# 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.

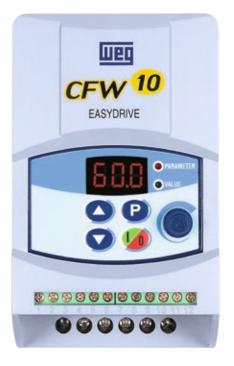
### CFW10

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

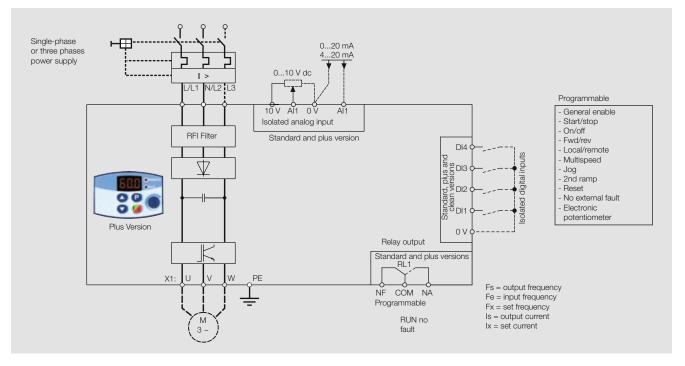
- Centrifugal pumps
- Processing pumps
- Fans / exhaust fans
- Stirrers / mixers

- 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 <sup>1)</sup>	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 <ul> <li>DC link overvoltage / undervoltage</li> <li>VSD overtemperature</li> <li>Keypad connection fault</li> <li>Motor overload (i x t)</li> <li>CPU error (watchdog), external fault</li> <li>Output short-circuit</li> <li>Programming error / self-diagnosis error</li> </ul> <li>Programming Commands</li> <li>Frequency UP/down (speed)</li> <li>-</li> <li>Variable speed potentiometer</li> <li>Variable speed potentiometer</li> <li>Output requency (Hz)</li> <li>DC link voltage (V dc)</li> <li>Wonitoring</li> <li>Heatsink temperature</li> <li>Output voltage</li> <li>Output voltage</li> <li>Temperature</li> <li>Models up to 10 A: 0 50 °C (32 104 °F) without derating</li> <li>15.2 A model: 0 40 °C (32 104 °F) without derating</li> <li>Altitude</li> <li>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</li> <li>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</li>	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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