

Application Note

AN-ODP- 43

Achieving Local / Remote control with a Modbus network

Author: Ning Xu, Invertek Drives Ltd

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- **General:**

This document gives details on how to use an Optidrive Plus 3GV-M to setup a Modbus control system with both remote (Modbus) and local (keypad) control capability. The function described in this document is only available for 3GV-M drives with software version 2.20 or later. For the standard 3GV drive, Modbus is not available.

- **Description:**

In this kind of application, there is usually a switch connected to the drive control terminal. This enables the user to select between local control mode and remote (Modbus) control mode.

In local control mode, the drive can be started or stopped by the enable (run) switch on the control terminals. The drive speed can be adjusted by the UP or DOWN buttons on the control panel or the UP or DOWN buttons on the remote keypad (Optiport+).

In remote control mode, the drive is controlled via the Modbus network and as such can be started or stopped using the Modbus master command. Similarly, the drive speed can be adjusted from the Modbus master.

In order to achieve the above functionality, the Optidrive Plus should be set up as follows.

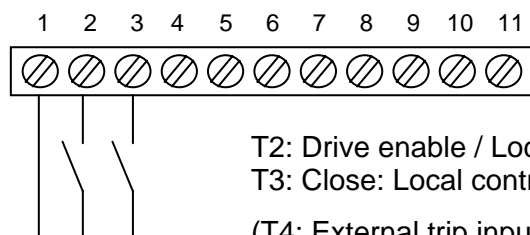
- **Parameter setup:**

The following parameters should be setup in order to get such control functionality.

$$P1-12 = 4, P2-01=10, P2-19 = 0 \text{ or } 1$$

For the Modbus network setup parameters, please refer to AN-ODP-37 for more information.

- **Terminal connection**



T2: Drive enable / Local start stop control
 T3: Close: Local control / Open: Remote control
 (T4: External trip input - connect to T1 if not used)

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