



## Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

<b>Manufacturer</b>	<b>EATON ELECTRIC LIMITED</b>
<b>Address</b>	Great Marlings, Butterfield, Luton, LU2 8DL, United Kingdom
<b>Type</b>	Barrier Units
<b>Description</b>	See Appendix
<b>Trade Name</b>	MTL 4500 and MTL 5500 series isolators
<b>Application</b>	For use in environmental categories ENV1, ENV2 and ENV3 as described in Lloyd's Register Test Specification No.1: 2015
<b>Specified Standard</b>	EN 60079-0 EN60079-11
<b>Additional Tests</b>	See Ex certificates for Explosion protection types
<b>Other Conditions</b>	Equipment suitable for general distribution zones only  Approved for use with the following backplanes: CPS08-LR/CSP08-LR-CC CPS16-LR/CPS16-LR-CC CPY-C3 range CPY-RS range

*Michael Hickey*

**Michael Hickey**

Marine Control and Automation Engineer to  
Lloyd's Register EMEA  
A member of the Lloyd's Register group

71 Fenchurch Street, London, EC3M 4BS, United  
Kingdom

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.



---

## Type Approval Certificate

This certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid Certificate.

**Previous Version:** 10/00035(E2)

The Design Appraisal Document LR2349160TA and its supplementary Type Approval Terms and Conditions form part of this Certificate.

71 Fenchurch Street, London, EC3M 4BS, United Kingdom

---

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.



**ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. LR2349160TA****Appendix****Description:**

MTL 4500 and MTL 5500 series isolators

	Backplane mounting	DIN Rail Mounting
Digital Input	MTL4501-SR	MTL5501-SR
	MTL4504	-
	MTL4510	MTL5510
	MTL4510B	MTL5510B
	MTL4514B	-
	MTL4514D	MTL5514D
	MTL4514N	-
	MTL4511	MTL5511
	MTL4513	MTL5513
	MTL4514	MTL5514
	MTL4516	MTL5516
	MTL4516C	MTL5516C
	MTL4517	MTL5517
Digital Output	MTL4521	MTL5521
	MTL4521L	MTL5522
	MTL4521Y	-
	MTL4523	MTL5523
	MTL4523L	-
	MTL4523R	-
	MTL4523V	MTL5523V
	MTL4523VL	MTL5523VL
	MTL4523Y	-
	MTL4524	MTL5524
	MTL4524S	-
	MTL4525	MTL5525
	MTL4526	MTL5526

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.

**ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. LR2349160TA**

	Backplane mounting	DIN Rail Mounting
Analogue Input	MTL4531	MTL5531
	MTL4533	MTL5533
	MTL4541	MTL5541
	MTL4541A	MTL5541A
	MTL4541AS	MTL5541AS
	MTL4541S	MTL5541S
	MTL4541B	-
	MTL4541P	-
	MTL4541Y	-
	MTL4541YA	-
	MTL4544	MTL5544
	MTL4544A	MTL5544A
	MTL4544AS	MTL5544AS
	MTL4544S	MTL5544S
	MTL4544B	-
	MTL4544D	MTL5544D
	MTL4545Y	-
	MTL4581	MTL5581
Analogue Output	MTL4546	MTL5546
	MTL4546C	-
	MTL4546Y	MTL5546Y
	MTL4549	MTL5549
	MTL4549C	-
	MTL4549Y	MTL5549Y



**ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. LR2349160TA**

	Backplane mounting	DIN Rail Mounting
Temp Converter	MTL4573	MTL5573
	MTL4573Y	-
	MTL4575	MTL5575
	MTL4576-RTD	MTL5576-RTD
	MTL4576-THC	MTL5576-THC
	-	MTL5582
	MTL4582B	MTL5582B
Fire/Smoke Interface	MTL4561	MTL5561
Pulse	MTL4532	MTL5532
Dummy	MTL4599	MTL5599
	MTL4599N	-

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.



## LLOYD'S REGISTER TYPE APPROVAL – DESIGN APPRAISAL DOCUMENT

Issue by: UK&I Technical Support Office

Issued to: EATON ELECTRIC Limited

For: MTL 4500 and MTL5000 series - Intrinsically safe galvanic isolators

Type: MTL4501-SR, MTL4504, MTL4510, MTL4510B, MTL4511, MTL4513, MTL4514, MTL4514N, MTL4514B, MTL4514D, MTL4516, MTL4516C, MTL4517, MTL4521, MTL4521L, MTL4521Y, MTL4523, MTL4523Y, MTL4523L, MTL4523R, MTL4523V, MTL4523VL, MTL4524, MTL4524S, MTL4525, MTL4526, MTL4531, MTL4532, MTL4533, MTL4541, MTL4541A, MTL4541AS, MTL4541B, MTL4541P, MTL4541S, MTL4541T, MTL4541Y, MTL4541YA, MTL4544, MTL4544A, MTL4544AS, MTL4544B, MTL4544D, MTL4544S, MTL4545Y, MTL4546, MTL4546C, MTL4546S, MTL4546Y, MTL4549, MTL4549C, MTL4549Y, MTL4561, MTL4573, MTL4573Y, MTL4575, MTL4575B, MTL4576, MTL4581, MTL4582B, MTL4599, MTL4599N

MTL5501-SR, MTL5510, MTL5510B, MTL5511, MTL5513, MTL5514, MTL5514-T, MTL5514D, MTL5516C, MTL5517, MTL5521, MTL5521-T, MTL5522, MTL5523, MTL5523V, MTL5523VL, MTL5524, MTL5525, MTL5526, MTL5531, MTL5532, MTL5533, MTL5541, MTL5541A, MTL5541AS, MTL5541S, MTL5541S-T, MTL5544, MTL5544A, MTL5544AS, MTL5544D, MTL5544S, MTL5546, MTL5546Y, MTL5546Y-T, MTL5549, MTL5549Y, MTL5553, MTL5561, MTL5573, MTL5575, MTL5575B, MTL5576, MTL5581, MTL5582, MTL5582B, MTL5599

The undernoted documents have been reviewed for compliance with the requirements of the Lloyd's Register Type Approval System Procedure TA14 Version 04 (September 2020) and this Design Appraisal Document forms part of the Certificate.

### APPROVAL DOCUMENTATION

EATON	EU Declaration of conformity for MTL4500 range No. MTL15DOC4500	22.07.2021
EATON	EU Declaration of conformity for MTL5500 range No. MTL15DOC5500	22.07.2021
LR	LR PQA audit report No. PRJ11100402575	24.02.2023
BSI	BSI ISO 9001:2015 Assesment Report	11.05.2022

### CERTIFICATES

BSI	BSI ISO 9001:2015 Certificate No.FM 665913	02.02.2022
BASEEFA	EU Type Examination certificate No. Baseefa06ATEX0155 Issue 9	26.09.2016
BASEEFA	EU Type Examination certificate No. Baseefa06ATEX0156 Issue 11	09.02.2018
BASEEFA	EU Type Examination certificate No. Baseefa06ATEX0157 Issue 9	26.09.2016
BASEEFA	EU Type Examination certificate No. Baseefa06ATEX0158 Issue 7	26.09.2016
BASEEFA	EU Type Examination certificate No. Baseefa06ATEX0172 Issue 6	26.09.2016
BASEEFA	EU Type Examination certificate No. Baseefa06ATEX0175 Issue 9	26.09.2016
BASEEFA	EU Type Examination certificate No. Baseefa06ATEX0200 Issue 6	26.09.2016
BASEEFA	EU Type Examination certificate No. Baseefa08ATEX0081 Issue 4	26.09.2016
BASEEFA	EU Type Examination certificate No. Baseefa08ATEX0083 Issue 3	26.09.2016
BASEEFA	EU Type Examination certificate No. Baseefa08ATEX0321 Issue 3	26.09.2016
BASEEFA	EU Type Examination certificate No. Baseefa09ATEX0026 Issue 4	26.09.2016
BASEEFA	EU Type Examination certificate No. Baseefa09ATEX0102 Issue 6	02.05.2017
BASEEFA	EU Type Examination certificate No. Baseefa09ATEX0117 Issue 4	26.09.2016

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.



BASEEFA	EU Type Examination certificate No. Baseefa09ATEX0155 Issue 6	26.09.2016
BASEEFA	EU Type Examination certificate No. Baseefa09ATEX0157 Issue 3	26.09.2016
BASEEFA	EU Type Examination certificate No. Baseefa11ATEX0037 Issue 3	26.09.2016
BASEEFA	EU Type Examination certificate No. Baseefa13ATEX0241 Issue 1	26.09.2016
BASEEFA	EU Type Examination certificate No. Baseefa14ATEX0157 Issue 2	26.09.2016
BASEEFA	EU Type Examination certificate No. Baseefa14ATEX0387 Issue 1	26.09.2016
BASEEFA	EU Type Examination certificate No. Baseefa15ATEX0003 Issue 2	26.09.2016
BASEEFA	EU Type Examination certificate No. Baseefa15ATEX0032 Issue 1	26.09.2016
BASEEFA	EU Type Examination certificate No. Baseefa15ATEX0033 Issue 1	26.09.2016
BASEEFA	EU Type Examination certificate No. Baseefa15ATEX0034 Issue 1	26.09.2016
BASEEFA	EU Type Examination certificate No. Baseefa15ATEX0195 Issue 1	26.09.2016
BASEEFA	EU Type Examination certificate No. Baseefa07ATEX0210 Issue 3	05.10.2016
BASEEFA	EU Type Examination certificate No. Baseefa07ATEX0211 Issue 7	03.04.2017
BASEEFA	EU Type Examination certificate No. Baseefa07ATEX0212 Issue 7	27.03.2017
BASEEFA	EU Type Examination certificate No. Baseefa07ATEX0213 Issue 7	09.02.2018
BASEEFA	EU Type Examination certificate No. Baseefa07ATEX0214 Issue 6	04.04.2017
BASEEFA	EU Type Examination certificate No. Baseefa07ATEX0215 Issue 4	05.10.2016
BASEEFA	EU Type Examination certificate No. Baseefa07ATEX0216 Issue 3	05.10.2016
BASEEFA	EU Type Examination certificate No. Baseefa08ATEX0082 Issue 4	05.10.2016
BASEEFA	EU Type Examination certificate No. Baseefa08ATEX0084 Issue 3	05.10.2016
BASEEFA	EU Type Examination certificate No. Baseefa08ATEX0322 Issue 3	05.10.2016
BASEEFA	EU Type Examination certificate No. Baseefa09ATEX0027 Issue 4	05.10.2016
BASEEFA	EU Type Examination certificate No. Baseefa09ATEX0103 Issue 6	02.05.2017
BASEEFA	EU Type Examination certificate No. Baseefa09ATEX0118 Issue 4	05.10.2016
BASEEFA	EU Type Examination certificate No. Baseefa09ATEX0156 Issue 7	02.05.2017
BASEEFA	EU Type Examination certificate No. Baseefa09ATEX0158 Issue 3	05.10.2016
BASEEFA	EU Type Examination certificate No. Baseefa10ATEX0227 Issue 2	05.10.2016
BASEEFA	EU Type Examination certificate No. Baseefa11ATEX0038 Issue 3	05.10.2016
BASEEFA	EU Type Examination certificate No. Baseefa13ATEX0242 Issue 1	05.10.2016
BASEEFA	EU Type Examination certificate No. Baseefa14ATEX0158 Issue 2	05.10.2016
BASEEFA	EU Type Examination certificate No. Baseefa15ATEX0196 Issue 1	05.10.2016
BASEEFA	EU Type Examination certificate No. Baseefa18ATEX0087 Issue 1	12.10.2018

Also all the documentation listed on Design Appraisal Document associated with Type Approval Certificate No. LR2349160TA-02

Michael Hickey  
Specialist, Electrotechnical  
Engineering Systems  
UK&I Technical Support Office, Marine & Offshore  
Lloyd's Register Global Technology Centre



**Supplementary Type Approval Terms and Conditions**

*Type Approval certifies that a representative sample of the product(s) referred to herein has/have been found to meet the applicable design criteria for the use specified herein. It does not mean or imply approval for any other use, nor approval of any product(s) designed or manufactured otherwise than in strict conformity with the said representative sample.*

*Type Approval is based on the understanding that the manufacturer's recommendations and instructions and any relevant requirements of the Rules and Regulations are complied with.*

*Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.*

*Lloyd's Register EMEA reserves the right to cancel or withdraw this Type Approval Certificate in accordance with the Lloyd's Register Type Approval System Procedure.*