DATASHEET

Variable Speed Drives





Product coding : CFW500B01P7T5DB66DS

: 14978664 : CFW500

Product reference Accessory module (control)

Power supply : 500-600 V

Input minimum-maximum voltage

- In

- Out

Supply voltage range	500-6	600 V
Overload cicle	Normal Overload (ND)	Heavy Overload (HD)
Rated current (HD)	1.7	1.7
CORRENTE_SOBRECARGA_60S_CFW		
CORRENTE_SOBRECARGA_3S_CFW		

Maximum applicable motor:

Voltage/Frequency	Power (HP/kW) [1]	
	Normal Overload (ND)	Heavy Overload (HD)

Accessory module (control)

Dynamic braking [2] : Standard with braking

External electronic suply 24Vcc : Not available Safety Stop : Not available Internal RFI filter : Without filter

Link Inductor

Memory card : Not included in the product

USB port : Only with plug-in Line frequency : 50/60Hz

Line frequency range (minimum - maximum) : 48-62 Hz

Phase unbalance : Less or equal to 3% of input rated line voltage

Transient voltage and overvoltage : Category III
Single-phase input current [3] : Not applicable
Three-phase input current [3] : 2,0 A

Power factor : 0,98

Rated efficiency

Maximum connections (power up cycles - on/off) per hour : 10 (1 each 6 minutes)

DC power supply

Standard switching frequency

Selectable switching frequency : 2,5 and 15 kHz
Real-time clock : Not available
COPY Function : Yes, by MMF

Dissipated power:

Mounting type	Overload	
	ND	HD
Surface		
Flange	Not applicable	Not applicable

Source available to the user

Output voltage
Maximum capacity

Power supply

Control method

Switched-mode power supply

V/f, VVW, Sensorless and Encoder

Encoder interface

Control output frequency : 0-500 Hz
Frequency resolution : 0,015 Hz

- Speed resolution : 1% of rated speed

- Speed range : 1:20

- Speed resolution : 1% of rated speed

- Speed range : 1:30

- Speed resolution : 0,5% of rated speed

- Speed range : 1:100

- Speed resolution : 0,1% of nominal speed

- Speed range : Up to 0 rpm

Quantity (standard)

17/09/2020	The information contained are reference values. Subject	1/2
17/09/2020	to change without notice. Image merely illustrative.	1/3

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Levels
Impedance for voltage input
Impedance for current input

Function

Maximum allowed voltage

Quantity (standard)
Activation
Maximum low level
Minimum high level
Input current

Maximum input current

Function

Maximum allowed voltage

Analog outputs

Analogic outputs - Quantity (standard)

Levels

RL for voltage output RL for current output

Function

Digital outputs

Digital outputs - Quantity (standard)

Maximum voltage Maximum current Function

-

-

Available protection

- Output phase-phase overcurrente/Short
- Overcurrent/Short circuit phase-ground
- Under/Overvoltage in power
- Heat sink overtemperature
- Motor overload
- IGBT's modules overload
- Fault/External alarm
- Programming error

Operation interface (HMI)

Avaliability Installation

Number of HMI buttons

Display

Indication accuracy Speed resolution

Standard HMI degree of protection

HMI battery type : Not applicable
HMI battery life expectancy : Not applicable
Remote HMI type : Accessory
Remote HMI frame : Not applicable
Remote HMI degree of protection : IP54

Enclosure : IP66
Degree of pollution : 2

RoHS : Yes Conformal Coating :

- Size : 00009

- Height - Width - Depth - Weight

Mechanical Installation

Mounting position

The information contained are reference values. Subject to change without notice. Image merely illustrative.

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Mechanical Installation

Fixing screw Tightening torque

Allows side-by-side assembly

Minimum spacing around the inverter:

- Top
- Bottom
- Front
- Side

Cable gauges and tightening torques:

:	
•	
- 1	
:	
•	
:	

	Recommended cable gauge	Recommended tightening torque
Power		
Braking		
Grounding		
Control		
•		

SoftPLC : Yes, incorporated

Maximum breaking current

Minimum resistance for the brake resistor

Recommended aR fuse Recommended circuit breaker

Disconnect switch : With disconnect switch

Motor coupling box : Not applicable

Standards

Safety	 - UL 508C - Power conversion equipment. - UL 840 - Insulation coordination including clearances and creepage distances for electrical equipment. - EN 61800-5-1 - Safety requirements electrical, thermal and energy. - EN 50178 - Electronic equipment for use in power installations. - EN 60204-1-Safety of machinery. Electrical equipment of machines. Part 1: General requirements. Note: To have a machine in accordance with that standard, the manufacturer of the machine is responsible for the installation of an emergency-stop device and a network switching equipment. - EN 60146 (IEC 146) - Semiconductor converters. - EN 61800-2 - Adjustable speed electrical power drive systems - Part 2: General requirements - Rating specifications for low voltage adjustable frequency AC power drive systems.
Electromagnetic Compatibility	- EN 61800-3 - Adjustable speed electrical power drive systems - Part 3: EMC product standard including specific test methods EN 55011 - Limits and methods of measurement of radio disturbance characteristics of industrial, scientific and medical (ISM) radio-frequency equipment CISPR 11 - Industrial, scientific and medical (ISM) radio-frequency equipment - Electromagnetic disturbance characteristics - Limits and methods of measurement.
	 EN 61000-4-2 - Electromagnetic compatibility (EMC) - Part 4: Testing and measurement techniques - Section 2: Electrostatic discharge immunity test. EN 61000-4-3 - Electromagnetic compatibility (EMC) - Part 4: Testing and measurement techniques - Section 3: Radiated, radio-frequency, electromagnetic field immunity test. EN 61000-4-4 - Electromagnetic compatibility (EMC) - Part 4: Testing and measurement techniques - Section 4: Electrical fast transient/burst immunity test.
	- EN 61000-4-5 - Electromagnetic compatibility (EMC) - Part 4: Testing and measurement techniques - Section 5: Surge immunity test EN 61000-4-6 - Electromagnetic compatibility (EMC)- Part 4: Testing and measurement techniques - Section 6: Immunity to conducted disturbances, induced by radio-frequency fields.
Mechanical Construction	- EN 60529 e UL 50

Notes

- 1) Motor power is orientative, valid for standard WEG Motors of IV poles. The correct sizing must be done according to the nominal current of the motor used, which must be less than or equal to the rated output current of the inverter;
- 2) Braking resistor is not included;
- 3) Considering minimum line impedance of 1%;
- 4) For more information, refer to the user manual of CFW500;
- 5) All images are merely illustrative.
- 6) For operation with switching frequency above nominal, apply derating to the output current (refer to the user manual).

