



Quick Parameter Reference

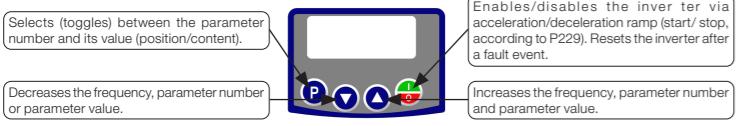
CFW300 Frequency Inverter

English

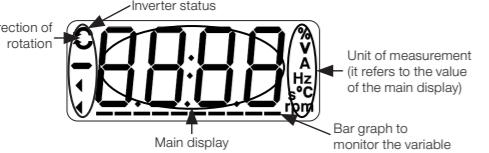


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1 USE OF THE KEYPAD TO OPERATE THE INVERTER



1.1 INDICATIONS OF DISPLAY



1.2 OPERATING MODES OF THE HMI

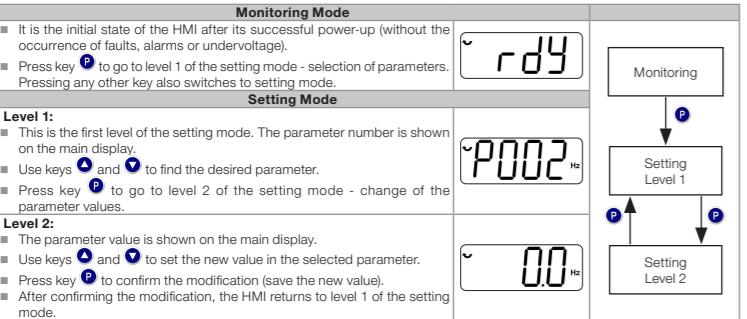


Figure 1: HMI operating modes

2 START-UP PREPARATION

**DANGER!**

Always disconnect the main power supply before making any connection.

- Check if the power, grounding and control connections are correct and firm.
- Remove all the materials left behind from the installation work from inside the inverter or the cabinet.
- Verify the motor connections and if its voltage and current are within the inverter rated value.
- Mechanically uncouple the motor from the load. If the motor cannot be uncoupled, make sure that any speed direction (forward or reverse) will not result in personnel injury and/or equipment damage.
- Close the inverter or cabinet covers.
- Measure the power supply and verify if it is within the allowed range. Please, refer to the user's manual, available for download on the website: www.weg.net.
- Apply power to the input: close the input disconnecting switch.
- Check the result of the first time power-up:

The HMI display indicates:



2.1 V/F TYPE OF CONTROL (P202 = 0)

Seq	Display Indication/Action	Seq	Display Indication/Action
1		2	
3		4	

- Initialization mode
- Press key **P** to enter the first level of the parameterization mode

- Press keys **▲** or **▼** to select parameter P296

3 MAIN PARAMETERS

The table below contains the mains parameters of the CFW300.

**NOTE!**

ro = read only parameter.

V/f = parameter available in V/f mode.

cfg = configuration parameter, value can only be changed with the motor stopped.

4 FAULTS AND ALARMS

Most common faults and alarms

Fault / Alarm	Description	Possible Causes
A046 Motor Overload	Motor overload alarm	<ul style="list-style-type: none"> Settings of P156 is too low for the used motor Overload on the motor shaft
A050 Power Module Overtemperature	Overtemperature alarm from the power module temperature sensor (NTC)	<ul style="list-style-type: none"> High temperature at IGBTs: P030 > 90 °C (> 194 °F) (200 V Line Frame size A), and P030 > 116 °C (> 240.8 °F) (200 V Line Frame size B) and P030 > 100 °C (> 212 °F) (400 V Line) High ambient temperature around the inverter: > 50 °C (>122 °F) @ 200 V Line and > 40 °C (>104 °F) @ 400 V Line Blocked or defective fan Heatsink is too dirty, preventing the air flow
F021 Undervoltage on the DC Link	Undervoltage fault on the intermediate circuit	<ul style="list-style-type: none"> Wrong voltage supply; check if the data on the inverter label comply with the power supply and parameter P296 Supply voltage too low, producing voltage on the DC link below its minimum value (Level of F021) Phase fault in the input Fault in the pre-charge circuit For more informations, refer to the programming manual
F022 Overvoltage on the DC Link	Overvoltage fault on the intermediate circuit	<ul style="list-style-type: none"> Wrong voltage supply; check if the data on the inverter label comply with the power supply and parameter P296 Supply voltage is too high, producing voltage on the DC link above its maximum value (Level of F022) Load inertia is too high or deceleration ramp is too fast P151 setting is too high For more informations, refer to the programming manual
F051 IGBTs Overtemperatures	Overtemperature fault measured on the temperature sensor of the power pack	<ul style="list-style-type: none"> High temperature at IGBTs: P030 > 100 °C (> 212 °F) (200 V Line Frame size A), and P030 > 126 °C (> 258.8 °F) (200 V Line Frame size B) and P030 > 110 °C (> 230 °F) (400 V Line) High ambient temperature around the inverter: > 50 °C (>122 °F) for 200 V Line and > 40 °C (104 °F) for 400 V Line and high output current Blocked or defective fan Heatsink is too dirty, preventing the air flow For more informations, refer to the programming manual
F070 Overcurrent/Shortcircuit	Overcurrent or short-circuit on the output, DC link or braking resistor	<ul style="list-style-type: none"> Short-circuit between two motor phases IGBTs module in short-circuit or damaged Start with too short acceleration ramp
F072 Motor Overload	Motor overload fault (for further information, refer to the programming manual)	<ul style="list-style-type: none"> P156, P157 or P158 setting is too low in relation to the motor operating current Overload on the motor shaft
F084 Auto-diagnosis Fault	Fault related to the automatic identification algorithm of the inverter hardware	<ul style="list-style-type: none"> Poor contact in the connection between the main control and the power pack Hardware not compatible with the firmware version Defect on the internal circuits of the inverter

**NOTE!**For further information, refer to the programming manual, available for download on the website: www.weg.net.

5 DEFAULT CONFIGURATION FOR SPEED REFERENCE AND COMMAND

The CFW300 is configured at the factory by setting its parameters so as to define the logical command and the speed reference in both LOCAL and REMOTE operating modes. This default setting can be restored by means of P204 for both motors 60Hz and 50Hz (P204 = 5 or 6).

In the LOCAL mode, the command and reference are directed to the HMI of the CFW300, allowing the commands Run/Stop, JOG and Direction of Rotation of the motor. In addition to these commands, the HMI keypad can also be used to select the LOCAL or REMOTE mode. The speed reference can be set in P121 or by means of the **▲** and **▼** keys of the HMI in the monitoring mode.

In the REMOTE mode, the speed reference and command are directed to the product terminals; DI1 execute Run/Stop and DI2 the Direction of Rotation. The reference is executed by analog input AI1 in this mode.

