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British Approvals Service for Electrical  
Equipment in Flammable Atmospheres

## *Certificate of Assurance*

APPARATUS CERTIFICATE No 90Y4409

Issued to

BEKA ASSOCIATES LIMITED  
of Hitchin, Hertfordshire, SG5 2DD

THIS IS TO CERTIFY THAT A DIGITAL TOTALISER TYPE BA334N

designed and constructed in accordance with the specification set out in the Schedule and the documents therein referred to, including any variation specified in the Schedule, complies with the requirements of BS 6941: 1988.

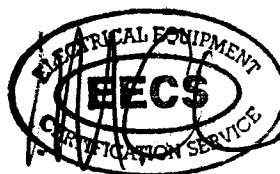
This Certificate is granted subject to the general conditions of the Electrical Equipment Certification Service and any additional conditions as may be prescribed.

This Certificate does not imply that the apparatus meets all statutory requirements in any particular industry or circumstance.

File No: EECS 0121/02/006

Report No: 90(n)484  
dated: 15 March 1991

Code: Ex N II T4  
( $T_{amb} = 60^{\circ}\text{C}$ )



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I M CLEARE  
DIRECTOR EECS  
24 April 1991

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RE-ISSUED FOR AMENDMENT 24 APRIL 1991



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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## Schedule

Certificate of Assurance No 90Y4409 dated 24 April 1991

### APPARATUS

A Digital Totaliser Type BA334N is designed to count and display the number of pulses from a variety of input sources.

The apparatus comprises 3 printed circuit boards and a liquid crystal display all housed in an aluminium or plastic enclosure fitted with a polycarbonate window. Terminals 5 and 6 of the unit are supplied from an external source having a maximum supply voltage of 36 volts.

External electrical connections are made through two tapped holes. The installation of the external connections and plugging of any unused entry must be carried out in accordance with BS 5345: Part 7: 1979 and additionally must be capable of meeting the requirements of IP54 when fitted to the apparatus.

### DRAWINGS

Number	Issue	Date	Description
CI334-02 Sheet 2	2	Dec 1990	Modification record
CI334-02 Sheet 3	2	Dec 1990	Circuit diagram
CI334-02 Sheets 4 & 5	2	Dec 1990	Parts list
CI334-02 Sheet 6	2	Dec 1990	General assembly
CI334-02 Sheet 7	2	Dec 1990	Artwork PC6
CI334-02 Sheet 8	2	Dec 1990	Artwork PC7
CI334-02 Sheet 9	2	Dec 1990	Artwork PC8
CI334-02 Sheet 10	2	Dec 1990	Label details

### VARIATION ONE To permit the following:

1. Modifications to the display printed circuit board and the deletion of capacitor C207.
2. The 8 digit Liquid crystal display to be replaced by a 4 digit liquid crystal display.



## Schedule

Certificate of Assurance No 90Y4409 dated 24 April 1991

The apparatus having the above changes is designated a Digital Totaliser Type BA333N.

### DRAWINGS

Number	Issue	Date	Description
CI333-02 Sheet 2	2	Dec 1990	Modification record
CI333-02 Sheet 3	2	Dec 1990	Circuit diagram
CI333-02 Sheets 4 & 5	2	Dec 1990	Parts list
CI333-02 Sheet 6	2	Dec 1990	General assembly
CI333-02 Sheet 7	2	Dec 1990	Artwork PC6
CI333-02 Sheet 8	2	Dec 1990	Artwork PC7
CI333-02 Sheet 9	2	Dec 1990	Artwork PC9
CI333-02 Sheet 10	2	Dec 1990	Label details



British Approvals Service for Electrical  
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## *Certificate of Assurance Variation*

THIS IS TO CERTIFY THAT APPARATUS CERTIFICATE NO Ex 90Y4409

Held by BEKA ASSOCIATES LIMITED  
of Hitchin, Herts, SG5 2DA  
(formerly of Hitchin, Herts, SG5 2DD)

for the DIGITAL TOTALISER TYPE BA334N

is hereby extended to apply to the Apparatus conforming to the specification set out in the Schedules of the said Certificate but having any variation specified in the attached Schedule.

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

File No: EECS 0121/02/006

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CERTIFICATE NO: Ex 90Y4409/1

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PP I M CLEARE  
DIRECTOR EECS  
21 February 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  
Tel: 0298 26211 Fax: 0298 79514 Telex: 668113 RLSD G





## Schedule



Certificate of Assurance No Ex 90Y4409/1

**VARIATION TWO** To permit the removal of window clamps when window is sealed to the enclosure using an alternative adhesive, namely Dow Corning SILASTIC 744. This change affects the Digital Totaliser Type BA334N and BA333N.

This change does not affect the original safety assessment.

### DRAWINGS

Number	Issue	Date	Description
CI334-02 Sheet 2	3	Nov 1994	Modification record, Type BA334N
CI334-02 Sheet 6	3	Nov 1994	General assembly, Type BA334N
CI333-02 Sheet 2	3	Nov 1994	Modification record, Type BA333N
CI333-02 Sheet 6	3	Nov 1994	General assembly, Type BA333N