



TRINAMIC TMCM-0013-xA Interface Board and Lab Tool Instruction Manual

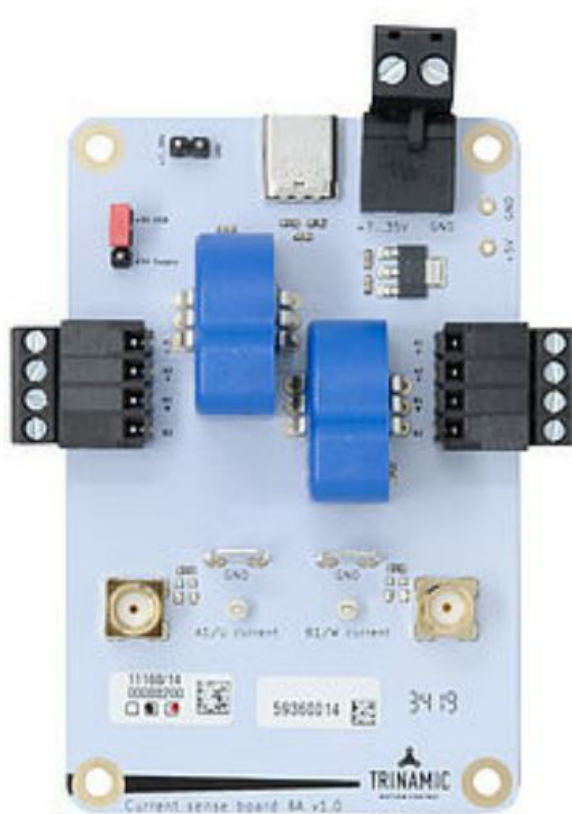
[Home](#) » [TRINAMIC](#) » TRINAMIC TMCM-0013-xA Interface Board and Lab Tool Instruction Manual 

Contents

- [1 TRINAMIC TMCM-0013-xA Interface Board and Lab Tool](#)
- [2 Description](#)
- [3 Block Diagram](#)
- [4 Order Codes](#)
- [5 Application Wiring](#)
- [6 Electrical and Environmental Parameter](#)
- [7 Manual History](#)
- [8 Documents / Resources](#)
 - [8.1 References](#)



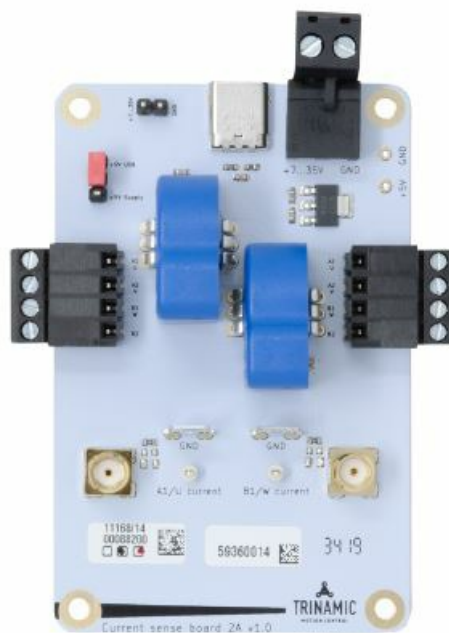
TRINAMIC TMCM-0013-xA Interface Board and Lab Tool



TMCM-0013-xA

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TMCM-0013-2A/-3A/-6A



Description

The TMCM-0013-xA boards are tools to simplify the measurement and visualization of 2x motor phase currents of small electric motors such as stepper motors, BLDC motors, or DC motors without the need for an expensive current probe. They are easy to use and can be connected to typical laboratory oscilloscopes.

- Supplied via USB or dedicated laboratory power supply with +7... +35V.
- Comes in 3 different current measurement ranges (nominal range).
- Connects to the scope via SMA-2-BNC cables or standard probe clamps.

- ## Block Diagram



Application Wiring



Parameter	Symbol	Min	Typ	Max	Unit
Supply voltage range from dedicated supply	V_S	7	24	35	V
USB supply voltage	V_{USB}		5		V
Transducer primary nominal RMS current	I_{PN}		2/3/6		A
Transducer primary current measuring range	I_{Pmax}	-19.2		+19.2	A
Output Voltage at $I_P = 0$	V_{OUT}	2.475	2.5	2.525	V
Output Voltage at primary current I_P	V_{OUT}	0	$2.5 \pm (0.625 \times I_P / I_{PN})$	5	V
Accuracy at $T_A = 25^\circ\text{C}$	X		± 0.2		%
Ambient operating temperature	T_A	-40		+85	$^\circ\text{C}$

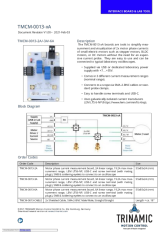
(I_P is the actual primary current visible at the motor inputs.) For more information on the current transducer LTS 6-NP visit www.lem.com.

Manual History

Version	Date	Author	Info
1.00	10.02.2017	SK	First release

- TMCM-0013-xA Interface Board & Lab Tool
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Documents / Resources

	TRINAMIC TCM-0013-xA Interface Board and Lab Tool [pdf] Instruction Manual TCM-0013-xA Interface Board and Lab Tool, TCM-0013-xA, Interface Board and Lab Tool, Board and Lab Tool, Lab Tool
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References

Manuals+.