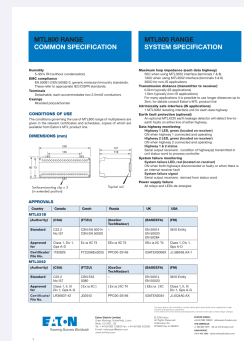


FIELD INSTALLATION QUICK GUIDE

Installation Instructions

MTL831B

eight-channel analog multiplexer transmitter



PRODUCT	MTL831B
FAMILY	MTL800 multiplexer systems
FUNCTION	eight-channel analog multiplexer transmitter
STATUS	Verify exact installed equipment

Prepared by Amikon Limited from Eaton MTL documentation. This guide supplements the complete manufacturer manual and site procedure.

01

CONFIRM THE ORDERED CONFIGURATION

Input Channels	8 analog channels
Highway Links	Dual redundant
Maximum IS Distance	0.5 km
Maximum Non-IS Distance	1.5 km
Extended Distance	Up to 3 km
Maximum Loop Impedance	300 ohm

02

PREPARATION AND CONNECTION

- Confirm the complete MTL831B article number and installed revision.
- Isolate applicable electrical and process energy using the approved site procedure.
- Record every connector, cable, terminal, shield and protective-earth connection before removal.
- Install without forcing keyed parts, then secure terminals, latches, fasteners and cable supports.

OFFICIAL INSTALLATION REFERENCE

MTL800 RANGE COMMON SPECIFICATION

Humidity

5–95% RH (without condensation)

EMC compliance

EN 50081-2/EN 50082-2, generic emission/immunity standards.
These refer to appropriate IEC/CISPR standards.

Terminals

Detachable, each accommodates two 2.5mm² conductors

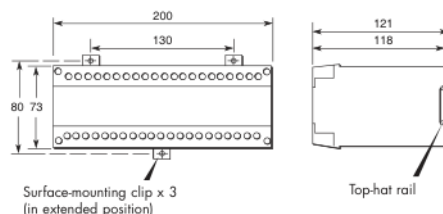
Casings

Moulded polycarbonate

CONDITIONS OF USE

The conditions governing the use of MTL800 range of multiplexers are given in the relevant certificates and schedules, copies of which are available from Eaton's MTL product line.

DIMENSIONS (mm)



MTL800 RANGE SYSTEM SPECIFICATION

Maximum loop impedance (each data highway)

50Ω when using MTL3052 interface (terminals 7 & 8)
130Ω when using MTL3052 interface (terminals 5 & 6)
300Ω for non-IS applications

Transmission distance (transmitter to receiver)

0.5km typically (IS applications)
1.5km typically (non-IS applications)
For many applications it is possible to use longer distances up to 3km, for details consult Eaton's MTL product line

Intrinsically safe interface (IS applications)

1 MTL3052 isolating interface unit for each data highway

Earth fault protection (optional)

An optional MTL4220 earth leakage detector will detect line-to-earth faults on either line of either highway.

Data highway monitoring

Highway 1 LED, green (located on receiver)

ON when highway 1 connected and operating

Highway 2 LED, green (located on receiver)

ON when highway 2 connected and operating

Highway 1 & 2 status

Serial output receivers: condition of highway(s) transmitted in unit status word to process controller

System failure monitoring

System failure LED, red (located on receiver)

ON when both highways disconnected or faulty or when there is an internal receiver fault

System failure signal

Serial output receivers: derived from status word

Power supply failure

All relays and LEDs de-energise

APPROVALS

Country	Canada	Czech	Russia	UK	USA
MTL831B					
(Authority)	(CSA)	(FTZU)	(GosGor TechNadzor)	(BASEEFA)	(FM)
Standard	C22.2 No.157	CSN EN 50014 CSN EN 50020	–	EN 50014 EN 50020 EN 50264	3610 Entity
Approved for	Class 1, Div 1, Gps A-D	Ex ia IIC T4	EEx ia IIC T4	EEx ia IIC T4	Class 1, Div 1, Gps A-D
Certificate/ File No.	1192629	FTZU98Ex0025	PPC00-25146	03ATEX0006X	J.I.5B0A8.AX-1

MTL3052

(Authority)	(CSA)	(FTZU)	(GosGor TechNadzor)	(BASEEFA)	(FM)
Standard	C22.2 No.157	CSN E33 0380	–	EN 50014 EN 50020	3610 Entity
Approved for	Class 1, II, III Div 1, Gps A-G	[Ex ia IIC]	[Ex ia] IIC T4	[EEx ia] IIC	Class 1, II, III Div 1, Gps A-G
Certificate/ File No.	LR36637-42	J02043	PPC00-25146	03ATEX0034	J.I.0Q4A0.AX

The given data is only intended as a product description and should not be regarded as a legal warranty of properties or guarantee.
In the interest of further technical developments, we reserve the right to make design changes.



Eaton Electric Limited,
Great Marlings, Butterfield, Luton
Beds, LU2 8DL, UK
Tel: +44 (0)1582 722833 Fax: +44 (0)1582 422283
E-mail: mtlenquiry@eaton.com
www.mtl-inst.com

© 2016 Eaton
All Rights Reserved
Publication No.
EPS830 Rev G 080916

EUROPE (EMEA):
+44 (0)1582 722833 mtlenquiry@eaton.com
THE AMERICAS:
+1 800 895 7075 mtl-usa-info@eaton.com
ASIA PACIFIC:
+65 6 645 9888 sales.mtl@eaton.com

04 COMMISSIONING CHECKS

- 01 Confirm product identity and mechanical seating.
- 02 Verify the documented supply before energising.
- 03 Inspect polarity, shielding and protective-earth connections.
- 04 Restore power in the approved sequence and observe status indications.
- 05 Test each connected input, output or communication path.
- 06 Record diagnostics and functional-test results before return to service.

05 CONTROLLED DOCUMENT

Official source	Eaton MTL800 Range System Specification EPS830 Rev G
Product record	MTL831B
Manufacturer	Eaton MTL
Warranty	12 months from AMIKON
Support	INFO@AMIKON.CN

AMIKON PRODUCT SUPPORT

+86-18020776786

INFO@AMIKON.CN

AMIKONG.COM