

Application Note

AN-VTC-08

Selecting the required start / restart mode

Author: Ning Xu, Invertek Drives Ltd

Revision: 2.21 **6 September 2006**

- **General:**

The Optidrive VTC can be configured to interpret a drive enable signal present on power up in different ways and also what actions to take in the event of a trip condition occurring.

- **Parameter:**

P2-17 Start mode / Auto reset select

P2-17 = Edge-r (Edge run):

The enable signal input (Digital input1) is configured to be edge-triggered and requires the run signal to be re-applied *after* a trip or a power-up to start the drive.

“Edge-r” may be used where for safety reasons the drive should not start automatically on power up should the run switch already be closed. In this case, the run switch must be opened and then re-closed before the drive will start. The same rule applies after clearing / re-setting a trip condition.

P2-17 = Auto-0 (Auto-run) (default):

When the drive is in terminal mode (P1-12 = 0) and provided the drive is not tripped, the drive will enable and run whenever a run signal is present (terminals 1 and 2 linked) even if the link is present on power-up. This is the factory default setting (Auto-0).

P2-17 = Auto-1 .. Auto-5:

Similar to Auto-0, except for the fact that they allow the user to define how many times the drive will automatically clear a trip and try to restart before permanently tripping and then requiring operator intervention. The drive will make between 1 (Auto-1) and 5 (Auto-5) attempts to clear the trip and restart.

The restart delay interval is defaults at 20s and can be changed from 1s to 60s by set up the value in P6-03 (Drive software version should be 2.00 or later).

The restart attempt counter (1..5) is reset by any of the following operation:

- Powering the drive down and back up again
- Pressing the reset (Stop) button on the drive keypad when drive is tripped (displaying a trip message).
- Removing and re-applying the hardware enable signal.

--- End ---