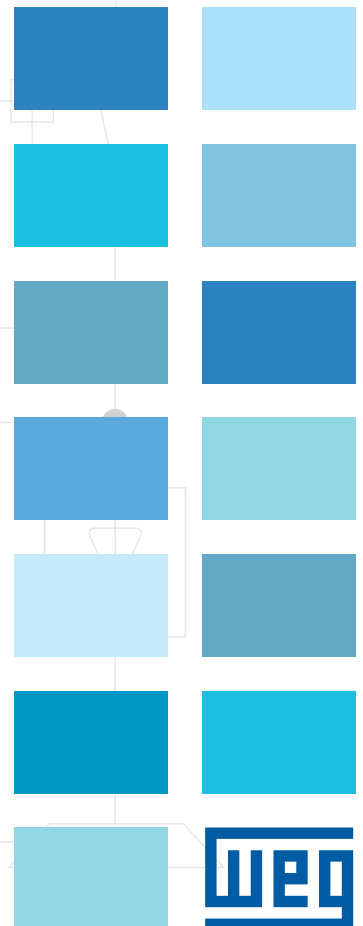
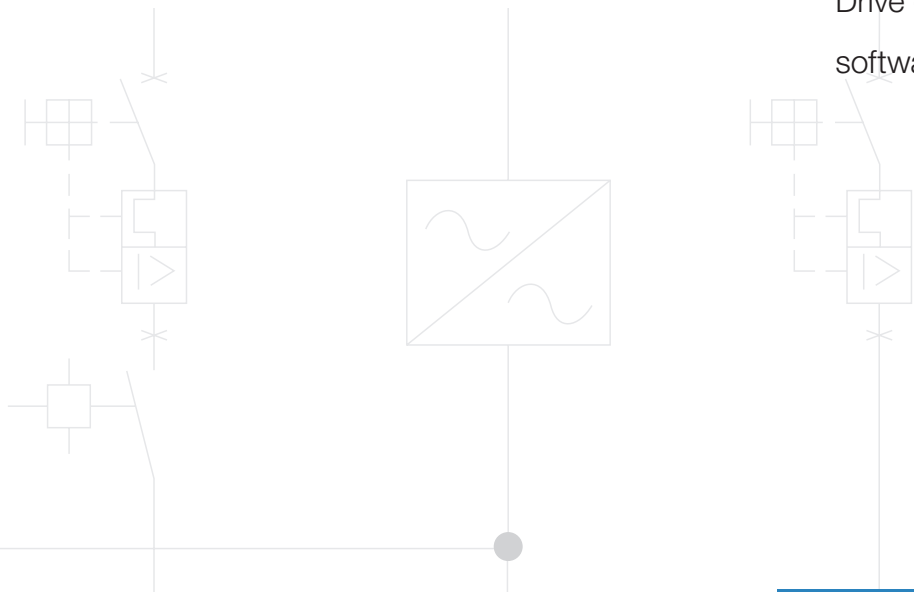


CFW11

Variable Frequency Drive

- Easy installation of options and accessories
- Free superdrive PC/Drive communication software



M
USACFW1109

M
3~





Variable Frequency Drives

WEG's CFW11 uses state-of-the-art technology to control motors up to 600HP. Aimed at increasing customers productivity, the CFW11 offers the following innovations:

Applications

- Pumps
- Fans / Blowers
- Conveyors
- Compressors
- Agitators and Mixers
- Extruders
- Grizzly Feeders
- Centrifuges
- Cranes and Hoists
- Rollout Tables
- Presses
- Saws

Options

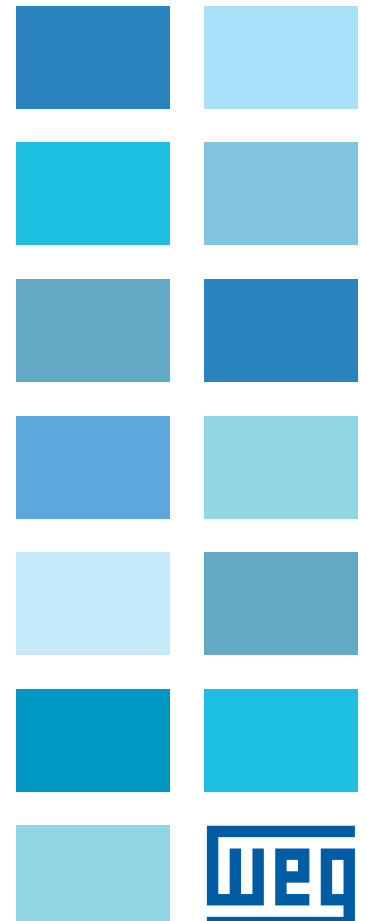
- Safety stop in compliance with EN 954 - 1 / category III**
- External control feed with 24 Vdc
- RFI filter in compliance with EN 61800 - 3 (internal)**
- DB Resistors available upon request

** Factory ordered

Standard Features

- Same programming as all other WEG VFD's
- Plug and play philosophy (connect and use) enables quick and easy installation of accessories and options.
- USB for microcomputer connection for using SUPERDRIVE programming and monitoring software as well as updating inverter firmware.
- Human-Machine Interface (HMI) with backlit graphic display and soft-keys, greatly facilitates inverter programming and operation.
- DC link inductors (symetrically connected to positive and negative DC link terminals) enable compliance with IEC61000-3-12 standard requirements regarding harmonics, (no need for external line reactance)
- Intelligent thermal management enables full protection of IGBTs, monitoring of heatsink and internal air temperature.
- Automatic control of the heatsink fan with speed sensor (additional protection) and easily detachable from the unit for cleaning and maintenance.
- Normal Duty and Heavy Duty ratings to adapt optimally to all kinds of loads.
- Protection with failure and alarm warnings.
- Motor overload protection in compliance with IEC 60947-4-2/UL 508 C.
- Memory card built into the standard product allows user to create functions without the need to use an external PLC (soft-PLC via IEC61131-3 programming software)
- Guided start-up simplifies initial user programming.
- Real time clock
- TRACE / SCOPE function to assist with the start-up and system diagnostics.

Mounting Options



CFW11

Variable Frequency Drives 1.5 to 600 HP

Coding

1.	2	3	4	5	6	7
CFW11	0006	T	4	0	N1	Z

1. CFW11 series

2. Frame Size:	= A, B, C, D or E	0006 = 6 Amps
		0024 = 24Amps
		0242 = 242Amps
		0601 = 601 Amps

3. Number of Phase:	B = Single phase or Three phase
	S = Single phase
	T = Three Phase

4. Input Voltage:	2 = 200...240VAC
	4 = 380...480VAC

5. Options:	S = Standard
	0 = An option function built-in (Ex. ON1 - NEMA1 included)

6. Enclosure:	N1 = NEMA 1
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7. End of Code:	Z
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Variable Frequency Drives CFW11

(NEMA1/IP21 Frame size A, B, C – NEMA1/IP20 Frame Size D)

Motor Volts	HP	Amps	HP	Amps	CATALOG NUMBER	Frame Size	Enclosure	DB	DIMENSIONS H x W x D	App. Shpg. Wt. (lbs.)	Multiplier Symbol
230V	INPUT POWER SUPPLY: SINGLE OR THREE PHASE - 200...240V										
	1.5	6	1.5	5	CFW110006B20N1Z	A	NEMA 1	YES	12.04 x 5.71 x 8.94	19.9	V1
	2	7	2	7	CFW110007B20N1Z	A	NEMA 1		12.04 x 5.71 x 8.94	20.8	V1
	INPUT POWER SUPPLY: SINGLE PHASE - 200...240V										
	3	10	3	10	CFW110010S20N1Z	A	NEMA 1	YES	12.04 x 5.71 x 8.94	20.8	V1
	INPUT POWER SUPPLY: THREE PHASE - 200...240V										
	2	7	1.5	5.5	CFW110007T20N1Z	A	NEMA 1	YES	12.04 x 5.71 x 8.94	19.9	V1
	3	10	2	8	CFW110010T20N1Z	A	NEMA 1		12.04 x 5.71 x 8.94	19.9	V1
	5	13	3	11	CFW110013T20N1Z	A	NEMA 1		12.04 x 5.71 x 8.94	20.8	V1
	5	16	5	13	CFW110016T20N1Z	A	NEMA 1		12.04 x 5.71 x 8.94	21.2	V1
	7.5	24	7.5	20	CFW110024T20N1Z	B	NEMA 1		13.82 x 7.45 x 8.94	28.5	V1
	10	28	10	24	CFW110028T20N1Z	B	NEMA 1		13.82 x 7.45 x 8.94	28.5	V1
	10	33.5	10	28	CFW110033T20N1Z	B	NEMA 1		13.82 x 7.45 x 8.94	28.5	V1
	15	45	15	36	CFW110045T20N1Z	C	NEMA 1		17.64 x 8.66 x 11.51	44.1	V1
	20	54	20	45	CFW110054T20N1Z	C	NEMA 1		17.64 x 8.66 x 11.51	45	V1
	25	70	20	56	CFW110070T20N1Z	C	NEMA 1		17.64 x 8.66 x 11.51	49.2	V1
	30	86	25	70	CFW110086T20N1Z	D	NEMA 1		19.82 x 11.81 x 12	115.9	V1
	40	105	30	86	CFW110105T20N1Z	D	NEMA 1		19.82 x 11.81 x 12	120.2	V1
	50	142	40	115	CFW110142T20N1Z	E	NEMA 1	NO	26.6 x 13.2 x 14.1	150	V1
	60	180	50	142	CFW110180T20N1Z	E	NEMA 1		26.6 x 13.2 x 14.1	150	V1
	75	211	60	180	CFW110211T20N1Z	E	NEMA 1		26.6 x 13.2 x 14.1	150	V1
	50	142	40	115	CFW110142T20N1DBZ	E	NEMA 1	YES	26.6 x 13.2 x 14.1	150	V1
	60	180	50	142	CFW110180T20N1DBZ	E	NEMA 1		26.6 x 13.2 x 14.1	150	V1
	75	211	60	180	CFW110211T20N1DBZ	E	NEMA 1		26.6 x 13.2 x 14.1	150	V1
480V	INPUT POWER SUPPLY: THREE PHASE - 380...480V										
	2	3.6	2	3.6	CFW110003T40N1Z	A	NEMA 1	YES	12.04 x 5.71 x 8.94	19.9	V1
	3	5	3	5	CFW110005T40N1Z	A	NEMA 1		12.04 x 5.71 x 8.94	20.3	V1
	5	7	3	5.5	CFW110007T40N1Z	A	NEMA 1		12.04 x 5.71 x 8.94	20.3	V1
	7.5	10	5	10	CFW110010T40N1Z	A	NEMA 1		12.04 x 5.71 x 8.94	20.8	V1
	10	13.5	7.5	11	CFW110013T40N1Z	A	NEMA 1		12.04 x 5.71 x 8.94	21.2	V1
	10	17	10	13.5	CFW110017T40N1Z	B	NEMA 1		13.82 x 7.45 x 8.94	28.5	V1
	15	24	10	19	CFW110024T40N1Z	B	NEMA 1		13.82 x 7.45 x 8.94	29.8	V1
	20	31	15	25	CFW110031T40N1Z	B	NEMA 1		13.82 x 7.45 x 8.94	31.3	V1
	25	38	20	33	CFW110038T40N1Z	C	NEMA 1		17.64 x 8.66 x 11.51	45.9	V1
	30	45	25	38	CFW110045T40N1Z	C	NEMA 1		17.64 x 8.66 x 11.51	52.9	V1
	40	58.5	30	47	CFW110058T40N1Z	C	NEMA 1		17.64 x 8.66 x 11.51	54.9	V1
	50/60	70.5	40	61	CFW110070T40N1Z	D	NEMA 1		19.82 x 11.81 x 12	119.5	V1
	75	88	50	73	CFW110088T40N1Z	D	NEMA 1	19.82 x 11.81 x 12	122.8	V1	
	75	105	75	88	CFW110105T40N1Z	E	NEMA 1	NO	26.6 x 13.2 x 14.1	150	V1
	100/125	142	75	115	CFW110142T40N1Z	E	NEMA 1		26.6 x 13.2 x 14.1	150	V1
	150	180	100	142	CFW110180T40N1Z	E	NEMA 1		26.6 x 13.2 x 14.1	150	V1
	175	211	125	180	CFW110211T40N1Z	E	NEMA 1		26.6 x 13.2 x 14.1	150	V1
	75	105	75	88	CFW110105T40N1DBZ	E	NEMA 1	YES	26.6 x 13.2 x 14.1	150	V1
	100/125	142	75	115	CFW110142T40N1DBZ	E	NEMA 1		26.6 x 13.2 x 14.1	150	V1
	150	180	100	142	CFW110180T40N1DBZ	E	NEMA 1		26.6 x 13.2 x 14.1	150	V1
	175	211	125	180	CFW110211T40N1DBZ	E	NEMA 1		26.6 x 13.2 x 14.1	150	V1
	200	242	150	211	CFW110242T4SZ	F	IP20	NO	48.6 x 16.9 x 14.2	267	V1
	250	312	200	242	CFW110312T4SZ	F	IP20		48.6 x 16.9 x 14.2	271	V1
	300	370	250	312	CFW110370T4SZ	F	IP20		48.6 x 16.9 x 14.2	277	V1
	350	477	300	370	CFW110477T4SZ	F	IP20		48.6 x 16.9 x 14.2	287	V1
	400	515	350	477	CFW110515T4SZ	G	IP20	NO	50 x 21.1 x 16.8	420	V1
	500	601	450	515	CFW110601T4SZ	G	IP20		50 x 21.1 x 16.8	425	V1
	600	720	500	601	CFW110720T4SZ	G	IP20		50 x 21.1 x 16.8	441	V1

Notes: "HP" rating based on FLA values from WEG W22, 2 and 4 poles, 460VAC, NEMA Premium motors".
Use as a guide only. Motor FLA may vary with speed and manufacturer.
ALWAYS compare motor FLA to Nominal AMPS of VFD and overload conditions.

Variable Frequency Drives

CFW11

Options and Accessories

	DESCRIPTION	CATALOG NUMBER	Multiplier Symbol
I/O Exp Modules	IOA Module for CFW11: 1 analog input (AI4 - 14 bits, voltage or current); 2 digital inputs; 2 analog outputs (AO3 and AO4 - 14 bits, voltage or current); 2 digital outputs (open-collector). All analog input and output are galvanic isolated.	IOA-01	V1
	IOB Module for CFW11: 2 isolated analog inputs (AI3 and AI4 - 12 bits, voltage or current); 2 digital inputs; Provides Galvanic Isolation for AO1 and AO2 - 11 bits, voltage or current); 2 digital outputs (open-collector). All analog inputs and outputs are galvanically isolated.	IOB-01	V1
Encoder Modules	Incremental encoder module, 5 to 12 VDC at 100 KHZ, with encoder signal repeater	ENC-01	V1
	Incremental encoder module, 5 to 12 VDC at 100 KHZ, without encoder signal repeater	ENC-02	V1
Communication Modules	RS-485 serial communication module (Modbus-RTU)	RS485-01	V1
	RS-232C serial communication module (Modbus-RTU)	RS232-01	V1
	RS232C serial communication module with DIP-switches for microcontroller's flash memory programming	RS232-02	V1
	CAN and RS-485 communication module (CANopen / Modbus / DeviceNet)	CAN/RS485-01	V1
	CAN interface module (CANopen / DeviceNet)	CAN-01	V1
	Profibus DP interface module - Anybus card*	PROFDP-05	V1
	DeviceNet interface module - Anybus card*	DEVICENET-05	V1
	Ethernet/IP interface module - Anybus card*	ETHERNET/IP-05	V1
	RS-232 serial communication module (Modbus-RTU)	RS232-05	V1
	RS-485 serial communication module (Modbus-RTU)	RS485-05	V1
PLC & Flash Memory Modules	PLC functions; Ladder programming; electronic gear box; 9 digital inputs; 3 dry-contact digital outputs; 3 open-collector digital outputs; 1 analog input (14 bits); 2 analog outputs (14 bits); 2 encoder interfaces; RS-485 Modbus-RTU interface; CAN interface (CANopen, CANopen master/slave)	PLC11-01	V1
	Flash Memory Module for CFW11	MMF-01	V1
Keypad Accessories and Remote Keypad Cables	CFW11 keypad	HMI-01	V1
	Frame for keypad remote assembly	RHMIF-01	V1
	Blank cover for keypad slot	HMID-01	V1
	1m (3.3ft) remote keypad cable	IHM-CAB-RS-1M	V1
	2m (6.6ft) remote keypad cable	IHM-CAB-RS-2M	V1
	3m (10ft) remote keypad cable	IHM-CAB-RS-3M	V1
	5m (16ft) remote keypad cable	IHM-CAB-RS-5M	V1
	7.5m (25ft) remote keypad cable	IHM-CAB-RS-7.5M	V1
	10m (33ft) remote keypad cable	IHM-CAB-RS-10M	V1
	Remote Station-includes Start PB, Stop PB, 1-NC and 1-NO contact block, Potentiometer 5k and legends (22mm) replaces CFW-REM	CSW-SP3PBS	Z5
	Remote Station-includes Start PB, Stop PB, 1-NC and 1-NO contact block, Potentiometer 5k and legends (30mm) replaces CFW-REM	CSW30-SP3PBS	Z5
Conduit Kit	Conduit Kit for frame size A	KN1A-01	V1
	Conduit Kit for frame size B	KN1B-01	V1
	Conduit Kit for frame size C	KN1C-01	V1
	IP21 Kit for frame size D	KIP21D-01	V1
Shielding Kit	Power Cables Shielding Kit for frame size A	PCSA-01	V1
	Power Cables Shielding Kit for frame size B	PCSB-01	V1
	Power Cables Shielding Kit for frame size C	PCSC-01	V1
	Power cables shielding kit for frame size D	PCSD-01	V1
	Power cables shielding kit for frame size E	PCSD-01	V1

*Anybus card goes in slot 4 and allows the user to combine the PLC11 board with DeviceNet, Profibus, or Ethernet/IP.

Variable Frequency Drives

CFW11

Technical Data

Supply	200...240V: +10% ...-15% of rated voltage 380...480V: +10% ...-15% of rated voltage
Supply frequency	50/60Hz, +/-2Hz
Output frequency	0 to 300Hz
Types of control	Vector with encoder
	Vector sensorless
	V V W: voltage vector
	V/F (scalar)
Ambient temperature	-10 ...50°C
	up to 60° with output current reduction (2%/°C above 50°C)
Humidity	5 to 90% without condensation
Altitude	0 to 1000m
	Up to 4000m without current reduction (1%/n for each 100m above 1000m)
Braking methods	Dynamic braking (available in all standard models)
	Optimal braking
	DC braking
Efficiency	Greater than 97%
Degree of protection	IP21 for models with A, B and C sizes
	IP20 / NEMA1 for models with D size
Possibility of flange mounting	Available in all standard models, rear part of heatsink with IP54 degree of protection
Overload	Normal Duty: 110%, 60s
	Heavy Duty: 150%, 60s
Analog inputs	1 differential, resolution 12 bits, 0 to 10V/(0)4 to 20mA
	1 differential, resolution 11 bits + signal, 0 to +/- 10V/(0)4 to 20mA
Analog outputs	2 isolated, resolution 11 bits, 0 to 10V/(0)4 to 20mA
Digital inputs	6 optoisolated, bi-directional, 24Vdc
Relay outputs	3 reverse contact outputs (NO/NC), 240Vac/1A
Motor thermistor	PTC/PT100/KTY84, use 1 analog output programmed for constant current + 1 analog input programmed for voltage
Supply + 24Vdc available for user	24Vdc +/-20%, 500ma
Norms	IEC 60146 – Semiconductor converters
	UL508C – Safety for power conversion equipment
	EN 50178 – Electronic equipment for use in power installations
	EN 61800-2 – General requirements adjustable speed electrical power drive systems
	EN 61800-5-1 – Safety requirements adjustable speed electrical power drive systems
	EN 61800-3 – EMC product standard including specific test methods adjustable speed electrical power drive systems
	EN 60204 – Electronic equipment of machines
	RoHS and WEEE Guidelines