

MEASURE

Current, voltage, weld time, force and conduction angle

KEY FEATURES

- Improved accuracy through ISO 17657 compliant toroidal coil
- Easy setup via 5.7" color touch panel
- Seam welding mode – Monitor AC current and voltage or DC voltage for up to 5 minutes
- ISO 17657 – compliant measurement for current – Requires ISO-compliant toroidal coil
- Data storage via on-board flash drive
- Ethernet (TCP/IP), and USB communication
- Multi-language support: English, Spanish, Japanese, Chinese, Korean, German and French

MM-410B

Handheld Resistance Weld Checker

MM-410B enables operators to monitor and manage key welding variables that result in changes in weld heat such as current, voltage, time, and force. The compact, handheld unit supports a wide range of resistance welding technologies including AC, DC inverter, AC inverter, transistor and capacitive discharge. It features a simple and intuitive user interface and color touch panel display.

COMMON APPLICATIONS:

PROCESS DEVELOPMENT

- Correlate waveform and numeric data with process results
- Provides detailed weld data for process optimization and validation

PRODUCTION ENVIRONMENT

- **Reduces scrap** – Detects drifts in the weld process and alerts operators before process failure
- **Reduces frequency of destructive testing** – Welds that pass the set parameter limits indicate the process is in control
- **Independent monitoring of welding power supply** – Detects drifts in welding power supply calibration.

ACCESSORIES (SOLD SEPARATELY)



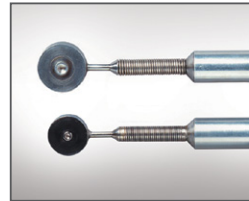
**Toroidal coil
MB-400P**
(ISO 17657-compliant)



**Toroidal coil
MB-800P**
(ISO 17657-compliant)



**Toroidal coil
MB-45G** (10x sensitivity)
(conversion cable
SK-1193305 is required)



Force sensors
Top: MA-522B
Bottom: MA-521B / MA-520B



**Current / force sensor
MA-770A / MA-771A**
(conversion cable
SK-1200918 is required)

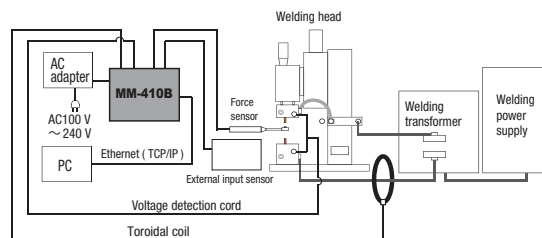
TECHNICAL SPECIFICATIONS

MODEL		MM-410B	
Current	Range	1x Sensitivity toroidal coil: 0.100 - 2.000 kA / 0.30 - 6.00 kA / 1.00 - 20.00 kA / 3.0 - 60.0 kA / 10.0 - 200.0 kA 10x Sensitivity toroidal coil: 0.010 - 0.200 kA / 0.030 - 0.600 kA / 0.100 - 2.000 kA / 0.30 - 6.00 kA / 01.00 - 20.00 kA	
	Item	PEAK / RMS* / Arithmetic mean RMS	Accuracy ±1% Full scale
Voltage	Range	0.30 - 6.00 V / 1.0 - 20.0 V	
	Item	PEAK / RMS* / Arithmetic mean RMS	Accuracy ±1% Full scale
Force	Range	4.90 - 98.06 N (MA-520B), 49.0 - 980.6 N (MA-521B), 245 - 4903 N (MA-770A), 490 - 9806 N (MA-522B, MA-771A)	
	Item	Mean RMS / maximum (peak) Before welding / After welding / Constant	Accuracy ±3% Full scale
External	Input voltage / current range	-10 to +10 V / 4 to 20 mA	
	Range	±0.5 to 10 V or 4.8 to 20 mA (5% to 100% of rated setting)	
	Item	Mean RMS / maximum (peak) Before welding / After welding / Constant	Accuracy ±3% Full scale
	Units	V / N / kgf / lbf / °C / °F / Mpa / bar / psi	
Measurement time	Current	AC	ms - AC 1 - 5000 ms
		DC	CYC - DC 0.5 - 100.0 CYC (50 Hz), 0.5 - 120.0 CYC (60 Hz)
	Voltage	AC	CYC - AC 0.5 - 250.0 CYC (50 Hz), 0.5 - 300.0 CYC (60 Hz)
		DC	CYC - DC 0.5 - 100.0 CYC (50 Hz), 0.5 - 120.0 CYC (60 Hz)
	Power	AC	CYC***Hz - AC 0.5 - 200.0 CYC (M050: 50 Hz), 0.5 - 300.0 CYC (M063: 63 Hz), 0.5 - 2000.0 CYC (M500: 500 Hz)
		DC	CYC - DC 0.5 - 100.0 CYC (50 Hz), 0.5 - 120.0 CYC (60 Hz)
Resistance	DC	ms - DC 1 - 2000 ms	
Force external		SHORT ms - DC 0.50 - 300.00 ms (0.05 ms increment)	
Force external		1 to 10000 ms	Accuracy ±9 degrees
Conduction angle		0-180 degrees	
Power supply voltage		Single-phase 100 to 240 V (50/60 Hz) AC adapter output 9 V DC	
External data output		USB / Ethernet (Protocol; TCP/IP)	
Languages		Japanese, English, Chinese, Korean, German, French, Spanish	
No. of schedules		127 schedules	

*ISO17657 compliant

WEIGHT & DIMENSIONS

Dimensions (W x D x H)	8.82 in x 1.85 in x 6.18 in (224 mm x 47 mm x 157 mm)
Weight	Approx. 1.98 lb (0.9 kg)



USA Headquarters and Western Technical Center
AMADA WELD TECH
 1820 S. Myrtle Ave. • Monrovia, CA 91016 US • T: (626) 303-5676
info@amadaweldtech.com • www.amadaweldtech.com
 ISO 9001 Certified Company • 24/7 Repair Service: 1-866-751-7378

AMERICAS

AMADA WELD TECH
(Eastern Technical Center)
 High Point, North Carolina
 T: (941) 544-5762
southsales@amadaweldtech.com

AMADA WELD TECH
(Mexico Office)
 El Paso, Texas
 T: (915) 881-8765
mxsales@amadaweldtech.com

AMADA WELD TECH
(Midwest Technical Center)
 Detroit, Michigan
 T: (248) 313-3078
midwestsales@amadaweldtech.com

EUROPE
AMADA WELD TECH
GmbH
 Munich, Germany
 T: +49-89-839403-0
infode@amadaweldtech.eu

ASIA

AMADA CO., LTD.
 Isehara, Japan
 T: +81-463-96-3268
sales@miyachi.co.jp

AMADA WELD TECH
SHANGHAI CO., LTD.
 Shanghai, China
 T: +86-21-6448-6000
juwu@amadaweldtech.com.cn

AMADA WELD TECH KOREA CO., LTD.
 Seoul, Korea
 T: +82-31-8015-6810
amadassales@amadaweldtech.co.kr
sales2@amadaweldtech.co.kr

AMADA WELD TECH TAIWAN CO., LTD.
 Taipei, Taiwan
 T: +886-2-2585-0161

AMADA (THAILAND) CO., LTD.
 Bangkok, Thailand
 T: +66-2170-5900
info@amada.co.th

AMADA VIETNAM CO., LTD.
 Ha Noi, Vietnam
 T: +84-4-6261-4583
thuyet@amada.co.jp

AMADA WELD TECH
INDIA PVT., LTD.
 Bangalore, India
 T: +91-80-4092-1749
info@amadaweldtech.in

Specifications subject to change without notice. Copyright© 2024 AMADA WELD TECH INC. The material contained herein cannot be reproduced or used in any other way without the express written permission of AMADA WELD TECH INC. All rights reserved.



follow us on: