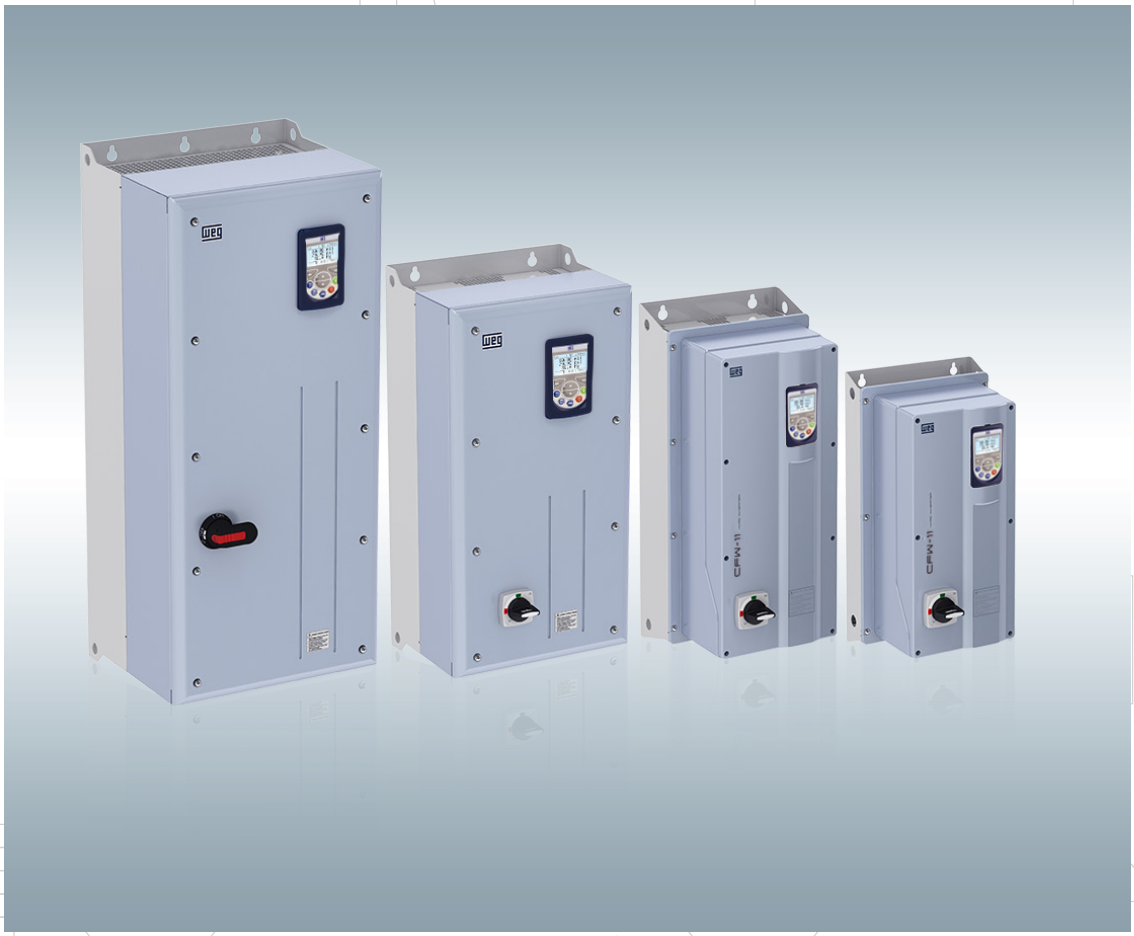
CFW11 Series

Variable Frequency Drive

NEMA 12/IP55 Enclosure



US.CFW11.Series.NEMA.12.5.2018

CFW11 NEMA 12/IP55 Enclosure

NEMA 12 / IP55 Enclosure with Disconnect Switch

Motor Voltage	ND / VT [1]		HD / CT [1]		Catalog Number	Braking Transistor	Frame Size	Dimensions (in.) HxWxD [4]	Approx. Weight (lbs.)	List Price	Multiplier
	Motor HP [2]	Drive Amps [3]	Motor HP [2]	Drive Amps [3]							
230 Vac	Input Power Supply: Three-Phase 200-240 Vac with Dynamic Braking Transistor										
	2	7.0	1 1/2	5.5	CFW110007T2O55DSZ	Yes	B	20.8 x 10.7 x 11.0	37.5	$2,022	V1
	3	10	2	8.0	CFW110010T2O55DSZ	Yes	B	20.8 x 10.7 x 11.0	37.5	$2,074	V1
	5	13	3	11	CFW110013T2O55DSZ	Yes	B	20.8 x 10.7 x 11.0	37.5	$2,130	V1
	5	16	5	13	CFW110016T2O55DSZ	Yes	B	20.8 x 10.7 x 11.0	37.5	$2,601	V1
	7 1/2	24	7 1/2	20	CFW110024T2O55DSZ	Yes	B	20.8 x 10.7 x 11.0	37.5	$3,074	V1
	10	28	10	24	CFW110028T2O55DSZ	Yes	B	20.8 x 10.7 x 11.0	37.5	$3,529	V1
	10	34	10	28	CFW110033T2O55DSZ	Yes	B	20.8 x 10.7 x 11.0	37.5	$4,062	V1
	15	45	15	36	CFW110045T2O55DSZ	Yes	C	26.4 x 12.1 x 13.7	66.2	$4,892	V1
	20	54	20	45	CFW110054T2O55DSZ	Yes	C	26.4 x 12.1 x 13.7	66.2	$6,037	V1
	25	70	20	56	CFW110070T2O55DSZ	Yes	C	26.4 x 12.1 x 13.7	66.2	$6,941	V1
	30	86	25	70	CFW110086T2O55DSZ	Yes	D	29.7 x 14.8 x 11.9	108	$7,895	V1
	40	105	30	86	CFW110105T2O55DSZ	Yes	D	29.7 x 14.8 x 11.9	108	$10,062	V1
	Input Power Supply: Three-Phase 200-240 Vac without Dynamic Braking Transistor										
	50	142	40	115	CFW110142T2O55DSZ	No	E	39.4 x 16.9 x 15.3	211.7	$12,539	V1
	60	180	50	142	CFW110180T2O55DSZ	No	E	39.4 x 16.9 x 15.3	211.7	$17,211	V1
	75	211	60	180	CFW110211T2O55DSZ	No	E	39.4 x 16.9 x 15.3	211.7	$22,167	V1
460 Vac	Input Power Supply: Three-Phase 380-480 Vac with Dynamic Braking Transistor										
	2	3.6	2	3.6	CFW110003T4O55DSZ	Yes	B	20.8 x 10.7 x 11.0	37.5	$1,873	V1
	3	5.0	3	5.0	CFW110005T4O55DSZ	Yes	B	20.8 x 10.7 x 11.0	37.5	$1,997	V1
	5	7.0	3	5.5	CFW110007T4O55DSZ	Yes	B	20.8 x 10.7 x 11.0	37.5	$2,065	V1
	7 1/2	10	5	10	CFW110010T4O55DSZ	Yes	B	20.8 x 10.7 x 11.0	37.5	$2,198	V1
	10	13.5	7 1/2	11	CFW110013T4O55DSZ	Yes	B	20.8 x 10.7 x 11.0	37.5	$2,632	V1
	10	17	10	13.5	CFW110017T4O55DSZ	Yes	B	20.8 x 10.7 x 11.0	37.5	$2,786	V1
	15	24	10	19	CFW110024T4O55DSZ	Yes	B	20.8 x 10.7 x 11.0	37.5	$3,622	V1
	20	31	15	25	CFW110031T4O55DSZ	Yes	B	20.8 x 10.7 x 11.0	37.5	$4,427	V1
	25	38	20	33	CFW110038T4O55DSZ	Yes	C	26.4 x 12.1 x 13.7	66.2	$5,610	V1
	30	45	25	38	CFW110045T4O55DSZ	Yes	C	26.4 x 12.1 x 13.7	66.2	$6,728	V1
	40	58.5	30	47	CFW110058T4O55DSZ	Yes	C	26.4 x 12.1 x 13.7	66.2	$7,678	V1
	50/60	70.5	40	61	CFW110070T4O55DSZ	Yes	D	29.7 x 14.8 x 11.9	108	$9,412	V1
	60/75	88	50	73	CFW110088T4O55DSZ	Yes	D	29.7 x 14.8 x 11.9	108	$11,084	V1
	Input Power Supply: Three-Phase 380-480 Vac without Dynamic Braking Transistor										
	75	105	75	88	CFW110105T4O55DSZ	No	E	39.4 x 16.9 x 15.3	211.7	$12,198	V1
	100/125	142	75	115	CFW110142T4O55DSZ	No	E	39.4 x 16.9 x 15.3	211.7	$15,062	V1
	150	180	100/125	142	CFW110180T4O55DSZ	No	E	39.4 x 16.9 x 15.3	211.7	$21,115	V1
	175	211	150	180	CFW110211T4O55DSZ	No	E	39.4 x 16.9 x 15.3	211.7	$27,554	V1

Notes:
1) CT = Constant Torque, 150% overload / 60 sec.; VT = Variable Torque (Quadratic Load), 110% overload / 60 sec.
2) "HP" rating based on "average FLA values". Use as a guide only.
3) Motor FLA may vary with speed and manufacturer. ALWAYS compare motor FLA to Nominal AMPS of drive.
4) Dimensions are provided for estimating purposes only. Always refer to as built drawings for actual measurements.
All CFW11 IP55/NEMA12 drives have maximum 40°C ambient temperature without derating
For other technical data please refer to WEG product manual.

Technical Data

Power Supply	Voltage	Three Phase	200-240, 380-480 Vac (+10%, -15%)
	Frequency	50 / 60Hz +/- 2Hz	
	Displacement Power Factor (Cos)	Greater than 0.98	
Enclosure	Degree of Protection	NEMA 12 or IP55	
Control	Control Modes	Volts per Hertz (Scalar)	Voltage Vector (VVW)
		Sensorless Vector	Vector with encoder
	Power Output	Sinusoidal PWM (Space Vector Modulation)	
		IGBT Transistors	
	Switching Frequency	1.25, 2.0, 2.5, 5.0 or 10.0 kHz	
	Frequency Range	0-300 Hz in Scalar Mode; 120 Hz in Vector Mode	
	Overload Capacity	CT = Constant Torque, 150% overload / 60 sec. VT = Variable Torque (Quadratic Load), 110% overload / 60 sec.	
Control Inputs	Six (6) Programmable isolated digital inputs, 24Vdc logic		
	Two (2) isolated programmable differential analog inputs 11 bit; programmable for current or voltage (0-10V, 4-20mA or 0-20mA)		
Control Outputs	Three (3) Programmable relay output; NO/NC (Form C); 240Vac, 30Vdc / 1.0 A		
	Two (2) isolated programmable analog outputs 11 bit; programmable for current or voltage (0-10V, 4-20mA or 0-20mA)		
Communication	Serial	Optional RS-232 serial interface, RS-485 with external RS-232/485 converter	
	Field Bus	Isolated RS-485 / Modbus RTU (standard)	
		CAN interface module (CANopen/DeviceNet)	
		Profibus DP interface module	
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	-10°C (14°F) to 40°C (104°F), up to 104°F (50°C) with 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	IEC 60146	Semiconductor convertors	
	UL 508 C	Power Conversion Equipment	
	UL 840	Insulation coordination including clearances and creepage distances for electrical equipment.	
	EN 50178	Electronic equipment for use in power installations	
	EN 61800-2	General requirements adjustable speed electrical power drive systems	
	EN 61800-3	EMC product standard including specific test methods adjustable speed electrical power drive systems	
	EN 61800-5-1	Safety requirements adjustable speed electrical power drive systems	
	EN 60204-1	Safety of machinery. Electrical equipment of machines. Part 1: General requirements.	
	RoHS and WEEE Guidelines		
Approvals	UL, cUL, CE, C-Tick, IRAM		
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	Graphical LCD display and 9 operator keys: Start/Stop, Up arrow, Down arrow, Direction of rotation, Jog, Local/Remote, Right soft key and Left soft key		
	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		