FM Approvals
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CERTIFICATE OF COMPLIANCE

HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT

This certificate is issued for the following equipment:

MW100 Series Data Acquisition Unit.

MW100-a-bc/d Main Module.
NI / I / 2 / ABCD / T4 Ta = 60°C – NFM015-A13; NIFW.
a = Instruction Manual Language J or E.
b = Power Supply Voltage 3
c = Power Inlet & Power Cord, W
d = Option Function C2, C3, M1, S7, and/or S8*

* C2 and C3 cannot be specified together.

Nonincendive Field Wiring Parameters:

Equipment supplying energy	Model	Voc (V)	Isc (mA)	Ca (µF)	La (mH)
	RS232C	8	30	1	1
	RS422A	7	250	1	0.5

Equipment receiving energy	Model	Vmax (V)	Imax (mA)	Ci (µF)	Li (µH)
	RS232C	30	15	0.001	10
	RS422A	25	0.3	0.001	10

MX110-a-b/c Analog Input Module.
NI / I / 2 / ABCD / T4 Ta = 60° C – NFM015-A13; NIFW.
a = Input Type UNV or V4R.
b = Measurement interval & number of channels H04, M06, or M10.
c = Option function NC or S10 *

* NC can be specified only for b = M10

Nonincendive Field Wiring Parameters:

Equipment supplying energy	Model	Voc (V)	Isc (mA)	Ca (µF)	La (mH)
	MX110-UNV-H04	5	0.5	1	10
	MX110-UNV-M10	5	0.5	1	10

	MX110-UNV-M10, with 772081	5	0.5	1	10
	MX110-UNV-M10, with 772082	5	0.5	1	10
	MX110-UNV-M10, with 772083	5	0.5	1	10
	MX110-V4R-M06	5	0.5	1	10

Equipment receiving energy	Model	Vmax (V)	Imax (mA)	Ci (µF)	Li (µH)
	MX110-UNV-H04	30	0.03	0.03	10
	MX110-UNV-M10	30	0.03	0.005	10
	MX110-UNV-M10, with 772081	1.5	100	0.005	10
	MX110-UNV-M10, with 772082	5	30	0.005	10
	MX110-UNV-M10, with 772083	8	20	0.005	10
	MX110-V4R-M06	30	0.03	0.005	10

MX112-a-b Strain Input Module.
NI / I / 2 / ABCD / T4 Ta = 60° C – NFM015-A13; NIFW.
a = Input Type B12, B35, or NDI.
b = Measurement interval & number of channels M04 or S10.

Nonincendive Field Wiring Parameters:

Equipment supplying energy	Model	Voc (V)	Isc (mA)	Ca (µF)	La (mH)
	MX112-B12-M04	8	20	1	10
	MX112-B35-M04	8	20	1	10
	MX112-NDI-M04	8	20	1	10

Equipment receiving energy	Model	Vmax (V)	Imax (mA)	Ci (µF)	Li (µH)
	MX112-B12-M04	10	0.01	0.01	10
	MX112-B35-M04	10	0.01	0.01	10
	MX112-NDI-M04	10	0.01	0.01	10

MX115-a-b/c Digital Input Module.
NI / I / 2 / ABCD / T4 Ta = 60°C– NFM015-A13; NIFW.
a = Input Type D05 or D24.
b = Measurement interval & number of channels H10.
c = Option function NC or S10*

Nonincendive Field Wiring Parameters:

Equipment supplying energy	Model	Voc (V)	Isc (mA)	Ca (µF)	La (mH)
	MX115-D05-H10	5.6	1.02	5	10
	MX115-D24-H10	8	0.05	5	10

Equipment receiving energy	Model	Vmax (V)	Imax (mA)	Ci (µF)	Li (µH)
	MX115-D05-H10	10	1	0.005	10
	MX115-D24-H10	50	0.25	0.005	10

MX120-a-b/c Analog Output Module.
NI / I / 2 / ABCD / T4 Ta = 50°C– NFM015-A13; NIFW.
a = Input Type VAO or PWM.
b = Measurement interval & number of channels M08.
c = Option function S10

Nonincendive Field Wiring Parameters:

Equipment supplying energy	Model	Voc (V)	Isc (mA)	Ca (µF)	La (mH)
	MX120-VAO-M08	22	62.5	0.3	1

MX125-a-b/c Digital Output Module.
NI / I / 2 / ABCD / T4 Ta = 50°C– NFM015-A13; NIFW.
a = Input Type MKC.
b = Measurement interval & number of channels M10.
c = Option function S10

Nonincendive Field Wiring Parameters:

Equipment receiving energy	Model	Vmax (V)	Imax (mA)	Ci (µF)	Li (µH)
	MX125-MKC-M10	5 12 24	1000 500 100	0.005	10

MX150-a/b Base Plate.
NI / I / 2 / ABCD / T4 Ta = 60°C.
a = Options 1, 2, 3, 4, 5, or 6.
b = Option function S10

772061 Terminal Block
NI / I / 2 / ABCD / T4 Ta = 60°C.

Note: The 772061 model is applicable only to the MX110-UNV-M10 or MX115-D05-H10 or MX115-D24-H10.

772062 -a Connection Cable.
NI / I / 2 / ABCD / T4 Ta = 60°C.
a = Cable length, cm,; 050 or 100.

Note: The 772062 model is applicable only between the MX110-UNV-M10 and 772061 or between the MX115-D05-H10 and 772061 or between the MX115-D24-H10 and 772061.

772063 Plate with Clamp Terminals
NI / I / 2 / ABCD / T4 Ta = 60°C.

Note: The 772063 model is applicable only to the MX110-UNV-M10 or MX115-D05-H10 or MX115-D24-H10.

772064 Clamp Terminal.
NI / I / 2 / ABCD / T4 Ta = 60°C.

Note: The 772064 model is applicable only to the MX110-UNV-H04.

772065 Clamp Terminal.
NI / I / 2 / ABCD / T4 Ta = 50°C

Note: The 772065 model is applicable only to the MX125-MKC-M10 or MX120-VAO-M08 or MX120-PWM-M08.

772066 Connector Cover for Base Plate.
NI / I / 2 / ABCD / T4 Ta = 60°C.

772067 Plate with Clamp Terminals.
NI / I / 2 / ABCD / T4 Ta = 60°C.

Note: The 772067 model is applicable only to the MX110-V4R-M06.

772068 Plate with Clamp Terminals (120Ω).
NI / I / 2 / ABCD / T4 Ta = 60°C.

Note: The 772068 model is applicable only to the MX112-B12-M04 or MX112-B35-M04.

772069 Plate with Clamp Terminals (350Ω).
NI / I / 2 / ABCD / T4 Ta = 60°C.

Note: The 772069 model is applicable only to the MX112-B12-M04 or MX112-B35-M04.

772080 Plate with Screw Terminals.
NI / I / 2 / ABCD / T4 Ta = 60°C.

Note: The 772080 model is applicable only to the MX110-UNV-M10 or MX115-D05-H10 or MX115-D24-H10.

772081 Plate with Clamp Terminals.
NI / I / 2 / ABCD / T4 Ta = 60°C.

Note: The 772081 model is applicable only to the MX110-UNV-M10.

772082 Plate with Clamp Terminals.
NI / I / 2 / ABCD / T4 Ta = 60°C.

Note: The 772082 model is applicable only to the MX110-UNV-M10.

772083 Plate with Clamp Terminals.
NI / I / 2 / ABCD / T4 Ta = 60°C.

Note: The 772083 model is applicable only to the MX110-UNV-M10.

Equipment Ratings:

Nonincendive for use in Class I, Division 2, Groups A, B, C, and D, Hazardous (Classified) Indoor Locations; Provides Nonincendive Field Wiring Connections for Class I, Division 2, Groups A, B, C, and D, Hazardous (Classified) Indoor Locations.

FM Approved for:

Yokogawa Electric Company
Tokyo, Japan

This certifies that the equipment described has been found to comply with the following Approval Standards and other documents:

Class 3600	1998
Class 3611	2004
Class 3810	2005

Original Project ID: 3029073 Approval Granted: 8 JUNE 2007

Subsequent Revision Reports / Date Approval Amended

Report Number	Date	Report Number	Date

FM Approvals LLC

Roger L. Allard
Assistant Vice President

8 JUNE 2007
Date