



Application Note for Using the Operator Station HE500TIU050/10X/11X/20X with the Danfoss VLT5000 Series Inverter

Protocol File Name

HE500TIU050 = VLT5000_R?.0xx
HE500TIU1xx = VLT5000_R?.1xx
HE500TIU2xx = VLT5000_R?.2xx
(The "?" = the TIU firmware revision)

Configuring the Operator Station

To verify the Automated Equipment type the Operator Station is setup for, watch the screen of the Operator Station on power up. The first screen message details the setup of the Operator Station. To configure the Operator Station for particular Automated Equipment, select the Automated Equipment in the Communication Settings from the Configure menu in **CBREEZE** software. Select the appropriate Manufacturer and the appropriate Remote Equipment Model. Then from the File menu select Update Protocol, the appropriate file name will appear in the file name field. The programmer may need to point to the correct folder name/location. If further information is required see the manual or **CBREEZE** help on update/change protocol.

The Horner APG VLT5000 protocol currently supports read and write of: -

- EEPROM Parameters
- RAM Parameters
- Control Word
- Bus Reference

Block Start

The block start or location is the actual parameter number for EEPROM and RAM Parameters. It should always be set to 0 when accessing the Control Word or Bus Reference.

Block Size

All register types in the current protocol implementation accesses data as multiples of 32 Bit words.

Serial Port Format

The PLC defaults to using 9600 baud, 8 data bits, one stop bit and even parity.

Connection is typically via two wire RS485 cabling.

These settings are intended as a guide and are correct at time of writing. Refer to your VLT5000 documentation for further details and modifications regarding configuring the RS485 Option port on the VLT5000.

Node Address.

The RS485 node address for the drive is specified in parameter 500.

Baud Rate

The VLT5000 RS485 baud rate is specified in parameter 501.

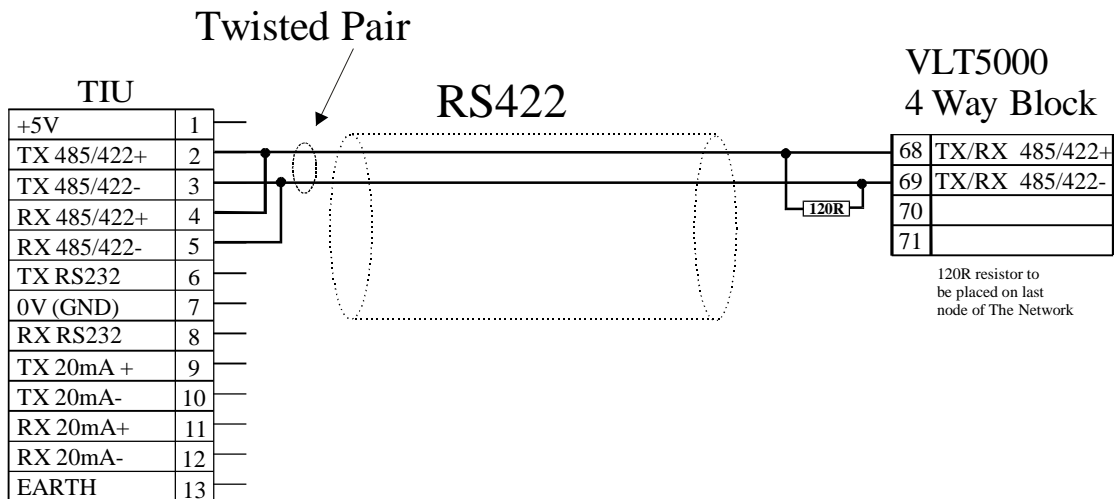
RAM / EEPROM Parameters

Parameter access is either via the current RAM based settings or writing direct to the EEPROM settings to effect changes which will be retained during drive power down.

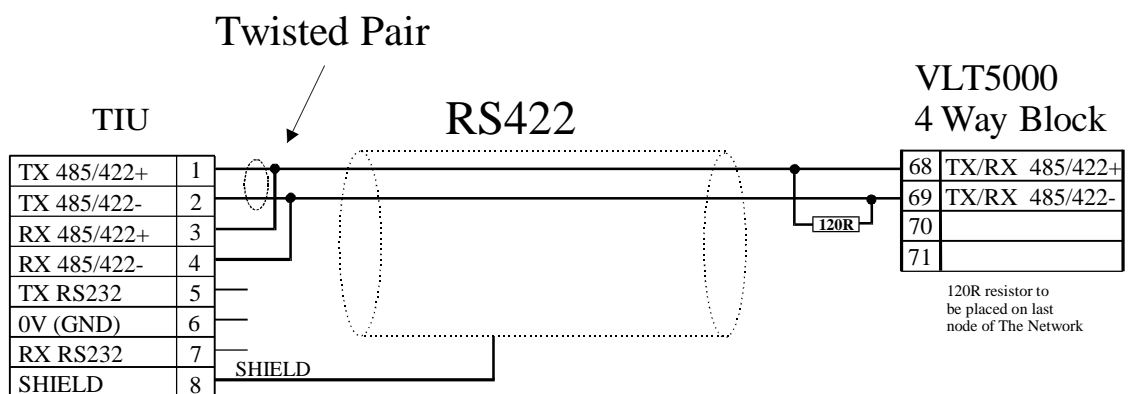
It is important that EEPROM parameters are used only where necessary since EEPROM has a defined number of write cycles.

CONNECTING THE OPERATOR STATION TO THE DANFOSS VLT5000 INVERTER

TIU 110/100



TIU 50/101/102/111/112/20X



Configuration Bank

Switch	ON	OFF
1	Pull-up	No Pull-up
2	120 termination	No termination
3	Pull-down	No Pull-down
4	Reserved for future use	

NOTE: Switch 1 and 3 must be used together.

Cable Screened Twisted Pair Beldon 9501

