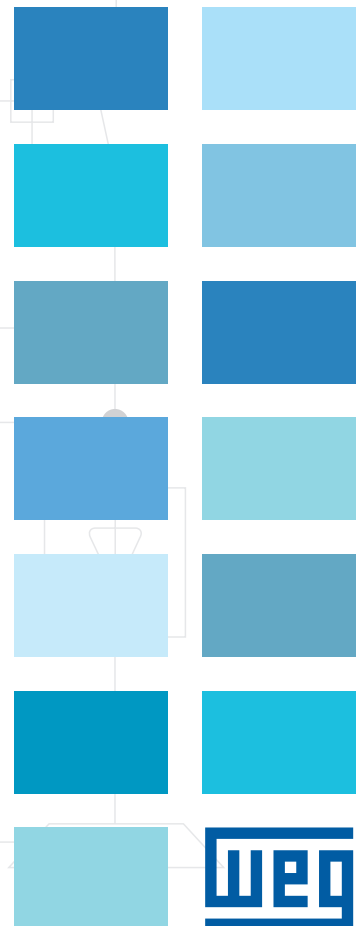
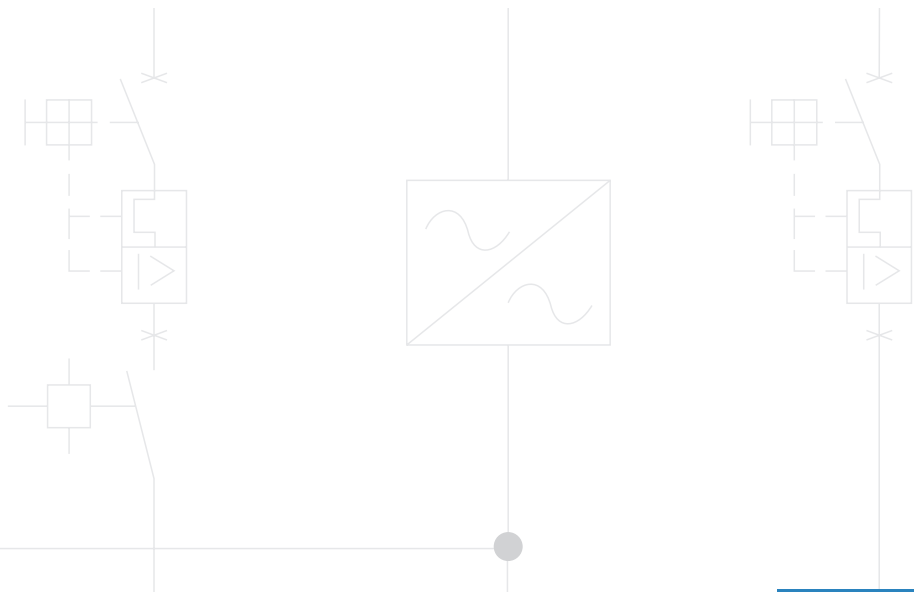


CFW11

Drive

- Tough
- Reliable
- Durable
- Quality



Variable Frequency Drives

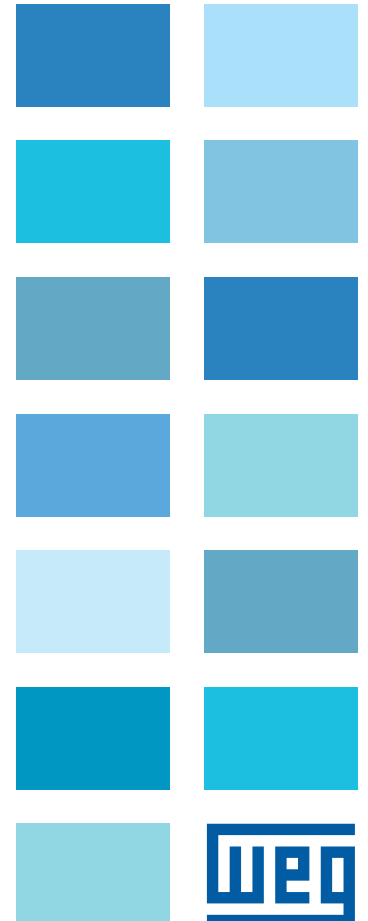
CFW11 Vectrue Inverter

The WEG CFW11 series of inverters includes state-of-the-art technology for three-phase induction motor control. Aimed at increasing customer productivity, this new line offers the following innovations:

- 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



Variable Frequency Drives CFW11

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

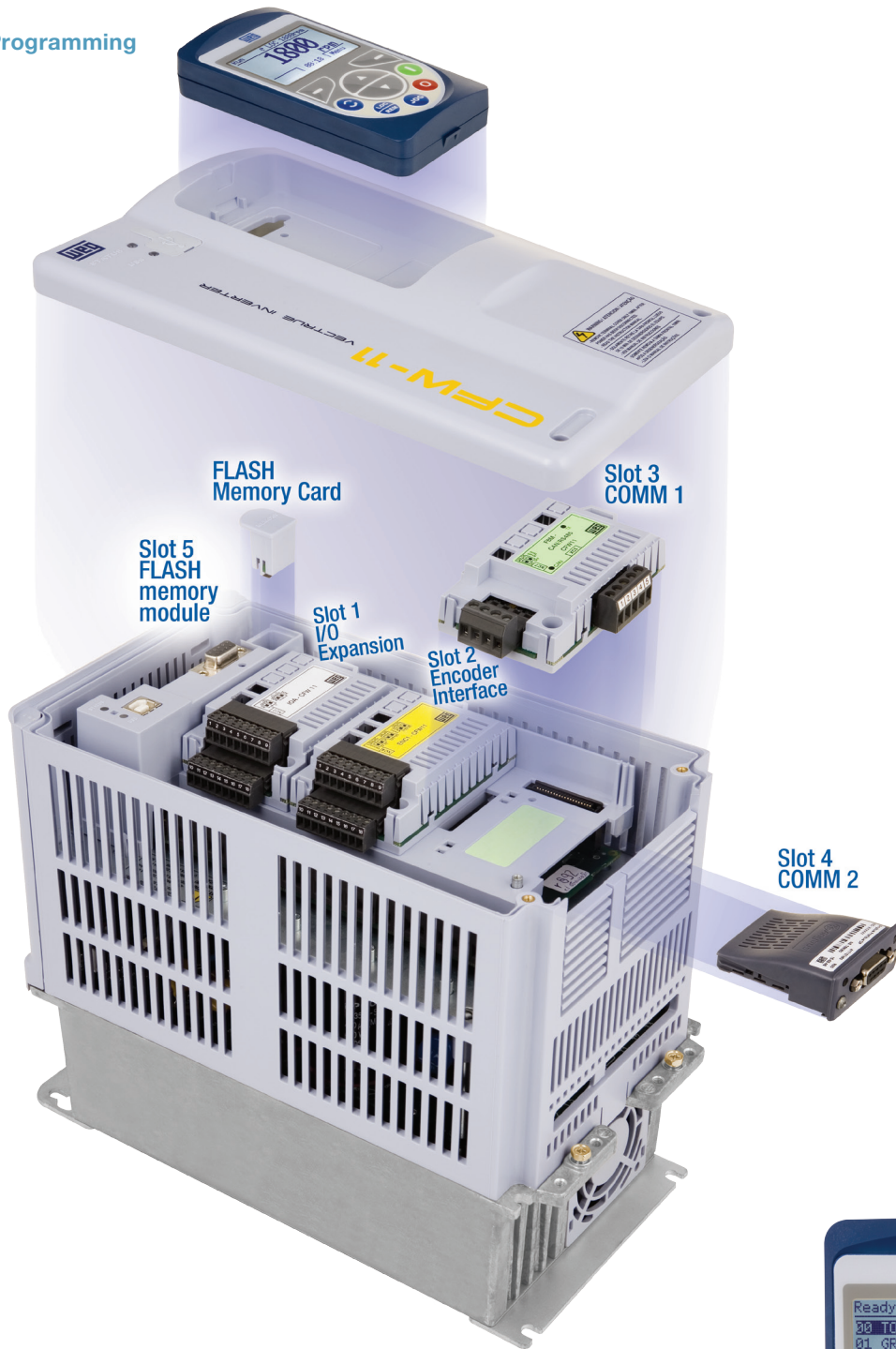
Motor Volts	ND HP	HD HP	ND Amps	HD Amps	CATALOG NUMBER	Frame Size	Dynamic Braking	DIMENSIONS H x W x D	App. Shpg. Wt. (lbs.)	
200...240V	INPUT POWER SUPPLY: SINGLE OR THREE PHASE - 200...240V									
	1.5	1.5	6	5	CFW110006B20N1Z	A	YES	12.04 x 5.71 x 8.94	19.9	
	2	2	7	7	CFW110007B20N1Z	A		12.04 x 5.71 x 8.94	20.8	
	INPUT POWER SUPPLY: SINGLE PHASE - 200...240V									
	3	3	10	10	CFW110010S20N1Z	A	YES	12.04 x 5.71 x 8.94	20.8	
	INPUT POWER SUPPLY: THREE PHASE - 200...240V									
	2	1.5	7	5.5	CFW110007T20N1Z	A	YES	12.04 x 5.71 x 8.94	19.9	
	3	2	10	8	CFW110010T20N1Z	A		12.04 x 5.71 x 8.94	19.9	
	4	3	13	11	CFW110013T20N1Z	A		12.04 x 5.71 x 8.94	20.8	
	5	4	16	13	CFW110016T20N1Z	A		12.04 x 5.71 x 8.94	21.2	
	7.5	6	24	20	CFW110024T20N1Z	B		13.82 x 7.45 x 8.94	28.5	
	10	7.5	28	24	CFW110028T20N1Z	B		13.82 x 7.45 x 8.94	28.5	
	12.5	10	33.5	28	CFW110033T20N1Z	B		13.82 x 7.45 x 8.94	28.5	
	15	12.5	45	36	CFW110045T20N1Z	C		17.64 x 8.66 x 11.51	44.1	
	20	15	54	45	CFW110054T20N1Z	C		17.64 x 8.66 x 11.51	45	
	25	20	70	56	CFW110070T20N1Z	C		17.64 x 8.66 x 11.51	49.2	
	30	25	86	70	CFW110086T20N1Z	D	19.82 x 11.81 x 12	115.9		
	40	30	105	86	CFW110105T20N1Z	D	19.82 x 11.81 x 12	120.2		
	50	40	142	105	CFW110142T20N1Z	E	YES	26.6 x 13.2 x 14.1	150	
	60	50	180	142	CFW110180T20N1Z	E		26.6 x 13.2 x 14.1	150	
75	60	211	180	CFW110211T20N1Z	E	26.6 x 13.2 x 14.1		150		
50	40	142	105	CFW110142T20N1DBZ	E	26.6 x 13.2 x 14.1		150		
60	50	180	142	CFW110180T20N1DBZ	E	26.6 x 13.2 x 14.1		150		
75	60	211	180	CFW110211T20N1DBZ	E	26.6 x 13.2 x 14.1		150		
380...480V	INPUT POWER SUPPLY: THREE PHASE - 380...480V									
	2	2	3.6	3.6	CFW110003T40N1Z	A		YES	12.04 x 5.71 x 8.94	19.9
	3	3	5	5	CFW110005T40N1Z	A			12.04 x 5.71 x 8.94	20.3
	4	3	7	5.5	CFW110007T40N1Z	A			12.04 x 5.71 x 8.94	20.3
	6	6	10	10	CFW110010T40N1Z	A	12.04 x 5.71 x 8.94		20.8	
	7.5	6	13.5	11	CFW110013T40N1Z	A	12.04 x 5.71 x 8.94		21.2	
	10	7.5	17	13.5	CFW110017T40N1Z	B	13.82 x 7.45 x 8.94		28.5	
	15	10	24	19	CFW110024T40N1Z	B	13.82 x 7.45 x 8.94		29.8	
	20	15	31	25	CFW110031T40N1Z	B	13.82 x 7.45 x 8.94		31.3	
	25	20	38	33	CFW110038T40N1Z	C	17.64 x 8.66 x 11.51		45.9	
	30	25	45	38	CFW110045T40N1Z	C	17.64 x 8.66 x 11.51		52.9	
	40	30	58.5	47	CFW110058T40N1Z	C	17.64 x 8.66 x 11.51	54.9		
	50	40	70.5	61	CFW110070T40N1Z	D	19.82 x 11.81 x 12	119.5		
	60	50	88	73	CFW110088T40N1Z	D	19.82 x 11.81 x 12	122.8		
	75	60	105	88	CFW110105T40N1Z	E	YES	26.6 x 13.2 x 14.1	150	
	100	75	142	105	CFW110142T40N1Z	E		26.6 x 13.2 x 14.1	150	
	150	100	180	142	CFW110180T40N1Z	E		26.6 x 13.2 x 14.1	150	
	175	150	211	180	CFW110211T40N1Z	E		26.6 x 13.2 x 14.1	150	
	75	60	105	88	CFW110105T40N1DBZ	E		26.6 x 13.2 x 14.1	150	
	100	75	142	105	CFW110142T40N1DBZ	E		26.6 x 13.2 x 14.1	150	
150	100	180	142	CFW110180T40N1DBZ	E	26.6 x 13.2 x 14.1		150		
175	150	211	180	CFW110211T40N1DBZ	E	26.6 x 13.2 x 14.1		150		





Variable Frequency Drives CFW11

Superdrive Programming
Software



Human/Machine Interface

Left and right soft key: function defined by the text in the display



Variable Frequency Drives

CFW11

Options and Accessories

The CFW11 frequency inverter incorporates Plug and Play technology automatically recognizing and configuring accessories and options used, enabling easy installation and safe operation while eliminating manual configuration.

Accessories

Name	Description
IOA-01	14-bit analog input; 2 digital inputs; 2 14-bit analog outputs in voltage and current; 2 open collector type digital outputs
IOB-01	2 isolated analog inputs; 2 digital inputs; 2 analog isolated outputs in voltage and current; 2 open collector type digital outputs
IOC-01 (*)	8 digital inputs and outputs
IOD-01 (*)	8 - 120VAC - digital inputs
IOE-01 (*)	6 - PT100 or KTY 84 - thermistor inputs
ENC-01	Interface for incremental encoder 5 to 12Vdc, 100kHz (1) with repeater
ENC-02	Interface for incremental encoder 5 to 12Vdc, 100kHz(1)
RS485-01	Interface for RS-485 serial communication (modbus)
RS232-01	Interface for RS-232C serial communication
CAN/RS485-01	CAN interface (CANopen, DeviceNet (*)); RS-485
CAN-01	CAN interface (CANopen, DeviceNet(*))
PROFIBUS DP-01 (*)	Profibus DP interface
PLC11-01 (*)	PLC functions; IEC programming; electronic gear box 9 digital inputs; 3 relay outputs; 3 digital outputs 14-bit analog input; 2 analog outputs with 14-bit resolution 2 encoder interfaces; RS-485 MODBUS-RTU; CAN (CANopen, DeviceNet, CANopen master/slave)
PROFIBUS DP-05	Profibus DP interface
Devicenet-05	Devicenet 4 interface
EtherNetIP-05 (*)	Ethernet IP interface
HMID - 01	Blind cover for slot HMI
RHMIF - 01	Frame for remote HMI
KN1A - 01	Conduit kit for size A
KN1B - 01	Conduit kit for size B
KN1C - 01	Conduit kit for size C

(*) Available soon – (1) Maximum input frequency

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)

Variable Frequency Drives

Communication Options & Superdrive

Superdrive

WEG Superdrive is a windows based software program that allows serial (RS - 232 or RS - 485) communication between a PC and all WEG Soft Starters and Variable Frequency Drives. Superdrive is an excellent programming, documentation, and troubleshooting tool for WEG Soft Starters and VFD's. Superdrive is available for free download at www.wegelectric.com. Hardware accessories may be required depending on the Soft Starter or VFD line.

Standard Features

- Online and Offline Soft Starter or VFD programming
- Command and Monitoring
- Parameter set storage in a computer file format





Variable Frequency Drives CFW11

Options and Accessories

DESCRIPTION		CATALOG NUMBER
I/O Exp Modules	IOA Module for CFW11: 2 analog inputs (14 bits, voltage or current); 2 digital inputs; 2 analog outputs (14 bits, voltage or current); 2 digital outputs (open-collector)	IOA-01
	IOB Module for CFW11: 2 isolated analog inputs (12 bits, voltage or current); 2 digital inputs; 2 isolated analog outputs (11 bits, voltage or current); 2 digital outputs (open-collector)	IOB-01
Encoder Modules	Incremental encoder module, 5 to 12 VDC at 100 kHz, with encoder signal repeater	ENC-01
	Incremental encoder module, 5 to 12 VDC at 100 kHz, without encoder signal repeater	ENC-02
Communication Modules	RS-485 serial communication module (Modbus-RTU)	RS485-01
	RS-232C serial communication module (Modbus-RTU)	RS232-01
	RS232C serial communication module with DIP-switches for microcontroller's flash memory programming	RS232-02
	CAN and RS-485 communication module (CANopen / Modbus)	CAN/RS485-01
	CAN interface module (CANopen)	CAN-01
	Profibus DP interface module	PROFDP-05
	DeviceNet interface module	DEVICENET-05
	Ethernet/IP interface module	ETHERNET/IP-05
	RS-232 serial communication module (Modbus-RTU)	RS232-05
RS-485 serial communication module (Modbus-RTU)	RS485-05	
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
	Flash Memory Module for CFW11	MMF-01
Keypad Accessories and Remote Keypad Cables	CFW11 keypad	HMI-01
	Frame for keypad remote assembly	RHMIF-01
	Blank cover for keypad slot	HMID-01
	1m (3.3ft) remote keypad cable	IHM-CAB-RS-1M
	2m (6.6ft) remote keypad cable	IHM-CAB-RS-2M
	3m (10ft) remote keypad cable	IHM-CAB-RS-3M
	5m (16ft) remote keypad cable	IHM-CAB-RS-5M
	7.5m (25ft) remote keypad cable	IHM-CAB-RS-7.5M
	Remote Station-includes Start PB, Stop PB, 1-NC and 1-NO contact block, Potentiometer 5k and legends (22mm) replaces CFW-REM	CSW-SP3PBS
	Remote Station-includes Start PB, Stop PB, 1-NC and 1-NO contact block, Potentiometer 5k and legends (30mm) replaces CFW-REM	CSW30-SP3PBS
10m (33ft) remote keypad cable	IHM-CAB-RS-10M	
Conduit Kit	Conduit Kit for frame size A	KN1A-01
	Conduit Kit for frame size B	KN1B-01
	Conduit Kit for frame size C	KN1C-01
	IP21 Kit for frame size D	KIP21D-01
Shielding Kit	Power Cables Shielding Kit for frame size A	PCSA-01
	Power Cables Shielding Kit for frame size B	PCSB-01
	Power Cables Shielding Kit for frame size C	PCSC-01



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	98%
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
Compliances	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	



**24/7 Technical
Support**

for Drives and Soft Starters

1-877-WEG-DRIV
(934-3748)

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