



E2 “T-Verter” Variable Speed Drive Quick-Start Guide



Technical Guide

This guide is to assist you in installing and running the inverter and verify that it is functioning correctly for its main and basic features.

For detailed information and if there are any doubts please refer to the instruction manual.

Step 1

Getting Started

- 1) Ensure that the VSD & the motor have the correct KW power and voltage ratings.
Motor full load amps must not exceed the VSD rating.
- 2) Ensure that the supply & Motor cables are connected correctly prior to power up.
Make reference to the motor connection and voltage ratings with respect to Star or Delta connection.
- 3) For single phase supply, use L1 & L3 (**N**) on units which have 3 supply terminals.
On units with two supply terminals L1 & L2, connect live to L1 and Neutral to L2.
- 4) Connect motor cable to terminals T1, T2 & T3.
(Swap two leads if motor runs in reverse direction).
- 5) Connect supply Earth and the motor Earth to the drive Earth terminal.



Note:-

For detailed installation and wiring refer to the Instruction Manual.



For further information contact Teco Europe

Step 2	Apply power to the drive
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Apply power to the drive. The display will be flashing, showing

05.0

This is the default (factory set) frequency.

If the unit has been used then it will show the last frequency programmed.



Note:- 50 Hz is set as maximum default frequency. This Provides motor full speed.

Step 3	Run from keypad
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Press **RUN/STOP** KEY to run.

The frequency will ramp up to **5.0** Hz **or** the user **pre-set** frequency and according to the default acceleration ramp time.

Step 4	To alter frequency from keypad
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Use the Arrow keys  

To alter the digits to the required frequency.

eg. 50.0 Hz then use **RUN/STOP** key to start/ stop.

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Remote Speed Reference and Remote Run

Step 1	Remote Mode Wiring
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Ensure that you have carried out installation & wiring requirements as per step 1 quick start guide on previous page before you proceed.

Check the position of SW1:

Down position for 0-10V dc.

Up position for 4-20 ma.

For potentiometer connection the switch SW1 should be in down (default) position.

Connect a remote 10k Ω potentiometer OR remote 0-10 vdc signal as required.

Use terminals 8, 9 and 10.

Terminal 8 is 10Vdc supply provided by the inverter.

Terminal 9. Is for potentiometer wiper connection.

Terminal 10 is 0Vdc.

Connect remote start switch if required according to diagram in the instruction manual.

Use terminals 3 & 5 (Forward run).

Step 2	Remote Mode Run
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Power up.

Display will read the frequency from one of the following according to the selection made via parameters.

- a) Remote potentiometer
- b) Remote 0-10VDC analogue signal.

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Step 3	Check/ verify and alter parameters
<p>Check / verify and alter parameters for remote start & remote frequency as necessary before you proceed. Parameters F10 & F11</p> <p>See quick start parameter list & how to alter parameters.</p>	

Step 4	RUN using remote speed reference. (Potentiometer, 0-10vdc or 4-20mA)
<p>To run. Activate the remote run switch connected to terminals 3 & 5. The frequency will ramp up to the frequency set on the pot or analogue signal (0-10v dc /4-20ma) and according to the set acceleration ramp time.</p> <p>To Stop. De-activate the remote run switch. The frequency will ramp down to zero and according to deceleration ramp time.</p>	
RUN using remote speed reference. (Potentiometer, 0-10vdc or 4-20mA)	
<p>To alter parameters:- Press the DSP/FUN key, until the first parameter F00 is displayed.</p> <p>Then use the arrow keys ▲ ▼ to select a parameter then Press DATA/ENTER key to read the current value.</p> <p>Use the ▲ ▼ keys to alter the setting of the parameters as per basic quick start parameter list.</p> <p>Note:- For full parameter list refer to the instruction manual.</p> <p>To save each parameter change, press DATA/ENTER key then the word END will be displayed.</p> <p>Use ▲ ▼ key to select the next parameter to alter and follow steps 2 to 4 until all changes are complete.</p> <p>Pressing the DSP/FUN key repeatedly will alternate the display between the pre-set frequency (flashing display) or the last parameter accessed.</p>	

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Basic Quick Start Parameter List

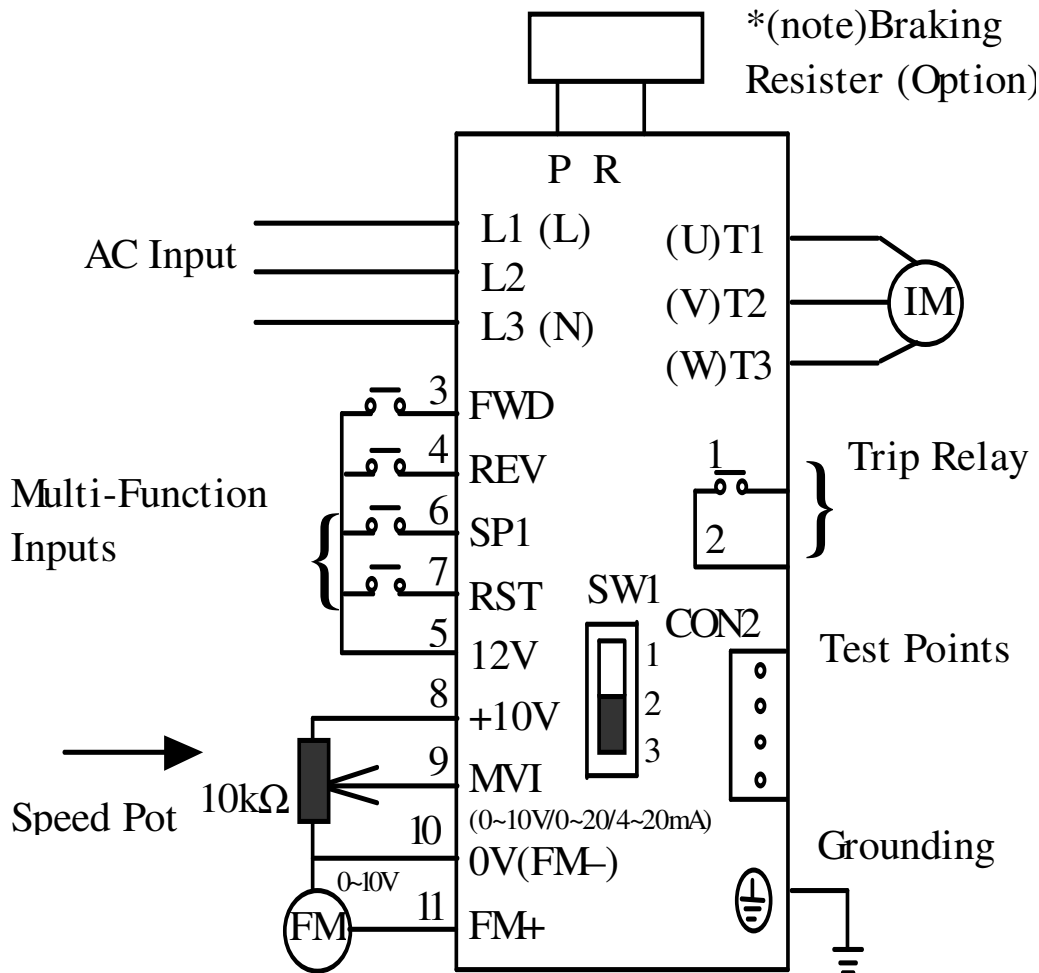
Parameter	Default	Range	Note
F01	05.0	0.1-999secs	Acceleration time in seconds
F02	05.0	0.1-999secs	Deceleration time in seconds
F03	000	0-1	000 = Fwd/Stop. Rev/Stop 001 = Run/Stop. Fwd/Rev
F06	50/60Hz	1.0-120Hz *4. 200Hz	Max frequency limit. See parameter F25
F07	0.0	0.0- 120 Hz *4 200Hz	Min frequency limit
F10	000	0-1	Start mode. Keypad = 000 Remote=001
F11	000	0-2	Frequency (Speed reference) Source. Keypad = 000 Remote 0-10v /0-20ma = 001 Remote 4-20ma =002
F14	000	0-1	Stop method:- 000 = Decel to stop 001= Coast to stop
F18	100%	50-100% (*4. 200%)	Motor overload protection F18= motor rated Current / Inv. Rated current
F25	000		Set to factory setting. 010 = 50 HZ system. 011 = 60HZ system

*4 . CPU Version above 1.9

Note:- For Full Parameter List see the Instruction manual

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Interconnection Diagram



Note:-

- 1) On 1Hp 220V Single phase L1 & L2 is available only for Connection.
- 2) Supply voltage **must not** be connected to Inverter output terminals T1, T2, T3. This will damage the inverter.

For further information contact Teco Europe



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