

Appendix A. PWM350T Technical Specification

TT **TECHNA-CHECK**[®] PWM350T Load Transducer

Power Transducer for 3-phase Inductive Loads

A fast measurement transducer specifically developed for Machine Tool Monitoring applications.

PWM350T measures motor power, kW.

- ◆ **TTBUS Networked Unit**
- ◆ **4 Remotely Programmable Measurement Ranges**
- ◆ **Remotely Programmable Averaging**

Power Measurement

*4 quadrant analogue multiplication.
Measures power after variable frequency inverter.*

Ultra Compact DIN rail mount

Less than 2" of rail space.

Current wires feeds through 3 holes in unit

3 internal 50 Amp. current sensors.

Monitor any size motor

(external CT >50Amp.)

Technical Specification

Mechanical

Housing: Polycarbonate.
Mounting: 35 mm DIN-rail.
Protection Class: IP40.
Temp. Range: -15 to + 50 C.
Weight: App. 500g (1 lb).
Dimensions: D 118 x B 45 x H 137,5 mm.
Connections: Max 2,5 mm² (AVG 24).

Electrical

Voltage Input: 3 x 0-500 V PWM (0-600V max).
Current Input: 3 x 50 Amp. 5Hz - 5kHz or
3 x 25 Amp. 5Hz - 5kHz or
3 x 12,5 Amp. 5Hz - 5kHz
see side label for actual range
Power Range: 0 - 43.3 kW.
Supply: 18-36 V DC max. 2.5 Watt.
TTBUS: RS485 electrically isolated.

Measurement Ranges

The Measurement range is programmable from the TTBUS.

Unit Type	3 x 50 A .	3 x 25 A.	3 x 12,5 A
100%	43.3 kW	21,7 kW	10,8 kW
50%	21.7 kW	10,8 kW	5,42 kW
20%	8.66 kW	4,33 kW	2,17 kW
5%	2.17 kW	1,08 kW	0,54 kW



The PWM350T is designed primarily for measuring the power delivered to motors by variable frequency inverters. Power is measured from the formula:

$$P = \sqrt{3} \times U \times I \times \text{Cos}\phi$$

The PWM350T Power Transducer is specifically developed to function as a load transducer for the **TECHNA CHECK**[®] Range of Machine Tool Monitors.

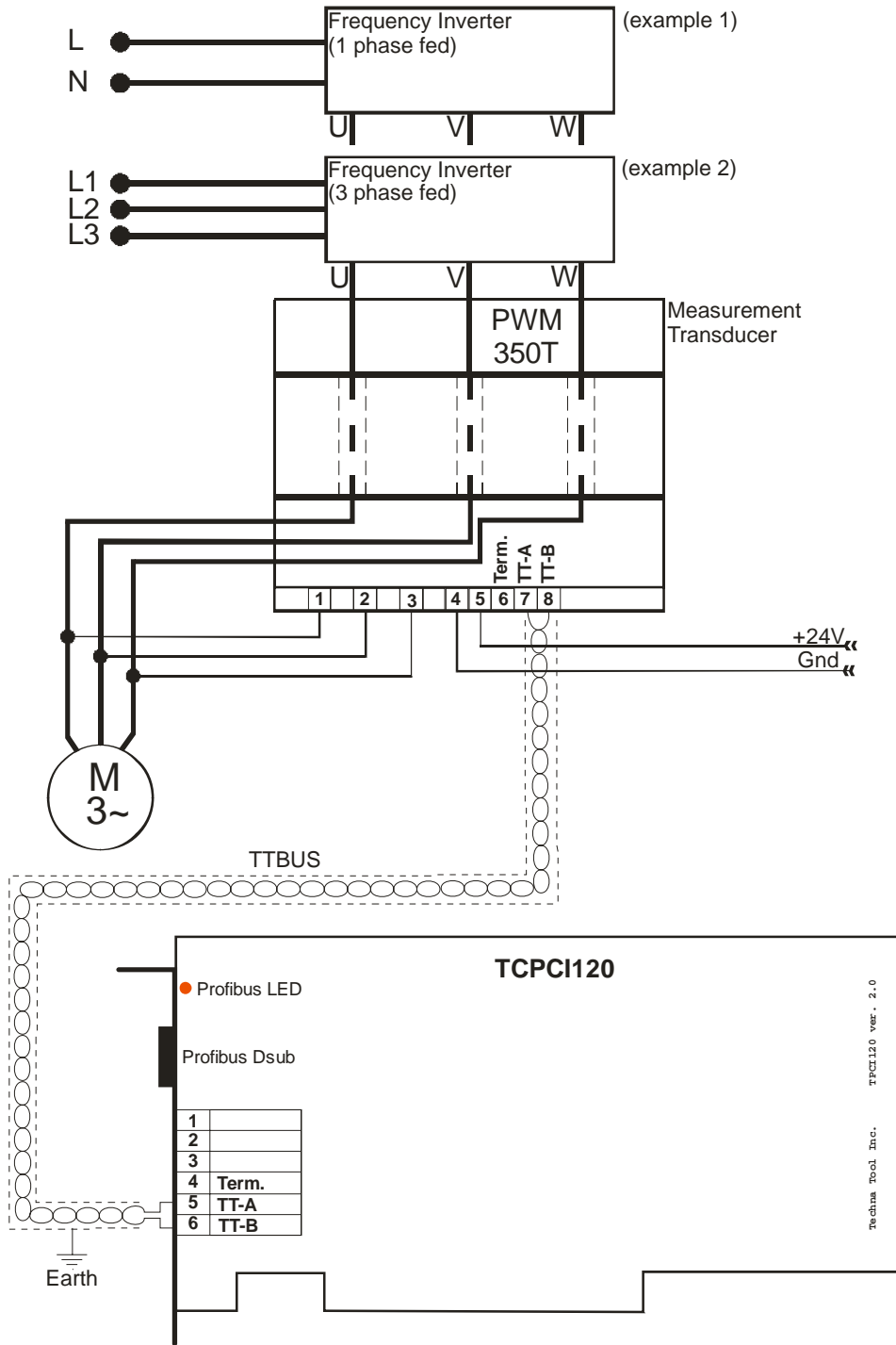
The PWM350T is available as a 3 x 50 Amp, 3 x 25 Amp or a 3 x 12,5 Amp transducer.

The three motor wires U, V and W **must** pass through the holes in the transducer in the **same direction** to the motor either from Top-Bottom or from Bottom-Up.

Note: The PWM350T is designed for use with inductive loads only (motors).

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PWM350T Wiring



Note!

Please use **good-quality** low-resistance twisted and shielded cable earth-connected at one or both ends for the TTBUS network.

Last unit in the TTBUS network chain **must** be terminated.

Please connect a wire between terminal 6 and 8 on the PWM350T (the TTBUS slave) when termination is required