	CFW500A01P6B2DB66G2		20	JHL20 (JHL20-1)	JHL20 (JHL20-1)	JM60030-2CR	JM60030-3CR
14990985	CFW500A02P6B2DB66G2	1-phase or	20	JHL20 (JHL20-1)	JHL20 (JHL20-1)	JM60030-2CR	JM60030-3CR
14991517	CFW500A04P3B2DB66G2	3-phase /	25	JHL25 JHL25-1)	JHL20 (JHL20-1)	JM60030-2CR	JM60030-3CR
14937890	CF W500A07P3B2DB66G2	230VAC	40	JHL40 (JHL40-1)	JHL20 (JHL20-1)	JM60060-2CR	JM60030-3CR
14938041	CFW500A10P0B2DB66G2		60	JHL60 (JHL60-1)	JHL25 JHL25-1)	JM60060-2CR	JM60030-3CR
14938111	CFW500A16P0T2DB66G2	2 /	40	,	JHL40 (JHL40-1)		JM60060-3CR
14975783	CFW500B24P0T2DB66G2	3-phase / 230VAC	60		JHL60 (JHL60-1)		JM60060-3CR
<u>14938547</u>	CFW500B28P0T2DB66G2	230 VAC	60		JHL60 (JHL60-1)		JM60060-3CR
<u>14991899</u>	CFW500A01P0T4DB66G2		20		JHL20 (JHL20-1)		JM60030-3CR
14992113	CFW500A01P6T4DB66G2		20		JHL20 (JHL20-1)		JM60030-3CR
14975888	CFW500A02P6T4DB66G2 CFW500A04P3T4DB66G2		20		JHL20 (JHL20-1)		JM60030-3CR
14976683 14976814	CFW500A04P314DB66G2 CFW500A06P5T4DB66G2	3-phase /	20	_	JHL20 (JHL20-1) JHL20 (JHL20-1)	_	JM60030-3CR JM60030-3CR
14977261	CFW500A00P5T4DB66G2	480VAC	25		JHL25 JHL25-1)		JM60030-3CR
14977391	CFW500B14P0T4DB66G2	40UVAC	35		JHL35 (JHL35-1)		JM60060-3CR
14977552	CFW500B16P0T4DB66G2		35		JHL35 (JHL35-1)		JM60060-3CR
14977629	CFW500B24P0T4DB66G2		60		JHL60 (JHL60-1)		JM60060-3CR
14978548	CFW500B31P0T4DB66G2		60		JHL60 (JHL60-1)		JM60060-3CR

^{1 -} Per UL standard

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^{2 -} Non UL standard



Fuses and Circuit Breakers, continued

	WEG CF	W500 AC L		rcuit Breaker C	omponent Se	election			
WEG MAT #	Model #	Input Voltage	Max Current (A)	WEG Circuit Breaker	WEG Current Limiter	WEG Power Terminal Block	WEG Short Circuit Alarm Contact		
				IP20 Drives					
<u>15570800</u>	CFW500A01P6B2NB20G2		16	MPW40-3-D063 / MPW40-3-D025					
<u>15571879</u>	CFW500A02P6B2NB20G2	1/	16	MPW40-3-U010 / MPW40-3-U004					
<u>15571881</u>	CFW500A04P3B2NB20G2	1-phase / 3-phase 230VAC IP20	16	MPW40-3-U016 / MPW40-3-D063					
<u>15574655</u>	CFW500B07P3B2DB20G2		25	MPW40-3-U025 / MPW40-3-U016	CLT32MPW40	LST25	TSB		
<u>15575067</u>	CFW500B10P0B2DB20G2		25	MPW40-3-U032 / MPW40-3-U016					
<u>15572625</u>	CFW500A07P0T2NB20G2		16	MPW40-3-U010					
<u>15572689</u>	CFW500A09P6T2NB20G2		16	MPW40-3-U016					
<u>15575202</u>	CFW500B16P0T2DB20G2		25	MPW40-3-U025					
<u>15575701</u>	CFW500C24P0T2DB20G2		32	MPW40-3-U032					
<u>15575716</u>	CFW500D28P0T2DB20G2	3-phase 230VAC	125						
<u>15576540</u>	CFW500D47P0T2DB20G2	IP20	125						
<u>15577077</u>	CFW500E56P0T2DB20G2		125	Any UL Listed CB		N/A			
<u>15342437</u>	CFW500F77P0T2DB20G2		225	7 tily OL Listed OB		14/7			
<u>15342760</u>	CFW500F88P0T2DB20G2		225						
<u>15342909</u>	CFW500F0105T2DB20G2		225						
<u>15572819</u>	CFW500A01P0T4NB20G2	_	16	MPW40-3-D016					
<u>15572908</u>	CFW500A01P6T4NB20G2	_	16	MPW40-3-D025					
<u>15573714</u>	CFW500A02P6T4NB20G2	_	16	MPW40-3-U004					
<u>15573819</u>	CFW500A04P3T4NB20G2	_	16	MPW40-3-D063					
<u>15573823</u>	CFW500A06P1T4NB20G2	_	16	MPW40-3-U010					
<u>15575568</u>	CFW500B02P6T4DB20G2	_	25	MPW40-3-U004	CLT32MPW40	LST25	<u>TSB</u>		
<u>15575577</u>	CFW500B04P3T4DB20G2	_	25	MPW40-3-D063					
<u>15575665</u>	CFW500B06P5T4DB20G2	_	25	MPW40-3-U010					
<u>15575699</u>	CFW500B10P0T4DB20G2	_	25	MPW40-3-U016					
<u>15575707</u>	CFW500C14P0T4DB20G2	3-phase 460VAC	32	MPW40-3-U020					
<u>15575711</u>	CFW500C16P0T4DB20G2	3-pnase 460VAC	32	MPW40-3-U032					
<u>15576919</u>	CFW500D24P0T4DB20G2		40						
<u>15577021</u>	CFW500D31P0T4DB20G2	_	50						
<u>15577211</u>	CFW500E39P0T4DB20G2	_	50	_					
<u>15577452</u>	CFW500E49P0T4DB20G2	_	65	_					
<u>15733937</u>	CFW500F77P0T4DB20G2	_	100	Any UL Listed CB		N/A			
<u>15734064</u>	CFW500F88P0T4DB20G2	_	100	- 7.11, 52 215100 05		IWA			
<u>15734119</u>	CFW500F0105T4DB20G2	_	125	_					
<u>15448371</u>	CFW500G0142T4DB20G2	_	175						
<u>15448372</u>	CFW500G0180T4DB20G2]	225						
<u>15448373</u>	CFW500G0211T4DB20G2		250						
			Table co	ntinued on next page					

UPI CFW500 Compatible Accessories

Fuses and Circuit Breakers, continued

	WEG CFW500	AC Drive	Circuit E	Breaker Compo	nent Selectio	n, <i>continue</i>	1
WEG MAT #	Model #	Input Voltage	Max Current (A)	WEG Circuit Breaker	WEG Current Limiter	WEG Power Terminal Block	WEG Short Circuit Alarm Contact
			Table conti	nued from previous page)		
				IP66 Drives			
<u>14990863</u>	CFW500A01P6B2DB66DSG2		16	MDW/40 0 LIGOS /			
<u>14991103</u>	CFW500A02P6B2DB66DSG2		16	MPW40-3-U025 / MPW40-3-U016			
<u>14991753</u>	CFW500A04P3B2DB66DSG2	1-phase / 3-phase 230VAC	16				
<u>14938005</u>	CFW500A07P3B2DB66DSG2	IP66	25	MPW40-3-U025 / MPW40-3-U016	CLT32MPW40	LST25	<u>TSB</u>
<u>14938047</u>	CFW500A10P0B2DB66DSG2		25	MPW40-3-U032 / MPW40-3-U016			
<u>14938113</u>	CFW500A16P0T2DB66DSG2	2 nhana 220\/AC	25.0	MPW40-3-U025			
<u>14975838</u>	CFW500B24P0T2DB66DSG2	3-phase 230VAC IP66	32.0	MPW40-3-U032			
<u>14938655</u>	CFW500B28P0T2DB66DSG2		125.0	Any UL Listed CB		N/A	
<u>14991953</u>	CFW500A01P0T4DB66DSG2		16.0				
14992148	CFW500A01P6T4DB66DSG2		16.0	MPW40-3-U016			
<u>14976517</u>	CFW500A02P6T4DB66DSG2		25.0	<u>IVII VV+0 0 0010</u>			
<u>14976809</u>	CFW500A04P3T4DB66DSG2		25.0		CLT32MPW40	LST25	<u>TSB</u>
<u>14977065</u>	CFW500A06P5T4DB66DSG2	3-phase 460VAC	25.0	MPW40-3-U025	OLI SZIVII VV40	<u>L0120</u>	<u>100</u>
<u>14977266</u>	CFW500A10P0T4DB66DSG2	IP66	25.0	1011 1040-0-0025			
<u>14977397</u>	CFW500B14P0T4DB66DSG2		32.0	MPW40-3-U032			
<u>14977556</u>	CFW500B16P0T4DB66DSG2		32.0	MPW40-3-U032			
<u>14978365</u>	CFW500B24P0T4DB66DSG2		125.0	Any UL Listed CB		N/A	
<u>14978573</u>	CFW500B31P0T4DB66DSG2		125.0	Ally OL Listed CB		N/A	
<u>14989840</u>	CFW500A01P6B2DB66G2		16	MD1440 0 11005 /			
<u>14990985</u>	CFW500A02P6B2DB66G2		16	MPW40-3-U025 / MPW40-3-U016			
14991517	CFW500A04P3B2DB66G2	1-phase /	16	<u> </u>	OL TOOL IDIA (40	1.0705	TOD
<u>14937890</u>	CFW500A07P3B2DB66G2	3-phase 230VAC IP66	25	MPW40-3-U025 / MPW40-3-U016	CLT32MPW40	LST25	<u>TSB</u>
<u>14938041</u>	CFW500A10P0B2DB66G2		25	MPW40-3-U032 / MPW40-3-U016			
<u>14938111</u>	CFW500A16P0T2DB66G2	2 phase 220\/AC	25.0	MPW40-3-U025			
<u>14975783</u>	CFW500B24P0T2DB66G2	3-phase 230VAC IP66	32.0	MPW40-3-U032	CLT32MPW40	LST25	<u>TSB</u>
14938547	CFW500B28P0T2DB66G2		125.0	Any UL Listed CB			
<u>14991899</u>	CFW500A01P0T4DB66G2		16.0				
14992113	CFW500A01P6T4DB66G2		16.0	MPW40-3-U016			
<u>14975888</u>	CFW500A02P6T4DB66G2		25.0	<u>IVIF VV4-0-3-UU IU</u>			
<u>14976683</u>	CFW500A04P3T4DB66G2		25.0		CLT32MPW40	LST25	<u>TSB</u>
<u>14976814</u>	CFW500A06P5T4DB66G2	3-phase 460VAC IP66	25.0	MPW40-3-U025	GLI 3ZIVIF VV4U	<u>L3123</u>	<u>100</u>
<u>14977261</u>	CFW500A10P0T4DB66G2		25.0	IVIE VV4U-3-UUZO			
<u>14977391</u>	CFW500B14P0T4DB66G2		32.0	MDWW0 3 LI033			
14977552	CFW500B16P0T4DB66G2		32.0	MPW40-3-U032			
14977629	CFW500B24P0T4DB66G2		125.0	Any III Linto d CD		NI/A	
14978548	CFW500B31P0T4DB66G2		125.0	- Any UL Listed CB		N/A	



Braking Resistors for WEG CFW500 AC Drives

Dynamic braking absorbs the motor regeneration energy when the motor is decelerated faster than it would if it was allowed to coast to a stop. The regeneration energy is dissipated by braking resistors. All drives have the braking function built-in and do not require a separate dynamic braking unit. The recommended open type or NEMA 1 type brake resistors available at AutomationDirect for each drive model are listed in the table below.

				WEG (CFW5	00 AC				mponent S	elect	ion																							
a)				Drive	Ratings			rake Capa ax Torque		128	125% Braking Torque @ 10% Duty Cycle*																								
Drive Voltage	WEG	Drive Model (CFW500xxxG2)	IP** Vo	Input	Drive	Motor		Max	Peak	Open Type B	raking F	Resistor	NEMA1 Resistors Swite		Thermal																				
Drive I	MAT#			Voltage Phases	Rated Amps (hp)	Resistor (Ω)	Current F	Power (kW)	Part #	Qty.	Total Brake Current (A)	Part #	Qty.	Total Brake Current (A)																					
	<u>15570800</u>	A01P6B2NB20		1/3	1.6					No Dynamic B	rokina /Ti	acac Madala)																							
	<u>15572819</u>	A01P0T4NB20		3	1					No Dynamic B	raking (11	iese iviodeis)																							
	14990863	A01P6B2DB66DS	IP66D		4.0	م م د					1			1																					
	14989840	A01P6B2DB66	IP66	1/3	1.6	0.25	407		4.0	CC DD 400W450	1		DD N4 040W450	1	2.6																				
	14991103	A02P6B2DB66DS	IP66D				127	6	4.6	GS-BR-400W150	1	2.6	BR-N1-240W150	1	2.6																				
	14990985	A02P6B2DB66	IP66		2.6						1	1		1																					
	<u>15571879</u>	A02P6B2NB20				0.5				No Dunamia D	rakina /Tl	aaa Madala\																							
	15572908	A01P6T4NB20		3	1.6	0.75				No Dynamic B	raking (11	nese iviodeis)																							
	14991753	A04P3B2DB66DS	IP66D						407	6	4.6	GS-BR-400W150	1	0.0	BR-N1-240W150	1																			
	14991517	A04P3B2DB66	IP66			4.3	1	127	, 6	4.0	<u>us-br-400W150</u>	1	2.6	BN-W1-240W130	1	2.6																			
	<u>15571881</u>	A04P3B2NB20								No Dynamic B	raking (Tl	nese Models)																							
	15574655	B07P3B2DB20	IP20	1/3								1			1																				
	14938005	A07P3B2DB66DS	IP66D		7.3	2	39	10	3.9	GS-BR-400W040	1	9.8	BR-N1-280W50	1	7.8																				
	14937890	A07P3B2DB66	IP66								1			1																					
	<u>15572625</u>	A07P0T2NB20			7					No Dynamic B	raking (Tl	nese Models)																							
	<u>15575067</u>	B10P0B2DB20	IP20												l																1			1	
2301	14938047	A10P0B2DB66DS	IP66D	1	10	3	27	15	6.1	GS-BR-400W040	1	9.8	BR-N1-280W50	1	7.8																				
2	14938041	A10P0B2DB66	IP66								1			1																					
	15572689	A09P6T2NB20			9.6					No Dynamic B	raking (TI	nese Models)																							
	15575202	B16P0T2DB20	IP20				5 20	20	8		1			1																					
	14938113	A16P0T2DB66DS	IP66D		16	5				GS-BR-400W040	1	9.8	BR-N1-800W25	1	15.6																				
	14938111	A16P0T2DB66	IP66								1			1																					
	15575701	C24P0T2DB20	IP20								1			1																					
	14975838	B24P0T2DB66DS	IP66D		24	7.5	15	26	10.1	GS-BR-1K0W020	1		BR-N1-800W18P0	1	21.7																				
	14975783	B24P0T2DB66	IP66								1	19.5		1																					
	15575716	D28P0T2DB20	IP20	3				38			1			1																					
	14938655	B28P0T2DB66DS	IP66D	1	28	10	10		14.4		1		<u>BR-N1-1K5W14P0</u>	1	27.9																				
	14938547	B28P0T2DB66	IP66						,	GS-BR-1K5W013	1	30.0		1																					
	15576540	D47P0T2DB20	IP20		47	15	8.6	45	17.4		1		BR-N1-2K2W08P6	1	45.3																				
	15577077	E56P0T2DB20	IP20		56		4.7	95	42.4		28			1																					
	15342437	F77P0T2DB20	IP20		77	20					2S		BR-N1-2K2W06P8	1	57.4																				
	15342760	F88P0T2DB20	IP20		88	25	6	66.7	26.7	GS-BR-1K5W3P3	28	59.1		1																					
	15342909	F0105T2DB20	IP20		105	30	3	133	53.1		28		BR-N1-3K6W06P8	1	114.7																				
			20					tinued or		IA.			<u></u>	_ '																					

^{* 10%} Duty Cycle with maximum ON (braking) time for 10 seconds.

^{**} IP66D stands for IP66 with disconnect.

Note: Where noted in resistor quanity, S = series and P = parallel

UPI CFW500 Compatible Accessories

Braking Resistors for WEG CFW500 AC Drives, continued

	WEG CFW500 AC Drive Braking Component Selection																					
					Ratings		Drive B	rake Capa lax Torque	acity -	125% Braking Torque @ 10% Duty Cycle*												
Drive Voltage	WEG MAT#	Drive Model (CFW500xxxG2)		Innut	Drive	Motor		Max	Peak Power (kW)	Open Type Braking Resistor			NEMA1 Resistors with Thermal Switch									
Drive			IP**	Input Voltage Phases	Rated Amps (A)	Power (hp)	Resistor (Ω)	SISTOR Current		Part #	Qty.	Total Brake Current (A)	Part #	Qty.	Total Brake Current (A)							
						Ta	able contin	ued from	previous	page												
	<u>14992148</u>	A01P6T4DB66DS	IP66D		1.6	0.25					1			1								
	14992113	A01P6T4DB66	IP66		1.0	0.25	127	6	4.6	CC DD 400W150	1	5.3	DD N1 240W150	1	5.3							
	<u>14991953</u>	A01P0T4DB66DS	IP66D]	4	0.22	127	0	4.0	GS-BR-400W150	1	5.3	<u>BR-N1-240W150</u>	1	5.3							
	14991899	A01P0T4DB66	IP66	1	1	0.33					1			1								
	<u>15573714</u>	A02P6T4NB20		1						No Dynamic B	raking (These Model	s)									
	<u>15575568</u>	B02P6T4DB20	IP20	1	2.6		127			GS-BR-400W150	1		<u>BR-N1-240W150</u>	1								
	14976517	A02P6T4DB66DS	IP66D	1		1		6	4.6		1	5.3		1	5.3							
	14975888	A02P6T4DB66	IP66	1							1			1								
	15573819	A04P3T4NB20		1						No Dynamic B	raking (These Model	s)									
	15575577	B04P3T4DB20	IP20	3			_					1		,	1							
	14976809	A04P3T4DB66DS	IP66D		4.3	2	127	6	4.6	GS-BR-400W150	1	5.3	BR-N1-240W150	1	5.3							
	14976683	A04P3T4DB66	IP66									1			1							
	15573823	A06P1T4NB20	_		6.1					No Dynamic B	rakina (These Model	s)									
	15575665	B06P5T4DB20	IP20				1 .					2P		-/	1							
	14977065	A06P5T4DB66DS	IP66D		6.5	3	100	8	6.4	GS-BR-300W250	2P	6.3	BR-N1-500W200	1	4.0							
	14976814	A06P5T4DB66	IP66		10							2P			1	1						
l	15575699	B10P0T4DB20	IP20								1			1								
	14977266	A10P0T4DB66DS	IP66D			10	5	47	16	12	GS-BR-1K0W075	1	10.5	BR-N1-720W85	1	9.3						
L	14977261	A10P0T4DB66	IP66									1			1							
4601/	<u>15575707</u>	C14P0T4DB20	IP20			3	3	3	3	3	3	3	3		7.5					1		
4	14977397	B14P0T4DB66DS	IP66D	1	14	10	33	24	19		1		BR-N1-720W85	1	9.3							
	14977391	B14P0T4DB66	IP66			10					1			1								
	<u>16675711</u>	C16P0T4DB20	IP20]	16	10	33			GS-BR-1K5W043	1			1								
	<u>14977556</u>	B16P0T4DB66DS	IP66D					34	19		1	18.4	<u>BR-N1-1K2W50</u>	1	15.8							
	14977552	B16P0T4DB66	IP66								1			1								
	<u>15576919</u>	D24P0T4DB20	IP20]							2P			1]							
	<u>14978365</u>	B24P0T4DB66DS	IP66D]	24	15	22		25.4		2P		<u>BR-N1-1K5W40</u>	1	19.8							
	<u>14977629</u>	B24P0T4DB66	IP66]							2P			1								
	<u>15577021</u>	D31P0T4DB20	IP20								2S2P			1								
	<u>14978573</u>	B31P0T4DB66DS	IP66D		31	20	18	48	41.5		2S2P		BR-N1-1K7W30	1	26.3							
	<u>14978548</u>	B31P0T4DB66	IP66							<u>GS-BR-1K0W020</u>	2S2P	39.5		1								
	<u>15577211</u>	E39P0T4DB20	IP20		39	25	8.6	78	52.3		2S2P		BR-N1-2K3W26	1	30.4							
	<u>15577452</u>	E49P0T4DB20	IP20		49	30	8.6	78	52.3		2S2P		BR-N1-3K6W20	1	39.5							
	<u>15733937</u>	F77P0T4DB20	IP20		77	40	12	66.7	53.4	<u>GS-BR-</u> 1K5W013GS-BR-	2S2P	60.8	BR-N1-4K7W14P7	1	53.7							
	<u>15734064</u>	F88P0T4DB20	IP20		88	50	12	66.7	53.4	<u>1K5W013</u>	2S2P		<u>BR-N1-6K9W13P6</u>	1	58.1							
	<u>15734119</u>	F0105T4DB20	IP20		105	60	6.2	129	103.2	GS-BR-1K5W012	2S2P	65.8	BR-N1-6K5W06P4	1	123.4							
	<u>15448371</u>	G0142T4DB20	IP20		142	75	3	267	208				BR-N1-10K8W04P3	1	183.7							
	<u>15448372</u>	G0180T4DB20	IP20		180	100	3	267	208	Not of	fered			1								
4.43	<u>15448373</u>	G0211T4DB20 with maximum ON (hi	IP20		211	150	2.2	364	284				BR-N1-18K0W03P7	1	213.5							

^{* 10%} Duty Cycle with maximum ON (braking) time for 10 seconds.

^{**} IP66D stands for IP66 with disconnect.

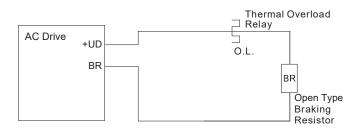
Note: Where noted in resistor quanity, S = series and P = parallel

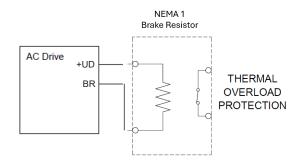


Brake Wiring

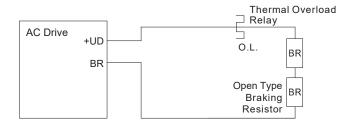
Use your drive's braking component selection table to determine the appropriate brake resistor model and configuration for your drive. Refer to the diagrams below for examples on how to wire each possible configuration.

Drive + 1 Resistor or NEMA1 Resistor:

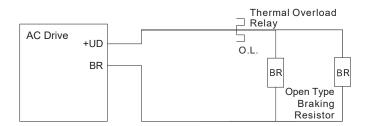




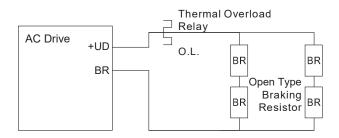
Drive + 2 Series Resistors:



Drive + 2 Parallel Resistors:



Drive + 2 Series and 2 Parallel Resistors:



UPI CFW500 Compatible Accessories

Line Reactors/Voltage Time Filters

Installing an AC Line Reactor on the input side of an AC motor drive can increase line impedance, improve the power factor, reduce input current, increase system capacity, and reduce interference generated from the motor drive.

Installing a load reactor or voltage time filter on the drive's output side can increase the high-frequency impedance to reduce the dV/dT and terminal voltage to protect the motor. Use output filters if the motor cable length exceeds 100ft [30m].

	W	EG CFW5	JU LIN	e/Load F	teactor a	nd AC Out	out Filter			
		Input Voltage	Motor	Drive Output		Line Re	actor*	Load Reactor*	Output Filter*	
WEG MAT #	Model #	(VAC)	HP	Rated Current	Phase / Nominal	1-phase	3-phase	3-phase	3-phase	
45570000	OF INTERNAL AND CROSS IROUGH		0.05	r	Drives	1 DO 00DO 4 DU	1 DO 00D0	L DO 00D0	N1/A	
<u>15570800</u>	CFW500A01P6B2NB20G2	<u> </u> -	0.25	1.6		LR2-20P2-1PH LR2-20P5-1PH or	LR2-20P2 LR2-20P5 or	LR2-20P2 LR2-20P5 or LR2-	N/A	
<u> 15571879</u>	CFW500A02P6B2NB20G2		0.5	2.6	3-phase /	LR2-20P5	LR2-20P2	20P2	VTF-246-CFG	
<u>15571881</u>	CFW500A04P3B2NB20G2	1-phase or 3-phase /	1	4.3		LR2-21P0-1PH or LR2-20P7	LR2-21P0 or LR2-20P5	LR2-21P0 or LR2-20P5	VTF-24-FH	
<u> 15574655</u>	CFW500B07P3B2DB20G2	230VAC	2	7.3	230VAC	LR-22P0-1PH or LR-25P0	LR2-22P0 or LR2-20P7	LR2-22P0 or LR2-20P7	VTF-246-GJJ	
<u>15575067</u>	CFW500B10P0B2DB20G2		3	10		<u>LR-23P0-1PH</u> or <u>LR-25P0</u>	<u>LR-23P0</u> or <u>LR2-22P0</u>	<u>LR-23P0</u> or <u>LR2-22P0</u>	VTF-246-HKL	
<u>15572625</u>	CFW500A07P0T2NB20G2		2	7			LR2-22P0 or LR2-20P7	<u>LR2-22P0</u> or <u>LR2-20P7</u>	VTF-246-GJJ	
<u>15572689</u>	CFW500A09P6T2NB20G2		3	9.6			LR-23P0 or LR2-22P0	<u>LR-23P0</u> or <u>LR2-22P0</u>	VTF-246-HKL	
<u> 15575202</u>	CFW500B16P0T2DB20G2]	5	16			LR-25P0	LR-25P0	VTF-24-JL	
<u>15575701</u>	CFW500C24P0T2DB20G2]	7.5	24			LR-27P5	<u>LR-27P5</u>	VTF-246-KMN	
<u>15575716</u>	CFW500D28P0T2DB20G2	1	10	28			LR-2010	LR-2010	VTF-246-LPQ	
<u>15576540</u>	CFW500D47P0T2DB20G2	3-phase / 230VAC	15	47	3-phase / 230VAC	N/A	LR-2015	LR-2015	VTF-246-MQR or VTF-246-NRS	
<u>15577077</u>	CFW500E56P0T2DB20G2	230VAC	20	56			LR-2020	LR-2020	VTF-246-NRS or VTF-246-PSU	
15342437	CFW500F77P0T2DB20G2		20	64			<u>LR-2025</u>	<u>LR-2025</u>	VTF-246-PSU	
70012101	OI WOODI III OIZBBZOGZ		(25-ND)	(77-ND)			LR-2025	LR-2025	VTF-246-PSU	
15342760	CFW500F88P0T2DB20G2		25	75			LR-2025	LR-2025	VTF-246-PSU	
			(30-ND)	(88-ND)			LR-2030	LR-2030	VTF-246-RUV	
15342909	CFW500F0105T2DB20G2		30 (40-ND)	(105 ND)			LR-2030	LR-2030	VTF-246-RUV	
15572819	CFW500A01P0T4NB20G2		0.33	(105-ND)	-		LR2-40P3	<u>LR-2040</u> LR2-40P3	VTF-246-RUV N/A	
15572908	CFW500A01P6T4NB20G2	-	0.75	1.6			LR2-40P3	LR2-40P7	VTF-46-DE	
15573714	CFW500A02P6T4NB20G2	-	1	2.6			LR2-41P0	LR2-41P0	VTF-246-CFG	
15573819	CFW500A04P3T4NB20G2	1	2	4.3			LR2-42P0	LR2-42P0	VTF-24-FH	
15573823	CFW500A06P1T4NB20G2	1	3	6.1			LR2-44P0	LR2-44P0	VTF-246-GJJ	
15575568	CFW500B02P6T4DB20G2	1	1	2.6			LR2-41P0	LR2-41P0	VTF-246-CFG	
15575577	CFW500B04P3T4DB20G2	1	2	4.3			LR2-42P0	LR2-42P0	VTF-24-FH	
15575665	CFW500B06P5T4DB20G2]	3	6.5			LR2-44P0	LR2-44P0	VTF-246-GJJ	
<u>15575699</u>	CFW500B10P0T4DB20G2]	5	10			LR2-45P0	LR2-45P0	VTF-246-HKL	
<u>15575707</u>	CFW500C14P0T4DB20G2		7.5	14			<u>LR-4010</u>	<u>LR-4010</u>	VTF-24-JL	
<u>15575711</u>	CFW500C16P0T4DB20G2		10	14			<u>LR-4010</u>	<u>LR-4010</u>	VTF-24-JL	
<u>15576919</u>	CFW500D24P0T4DB20G2]	15	24			<u>LR-4015</u>	<u>LR-4015</u>	VTF-246-KMN	
<u>15577021</u>	CFW500D31P0T4DB20G2	2 1	20	31	0 /		LR-4020	LR-4020	VTF-246-LPQ	
15577211	CFW500E39P0T4DB20G2	3-phase / 480VAC	25	39	3-phase / 480VAC	N/A	LR-4025	<u>LR-4025</u>	VTF-246-MQR	
<u>15577452</u>	CFW500E49P0T4DB20G2		30	49	700770		LR-4030	<u>LR-4030</u>	VTF-246-NRS	
15733937	CFW500F77P0T4DB20G2		40	61			LR-4040	LR-4040	VTF-246-PSU	
		-	50	(77-ND)			LR-4050	LR-4050	VTF-246-PSU	
15734064	CFW500F88P0T4DB20G2		50	73			LR-4050	LR-4050	VTF-246-PSU	
		-	60	(88 - ND)			LR-4060	LR-4060	VTF-246-RUV	
<u>15734119</u>	CFW500F0105T4DB20G2		60 75	(105 - ND)			<u>LR-4060</u> LR-4075	<u>LR-4060</u> <u>LR-4075</u>	VTF-246-RUV VTF-246-RUV	
		-	75	(105 - ND) 115						
<u>15448371</u>	CFW500G0142T4DB20G2						LR-4075	<u>LR-4075</u>	VTF-246-RUV	
		-	100	(142-ND)			LR-4075	LR-4075	VTF-246-RUV	
15448372	CFW500G0180T4DB20G2		100	142 (190 ND)			LR-4100	LR-4100	n/a	
		-	150	(180-ND)			LR-4100	LR-4100	n/a	
<u>15448373</u>	CFW500G0211T4DB20G2		150	180			LR-4150	LR-4150	n/a	
			175	(211-ND)			<u>LR-4150</u>	<u>LR-4150</u>	n/a	

^{*} All specs for the LR, LR2, and VTF can be found at www.automationdirect.com

UPI CFW500 Compatible Accessories

Line Reactors/Voltage Time Filters, continued

WEG CFW500 Line/Load Reactor and AC Output Filter, continued													
		Input Voltage	Motor	Drive	Output	Line Re	actor*	Load Reactor*	Output Filter*				
WEG MAT #	Model #	(VAC)	HP	Rated Current	Phase / Nominal	1-phase	3-phase	3-phase	3-phase				
			Table		om previous	nage	<u> </u>	-	-				
			Table	IP66 L		page							
14990863	CFW500A01P6B2DB66DSG2		0.25	1.6		LR2-20P2-1PH	LR2-20P2	LR2-20P2	N/A				
14991103	CFW500A02P6B2DB66DSG2		0.5	2.6		LR2-20P5-1PH or LR2-20P5	LR2-20P5	LR2-20P5	VTF-246-CFG				
14991753	CFW500A04P3B2DB66DSG2	1-phase or 3-phase /	1	4.3	3-phase /	LR2-21P0-1PH or LR2-20P7	LR2-21P0	LR2-21P0	VTF-24-FH				
14938005	CFW500A07P3B2DB66DSG2	230VAC	2	7.3	- 230VAC	<u>LR-22P0-1PH</u> or <u>LR-25P0</u>	LR2-22P0	LR2-22P0	VTF-246-GJJ				
14938047	CFW500A10P0B2DB66DSG2		3	10		LR-23P0-1PH or LR-25P0	LR-23P0	LR-23P0	VTF-246-HKL				
14938113	CFW500A16P0T2DB66DSG2		5.0	16			LR-25P0	LR-25P0	VTF-24-JL				
14975838	CFW500B24P0T2DB66DSG2	3-phase / 230VAC	7.5	24	3-phase / 230VAC	N/A	LR-27P5	LR-27P5	VTF-246-KMN				
14938655	CFW500B28P0T2DB66DSG2	230VAC	10.0	28	230VAC		LR-2010	LR-2010	VTF-246-LPQ				
14991953	CFW500A01P0T4DB66DSG2		0.3	1			LR2-40P3	LR2-40P3	N/A				
14992148	CFW500A01P6T4DB66DSG2		0.5	1.6	1		LR2-40P5	LR2-40P5	N/A				
14976517	CFW500A02P6T4DB66DSG2		1.0	2.6	1		LR2-41P0	LR2-41P0	VTF-246-CFG				
14976809	CFW500A04P3T4DB66DSG2		2.0	4.3			LR2-42P0	LR2-42P0	VTF-246-DGH				
14977065	CFW500A06P5T4DB66DSG2	3-phase /	3.0	6.5	3-phase /		LR2-44P0	LR2-44P0	VTF-24-FH				
14977266	CFW500A10P0T4DB66DSG2	480VAC	5.0	10	480VAC	N/A	LR2-45P0	LR2-45P0	VTF-246-GJJ				
14977397	CFW500B14P0T4DB66DSG2		7.5	14			LR-4010	LR-4010	VTF-24-JL				
14977556	CFW500B16P0T4DB66DSG2		10.0	14			LR-4010	LR-4010	VTF-24-JL				
14978365	CFW500B24P0T4DB66DSG2		15.0	24			LR-4015	LR-4015	VTF-246-KMN				
14978573	CFW500B31P0T4DB66DSG2	-	20.0	31			LR-4020	LR-4020	VTF-246-LPQ				
14989840	CFW500A01P6B2DB66G2		0.25	1.6		LR2-20P2-1PH	LR2-20P2	LR2-20P2	N/A				
14990985	CFW500A02P6B2DB66G2		0.5	2.6	-	LR2-20P5-1PH or LR2-20P5	LR2-20P5	LR2-20P5	VTF-246-CFG				
14991517	CFW500A04P3B2DB66G2	1-phase or 3-phase /	1	4.3	3-phase / 230VAC	LR2-21P0-1PH or LR2-20P7	LR2-21P0	LR2-21P0	VTF-24-FH				
14937890	CFW500A07P3B2DB66G2	230VAC	2	7.3	230VAC	LR-22P0-1PH or <u>LR-25P0</u>	LR2-22P0	LR2-22P0	VTF-246-GJJ				
<u>14938041</u>	CFW500A10P0B2DB66G2		3	10		<u>LR-23P0-1PH</u> or <u>LR-25P0</u>	LR-23P0	<u>LR-23P0</u>	VTF-246-HKL				
<u>14938111</u>	CFW500A16P0T2DB66G2	2 phase /	5.0	16	2 nh /		LR-25P0	<u>LR-25P0</u>	VTF-24-JL				
<u>14975783</u>	CFW500B24P0T2DB66G2	3-phase / 230VAC	7.5	24	3-phase / 230VAC	N/A	<u>LR-27P5</u>	<u>LR-27P5</u>	VTF-246-KMN				
14938547	CFW500B28P0T2DB66G2	2007AU	10.0	28	2007AC		LR-2010	LR-2010	VTF-246-LPQ				
<u>14991899</u>	CFW500A01P0T4DB66G2		0.3	1			LR2-40P3	LR2-40P3	N/A				
<u>14992113</u>	CFW500A01P6T4DB66G2		0.5	1.6]		LR2-40P5	LR2-40P5	N/A				
14975888	CFW500A02P6T4DB66G2		1.0	2.6			LR2-41P0	LR2-41P0	VTF-246-CFG				
14976683	CFW500A04P3T4DB66G2		2.0	4.3			LR2-42P0	LR2-42P0	VTF-246-DGH				
14976814	CFW500A06P5T4DB66G2	3-phase /	3.0	6.5	3-phase /	N/A	LR2-44P0	LR2-44P0	VTF-246-GJJ				
<u>14977261</u>	CFW500A10P0T4DB66G2	480VAC	5.0	10	480VAC	IN/A	LR2-45P0	LR2-45P0	VTF-246-HKL				
<u>14977391</u>	CFW500B14P0T4DB66G2		7.5	14			LR-4010	LR-4010	VTF-24-JL				
14977552	CFW500B16P0T4DB66G2		10.0	14			LR-4010	LR-4010	VTF-24-JL				
14977629	CFW500B24P0T4DB66G2		15.0	24			LR-4015	LR-4015	VTF-246-KMN				
<u>14978548</u>	CFW500B31P0T4DB66G2		20.0	31			<u>LR-4020</u>	<u>LR-4020</u>	VTF-246-LPQ				

^{*} All specs for the LR, LR2, and VTF can be found at www.automationdirect.com.



CFW-WPS Software Package

WEG WPS is the versatile configuration software for all WEG products. The software is compatible with all CFW series AC drives and SSW07/SSW900 soft starters. Powerful features include:

- Configuration and Monitoring Wizards
- Custom Variable Monitoring Windows
- IEC 61131 Ladder Programming
- Advanced Trending & Diagnostics
- FW updates
- Automatic online software updates

And MORE!

WEG WPS requires a PC USB port or RJ45 port and appropriate cables or USB-485M kit. Each drive or softstarter series can connect to the software, through the methods noted below:

CFW100

- USB via the CFW100-CUSB module
- RS485 via the CFW100-CRS485 module

CFW300:

- USB via the CFW300-CUSB module
- RS485 via the CFW300-CRS485 module
- RS232 via the CFW300-CRS232 module

CFW320

- USB via the CFW320-CUSB module
- Ethernet via the CFW320-CETH module
- RS485 via the CFW320-CRS485 module
- RS232 via the CFW320-CRS232 module

CFW500:

- RS485 via the included CFW500-IOS module or optional CFW500-CRS485-B module.
- USB via the CFW500-CUSB module
- Ethernet via the CFW500-CETH-IP or CFW500-CEMB-TCP module
- RS232 via the CFW500-CRS232 module

SSW07:

- RS485 via the SSW07-08-KRS-485 module
- RS232 via the SSW07-08-KRS-232 module

SSW900:

- USB with integrated USB port.
- Ethernet via the SSW900-CETH-W module
- RS485 via the SSW900-CRS485-W module

See the WPS quick start videos for more information:

• Drive Parameters:

https://www.automationdirect.com/VID-DR-0071



 Confguration, Diagnositcs, and WIzards: https://www.automationdirect.com/VID-DR-0074



	WEG CFW500 Configuration Software												
Model #	Version	Price	Description	Features/Specifications	CFW500 Drive								
	USB Card	\$10.50	WEG Electric Windows Configuration Software: for all WEG	USB card containing WEG WPS softare.									
<u>CFW-WPS</u>	Download	Free	CFW series AC drives and SSW07 and SSW900 series soft starters (PN# CFW- WPS)	Download software for free through the AutomationDirect.com website: • <u>CFW-WPS Software</u>	All								





CFW-WLP Software Package

WEG WLP software is only needed for access to the Pump Genius configuration tool. The Pump Genius makes configuring Pumping applications a snap. From single pumps to multi-pump systems, the software walks you through building a pumping application to suit your specific needs. Pump Genius is compatible with CFW500 drives only. Requires a PC USB port and connection options identical to WPS software.

For Download only:

https://www.automationdirect.com/support/software-downloads?itemcode=WEG%20WLP

See the "how to" video for more information:

https://www.automationdirect.com/VID-DR-0335

