

Variable Frequency Drives CFW08 Plus, Multipump, and Wash

The WEG CFW08 Series of drives features the compact size of a microdrive yet the full functionality of much larger competitors. From extensive programmable control features to flexible mounting and display options, the CFW08 has everything one needs in a small, reliable drive package.

The CFW08 Series features three versions: standard NEMA 1, Multipump control, and NEMA 4 Wash Down duty.

Applications

A1

- Pumps
- Fans
- Blowers
- Conveyors
- Rollout tables
- Agitators
- Mixers Food Applications
- A5
- Multi-pumps systems

Optional Features

- Dynamic Braking Resistors available
- Remote Keypad with Copy Function
- RS-232 or RS-485 Serial Interface
- Modbus Communication*
- DIN rail mounting through 2HP

*Requires optional RS-232 or RS-485 Interface







Standard Features

- V/Hz and Sensorless Vector Control
- NEMA 1 Enclosure
- Single and Three-phase input voltage
- 200-240V or 380-480V input voltage
- 150% current overload capacity
- 16 bit DSP controlled PWM output
- 2.5 / 5 / 10 / 15 kHz adjustable swiching frequency
- Four isolated programmable digital inputs
- Two programmable relay outputs
- Two isolated programmable analog inputs
- Protective features: Over current, motor overload, drive over temperature, output phase-to-phase and phase-to-ground 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, adjustable V/Hz profile, maximum and minimum adjustable frequency limits, two skip frequencies, adjustable output current limit, JOG, ride-thru, flying start and PID regulator.
- Display readings: Motor speed, frequency, voltage, current, last fault, heatsink temperature and drive status
- Ambient: 32°F (0°C) to 104°F (40°C), 3300ft (1000m) altitude, 90% humidity, non-condensing

Шеп

Variable Frequency Drives CFW08 Plus



CFW08 Plus – NEMA 1 Enclosure - A1 Version

Motor Volts	Motor HP	Drive AMPS	Catalog Number	Braking Transistor	Frame Size	Dimensions (in.) H x W x D	App. Shpg. Wt. (lbs.)			
	INPUT POWER SUPPLY: SINGLE OR THREE-PHASE - 230V									
	1/4 or 1/3	1.6	CFW080016BDN1A1Z	NO	1	6.8 x 3 x 5.2	3			
	1/2	2.6	CFW080026BDN1A1Z	NO	1	6.8 x 3 x 5.2	3			
	1	4	CFW080040BDN1A1Z	NO	1	6.8 x 3 x 5.2	3			
	2	7.3	CFW080073BDN1A1Z	YES	2	9.7 x 4.5 x 5.9	6			
	3	10	CFW080100BDN1A1Z	YES	2	9.7 x 4.5 x 5.9	6			
	INPUT POWER SUPPLY: THREE PHASE - 230V									
>	1/4 or 1/3	1.6	CFW080016BDN1A1Z	NO	1	6.8 x 3 x 5.2	3			
230 V	1/2	2.6	CFW080026BDN1A1Z	NO	1	6.8 x 3 x 5.2	3			
	1	4	CFW080040BDN1A1Z	NO	1	6.8 x 3 x 5.2	3			
	2	7	CFW080070TDN1A1Z	NO	1	6.8 x 3 x 5.2	3			
	2	7.3	CFW080073BDN1A1Z	YES	2	9.7 x 4.5 x 5.9	6			
	3	10	CFW080100BDN1A1Z	YES	2	9.7 x 4.5 x 5.9	6			
	5	16	CFW080160TDN1A1Z	YES	2	9.7 x 4.5 x 5.9	6			
	7.5	22	CFW080220TDN1A1Z	YES	3	8 x 5.6 x 6.5	8			
	10	28	CFW080280TDN1A1Z	YES	4	11.4 x 7.2 x 7.7	16			
	INPUT POWER SUPPLY: THREE PHASE - 460V									
	1/4 or 1/3	1	CFW080010TGN1A1Z	NO	1	6.8 x 3 x 5.2	3			
	3/4	1.6	CFW080016TGN1A1Z	NO	1	6.8 x 3 x 5.2	3			
	1	2.6	CFW080026TGN1A1Z	NO	1	6.8 x 3 x 5.2	3			
	1	2.7	CFW080027TGN1A1Z	YES	2	9.7 x 4.5 x 5.9	6			
	2	4	CFW080040TGN1A1Z	NO	1	6.8 x 3 x 5.2	3			
460 V	2	4.3	CFW080043TGN1A1Z	YES	2	9.7 x 4.5 x 5.9	6			
46	3	6.5	CFW080065TGN1A1Z	YES	2	9.7 x 4.5 x 5.9	6			
	5	10	CFW080100TGN1A1Z	YES	2	9.7 x 4.5 x 5.9	6			
	7.5	13	CFW080130TGN1A1Z	YES	3	8 x 5.6 x 6.5	8			
	10	16	CFW080160TGN1A1Z	YES	3	8 x 5.6 x 6.5	8			
	15	24	CFW080240TGN1A1Z	YES	4	11.4 x 7.2 x 7.7	16			
	20	30	CFW080300TGN1A1Z	YES	4	11.4 x 7.2 x 7.7	16			
	INPUT POWE	R SUPPLY: THREE P	HASE - 575V	-			-			
	1	1.7	CFW080017THN1A1Z	YES	6	8.0 x 5.6 x 6.5	6			
>	2	3	CFW080030THN1A1Z	YES	6	8.0 x 5.6 x 6.5	6			
575V	3	4.3	CFW080043THN1A1Z	YES	6	8.0 x 5.6 x 6.5	6			
	5 7.5	7 10	CFW080070THN1A1Z CFW080100THN1A1Z	YES	6 6	8.0 x 5.6 x 6.5 8.0 x 5.6 x 6.5	6			
	10	10	CFW080100THN1A1Z	YES	6	8.0 x 5.6 x 6.5	6			
	-		"average FLA values". Use	-	-		-			

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. 3) All 575V drives are non-stocked items, consult WEG for availability.





www.weg.net

Variable Frequency Drives CFW08 Wash CFW08 NEMA 4 Enclosure



HP		NOM. AMPS	CATALOG NUMBER	BRAKING TRANSISTOR	DIMENSIONS H x W x D	App. Shpg. Wt. (lbs.)		
	THREE PHASE - 230V							
	2	7.3	CFW080073BDN4A1Z	YES	10.4 X 6.5 X 8.5	5		
230 V	3	10	CFW080100BDN4A1Z	YES	10.4 X 6.5 X 8.5	5		
53	5	16	CFW080160TDN4A1Z	YES	10.4 X 6.5 X 8.5	5		
	7.5	22	CFW080220TDN4A1Z	YES	13.4 X 8.5 X 8.5	18		
	10	28	CFW080280TDN4A1Z	YES	13.4 X 8.5 X 8.5	18		
	THREE PHASE - 460V							
	1	2.7	CFW080027TGN4A1Z	YES	10.4 X 6.5 X 8.5	5		
	2	4.3	CFW080043TGN4A1Z	YES	10.4 X 6.5 X 8.5	5		
2	3	6.5	CFW080065TGN4A1Z	YES	10.4 X 6.5 X 8.5	5		
460V	5	10	CFW080100TGN4A1Z	YES	10.4 X 6.5 X 8.5	5		
	7.5	13	CFW080130TGN4A1Z	YES	13.4 X 8.5 X 8.5	18		
	3	16	CFW080160TGN4A1Z	YES	13.4 X 8.5 X 8.5	18		
	5	24	CFW080240TGN4A1Z	YES	13.4 X 8.5 X 8.5	18		
	7.5	30	CFW080300TGN4A1Z	YES	13.4 X 8.5 X 8.5	18		
	THREE PHASE - 460V							
	1	1.7	CFW080017THN1A1Z	YES	13.4 X 8.5 X 8.5	18		
>	2	3	CFW080030THN1A1Z	YES	13.4 X 8.5 X 8.5	18		
575V	3	4.3	CFW080043THN1A1Z	YES	13.4 X 8.5 X 8.5	18		
	5	7	CFW080070THN1A1Z	YES	13.4 X 8.5 X 8.5	18		
	7.5	10	CFW080100THN1A1Z	YES	13.4 X 8.5 X 8.5	18		
	10	12	CFW080120THN1A1Z	YES	13.4 X 8.5 X 8.5	18		

Variable Frequency Drives CFW08 Multipumps CFW08 - NEMA 1 Enclosure - A5 Version



100	A /3 A /	11/0	\rightarrow t
VVV	NW.	VVE	



Motor Volts	Motor HP	Drive AMPS	Catalog Number	Braking Transistor	Frame Size	Dimensions (in.) H x W x D	App. Shpg. Wt. (lbs.)	
	INPUT POWER SUPPLY: SINGLE OR THREE-PHASE - 230V							
230 V	2	7.3	CFW080073BDN1A5Z	YES	2	7.9 x 4.5 x 5.9	4.4	
	3	10	CFW080100BDN1A5Z	YES	2	7.9 x 4.5 x 5.9	4.4	
	INPUT POWER SUPPLY: THREE PHASE - 230V							
	2	7.3	CFW080073BDN1A5Z	YES	2	7.9 x 4.5 x 5.9	4.4	
>	3	10	CFW080100BDN1A5Z	YES	2	7.9 x 4.5 x 5.9	4.4	
230 V	5	16	CFW080160TDN1A5Z	YES	2	7.9 x 4.5 x 5.9	4.4	
	7.5	22	CFW080220TDN1A5Z	YES	3	8.0 x 5.6 x 6.5	5.5	
	10	28	CFW080280TDN1A5Z	YES	4	11.4 x 7.2 x 7.7	13.2	
	INPUT POWER SUPPLY: THREE PHASE - 460V							
	1	2.7	CFW080027TGN1A5Z	YES	2	7.9 x 4.5 x 5.9	4.4	
	2	4.3	CFW080043TGN1A5Z	YES	2	7.9 x 4.5 x 5.9	4.4	
	3	6.5	CFW080065TGN1A5Z	YES	2	7.9 x 4.5 x 5.9	4.4	
460V	5	10	CFW080100TGN1A5Z	YES	2	7.9 x 4.5 x 5.9	4.4	
	7.5	13	CFW080130TGN1A5Z	YES	3	8.0 x 5.6 x 6.5	5.5	
	3	16	CFW080160TGN1A5Z	YES	3	8.0 x 5.6 x 6.5	5.5	
	5	24	CFW080240TGN1A5Z	YES	4	11.4 x 7.2 x 7.7	13.2	
	7.5	30	CFW080300TGN1A5Z	YES	4	11.4 x 7.2 x 7.7	13.2	

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.



Weq

www.weg.net

Variable Frequency Drives CFW08



CFW08 – DB Resistors 10% Duty Cycle

Motor Volts	Motor HP	For Use with CFW08 Plus Model Number:	Catalog Number	OHMS	WATTS
	2	CFW080073BDN1A1Z or A5Z	CFDB39-224	39	224
_	3	CFW080100BDN1A1Z or A5Z	CFDB27-298	27	298
230 V	5	CFW080160TDN1A1Z or A5Z	CFDB22-373	22	373
~	7.5	CFW080220TDN1A1Z or A5Z	CFDB15-560	15	560
	10	CFW080280TDN1A1Z or A5Z	CFDB10-746	10	746
	1	CFW080027TGN1A1Z or A5Z	CFDB120-298	120	298
	2	CFW080043TGN1A1Z or A5Z	CFDB120-298	120	298
	3	CFW080065TGN1A1Z or A5Z	CFDB100-224	100	224
460 V	5	CFW080100TGN1A1Z or A5Z	CFDB47-746	47	746
46(7.5	CFW080130TGN1A1Z or A5Z	CFDB33-746	33	746
	10	CFW080160TGN1A1Z or A5Z	CFDB33-746	33	746
	15	CFW080240TGN1A1Z or A5Z	CFDB22-1119	22	1119
	20	CFW080300TGN1A1Z or A5Z	CFDB18-1492	18	1492

Note: These are non-stocked items, consult WEG for availability

CFW08 – Accessories

	Description	Catalog Number
	NEMA 4 Remote Keypad (requires MIS-CFW08-RS & cable)	HMI-CFW08-RS
Keypads	Remote Keypad Interface	MIS-CFW08-RS
	Keypad Cover	TCL-CFW08
	3.3 ft Remote Keypad Cable	CAB-RS-1
	6.6 ft Remote Keypad Cable	CAB-RS-2
Keypad Cables	10 ft Remote Keypad Cable	CAB-RS-3
Keypau Gables	16 ft Remote Keypad Cable	CAB-RS-5
	25 ft Remote Keypad Cable	CAB-RS-7.5
	33 ft Remote Keypad Cable	CAB-RS-10
	RS-232 Serial Comm. Module (mounted in place of keypad)	KCS-CFW08
	RS-232/485 Converter (mounted externally)	MIW-02
	PC Communication Kit	KSD-CFW08
	Interface for RS-485 Communication	KRS-485-CFW08
	Easy Mounting Kit - Size 1	KFIX-CFW08-M1
	Easy Mounting Kit - Size 2	KFIX-CFW08-M2
	NEMA 1 Kit - IP20 - Size 1	KN1-CFW08-M1
Options	NEMA 1 Kit - IP20 - Size 2	KN1-CFW08-M2
	DIN Rail Mounting Base - Size 1	KMD-CFW08-M1
	Remote Station-includes Start PB, Stop PB, 1-NC and 1-NO con- tact block, Potentiometer 5k and legends (22mm) replaces CFW-REM	CSW-SP3PBS
	Remote Station-includes Start PB, Stop PB, 1-NC and 1-NO con- tact block, Potentiometer 5k and legends (30mm) replaces CFW-REM	CSW30-SP3PBS
	120VAC Digital Input Adaptor Board (4 inputs)	KAC-120-CFW08

Variable Frequency Drives CFW08

CFW08 Plus – Technical Data

Power Supply	Voltage	Single or Three Phase	220240V (+10%, -15%)			
		Three Phase	380480V (+10%, -15%)			
	Frequency	50 / 60Hz +/- 2Hz				
	Cos (Displacement Power Factor)	Greater than 0.98	-			
inclosure	Degree of Protection	NEMA1	-			
Control	Control Modes	V/Hz	-			
		Sensorless Voltage Vector				
	Processor	16 bit DSP				
	Power Output	Sinusoidal PWM (Space Vector Modulation)				
		IGBT Transistors 2.5, 5, 10 or 15kHz				
	Switching Frequency	2.5, 5, 10 or 15kHz Switching Frequency	_			
	Frequency Range	0 - 300Hz	_			
	Overload Capacity	150% during 60 sec. every 10 min.				
Control Inputs	4 programmable isolated digital inputs, NPN	l or 24Vdc logic (PNP)				
	2 x programmable differential analog inputs be set as DI or as PTC input	, programmable for current or voltage v	with 0.25% linearity error and can			
Control Outputs	2 programmable relay outputs, one NO (Form A) and on NC (Form B): 250 V / 0.5 A					
	1 x outputs with independent NO and NC at a same common 1 x output, programmable for voltage (0-10V) or current (0-20 mA or 4-20 mA) and with 0.25% linearity error					
Communication	Serial Optional RS-232 serial interface, RS-485 with external RS-232/485 converter					
	Field Bus	Modbus RTU with external RS-232/48	35 converter			
afety	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	0104°F (40°C), up to 122°F (50°C) v derating	with 2% / 1.8°F (1°C) output curren			
	Humidity	590% Non Condensing				
	Altitude	03300 ft (1000m), up to 13,200 ft (4000m) with 10% / 3300 ft (1000m) output current derating				
Conformities	EMC Directive 89 / 336 / EEC	Electromagnetic compatibility – Industrial Environment EMC – Emissio				
	ENC61800-3	and Immunity				
	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					
Keypad	4 digit display, 2 indicator LEDs and 8 keys					
	Readouts for: output frequency (Hz), output voltage (V), value proportional to frequency					
Nounting	Screws or optional DIN rail mount					

Please contact your authorized distributor:

ACP&D Limited 86 Rose Hill Road, Ashton-under-Lyne, Lancashire, England, OL6 8YF.

Tel: +44 (0)161 343 1884 Fax: +44 (0)161 343 7773 e-mail; sales@acpd.co.uk Websites: www.acpd.com & www.acpd.co.uk

