

Platinum 24V DC Systems

VFD Programming


Description

The Platinum 24V DC system uses VFDs that may be programmed via an 1002284 ABB ACP-CP-A faceplate.

The faceplate is available with the program pre-loaded for customer convenience.

Keypad Part Number	Program Loaded – Electrical Supply
1002285	380-480 VAC 3 phase
1002286	220-240 VAC 3 phase
1002287	220-240 VAC 1 phase

Procedure – Pre-Programmed Keypad

1. Plug the faceplate into the VFD with the power to the drive off.
2. Turn on the power and turn the fans on.
Note: Ensure cabinet doors are closed and all personnel are clear of the ECU before starting the fans.
3. Place the drive in LOC mode by pressing LOCREM button .
4. Go to **Main** menu.
5. Select **Copy** mode.
6. Download the program by selecting **uL** and then **dL A**.
7. Wait until the program is 100% downloaded.
8. Once all necessary changes have been made, press LOCREM again to place the drive in REMOTE mode.
9. Turn the power to the drive off and remove the programming keypad.
10. Restore power to the drive.
11. Connect the ECU to output terminals V2, U2 and W2.
12. Run the fans at 100% for 1 minute to verify function. The display should show 60 Hz.
Note: Ensure cabinet doors are closed and all personnel are clear of the ECU before starting the fans.

How to upload and download parameters

For the upload and download functions available, see above. Note that the drive has to be in local control for uploading and downloading.






























Step	Action	Display
1.	Go to the Main menu by pressing  if you are in the Output mode, otherwise by pressing  repeatedly until you see MENU at the bottom.	<div style="border: 1px solid black; padding: 5px;"> LOC <div style="text-align: center; font-size: 2em; font-weight: bold;">PAR</div> <div style="display: flex; justify-content: space-between; font-size: 0.8em;"> MENU FWD </div> </div>
2.	If the panel is not in the Copy mode ("CoPY" not visible), press key  or  until you see "CoPY". Press  .	<div style="border: 1px solid black; padding: 5px;"> LOC <div style="text-align: center; font-size: 2em; font-weight: bold;">CoPY</div> <div style="display: flex; justify-content: space-between; font-size: 0.8em;"> MENU FWD </div> </div>
		<div style="border: 1px solid black; padding: 5px;"> LOC <div style="text-align: center; font-size: 2em; font-weight: bold;">uL</div> <div style="display: flex; justify-content: space-between; font-size: 0.8em;"> MENU FWD </div> </div>
3.	To upload all parameters (including user sets) from the drive to the control panel, step to "uL" with keys  and  . Press  . During the transfer, the display shows the degree of completion in percent. To perform downloads, step to the appropriate operation (here "dL A", Download all, is used as an example) with keys  and  . Press  . During the transfer, the display shows the degree of completion in percent.	<div style="border: 1px solid black; padding: 5px;"> LOC <div style="text-align: center; font-size: 2em; font-weight: bold;">uL</div> <div style="display: flex; justify-content: space-between; font-size: 0.8em;"> MENU FWD </div> </div>
		<div style="border: 1px solid black; padding: 5px;"> LOC <div style="display: flex; justify-content: space-between; font-size: 1.5em;"> uL 50 % </div> <div style="text-align: right; font-size: 0.8em;">FWD</div> </div>
		<div style="border: 1px solid black; padding: 5px;"> LOC <div style="display: flex; justify-content: space-between; font-size: 2em; font-weight: bold;"> dL A </div> <div style="display: flex; justify-content: space-between; font-size: 0.8em;"> MENU FWD </div> </div>
		<div style="border: 1px solid black; padding: 5px;"> LOC <div style="display: flex; justify-content: space-between; font-size: 2em; font-weight: bold;"> dL 50 % </div> <div style="text-align: right; font-size: 0.8em;">FWD</div> </div>

Figure 1: Keypad programming manual excerpt

Procedure – Programming Via VFD

1. Plug the faceplate into the VFD with the power to the drive off.
2. Turn on the power and turn the fans on.
Note: Ensure the cabinet doors are closed and all personnel are clear of the ECU before starting the fans.
3. Place the drive in LOC mode by pressing LOCREM button .

4. Follow these instructions to select a parameter and change its value:

Step	Action	Display
1.	Go to the Main menu by pressing  if you are in the Output mode, otherwise by pressing  repeatedly until you see MENU at the bottom.	<div style="border: 1px solid black; padding: 5px; text-align: center;"> LOC rEF MENU FWD </div>
2.	If the panel is not in the Parameter mode ("PAr" not visible), press key  or  until you see "PAr" and then press  . The display shows the number of one of the parameter groups.	<div style="border: 1px solid black; padding: 5px; text-align: center;"> LOC PAr MENU FWD </div>
		<div style="border: 1px solid black; padding: 5px; text-align: center;"> LOC -01- PAR FWD </div>
3.	Use keys  and  to find the desired parameter group.	<div style="border: 1px solid black; padding: 5px; text-align: center;"> LOC -11- PAR FWD </div>
4.	Press  . The display shows one of the parameters in the selected group.	<div style="border: 1px solid black; padding: 5px; text-align: center;"> LOC 1101 PAR FWD </div>
5.	Use keys  and  to find the desired parameter.	<div style="border: 1px solid black; padding: 5px; text-align: center;"> LOC 1103 PAR FWD </div>
6.	Press and hold  for about two seconds until the display shows the value of the parameter with SET underneath indicating that changing of the value is now possible. Note: When SET is visible, pressing keys  and  simultaneously changes the displayed value to the default value of the parameter.	<div style="border: 1px solid black; padding: 5px; text-align: center;"> LOC 1 PAR SET FWD </div>
		<div style="border: 1px solid black; padding: 5px; text-align: center;"> LOC 2 PAR SET FWD </div>
7.	Use keys  and  to select the parameter value. When you have changed the parameter value, SET starts flashing. <ul style="list-style-type: none"> • To save the displayed parameter value, press . • To cancel the new value and keep the original, press . 	<div style="border: 1px solid black; padding: 5px; text-align: center;"> LOC 1103 PAR FWD </div>

Check that all parameters match the requirements below.

5. Once all necessary changes have been made, press LOCREM again to place the drive in REMOTE mode.
6. Turn the power to the drive off and remove the programming keypad.
7. Restore power to the drive.
8. Connect the ECU to output terminals V2, U2 and W2.
9. Run the fans at 100% for 1 minute to verify function. The display should show 60 Hz.



Programming Parameters

Ensure you are consulting the correct table of parameters for the voltage, phase and drive in place.

Parameter Number	Description	220-240 VAC 1 Ph Parameter Value	220-240 VAC 3 Ph Parameter Value	380-480 VAC 3 Ph Parameter Value
Group 99				
9901	Language	0	0	0
9902	Application Macro	1	1	1
9905	Nominal Motor Voltage	220 V	220 V	380 V
9906	Nominal Motor Current	7 A	7 A	5 A
9907	Nominal Motor Frequency	60 Hz	60 Hz	60 Hz
9908	Nominal Motor Speed	1730 RPM	1730 RPM	1690 RPM
9909	Nominal Motor Power	1.5 kW	1.5 kW	1.5 kW
Group 11				
1105	Max Value for RFF1	60 Hz	60 Hz	60 Hz
Group 20				
2008	Max limit for frequency	60 Hz	60 Hz	60 Hz
Group 15				
1501	Drive signal	104	104	104
1502	Minimum signal value	0	0	0
1503	Maximum signal value	14	14	8
1504	Minimum analog output signal	0	0	0
1505	Maximum analog output signal	20	20	20