

Supplement to MFT 4000/4005/4010 User's Manual

Reference MFC 4000:440-6 User's Manual, November 2006

The purpose of this Supplement is to provide corrections, clarifications or additions to the user information contained in MFC 4000:440-6 User's Manual. The following supplemental corrections, clarifications or additions have no impact on the Intrinsically Safe documentation in the manual.

Corrections on page 90, section 5.0 "Resolution, Range, Accuracy for VMA0055 Module"

1. Add ambient temperature range: -10° C to +50° C (+14° F to +122° F)
2. Add temperature range limitation to VMA0055 factory specifications; range limit is 18° C to 28 ° C (64.4° F to 82.4° F).
3. Add temperature coefficients to be applied to factory specification when used at temperatures below 18° C (64.4° F) or above 28 ° C (82.4° F).
4. Change accuracy specification for V dc Measure Mode section:
from $\pm (0.01\% \text{ of reading} + 0.005\% \text{ FS})$,
to $\pm (0.025\% \text{ of reading} + 0.005\% \text{ FS})$
5. Removed resolution and accuracy terms from "Regulated Loop Power" section.

See the page 2 of this Supplement for corrected VMA0055 specification table.

Dec. 2009: Added degree F equivalents above and to VMA0055 specification table – see page 2 of this Supplement.

Resolution, Range, and Accuracy Specification for VMA0055 Module

Ambient temperature limits: -10°C to +50°C (+14°F to +122°F)

Accuracy statements are for ambient temperatures of 18°C to 28°C (64.4°F to 82.4°F)

Apply the Temperature Coefficient for ambient temperatures below 18°C (64.4°F) and above 28°C (82.4°F)

VMA0055 DC Current (mA) Measure and Source Modes

Specification	Measure Mode	Source Mode (No External Power)
Resolution	.001 mA	.001 mA
Range	±100.000 mA (55 Vdc compliance)	0 - 22.000 mA (See Note 3 below)
Accuracy	± (0.01% of reading + 0.015% FS)	± (0.01% of reading + 0.015% FS)
Open Circuit Voltage		24 VDC
Output Drive		15 VDC minimum @ 24 mA, Resistive load
Temperature Coefficient	± (0.001% Rdg +0.002% FS) / °C	± (0.003% Rdg +0.003% FS) / °C

VMA0055 Volts DC Measure and Source Modes

Specification	Measure Mode	Source Mode (No External Power)
Resolution	1/100,000 counts: .001 mV; .001 V	1/100,000
Range	500 mV; 1, 2, 4, 8, 15, 30, 55 V	0 - 24.000 VDC
Accuracy	± (0.025% of reading + 0.005% FS)	± (0.01% of reading + 0.05% FS)
Open Circuit Voltage		24 VDC
Output Drive		15 VDC minimum @ 24 mA, Resistive load
Temperature Coefficient	± (0.001% Rdg +0.0015% FS) / °C	± (0.0025% Rdg +0.0035% FS) / °C

2-Wire Transmitter Simulation Mode

Specification	Simulation (External Power)
Resolution	.001 mA
Range	0 - 24.000 mA
Accuracy	± (0.01% of reading + 0.015% FS)
Loop Voltage Limits	1 VDC min., 55 VDC max.
Temperature Coefficient	± (0.003% Rdg +0.003% FS) / °C

Loop Power Mode

Specification	Regulated Power Source
Range	24 VDC
Open Circuit Voltage	24 VDC
Output Drive	15 VDC Min. @ 24mA, Resistive load

Ordering Information

VMA0055-11-1 VMA Module

Accessories

P/N A900529-00015:VMA Test Lead Kit: banana plugs on 9" breakouts (both ends), assorted connectors (required for source and simulate functions)

Notes:

1. Nominal resistance at VMA current terminal is 10 - 15 Ω
2. Output load line is linear
3. Unit operating time de-rated at high temp and high current as follows:
 - Continuous operation @ 50°C and 20mA
 - 15 minutes typical @ 50°C and 24mA (unit will shut down to prevent thermal damage)

VMA4000:215-4