

Variable Frequency Drives CFW10 Single Phase - Three Phase Converter

The CFW10 is an economical solution to many applications on the Farm, in the Factory and in the Home Shop. It's a low cost solution for operating three phase motors where only single phase power exists. The CFW10 takes single phase 115 or 230 volt input power and converts it to three phase 230 volts without the need for a transformer. A simple programming keypad and a bright LED display make the drive easy to program and operate while giving the user flexibility to customize the operation for their needs. This rugged drive is capable of operating in ambient temperatures up to 122°F (50°C) without derating. The CFW10 is a simple, rugged drive that will give long lasting performance in the most extreme conditions.



Applications

Standard Features

- Pumps
- Fans/Blowers
- Blowers
- Conveyors
- Rollout tables
- V/Hz control
- IP20 finger safe enclosure
- Single Phase 110-127V input voltage up to 1 HP
- Single Phase 200–240V input voltage up to 3 HP
 - 150% current overload capacity
 - DSP controlled PWM output
 - 2.5-15 kHz adjustable switching frequency
 - Four isolated programmable digital inputs
 - Programmable relay output
 - One isolated programmable analog input
 - Diagnostic features: Over current, motor overload, drive over temperature, output short circuit, DC bus over and under voltage and external fault
 - Control features: Linear and S-Ramp acceleration and deceleration, local / remote control, DC braking, torque boost, motor slip compensation, electronic pot, preset speeds, minimum and maximum adjustable frequency limits, adjustable output current limit, JOG
 - Display readings: Motor speed, frequency, voltage, current, last fault, heatsink temperature and drive status
 - Ambient: 122°F (50°C), 3300 ft (1000 m) altitude, 90% humidity, non-condensing





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Variable Frequency Drives CFW10



IP20 Finger-Safe Enclosure

Motor Volts	Motor HP	Drive AMPS	Catalog Number	Frame Size	Dimensions (in.) H x W x D	App. Shpg. Wt. (lbs.)		
hase	INPUT POWER SUPPLY: SINGLE - PHASE 120V							
	1/4	1.6	CFW100016SAZ	1	5.2 x 3.8 x 4.8	2		
	1/2	2.6	CFW100026SAZ	1	5.2 x 3.8 x 4.8	2		
	1	4.0	CFW100040SAZ	2	6.4 x 4.6 x 4.4	3		
66	INPUT POWER SUPPLY: SINGLE - PHASE 230V							
230V Three Phase	1/4	1.6	CFW100016SDZ	1	5.2 x 3.8 x 4.8	2		
	1/2	2.6	CFW100026SDZ	1	5.2 x 3.8 x 4.8	2		
	1	4.0	CFW100040SDZ	1	5.2 x 3.8 x 4.8	2		
	2	7.3	CFW100073SDZ	2	6.4 x 4.6 x 4.4	3		
	3	10	CFW100100SDZ	3	7.6 x 4.6 x 4.8	4		

Notes: 1) "HP" rating based on "average FLA values". Use as a guide only. Motor FLA may vary with speed and manufacturer. ALWAYS compare motor FLA to Nominal AMPS of drive. 2) For other technical data please refer to WEG product manual.

IP20 Finger-Safe Enclosure – With Potentiometer

Motor Volts	Motor HP	Drive AMPS	Catalog Number	Frame Size	Dimensions (in.) H x W x D	App. Shpg. Wt. (lbs.)		
	INPUT POWER SUPPLY: SINGLE - PHASE 120V							
	1/4	1.6	CFW100016SAPLZ	1	5.2 x 3.8 x 4.8	2		
۵ ۵	1/2	2.6	CFW100026SAPLZ	1	5.2 x 3.8 x 4.8	2		
Three Phase	1	4.0	CFW100040SAPLZ	2	6.4 x 4.6 x 4.4	3		
Ge P	INPUT POWER SUPPLY: SINGLE - PHASE 230V							
Thr	1/4	1.6	CFW100016SDPLZ	1	5.2 x 3.8 x 4.8	2		
230V	1/2	2.6	CFW100026SDPLZ	1	5.2 x 3.8 x 4.8	2		
8	1	4.0	CFW100040SDPLZ	1	5.2 x 3.8 x 4.8	2		
	2	7.3	CFW100073SDPLZ	2	6.4 x 4.6 x 4.4	3		
	3	10	CFW100100SDPLZ	3	7.6 x 4.6 x 4.8	4		



Notes: 1) "HP" rating based on "average FLA values". Use as a guide only. Motor FLA may vary with speed and manufacturer. ALWAYS compare motor FLA to Nominal AMPS of drive.

2) For other technical data please refer to WEG product manual.

Technical Data

Power Supply	Voltage	Single phase 110127V (+10%, -15%)					
		Single phase	200240V (+10%, -15%)				
	Frequency	Frequency 50 / 60Hz +/- 2Hz					
	Displacement Power Factor	Displacement Power Factor Greater than 0.98					
Enclosure	Degree of Protection	IP20					
	Control Mode	Linear or Quadratic V/Hz					
Control	Power Output 16 bit DSP						
	Sinusoidal PWM (Space Vector Modulation)						
	Switching Frequency	2.5, 5, 10 or 15kHz					
	Frequency Range	0-300 Hz	0-300 Hz				
	Overload Capacity	150% during 60 sec. every 10 min.					
Control Inputs	4 programmable isolated digital inputs						
	1 programmable differential analog input: 0-10V, 0-20mA or 4-20mA						
Control Ouput	1 programmable realy outputs, one rev	1 programmable realy outputs, one reversing (Form C) contact: 250V / 0.5A					
Safety	Protections	Motor over current	DC link over voltage				
		Motor overload	DC link under voltage				
		output phase-to-phase short circuit	Drive over temperature				
		output phase-to-ground short circuit	external fault				
		programming error					
Ambient	Temperature	Up to 122°F (50°C) without derating					
	Humidity	590% Non Condensing					
	Altitude	03300 ft (1000m), up to 13,200 ft (4000m) with 10% / 3300ft (1000m) output current derating					
Conformities	EMC Directive 89 / 336 / EEC	Electromagnetic compatibility – Industrial Environment EMC – Emission and Immunity					
	ENC61800-3						
	LVD 73/23/EEC	Low Voltage Directive					
	UL 508 C	Power Conversion Equipment					
Special Functions		Linear and "S" ramp accel and decel, local/remote control, FWD/REV selection, DC braking, manual and auto torque boost, motor slip compensation, electronic pot, two skip frequencies, maximum and minimum adjustable frequency limits, adjustable output current limit, 8 present speeds and JOG.					
Keypad	3 digit display, 2 indication LEDs and 4 keys						
	Readouts for: output freqency (Hz), output current (A), output voltage (V), value proportional to frequency (Ex: RPM), heatsink temperature, fault and status messages.						
Mounting	j.	Surface with screws					

Please contact your authorized distributor:

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