

Application Note

AN-VTC-04

Locking parameters to prevent unauthorised changes

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- ***General:***

Optidrive VTC incorporates a feature that, when activated, effectively “locks” the settings of the drive. Parameters within the drive can then be viewed but not changed. This is useful in cases where the commissioning engineer wishes to ensure that unauthorised changes are prevented.

For complete security, this function can also be used in conjunction with the access code (P1-14) to prevent unauthorised access to the locking parameter.

- ***Procedure***

Changing the access code

The access code in drive is a pre-defined number between 1 and 9999 that has to be entered into P1-14 before access to parameter groups 0, 2, 3, 4 are permitted. By default, the access code for the drive is 101.

To gain access to parameter groups 0, 2, 3 and 4, this value (101) must be entered into P1-14. The user can change the access code to any desired value between 1 and 9999 by setting P2-37 to this desired value.

Access to parameter groups 0, 2, 3 or 4 will only be permitted if $P1-14 = P2-37$.

Note that P1-14 will be reset to zero if a drive parameter default operation is performed.

Example 1:

Assuming that the drive is in factory default settings.

- Change the value of P1-14 to 101; the parameter groups 0, 2, 3, and 4 are now available for access.
- Change the value of P2-37 from 101 to 1234, the “Access Code” is now 1234. Now if user wants to access parameter group 0, 2, 3 or 4, value 1234 must be put into parameter P1-14

Write protecting the parameters

Parameter P2-38 controls the drive parameter access mode.

In default settings, parameter P2-38 is set to 0. This means that parameters can be changed, and they are automatically saved on power down. P2-38 can be set to the following values:

- 0 – Parameters can be changed, they are saved on power down (default).
- 1 – Parameters values are locked and cannot be changed.

Note that when P2-38 = 1, all parameters remain fully accessible, but cannot be changed.

Example 2:

- Change P2-38 to 1, so that all the parameters are locked (except P1-14).
- Change P1-14 to 0 so that all parameter groups except the basic parameter group (group 1) cannot be accessed.

The parameters of the drive are now locked, and cannot be unlocked without changing P2-38 to 0. If P2-37 has also been changed to the user's preferred access code value, parameter access can only be unlocked if the extended menu access code is known, which allowing access to P2-38.

If there is an Optiport Plus (Remote keypad module) connected with the drive, and P2-38 is set to 1, then no parameter can be accessed through Optiport module unless P2-38 is reset to 0 through drive control panel.

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