CFW10

Variable Speed Drive





VSD

VSDs are intended for speed control of three-phase induction motors in a wide variety of industrial applications. The WEG VSD series offers state-of-the-art technology in motor control with a modern design, great number of features, and easy installation and operation.

These products are designed with high-software optimization and are easily set through a simple Human-Machine Interface (keypad). Additionally, they comprise functions and resources that allow protection and control of electric motors an extremely easy and efficient way. They are suitable to operate with V/f or vector control.

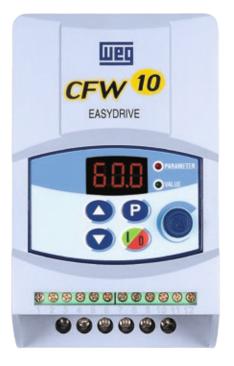
CFW10

The CFW10 VSD line is designed for the control and speed variation of three-phase induction motors. CFW10 combines modern design with cutting-edge technology, and stands out for its small profile and easy programming. In addition, CFW10 is simple to install and operate, due to its built-in standard keypad.

Features

V/f control

- IP20 finger-safe enclosure
- Single-phase 110-127 line voltage up to 0.75 kW / 1 hp
- Single-phase 200-240 line voltage up to 2.2 kW / 3 hp
- Three-phase 200-240 line voltage up to 4 kW / 5 hp
- 150% current overload capacity
- DSP controlled PWM output
- 2.5 15 kHz ajustable switching frequency
- Four isolated programmable digital inputs
- Programmable relay output
- One isolated programmable analog input
- Motor and VSD protections: overcurrent, motor overload, drive overtemperature, output short circuit, DC link over and undervoltage, and external fault
- Control features: linear and "S" acceleration and deceleration ramps, local/remote control, DC braking, torque boost, motor slip compensation, electronic pot, preset speeds, maximum and minimum adjustable frequency limits, adjustable output current limit, JOG function
- Display readings: motor speed, frequency, voltage, current, last fault, heatsink temperature and drive status
- Ambient: 50 °C (122 °F), 1,000 m (3,300 ft) altitude, 90% humidity, non-condensing.



Certifications



Applications

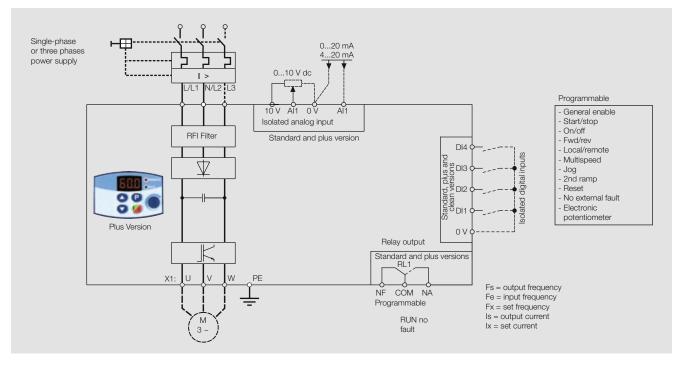
- Centrifugal pumps
- Processing pumps
- Fans / exhaust fans
- Stirrers / mixers

- Extruding machines
- Roller tables
- Driers

- Rotating filters
- Cutting machines
- Conveyors



Block Diagram





Drive Ratings

The correct way to select a VSD is matching its output current with the motor rated current. However, the table below presents the expected motor power for each VSD model.

Use the motor power ratings below only as a guidance. Motor rated currents may vary with speed and manufacturer. IEC motor powers are based on WEG 4-pole motors; NEMA motor powers are based on NEC table 430-150.

Motor Voltages Between 220 V and 230 V

-	wer oply	Model	Output current A
7 V		CFW100016S1112	1.6
110-127 V	10	CFW100026S1112	2.6
110		CFW100040S1112	4
		CFW100016S2024	1.6
	10/30	CFW100026S2024	2.6
		CFW100040S2024	4
		CFW100073S2024	7.3
> 0		CFW100100S2024	10
220-230 V		CFW100016T2024	1.6
220	30	CFW100026T2024	2.6
		CFW100040T2024	4
		CFW100073T2024	7.3
		CFW100100T2024	10
		CFW100152T2024	15.2

IEC	NEMA
50 Hz 220 V 230 V	60 Hz 230 V
kW	HP
0.25	-
0.55	0.5
0.75	0.75
0.25	-
0.55	0.5
0.75	0.75
1.5	2
2.2	3
0.25	-
0.55	0.5
0.75	0.75
1.5	2
2.2	3
4	5





"Cold Plate" - Drive Ratings

Power		CFW10 cold plate				Maximum applicable motor			Frame Dimensions			Weight
supply	Number of	Model	In output (A)	Braking	Voltage		rating	size		mm (in)		kg (lb)
voltage	phases	Model	in output (A)	transistor	(V)	kW	HP		H	W	D	3(1)
۸ <i>L</i> a		CFW100016S1112E0CPZ	1.6			0.18	0.25	1	132 (5.2)	100 (3.9)		0.7 (1.5)
)-127		CFW100026S1112E0CPZ	2.6			0.37	0.5	1	132 (3.2)	100 (3.9)		0.7 (1.3)
110		CFW100040S1112E0CPZ	4.0			0.75	1	2	161 (6.3)	120 (4.7)		1.0 (2.2)
	Single phase	CFW100016S2024E0CPZ	1.6			0.18	0.25	1	132 (5.2)			
	Single phase	CFW100026S2024E0CPZ	2.6			0.37	0.5	1		100 (3.9)		0.7 (1.5)
	CFW100040S2024E0CPZ	4.0]	0.75	1	1					
		CFW100073S2024E0CPZ	7.3		230	1.5	2	2	161 (6.3) 191 (7.5)	120 (4.7)	82 (3.2)	1.0 (2.2)
> 0		CFW100100S2024E0CPZ	10			2.2	3	3				1.2 (2.6)
200-240 V		CFW100016T2024E0CPZ	1.6			0.18	0.25	1				
200	200	CFW100026T2024E0CPZ	2.6			0.37	0.5	1		100 (2.0)		07(15)
Three sheers 1	CFW100040T2024E0CPZ	4.0		1	0.75	1	1	132 (5.2)	100 (3.9)		0.7 (1.5)	
	Three phases ¹⁾	CFW100073T2024E0CPZ	7.3		-	1.5	2	1	1			
		CFW100100T2024E0CPZ	10.0			2.2	3	2	161 (6.3) 191 (7.5)	400 (4 7)		1.0 (2.2)
		CFW100152T2024E0CPZ	15.2			4	5	3		120 (4.7)		1.2 (2.6)

Note: 1) CE Certification pending.

Dimensions and Weight

	Standard frame size Cold plate version										
Model	Frame size		Dimensions mm (in)		Weight	Frame size		Dimensions mm (in)		Weight kg (lb)	Braking IGBT
	SIZE	Н	W	D	kg (lb)	SIZE	Н	W	D	KY (ID)	
CFW100016S1112	1	95	132	121	0.9	1	95	132	82	0.7	No
CFW100026S1112		(3.74)	(5.20)	(4.76)	(1.98)	1	(3.74)	(5.20)	(3.23)	(1.54)	INU
CFW100040S1112	2	115 (4.53)	161 (6.34)	122 (4.80)	1.5 (3.31)	2	115 (4.53)	161 (6.34)	82 (3.23)	1.0 (2.20)	Yes
CFW100016S2024											
CFW100026S2024	1	95 (3.74)	132 (5.20)	121 (4.76)	0.9 (1.98)	1	95 (3.74)	132 (5.20)	82 (3.23)	0.7 (1.54)	No
CFW100040S2024		(3.74)	(3.20) (4.70)		(1.90)		(3.74)	(3.20)	(3.23)	(1.34)	
CFW100073S2024	2	115	161	122	1.5	2	115	161	82	1.0	
01 11 10007 002024	-	(4.53)	(6.34)	(4.80)	(3.31)	-	(4.53)	(6.34)	(3.23)	(2.20)	Yes
CFW100100S2024	3	115 (4.53)	191 (7.52)	122 (4.80)	1.8 (3.96)	3	115 (4.53)	191 (7.52)	82 (3.23)	1.2 (2.65)	100
CFW100016T2024		(4.00)	(1.52)	(4.00)	(0.00)		(4.00)	(1.52)	(0.20)	(2.00)	
CFW100026T2024		95	132	121	0.9		95	132	82	0.7	
CFW100040T2024	1	(3.74)	(5.20)	(4.76)	(1.98)	1	(3.74)	(5.20)	(3.23)	(1.54)	No
CFW100073T2024											
CFW100100T2024	2	115	161	122	1.5	2	115	161	82	1.0	
01 W10010012024	2	(4.53)	(6.34)	(4.80)	(3.31)	2	(4.53)	(6.34)	(3.23)	(2.20)	Yes
CFW100152T2024	3	115	191	122	1.8	3	115	191	82	1.2	162
		(4.53)	(7.52)	(4.80)	(3.96)		(4.53)	(7.52)	(3.23)	(2.65)	





Technical Data

Control inputs Analog 0 -10 V dc, 0 - 20 mA or 4 - 0 mA 0 -10 V dc, 0 - 20 mA or 4 - 0 mA Digital 4 programmable isolated inputs 12 V dc	Model			CFW10 Standard CFW10 Clean CFW10 plus							
Power supply Immer phases 200 - 240 V at (10%, -15%) Image: Control costs of displacement power factory 50 / 60 Hz, +2 / 2 Hz (48 - 62 Hz) Costs of displacement power factory > 0.98 Power supply Structured PWM modulation (space vector modulation), linear or quadratic V/I Control Power supply Structured PWM modulation (space vector modulation), linear or quadratic V/I Control Switching frequency Frequency and digital ref. 0.01 Hz (t-100 Hz), 0.1 Hz (t-		Voltage Single phase or									
Costs or (displacement power factor) > 0.98 Enclosure Degree of protection P20 Prover supply Switcheld mode power supply Control Switching frequency Frequencies: from 2.5 kHz to 15 kHz Output frequency Prequencies: from 2.5 kHz to 15 kHz Performance Overdad capacity 100 km requency and digital ref: 0.01 Hz (f-100 Hz); 0.1 Hz (f-100 Hz); 0.	Power supply			200 - 240 V ac (+10%, -15%)							
Enclosure Degree of protection IP20 Power supply Switched mode power supply Switched mode power supply Control Control method Switched mode power supply Control Switching frequency Frequencies (space vector modulation), linear or quadratic V/f Output frequency 0<		Freq	Jency		50 / 60 Hz, +/- 2 Hz (48 - 62 Hz)						
Power supply Switched mode power supply Control Control method Sinusoidal PVM nodulation (space vector modulation), linear or quadratic V/i Output frequency Prequencis: trom 2.5 kHz to 15 kHz Output frequency 0 - 300 Hz Frequency setting resolution Analog ref: 0.1% of max. frequency and digital ref: 0.01 Hz (t Output frequency securacy Analog ref: 0.1% of max. frequency and digital ref: 0.01 Hz (t Control inputs Analog 1 programmable isolated input 0 - 10 V dc, 0 - 20 mA or 4 - 0 m Digital 1 programmable isolated input 0 - 10 V dc, 0 - 20 mA or 4 - 0 m 1 programmable isolated input 0 - 10 V dc, 0 - 20 mA or 4 - 0 m Control outputs Relay 1 programmable output, form C 0 - 0 V dc 1 programmable output, form C 0 - 0 V dc Control outputs Relay 1 programmable output, form C 0 - 0 V dc 1 programmable output, form C 0 - 0 V dc Safety Protections 1 programmable output, form C 0 - 0 V dc 1 programmable output, form C 0 - 0 V dc Commands		cos φ (displacen	ent power factor)		> 0.98						
Control Control method Sinusoidal PWM modulation (space vector modulation), intered or quadrate VM Control Switching frequency 0	Enclosure	Degree of	protection		IP20						
Control Control memory Image: Frequencies: from 2.5 kHz to 15 kHz Switching frequency 0-30 kHz to 15 kHz 0.5 kHz to 15 kHz Output frequency 0-30 kHz to 15 kHz 0.5 kHz to 15 kHz Performance Overfoad capachy Analog ref: 0.1% of max. frequency and digital ref: 0.01 Hz (f=100 Hz); 0.1 Hz (f=100 Hz);		Power	supply		Switched mode power supply	1					
Output frequency 0 - 300 Hz Prequency setting resolution Analog ref::0.1% of max.frequeny and digital ref::0.01 Hz (f<100 Hz); 0.1 Hz (f>100 Hz) Output frequency accuracy Analog ref::0.5% of max.frequency and digital ref::0.01 Hz (f>100 Hz); 1 programmable isolated input Output frequency accuracy 100 Hz 100 Hz (f<00 Hz);	-	Control	method	Sinus		r modulation),					
Frequency setting resolution Analog ref:: 0.1% of max. frequency and digital ref:: 0.01 Hz (f<100 Hz); 0.1 Hz (f<100 Hz) Output frequency accuracy Analog ref:: 0.5% digital ref:: 0.01 Hz (f<100 Hz); 0.1 Hz (f<100 Hz)	Control	Switching	frequency		Frequencies: from 2.5 kHz to 15	kHz					
Output frequency accuracy Analog ref.: 0.5% digital ref.: 0.1% Performance Overload capacity 150% during 60s every 10min. Control inputs Analog 1 programmable isolated input 0 -10 V dc, 0 - 20 mÅ or 4 - 0 mÅ 1 programmable isolated input 0 -10 V dc, 0 - 20 mÅ or 4 - 0 mÅ Digital 4 programmable isolated input 0 -10 V dc, 0 - 20 mÅ or 4 - 0 mÅ 1 programmable output, form C con (n0/NC) Control outputs Relay 1 programmable output, form C con (n0/NC) 1 programmable output, form C con (n0/NC) Safety Protections 1 programmable output, form C con (n0/NC) 1 programmable output, form C con (n0/NC) Safety Protections 1 programmable output, form C con (n0/NC) 1 programmable output, form C con (n0/NC) Safety Protections 1 programming options: Is > Is; Fs > Fx; Fs = Fe; Run; No Fault Safety Protections Keypad connection fault Relay 0 - 0 or / self-diagnosis error Safety Programming Star/Stop Respad Commands Frequency (P/Gown (speed) Commands Frequency (P/Gown (speed) Variable speed potentiometer Monitoring Output current (Amps) Output vottage<		Output f	requency		0 - 300 Hz						
Performance Overload capacity 15/9% during 60s every 10min. Control inputs Analog 1 programmable isolated input 0 - 10 V dc, 0 - 20 mA or 4 - 0 mA 1 programmable isolated input 0 - 10 V dc, 0 - 20 mA or 4 - 0 mA Digital 4 programmable isolated input 0 - 10 V dc, 0 - 20 mA or 4 - 0 mA 1 programmable isolated inputs 1 Programmable isolated inputs 2 V dc 1 programmable isolated input isolated input isolated inputs 2 V dc 1 programmable isolated input isolated isolated inputs 2 V dc 1 programmable isolated input is		Frequency set	ting resolution	Analog ref.: 0.1% of ma	ax. frequency and digital ref.: 0.01 Hz	(f<100 Hz); 0.1 Hz (f>100 Hz)					
Analog 1 programmable isolated input 0-10 V dc, 0 - 20 mA or 4 - 0 m 1 programmable isolated input 0-10 V dc, 0 - 20 mA or 4 - 0 m Digital 4 programmable isolated input 0-10 V dc, 0 - 20 mA or 4 - 0 m 1 programmable isolated input 0-10 V dc, 0 - 20 mA or 4 - 0 m Control outputs Relay 1 programmable output, form C contacts (NO/NC) 1 programmable isolated input 0-10 V dc, 0 - 20 mA or 4 - 0 m Safety Relay 1 programmable output, form C contacts (NO/NC) 1 programmable isolated input 0-10 V dc, 0 - 20 mA or 4 - 0 m Safety Protections Protections 1 programmable output, form C contacts (NO/NC) 1 programmable isolated input 0-10 V dc, 0 - 20 mA or 4 - 0 m Keypad Protections Protections 1 programmable isolated input 0-10 V dc, 0 - 20 mA or 4 - 0 m 1 programmable isolated input 0-10 V dc, 0 - 20 mA or 4 - 0 m Keypad Protections Protections 1 programming options: Is > Ix; Fis > Fix; Fis		Output freque	ency accuracy		Analog ref.: 0.5% digital ref.: 0.0	11%					
Control inputs Analog 0 -10 V dc, 0 - 20 mA or 4 - 0 mA 4 programmable isolated inputs 12 V C Digital 4 programmable output, form C 1 programmable output, form C </td <td>Performance</td> <td>Overload</td> <td>capacity</td> <td></td> <td>150% during 60s every 10mir</td> <td>1.</td>	Performance	Overload	capacity		150% during 60s every 10mir	1.					
Control outputs Relay 1 programmable output, form C condicts (NO/NC) 1 programmable output, form C condicts (NO/NC) Safety Protections 0 DC link overvoitage / undervoitage 0 DC link overvoitage / undervoitage Safety Protections 0 Clink overvoitage / undervoitage 0 Clink overvoitage / undervoitage Safety Protections 0 Clink overvoitage / undervoitage 0 Clink overvoitage / undervoitage Safety Protections 0 CPU error (watchdog), external fault 0 CPU error (watchdog), external fault Output short-circuit 0 CPU error (watchdog), external fault 0 CPU error (watchdog), external fault Commands Frequency UP/down (speed) - - Keypad Commands Frequency UP/down (speed) - Keypad Monitoring Under output frequency (ed.: rpm) - Monitoring Value proportinal to the frequency (ed.: rpm) - 0 Cutput voltage Monitoring Temperature 0 Cutput voltage - 0 Cutput voltage Monitoring Temperature 15.2 A model: 0 40 ° C (32 122 °F) without derating 15.2 A model: 0 40 ° C (32 122 °F) without derating	Control inputs	Ana	alog		-	1 programmable isolated input 0 -10 V dc, 0 - 20 mA or 4 - 0 mA					
Control outputs Relay contacts (NO/NC) contacts (NO/NC) Programming options: Is > lx; Fs > Fx; Fs = Fe; Run; No Fault Programming options: Is > lx; Fs > Fx; Fs = Fe; Run; No Fault Safety DC link overvoltage / undervoltage / undervo		Diç	jital		4 programmable isolated inputs 12	2 V dc					
Safety Protections DC link overvoltage / undervoltage VSD overtemperature Keypad connection fault Motor overload (i x t) CPU error (watchdog), external fault Output short-circuit Programming error / self-diagnosis error Programming Commands Frequency UP/down (speed) - Variable speed potentiometer Variable speed potentiometer Output requency (Hz) DC link voltage (V dc) Wonitoring Heatsink temperature Output voltage Output voltage Temperature Models up to 10 A: 0 50 °C (32 104 °F) without derating 15.2 A model: 0 40 °C (32 104 °F) without derating Altitude 0 1,000 m (3,300 ff), up to 4,000 m (13,100 ft) with 1%/100 m (3%/1,000 ft) output current derating Output so 0 1,000 m (3,300 ff), up to 4,000 m (13,100 ft) with 1%/100 m (3%/1,000 ft) output current derating	Control outputs	Re	lay		-	1 programmable output, form C contacts (NO/NC)					
Safety Protections VSD overtemperature Keypad connection fault Keypad connection fault Other overload (ix t) CPU error (watchdog), external fault Output short-circuit Output short-circuit Programming Start/stop Reypad Start/stop Commands Frequency UP/down (speed) Commands Frequency UP/down (speed) Commands Variable speed potentiometer Monitoring Value proportinal to the frequency (dc) Monitoring Value proportinal to the frequency (e.d.: rpm) Heatsink temperature Output voltage Image: Commands Frequency UP/down (speed) Start Start Start Start Monitoring Temperature Monitoring Start Start Image: Commands Temperature Start Start Start Start Monitoring Temperature Start Start Start Start Start Start Start St				Programming	options: Is > Ix; Fs > Fx; Fe > Fx; F	s = Fe; Run; No Fault					
Safety Protections Keypad connection fault Motor overload (i x t) Motor overload (i x t) CPU error (watchdog), external fault Output short-circuit Output short-circuit Programming error / self-diagnosis error Programming Start/stop Commands Frequency UP/down (speed) Commands - Variable speed potentiometer Variable speed potentiometer Keypad Monitoring Monitoring Value proportinal to the frequency (Hz) Output current (Amps) Output voltage Output voltage Output voltage Fault indication Fault indication Models up to 10 A: 0 50 °C (32 122 °F) without derating 15.2 A model: 0 40 °C (32 122 °F) without derating Ambient Humidity 5 90% non-condensing					DC link overvoltage / undervolta	age					
Safety Protections Motor overload (ix t) CPU error (watchdog), external fault Output short-circuit Output short-circuit Output short-circuit Programming Programming error / self-diagnosis error Keypad Programming Keypad Output short-circuit Monitoring Output short-circuit Monitoring Parameters setting Monitoring - Variable speed potentiometer Monitoring Output short-circuit frequency (Hz) DC link voltage (V dc) Upper setting Output current (Amps) Output short-circuit frequency (ed.: rpm) Monitoring Fault indication Fault indication Ambient Temperature Models up to 10 A: 0 50 °C (32 122 °F) without derating Humidity 5 90% non-condensing Attitude 0 1,000 m (3,300 ft), up to 4,000 m (13,100 ft) with 1%/100 m (3%/1,000 ft) output current derating					VSD overtemperature						
Safety Protections Motor overload (ix t) CPU error (watchdog), external fault Output short-circuit Output short-circuit Output short-circuit Programming Programming error / self-diagnosis error Keypad Programming Keypad Output short-circuit Monitoring Output short-circuit Monitoring Parameters setting Monitoring - Variable speed potentiometer Monitoring Output short-circuit frequency (Hz) DC link voltage (V dc) Upper setting Output current (Amps) Output short-circuit frequency (ed.: rpm) Monitoring Fault indication Fault indication Ambient Temperature Models up to 10 A: 0 50 °C (32 122 °F) without derating Humidity 5 90% non-condensing Attitude 0 1,000 m (3,300 ft), up to 4,000 m (13,100 ft) with 1%/100 m (3%/1,000 ft) output current derating				· · · · · · · · · · · · · · · · · · ·							
CPU error (watchdog), external fault Output short-circuit Programming Programming Start/stop Parameters setting Commands Frequency UP/down (speed) - - Variable speed potentiometer Monitoring Monitoring Monitoring Temperature Output urrent (Amps) Output voltage Ambient Humidity Attitude 0 Montor (3300 ft), up to 4,000 m (13,100 ft) with 1%/100 m (3%/1,000 ft) output current derating	Safety	Protections									
Image: mathematic math mathematic math math math math math math math math											
Programming Programming Programming Start/stop Parameters setting Parameters setting Commands Frequency UP/down (speed) Motor output frequency (Hz) Variable speed potentiometer Monitoring OC link voltage (V dc) Heatsink temperature Output current (Amps) Output voltage Output voltage Fault indication Fault indication Ambient Temperature Models up to 10 A: 0 50 °C (32 122 °F) without derating 15.2 A model: 0 40 °C (32 104 °F) without derating Attitude 0 1,000 m (3,300 ft), up to 4,000 m (13,100 ft) with 1%/100 m (3%/1,000 ft) output current derating											
Programming Start/stop Parameters setting Parameters setting Commands Frequency UP/down (speed) - - Monitoring Otor output frequency (Hz) Monitoring Use proportinal to the frequency (e.d.: rpm) Heatsink temperature Output current (Amps) Output voltage Fault indication Frequency Fault indication Models up to 10 A: 0 50 °C (32 122 °F) without derating 15.2 A model: 0 40 °C (32 104 °F) without derating Humidity 5 90% non-condensing Attitude 0 1,000 m (3,300 ft), up to 4,000 m (13,100 ft) with 1%/100 m (3%/1,000 ft) output current derating				•							
Keypad Parameters setting Monitoring - Variable speed potentiometer Monitoring Motor output frequency (Hz) Variable speed potentiometer Monitoring - Variable speed potentiometer Monitoring - Variable speed potentiometer Monitoring - Value proportinal to the frequency (Hz) DC link voltage (V dc) - - Heatsink temperature - 0utput current (Amps) Output voltage - - Fault indication - - Models up to 10 A: 0 50 °C (32 122 °F) without derating 15.2 A model: 0 40 °C (32 104 °F) without derating Humidity 5 90% non-condensing - Altitude 0 1,000 m (3,300 ft), up to 4,000 m (13,100 ft) with 1%/100 m (3%/1,000 ft) output current derating		Programming									
Keypad Commands Frequency UP/down (speed) Keypad - - Variable speed potentiometer Monitoring - DC link voltage (V dc) - Monitoring - - Commands - Monitoring - DC link voltage (V dc) - - Monitoring -	-										
Keypad - Variable speed potentiometer Keypad Monitoring DC link voltage (V dc) Monitoring Value proportinal to the frequency (e.d.: rpm) Heatsink temperature Output current (Amps) Output voltage Output voltage Monitoring Fault indication Heatsink temperature Output voltage Models up to 10 A: 0 50 °C (32 122 °F) without derating 15.2 A model: 0 40 °C (32 104 °F) without derating Humidity 5 90% non-condensing Altitude 0 1,000 m (3,300 ft), up to 4,000 m (13,100 ft) with 1%/100 m (3%/1,000 ft) output current derating		Commands									
Keypad Motor output frequency (Hz) Monitoring DC link voltage (V dc) Value proportinal to the frequency (e.d.: rpm) Heatsink temperature Output current (Amps) Output voltage Image: Ambient Humidity Altitude 0 1,000 m (3,300 ft), up to 4,000 m (13,100 ft) with 1%/100 m (3%/1,000 ft) output current derating		oom	nanus								
Keypad DC link voltage (V dc) Monitoring Value proportinal to the frequency (e.d.: rpm) Heatsink temperature Output current (Amps) Output voltage Output voltage Image: Competition of the frequency (e.d.: rpm) Output current (Amps) Monitoring Fault indication Fault indication Fault indication Models up to 10 A: 0 50 °C (32 122 °F) without derating 15.2 A model: 0 40 °C (32 104 °F) without derating Humidity 5 90% non-condensing Altitude 0 1,000 m (3,300 ft), up to 4,000 m (13,100 ft) with 1%/100 m (3%/1,000 ft) output current derating	-				Motor output frequency (Hz)						
Monitoring Value proportinal to the frequency (e.d.: rpm) Heatsink temperature 0utput current (Amps) Output voltage 0utput voltage Image: Competence of the second	Keypad										
Monitoring Heatsink temperature Output current (Amps) Output voltage Image: Constraint of the second secon											
Output current (Amps) Output voltage Output voltage Fault indication Ambient Temperature Humidity 5 90% non-condensing Altitude 0 1,000 m (3,300 ft), up to 4,000 m (13,100 ft) with 1%/100 m (3%/1,000 ft) output current derating		Moni	toring								
Image: Constraint of the system Constraint of the system Ambient Temperature Models up to 10 A: 0 50 °C (32 122 °F) without derating 15.2 A model: 0 40 °C (32 104 °F) without derating 15.2 A model: 0 40 °C (32 104 °F) without derating 15.2 A model: 0 40 °C (32 104 °F) without derating 15.2 A model: 0 100 m (3,300 ff), up to 4,000 m (13,100 ft) with 1%/100 m (3%/1,000 ft) output current derating 15.2 A model ft for the system											
Image: Constraint of the second sec											
Ambient Temperature Models up to 10 A: 0 50 °C (32 122 °F) without derating 15.2 A model: 0 40 °C (32 104 °F) without derating Humidity 5 90% non-condensing Altitude 0 1,000 m (3,300 ft), up to 4,000 m (13,100 ft) with 1%/100 m (3%/1,000 ft) output current derating											
Ambient Immediative 15.2 A model: 0 40 °C (32 104 °F) without derating Ambient Humidity 5 90% non-condensing Altitude 0 1,000 m (3,300 ft), up to 4,000 m (13,100 ft) with 1%/100 m (3%/1,000 ft) output current derating				Modeleu		without derating					
Ambient Humidity 5 90% non-condensing Altitude 0 1,000 m (3,300 ft), up to 4,000 m (13,100 ft) with 1%/100 m (3%/1,000 ft) output current derating		Tempe	erature								
Altitude 0 1,000 m (3,300 ft), up to 4,000 m (13,100 ft) with 1%/100 m (3%/1,000 ft) output current derating	Ambient										
				0 1,000 m (3,300 ft), up to		(3%/1,000 ft) output current derating					
	Enclosure	Co	lor	, , ,, ,, ,,	· · · · ·						
EMC directive 89 / 336 / EEC				EMC directive 89 / 336 / EEC							
Conformities Electromagnetic compatibility EN 61800-3	Conformities	Electromagnet	c compatibility								
Low voltage LVD 73/23/EEC - low voltge directive / UL 508C	-	Low voltage									
Keypad with 7-segment LED display				• • • • • • • • • • • • • • • • • • •							
Password to protect VSD programming											
Self-diagnosis fault and auto-reset		Standard									
Motor slip compensation											
Manual and automatic torque boost (I x R)											
	Features										
JOG function											
DC braking											
Multi-speed function (up to 8 programmable speeds)				Mult		able speeds)					
Forward/reverse speed selection via DI						. ,					
Local/remote reference selection via DI					· · ·						

Шеп

Coding

CFW10	0040	S	2024	Е	0	 	 	Ζ
		\top				\top		
1	2	3	4	5			10	11

1 - CFW10 VSD series

3 - Number of phases

2 - Output rated current:

110-1	127 V
0016	1.6 A
0026	2.6 A
0040	4.0 A

S = single phase

200-240 V						
0016	1.6 A					
0026	2.6 A					
0040	4.0 A					
0073	7.3 A					
0100	10.0 A					
0152	15.2 A					

* Three-phase model only.

5 - Number of phases	T = three phases
4- Power supply voltage	1,112 = 110 - 127 V (single-phase only) 2,024 = 200 - 240 V
5 - Manual language	P = portuguese E = english S = spanish
6 - Options	S = standard (no optionals) O = with optionals
7 - Control card	Blank = standard CL = clean (without analog input and relay output) PL = plus (with potentiometer)
8- EMC filter	Blank = without filter FA = with built-in class A EMC filter (only 200 - 240 V single-phase models)
9 - Special hardware	Blank = standard (no special hardware) Hx = special hardware in version X CP = Cold Plate heatsink version
10 - Special software	Blank = standard (no special software) Sx = special software in version X
11 - End of code	Ex.: CFW100040S2024ESZ VSD of CFW10 series, 4.0 A, single -phase at 200 - 240 V ac and manual in english.

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