



British Approvals Service for Electrical
Equipment in Flammable Atmospheres

Certificate of Conformity

- 1.
2. BAS No Ex 93C2151X
3. This certificate is issued for the electrical apparatus:
MTL 378-* SURGE PROTECTION UNIT
4. manufactured and submitted for certification by:
MEASUREMENT TECHNOLOGY LIMITED
of Luton, Bedfordshire, LU1 3JJ
5. This electrical apparatus and any acceptable variation thereto is specified in the Schedule to this Certificate and the documents therein referred to.
6. BASEEFA being an Approved Certification Body in accordance with Article 14 of the Council Directive of the European Communities of 18 December 1975 (76/117/EEC) certifies that the apparatus has been found to comply with harmonised European Standards

EN50 014 (1977) + Amendments 1 to 5
EN50 020 (1977) + Amendments 1 and 2

and has successfully met the examination and test requirements as recorded in confidential Report

No 93(C)119 dated 17 May 1993

7. The apparatus marking shall include the code

EEx ia IIC T4
($T_{amb} = 60^{\circ}\text{C}$)

File No: EECS 0703/02/173



Sheet 1/3

BJA

I M CLEARE
DIRECTOR EECS
9 August 1993



Electrical Equipment Certification Service
Health and Safety Executive
Harpur Hill, Buxton, Derbyshire, SK17 9JN, United Kingdom
Tel: 0298 262111 Fax: 0298 79514 Telex: 668113 RLSD G





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Certificate BAS No Ex 93C2151X dated 9 August 1993

8. The manufacturer of the electrical apparatus referred to in this certificate, has the responsibility to ensure that the apparatus conforms to the specification laid down in the Schedule to this certificate and has satisfied routine verifications and tests specified therein.

9. This apparatus may be marked with the Distinctive Community Mark specified in Annex II to the Council Directive of 16 January 1984 (Doc 84/47/EEC). A facsimile of this mark is printed on sheet 1 of this certificate.

Sheet 2/3

This certificate is granted subject to conditions applicable to the Approval Service, it does not necessarily indicate that the apparatus may lawfully be used in particular industries or circumstances.



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Schedule



Certificate of Conformity BAS No Ex 93C2151X dated 9 August 1993

APPARATUS

An MTL 378-* Surge Protection Unit is designed to protect instrumentation and electronic systems from surges conducted through signal cables.

The apparatus comprises a printed circuit board upon which are mounted all the electrical components. The pcb is encapsulated within a steel enclosure with three wires protruding from the threaded end. The threaded end of the apparatus enables it to be fitted to other apparatus. The wire ends are terminated within this additional apparatus.

The three wires are colour coded and identified on drawing No CI 378-1/4 sheet 3 of 5. The suffix * (e.g. N, P or I) indicates different thread types and sizes for mechanical mounting.

Input Parameter

$$\begin{aligned} W_{\max:in} &= 1.2W \\ C_{eq} &= 0 \\ L_{eq} &= 0 \end{aligned}$$

DRAWINGS

Number	Issue	Date	Description
CI 378-1/4 Sheet 1 of 5	4	6.93	Table of Contents
CI 378-1/4 Sheet 2 of 5	4	6.93	Label Details
CI 378-1/4 Sheet 3 of 5	4	6.93	Circuit Diagram and Pcb Layout
CI 378-1/4 Sheet 4 of 5	4	6.93	Outer Enclosure
CI 378-1/4 Sheet 5 of 5	4	6.93	General Assembly

SPECIAL CONDITIONS FOR SAFE USE

The three wires must be afforded a degree of protection of at least IP20 when the apparatus is installed.



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Certificate of Conformity Variation

THIS IS TO CERTIFY THAT CERTIFICATE BAS NO Ex 93C2151X

Held by **TELEMATIC LTD**
of St Albans, Herts, AL4 0XY

for the **MTL 378-* SURGE PROTECTION UNIT**

is hereby extended to apply to apparatus designed and constructed in accordance with the specification set out in the Schedule of the said Certificate but having the variations specified in the attached Schedule.

A copy of this Supplementary Certificate shall be attached to the original Certificate.

File No: EECS 1084/02/003



CERTIFICATE BAS NO Ex 93C2151X/1
Sheet 1/2
BP

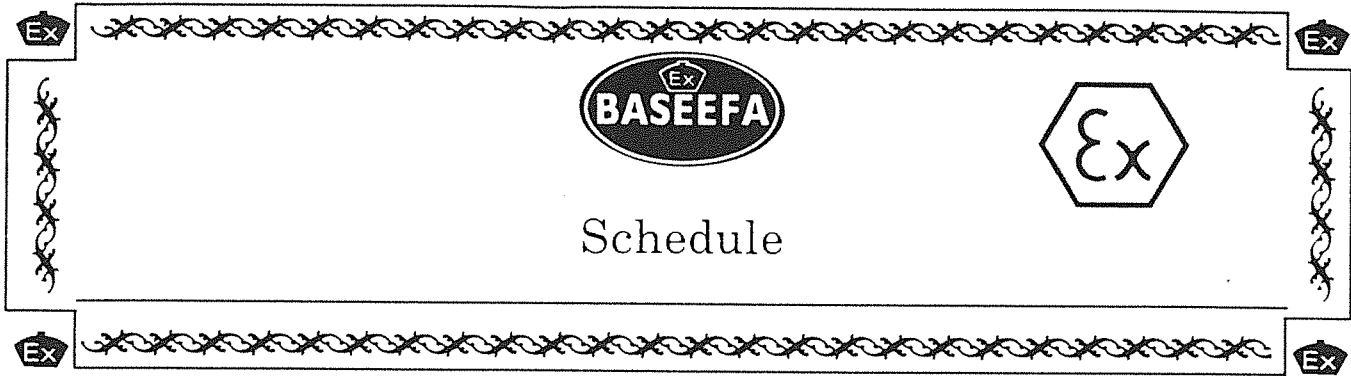
I M CLEARE
DIRECTOR EECS
26 June 1995

This certificate is issued under NACCB accreditation No. 020



Electrical Equipment Certification Service
Health and Safety Executive
Harpur Hill, Buxton, Derbyshire, SK17 9JN, United Kingdom
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Certificate of Conformity BAS No Ex 93C2151X/1

VARIATION ONE

To permit the addition of two varistors and a change of type number to TP48-*. The * still represents the letters N, P or I which indicate different thread types for mounting purposes.

DRAWINGS

Number	Issue	Date	Description
CI378-4/2 Sheet 1 of 5	2	5/95	Table of Contents
CI378-4/2 Sheet 2 of 5	2	5/95	Label Details
CI378-4/2 Sheet 3 of 5	2	5/95	Circuit Diagram and PCB Layout
CI378-4/2 Sheet 4 of 5	2	5/95	Outer Enclosure
CI378-4/2 Sheet 5 of 5	2	5/95	General Assembly

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Certificate of Conformity - Variation

SUPPLEMENTARY CERTIFICATE BAS No. Ex 93C2151X/2

This is to certify that Apparatus Certificate number:

Ex 93C2151X

held by:

TELEMATIC LTD

of:

St Albans, Herts, AL4 0XY

for the:

MTL378-* SURGE PROTECTION UNIT

is hereby extended to apply to the apparatus designed and constructed in accordance with the specification set out in the Schedule of the said Certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

This Supplementary Certificate shall be held with the original Certificate.

File No: EECS 1084/02/003

Sheet 1 of 2

This certificate is granted subject to the general conditions of the Electrical Equipment Certification Service. It does not necessarily indicate that the apparatus may be used in particular industries or circumstances. Representation of equipment as "Certified" is valid only when the number of the prime certificate to which this certificate is a supplement is given on the relevant EECS Manufacturing Licence or Verification Certificate.



I M CLEARE
DIRECTOR

17 June 1999



Registration Number
020
The use of the Accreditation
Mark indicates accreditation in
respect of those activities
covered by the accreditation
certificate number 020



Electrical Equipment Certification Service
Health and Safety Executive
Harpur Hill, Buxton, Derbyshire. SK17 9JN. United Kingdom
Tel: 01298 28000 Fax: 01298 28244

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Schedule

Supplementary Certificate BAS No. Ex 93C2151X/2

VARIATION TWO

To permit the inclusion of an additional external thread form; thus forming a Type TP48-G Surge Protection Unit.

DRAWINGS

<u>Number</u>	<u>Issue</u>	<u>Date</u>	<u>Description</u>
CI378-4/3 Sheet 1 of 5	3	5/99	Table of Contents
CI378-4/3 Sheet 2 of 5	3	5/99	Label Details
CI378-4/3 Sheet 3 of 5	3	5/99	Circuit Diagram and PCB Layout
CI378-4/3 Sheet 4 of 5	3	5/99	Outer Enclosure
CI378-4/3 Sheet 5 of 5	3	5/99	General Assembly