# CFW08 - Wash Drive

- N4X Wash Down Duty Enclosures
- Compact Size
- Full functionality of larger size drives
- DB Resistors available,10% duty cycle















# Variable Frequency Drives CFW08 N4X Wash Down Duty

The WEG CFW08 WASH Series is a redesign of our successful uline VFDs. Engineering improvements have produced one of the most compact and full featured microdrives in the marketplace.

Outstanding features and options in a NEMA 4 enclosure allow the CFW08 WASH to be successfully used in a large variety of applications.

#### **Standard Features**

- Same programming as other WEG VFD's
- V/Hz and Sensorless Vector Control
- NEMA 4X(IP56) Enclosure (indoor use only)
- Single and Three-phase input voltage
- 200-240V, 380-480V or 500-600 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 (1NO, 1NC, 240vac 0.5A)
- Two isolated programmable analog inputs (0-10V, 0/4-20mA)
- ☐ 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
- SuperDrive (G1) compatible





# **Applications** NEMA 4X

- Pumps
- Fans
- Blowers
- Conveyors
- Rollout tables
- Agitators
- Mixers
- Any washdown applications

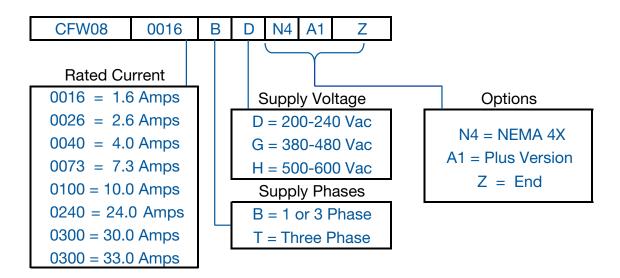
# **Optional Features**

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

**NEMA 4 Enclosure - A1 Version** 



# **CFW08 WASH Catalog Number Sequence**







# Variable Frequency Drives CFW08 Wash

## Wash Down - NEMA 4X Enclosure

Motor Voltage	Motor HP <sup>1</sup>	Drive Amps <sup>2</sup>	Catalog Number	Braking Tran- sistor	Frame Size	Dimensions (in.) HxWxD	Approx. Weight (lbs.)
	Input Power Supply: Single or Three-Phase 200-240 Vac						
	2	7.3	CFW080073BDN4A1Z	Yes	Α	10.4 x 6.5 x 8.5	5
	3	10.0	CFW080100BDN4A1Z	Yes	Α	10.4 x 6.5 x 8.5	5

230 Vac

Notes:
1) "HP" rating based on "average FLA values". Use as a guide only.
2) Motor FLA may vary with speed and manufacturer. ALWAYS compare motor FLA to Nominal AMPS of drive.
3) All 575V drives are non-stocked items. Consult WEG for availability.
For other technical data please refer to WEG product manual.



# Variable Frequency Drives CFW08 - Wash

NON-STOCK (call for lead time)

### CFW08 - DB Resistors 10% Duty Cycle

# 10% Duty Cycle

Motor Voltage	Motor HP <sup>1</sup>	CFW08 Catalog Number	WEG DB Resistor Catalog Number <sup>2</sup>	Ohms	Watts			
	Input Power Su	Input Power Supply: Single or Three-Phase 200-240 Vac						
	2	CFW080073BDN4A1Z	CFDB39-224	39	224			
Vac	3	CFW080100BDN4A1Z	CFDB27-298	27	298			
	3	CFW080100BDN4A1Z	CFDB27-298	27	298			

Notes:
1) "HP" rating based on "average FLA values". Use as a guide only.
2) Dynamic Braking Resistors are non-stock items. Consult WEG for availability



# Variable Frequency Drives CFW08 - Wash

### **CFW08 Plus - Technical Data**

## **Technical Data**

reorninear Data						
Power Supply	Voltage	Single Phase or Three Phase	200-240V (+10%, -15%)			
		Three phase	380-480V (+10%, -15%)			
	Frequency	50 / 60Hz +/- 2Hz				
	Displacement Power Factor (Cos)	Greater than 0.98				
Enclosure	Degree of Protection	NEMA 4/4X (indoor use only)				
Control	Control Modes	Volts per Hertz (Scalar)				
		Sensorless Voltage Vector VVW				
	Power Output	Sinusoidal PWM (Space Vector Modulation)				
		IGBT Transistors				
	Switching Frequency	2.5, 5, 10 or 15kHz				
	Frequency Range	0-300 Hz				
	Overload Capacity	150% for 60 seconds, repeatable every 10 min.				
Control Inputs	4 programmable isolated digital inputs, NPN or 24Vdc logic (PNP)					
	2 programmable differential analog inputs; programmable for current or voltage Can be set as DI or as PTC input (0-10V, 4-20mA or 0-20mA)					
Control Outputs	2 programmable relay outputs: One NO (Form A) and one NC (Form B): 240 V / 0.5 A					
	1 Output with independent NO and NC at a same common					
	1 Analog 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-232/485 converter				
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	32° - 104°F (40°C), up to 122°F (50°C) with 2% / 1.8°F (1°C) output current derating				
	Humidity	5-90% Non Condensing				
	Altitude	0-3300 ft (1000m), up to 13,200 ft (4000m) with 1% output current derating per 330ft (100m) above 3300 ft (1000m).				
Regulatory Conformance	EMC Directive 89 / 336 / EEC	Electromagnetic compatibility – Industrial Environment EMC Emission and Immunity optional filter				
	ENC61800-3					
	LVD 73/23/EEC	Low Voltage Directive				
	UL 508 C	Power Conversion Equipment				
Special Functions		I, local/remote control, FWD/REV selection, DC braking, manual and auto torque boost, motor 70 skip frequencies, maximum and minimum adjustable frequency limits, adjustable output				
Keypad	4 digit display, 2 indicator LEDs and 8 keys					
	Readouts for: output frequency (Hz), output current (A), output voltage (V), motor torque (%) in vector mode, DC bus voltage (V), value proportional to frequency (Ex.: RPM), heatsink temperature, fault and status messages					
	value proportional to frequency (Exc.	,, <b>,</b>				

WEG Electric Corp. offers the following products, and more! With a full range of IEC/NEMA Global Certifications and a full line of products, WEG can supply the right solution for your needs anywhere in the world. To learn more about WEG's products and solutions or to locate a Distributor near you, please call **1-800-ASK-4WEG** or visit **www.weg.net**.

#### Low Voltage Motors,

#### Single and 3-Phase, 1/8 - 700HP

General Purpose Motors Explosion Proof Motors

Crusher Duty Motors

IEC Tru-Metric Motors

Pump Motors including JP/JM

P-Base Pump Motors

Oil Well Pumping Motors

Pool & Spa Motors

Brake Motors

Compressor Duty Motors

Farm Duty Motors

Poultry Fan Motors

Auger Drive Motors

IFFF 841 Motors

Stainless Steel Wash Down Motors

Saw Arbor Motors

Cooling Tower Motors
Commercial HVAC Motors

Pad Mounted Motors

Vector Duty Motors

#### **Large Electric Motors**

Low Voltage 3-phase motors up to 2,500HP

Motors up to 70,000HP and 13,200V Wound Rotor Systems (including starters) up to 70,000HP and 13,200V

Synchronous Motors up to 70,000HP and 13.200V

Explosion proof motors (Ex-d) up to 1,500kW and 11kV

Ex-n, Ex-e, Ex-p motors

#### **Variable Frequency Drives**

Low Voltage 1/4 to 2500HP, 230V – 480V Medium Voltage 500-8000HP

Multi-pump systems

NEMA 4X

Dynamic braking resistors

Line and load reactors

Plug and play technology

Network communications: Profibus-DP,

DeviceNet, Modbus-RTU

PLC functions integrated

Complete line of options and accessories

#### **Soft Starters**

3-1500HP

Oriented start-up

Built-in bypass contactor

Universal source voltage (230-575V,

50/60Hz)

Network communications: Profibus-DP,

DeviceNet, Modbus-RTU

Complete Line of options and accessories

MV Soft-starter 3.3kV, 4.16kV: up to

3500HP, Withdrawable Power Stacks, & 8x PT100 Temperature monitoring

#### **Controls**

Mini - Contactors

IEC Contactors

Thermal Overload Relays

Manual Motor Protectors

Molded Case Circuit Breakers

Smart Relays

Enclosed Starters: combination & non-

combination,

Pushbuttons & Pilot Lights

Timing & Motor Protection Relays

Terminal Blocks

#### **Custom Panels**

Custom configured to your specification.

NEMA 1, 12, 3R, 4 and 4X cabinets

Quick delivery of preconfigured drives
and soft starters

UL 508 certified

Low Voltage (230-460)

Made in the U.S.A.

#### Generators

Brushless Synchronous Generators for diesel gen-sets up to 4,200kVA

Hydro-generators up to 25,000kVA Turbo-generators up to 62,500kVA

#### **Power Transformers**

Built and engineered in North America

Voltages < 500kV

Ratings 5-300MVA

Station class, oil filled, round core, copper windings

Special configurations and designs available!

Ask your WEG Sales Representative for

Designed, built, and engineered to ANSI standards.

#### **Custom Solution Package Sales**

WEG can package any of its products for ease of sale! Enjoy a single point of contact for the entire package of products and assistance from quote through after-sales support. Ask your WEG Sales Representative for details.



WEG Electric Corp. 6655 Sugarloaf Parkway Duluth, GA 30097 Phone: 1-800-ASK-4WEG

web: www.weg.net

USA.CFW08.9.2020