



EC-TYPE EXAMINATION CERTIFICATE

Equipment or Protective System Intended for use
in Potentially Explosive Atmospheres
Directive 94/9/EC

EC-Type Examination Certificate Number : **BAS98ATEX3090X**

Equipment or Protective System: **TYPE GB RANGE OF TERMINAL BOXES**

Manufacturer: **BARTEC (UK) LIMITED**

Address: **Station Road, Facit, Whitworth, Rochdale, Lancashire, OL12 8LN**

This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

The Electrical Equipment Certification Service, notified body number 600 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential Report N°

98(C)0179/1 dated 16 October 1998

99(C)0176 dated 11 November 1999

Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 50014: 1992 + Amd 1

EN 50019: 1994

EN 50281-1-1: 1998

except in respect of those requirements listed at item 18 of the Schedule.

If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

This EC-TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified equipment or protective system. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment or protective system.

The marking of the equipment or protective system shall include the following:-

 **II 2 GD T85°C EEx e II T6 (T_{amb} See Schedule)**

This certificate may only be reproduced in its entirety and without any change, schedule included.

File No: EECS 1412/03/011

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.



Electrical Equipment Certification Service
Health and Safety Executive
Harpur Hill, Buxton, Derbyshire. SK17 9JN. United Kingdom
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DIRECTOR
30 October 1998



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Description of Equipment or Protective System

The Type GB Range of Terminal Boxes each consists of a two part glass reinforced polyester (GRP) resin box - see table below for type and size.

Terminal Box Type	Size (mm)
GB-80	80 x 75 x 55
GB-110	110 x 75 x 55
*GB-122	122 x 120 x 90
*GB-160	160 x 160 x 90
GB-220	220 x 120 x 90
*GB-260	260 x 160 x 90
*GB-255	255 x 250 x 120
GB-400/2	400 x 250 x 120
*GB-400	400 x 405 x 120

Note: Coloured boxes require a warning label referring to the static electricity hazard, to be fitted - see Drawing No. 1124/A4 or 1293/A4.

A silicone or nitrile rubber 'O' ring is fitted into a groove in the lid and forms an IP54 seal minimum (in accordance with EN60 529:1992). Those enclosures marked * have been proof tested to IP66 and IP67.

The empty enclosure is chosen from either, the Type GB-5195 Range of Polyester Enclosures covered by BASEEFA EC-Type Examination Certificate No. BAS98ATEX3089U, the Type 07-5184 or Type 07-5185 Range of Enclosures covered by PTB Component Certificate No. Ex-90.C.3181U, all of which are coded EEx e II.

The Type 07-5184 enclosure is grey and the Type 07-5185 enclosure is black which is carbon loaded.

Provision is made for the fitting of optional terminal rails, earth continuity plates and terminal types. Rail mounted terminals may be fitted horizontally or diagonally within the terminal box.

The enclosure base may be fitted with various types of earth continuity plate. These are either moulded into the inside of the box or screwed to the base.

These earth continuity plates provide continuity between cable glands, earth terminals and terminal rails.

A simple base plate may replace the earth continuity plate if required.



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The enclosure may be supplied with drilled and tapped holes for the reception of suitable cable entry devices, chosen in accordance with a recognised Code of Practice. In this case, the earth continuity plate, if fitted is supplied with:-

- (a) A corresponding clearance hole, with raised "dimples" around the edge of the hole to provide a high pressure electrical connection between the plate and the lock-nut of a metal cable entry device, thus incorporating a measure of protection against thermal and vibration effects.
- (b) A corresponding tapped hole.

Alternatively, the enclosure may be supplied with undrilled walls and earth plate.

The following terminals may be fitted, see the schedule drawings for individual arrangements:-

Terminal Type	Manufacturer	Catalogue Number	BASEEFA Certificate No.	PTB Certificate No.	KEMA Certificate No.	LCIE Certificate No.
BTB4	Bartec	-	Ex 92C3313U	-	-	-
BTB6	Bartec	-	Ex 92C3313U	-	-	-
Mini 2-Way Block	Bartec	07-9702-0220	-	Ex-89.C.3150U	-	-
Mini 3-Way Block	Bartec	07-9702-0320	-	Ex-89.C.3150U	-	-
QS3	Bartec	05-0512-0005	-	-	-	-
QS4	Bartec	05-0512-0006	-	-	-	-
QS9	Bartec	05-0512-0030	-	-	-	-
QS15	Bartec	05-0512-0039	-	-	-	-
BET2	Bartec	-	Ex 92C3318U	-	-	-
UK2.5B-EX	Phoenix	3001035	-	-	Ex-94.C.7133U	-
UK2.5N	Phoenix	3003347	-	-	Ex-95.D.3678U	-
UK3-EX	Phoenix	0531074	-	-	Ex-94.C.8675U	-
UK3N	Phoenix	3001501	-	-	Ex-94.C.8675U	-
UK4-EX	Phoenix	0531207	-	-	Ex-95.D.8574U	-
UK5-EX	Phoenix	0531090	-	-	Ex-94.C.8675U	-
UK5N	Phoenix	3004362	-	-	Ex-94.C.7133U	-
UK6N	Phoenix	3004524	-	-	Ex-94.C.7133U	-
UK10-EX	Phoenix	0531100	-	-	Ex-94.C.8675U	-
UK10N	Phoenix	3005073	-	-	Ex-95.D.3678U	-
UK16-EX	Phoenix	0531113	-	-	Ex-94.C.8675U	-
UK16N-EX	Phoenix	0531184	-	-	Ex-94.C.8675U	-



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Terminal Type	Manufacturer	Catalogue Number	BASEEFA Certificate No.	PTB Certificate No.	KEMA Certificate No.	LCIE Certificate No.
UK35-EX	Phoenix	0531139	-	-	Ex-94.C.8675U	-
XK10 KRI-EX	Phoenix	0502032	Ex 91C3051U	Ex-92.C.3148U	-	-
USLKG 2.5	Phoenix	0441025	-	-	Ex-93.C.8230U	-
USLKG 2.5N	Phoenix	0441119	-	-	KEMA 96ATEX4370U	-
USLKG 4	Phoenix	0441012	-	-	Ex-93.C.8230U	-
USLKG 5	Phoenix	0441504	-	-	Ex-94.C.7133U	-
USLKG 6N	Phoenix	0442079	-	-	KEMA 96ATEX4370U	-
USLKG 10	Phoenix	0442011	-	-	Ex-93.C.8230U	-
USLKG 10N	Phoenix	3003923	-	-	Ex-95.D.3678U	-
USLKG 16	Phoenix	0443010	-	-	Ex-93.C.8230U	-
USLKG 16N	Phoenix	0443023	-	-	Ex-92.C.8955U	-
USLKG 35	Phoenix	0444019	-	-	Ex-93.C.8230U	-
SAK 2.5	Weidmuller	027966E	Ex 823112U	-	-	-
SAK 4	Weidmuller	012836E	Ex 823112U	-	-	-
SAK 6N	Weidmuller	019326E	Ex 823112U	-	-	-
SAK 10	Weidmuller	011006E	Ex 823112U	-	-	-
SAK 16	Weidmuller	027106E	Ex 823112U	-	-	-
SAK 35N	Weidmuller	055066E	Ex 823112U	-	-	-
SAK G46 II	Weidmuller	017062E	Ex 813093U	-	-	-
SAK 2.5	Weidmuller	027962E	Ex 813092U	-	-	-
SAK 4	Weidmuller	012832E	Ex 813092U	-	-	-
SAK 6N	Weidmuller	019322E	Ex 813092U	-	-	-
SAK 10	Weidmuller	011002E	Ex 813092U	-	-	-
SAK 16	Weidmuller	027102E	Ex 813092U	-	-	-
SAK 35N	Weidmuller	055062E	Ex 813092U	-	-	-
SAK 70	Weidmuller	034082E	Ex 813092U	-	-	-
AKE4	Weidmuller	038026E	-	Ex-89.C.3129U	-	-
AZK4 (Stamin)	Weidmuller	051083	-	Ex-89.C.3136U	-	-
AZK4 (Polyamide)	Weidmuller	029436	-	-	Ex-94.C.7609U	-
BK 3	Weidmuller	062492E	Ex 813094U	-	-	-
BK 4	Weidmuller	062512E	Ex 813094U	-	-	-
BK 6	Weidmuller	062522E	Ex 813094U	-	-	-



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Terminal Type	Manufacturer	Catalogue Number	BASEEFA Certificate No.	PTB Certificate No.	KEMA Certificate No.	LCIE Certificate No.
BK 12	Weidmuller	062532E	Ex 813094U	-	-	-
MK 6/6	Weidmuller	062012E	Ex 813095U	-	-	-
WDU 2.5	Weidmuller	102000	-	-	-	86B0004U
WDU 4	Weidmuller	102010	-	-	-	86B0004U
WDU 6	Weidmuller	102020	-	-	-	86B0004U
WDU 10	Weidmuller	102030	-	-	-	86B0004U
WDU 16	Weidmuller	102040	-	-	-	86B0004U
WDU 35	Weidmuller	102050	-	-	-	86B0004U
WPE 2.5	Weidmuller	101000	-	-	-	86B0004U
WPE 4	Weidmuller	101010	-	-	-	86B0004U
WPE 6	Weidmuller	101020	-	-	-	86B0004U
WPE 10	Weidmuller	101030	-	-	-	86B0004U
WPE 16	Weidmuller	101040	-	-	-	86B0004U
WPE 35	Weidmuller	101050	-	-	-	86B0004U
DK4Q	Weidmuller	059006E	Ex 833123U	-	-	-
EK 2.5N	Weidmuller	047436E	Ex 813096U	-	-	-
EK 4	Weidmuller	035456E	Ex 813096U	-	-	-
EK 10	Weidmuller	035466E	Ex 813096U	-	-	-
EK 16	Weidmuller	037466E	Ex 813096U	-	-	-
EK 35	Weidmuller	035476E	Ex 813096U	-	-	-
DFG/1 EN	Weco	-	-	Ex-91.C.3123U	-	-
DFG/2 EN	Weco	-	-	Ex-91.C.3123U	-	-
2MK	Weco	-	-	Ex-91.C.3123U	-	-

The rail mounted power terminals may be fitted onto either single or twin rails. These are normally arranged horizontally, although a single rail may be mounted diagonally.

In addition at least one earth terminal is fitted, of a size equal to or greater than the live terminals.

The range is suitable for a maximum ambient of +40°C, +55°C or +65°C, therefore T_{amb} need not be specified on the label if the higher ambients are not used.

Various combinations of the listed terminals and other conductor sizes are permitted, subject to calculation of the power dissipation within the enclosure, based on actual rated currents, actual cable and terminal resistance values listed on the terminal schedule and a cable length per terminal as listed on table below.



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The maximum power dissipation within the relevant terminal box is as follows:

Type	Watts 40°C Ambient	Watts 55°C Ambient	Watts 65°C Ambient	Cable Length per Terminal
GB-80	1.8	0.9	0.45	123
GB-110	2.2	1.1	0.55	144
GB-122	4	2	1	140
GB-160	7	3.5	1.75	185
GB-220	6.8	3.4	1.7	266
GB-260	9	4.5	2.25	260
GB-255	15	7.5	3.75	305
GB-400/2	21.4	10.7	5.35	487
GB-400	31	15.5	7.75	510

RFI shielding material may optionally be fitted to the inside and/or outside of the empty enclosure.

The ambient temperature ranges from -55°C to +65°C.

Enclosures covered by BASEEFA EC-Type Examination Certificate BAS98ATEX3089U or PTB Component Certificate Ex-90.C.3181U are suitable for an ambient temperature range of -55°C to +65°C, with a maximum service temperature of 80°C except for the GB5195-2553/5012 and GB5195-4004/0512 enclosures which have a maximum service temperature of 70°C. Therefore, the limiting hot and/or cold ambient temperature is dictated by the terminals maximum and minimum limits as stated on the relevant Component Certificate.

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Special Conditions For Safe Use

1. All terminal screws, used and unused, shall be fully tightened down.
2. The use of any cross-connection devices between adjacent terminal ways shall be in accordance with the requirements given in the relevant BASEEFA Component Certificate listed on the terminal schedule.
3. Only one conductor shall be connected to each Weidmuller and Phoenix terminal way, unless the multiple conductors have previously been joined in a suitable manner (for example with a crimped boot-lace ferrule) such that they form a single cohesive item for insertion into the terminal way.
4. Conductor insulation shall extend to within 1mm of the metal in the Weidmuller and Phoenix terminal throat.



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5. The installer shall use an appropriate method to ensure a minimum ingress protection of IP64 or higher if required, at each cable entry, choosing cable entry devices in accordance with a recognised Code of Practice.
6. Where earth continuity is required, via cable entry devices, either:-
 - (a) The entry device shall be screwed into a tapped hole in the wall of the enclosure and the lock-nut shall be securely tightened against the "dimples" provided around the clearance hole in the earth continuity plate.
 - (b) In the event that the hole in the enclosure wall is a clearance hole and/or the clearance hole in the earth continuity plate is not provided with "dimples" (for example, if the holes are drilled by the installer) then the installer shall provide a resilient washer for installation between the earth continuity plate and the lock-nut.

The installer is responsible for ensuring that the resilient washer is suitable for the conditions of use, noting particularly that any earth fault current must pass via the washer.

7. Unused entry holes shall be filled with an appropriate stopping plug.
8. The installer shall only drill cable entry holes in the recognised positions according to the General Arrangement drawings listed in this Schedule, or according to the manufacturer's installation leaflet containing information extracted from these drawings.
9. **BTB & BET Terminals**
 - (a) Leads connected to the terminals shall be insulated for the appropriate voltage, and this insulation shall extend to within 3mm of the metal of the terminal throat. The bared end of each lead shall not extend beyond the other side of the slot by more than 1mm for the BTB terminal or by more than 2mm for the BET terminal.
 - (b) The conductors and their termination's shall not be subjected to unnecessary mechanical stress or bending.

10. **DK4Q Terminals**

When cross-connection units or jumper bars are used on the lower terminals, the terminal voltage rating is reduced to 66V maximum for upper and lower terminals.

11. When Weidmuller Polyamide Type SAK terminals are fitted into the enclosure, the rated voltage shall be in accordance with the relevant BASEEFA Component Certificate.
12. When the Weidmuller Type BK12 terminal block is fitted to the Type GB-122 terminal box, the maximum current rating for the terminal is reduced to 20 Amperes.



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13. XE-1 & XE-2 Earth Terminals

When Bartec XE-1 & XE-2 earth connection facilities are fitted the installer shall ensure that the end locknut(s) are fully tightened down against the saddle clamp(s) when in service.

- 14. When used as a general purpose junction box or marshalling box, the circuits carrying currents $\geq 1A$ shall be individually protected against overcurrent such that the protective device operates effectively at no more than 1.45 times the current carrying capacity of the smallest conductor used in that circuit.

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Essential Health and Safety Requirements

Essential Health and Safety Requirements not covered by Standards listed at (9)		
Clause	Subject	Compliance
1.0.2	Analysis of possible operating faults and misuse	see Report 98(C)0179/1 Clause 4.1.0.2
1.0.4	Surrounding area conditions	see Report 98(C)0179/1 Clause 4.1.0.4
1.0.5	Marking	see Report 98(C)0179/1 Clause 4.1.0.5
1.0.6	Instructions	see Report 98(C)0179/1 Clause 4.1.0.6
1.1.1	Materials not to trigger off explosions	see Report 98(C)0179/1 Clause 4.1.1.1
1.2.3	Enclosed structures and prevention of leaks	see Report 98(C)0179/1 Clause 4.1.2.3
1.2.7	Protection against other hazards	see Report 98(C)0179/1 Clause 4.1.2.7
1.2.8	Overloading of equipment	see Report 98(C)0179/1 Clause 4.1.2.8
1.3.3	Hazards arising from stray electric and leakage currents	see Report 98(C)0179/1 Clause 4.1.3.3
2.2.1.3	Opening of equipment	see Report 98(C)0179/1 Clause 4.2.2.1.3

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DRAWINGS

Number	Sheet	Issue	Date	Description
1124/A4	-	A	17.3.89	Electrostatic Hazard Warning Label
1153/A3	1	E	9.7.98	Terminal Schedule GB-122
1153/A3	2	C	10.12.97	Terminal Schedule GB-122
1153/A3	3	B	9.7.98	Terminal Schedule GB-122
1153/A3	3	B	9.7.98	Terminal Schedule GB-122
1153/A3	4	B	10.12.97	Terminal Schedule GB-122
1155/A3	1	D	10.12.97	Terminal Schedule GB-160
1155/A3	2	C	10.12.97	Terminal Schedule GB-160
1155/A3	3	B	9.7.98	Terminal Schedule GB-160
1155/A3	4	B	10.12.97	Terminal Schedule GB-160



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EC-TYPE EXAMINATION CERTIFICATE N° BAS98ATEX3090X

Number	Sheet	Issue	Date	Description
1168/A3	1	C	10.12.97	Terminal Schedule GB-260
1168/A3	2	C	10.12.97	Terminal Schedule GB-260
1168/A3	3	B	10.12.97	Terminal Schedule GB-260
1174/A3	1	C	10.12.97	Terminal Schedule GB-255
1174/A3	2	C	10.12.97	Terminal Schedule GB-255
1174/A3	3	A	10.12.97	Terminal Schedule GB-255
1180/A3	1	E	28.10.99	Terminal Schedule GB-400
1180/A3	2	C	10.12.97	Terminal Schedule GB-400
1180/A3	3	A	10.12.97	Terminal Schedule GB-400
1188/A4	-	B	20.6.95	Base Plate GB-400
1293/A4	-	B	21.9.94	Electrostatic Hazard Warning Label
1356/A4	-	B	15.6.95	Bartec QS Earth Bars General Arrangement
1624/A3	-	C	9.7.98	Terminal Schedule GB-80 & GB-110
1625/A3	1	B	10.12.97	Terminal Schedule GB-220
1625/A3	2	B	10.12.97	Terminal Schedule GB-220
1625/A3	3	A	19.4.96	Terminal Schedule GB-220
1626/A3	1	B	10.12.97	Terminal Schedule GB-400/2
1626/A3	2	B	10.12.97	Terminal Schedule GB-400/2
1633/A4	-	A	23.4.96	Terminal Rails GB-80 & GB-110
1634/A3	-	B	11.3.97	Earth Continuity Plate & Base Plate GB-80
1635/A3	-	B	11.3.97	Earth Continuity Plate & Base Plate GB-110
1636/A4	-	A	23.4.96	Terminal Rails GB-220
1637/A3	-	B	2.9.97	Earth Continuity Plate & Base Plate GB-220
1638/A3	-	B	2.9.97	Recessed Earth Continuity Plate GB-220
1639/A4	-	B	11.3.97	Terminal Rails GB-400/2
1640/A3	-	A	19.4.96	Earth Continuity Plate & Base Plate GB-400/2
1697/A3	-	A	11.3.97	Earth Continuity Plate GB-255
1808/A3	-	B	24.6.99	Earth Continuity Plate GB-260
1809/A3	-	B	28.3.99	Earth Continuity Plate GB-400
1810/A3	-	A	3.7.98	Earth Continuity Plate GB-400/2
1776/A3	1	B	17.2.99	General Arrangement GB-80
1776/A3	2	A	2.7.98	General Arrangement GB-80



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Number	Sheet	Issue	Date	Description
1777/A3	1	B	17.2.99	General Arrangement GB-110
1777/A3	2	A	2.7.98	General Arrangement GB-110
1778/A3	1	A	2.7.98	General Arrangement GB-122
1778/A3	2	A	2.7.98	General Arrangement GB-122
1779/A3	1	A	2.7.98	General Arrangement GB-220
1779/A3	2	A	2.7.98	General Arrangement GB-220
1780/A3	1	A	2.7.98	General Arrangement GB-160
1780/A3	2	A	2.7.98	General Arrangement GB-160
1781/A3	-	A	2.7.98	General Arrangement GB-260
1782/A3	-	A	3.7.98	General Arrangement GB-255
1783/A3	-	A	3.7.98	General Arrangement GB-400/2
1784/A3	-	A	9.9.98	General Arrangement GB-400
1785/A4	-	A	7.4.98	Terminal Rails GB-122
1786/A4	-	A	7.4.98	Terminal Rails GB-160
1787/A4	-	A	7.4.98	Terminal Rails GB-260
1788/A4	-	A	7.4.98	Terminal Rails GB-255
1789/A4	-	A	7.4.98	Terminal Rails GB-400
1790/A3	-	B	17.2.99	Earth Continuity Plate GB-122
1791/A3	-	A	7.4.98	Recessed Earth Continuity Plate GB-122
1792/A3	-	B	17.2.99	Earth Continuity Plate GB-160
1793/A3	-	A	7.4.98	Recessed Earth Continuity Plate GB-160
1794/A3	-	A	7.4.98	Recessed Earth Continuity Plate GB-260
1796/A4	-	B	8.11.99	Approval Label
1797/A4	-	A	11.6.98	Earth Connection Facility Type XE-2
1798/A4	-	A	7.4.98	Earth Connection Facility Type XE-1
1799/A3	-	A	7.4.98	Earth Continuity Plate GB-255
1801/A3	-	A	7.4.98	Terminal Schedule GB-122 (Bartec Terminals)
1802/A3	-	A	7.4.98	Terminal Schedule GB-160 (Bartec Terminals)

This certificate may only be reproduced in its entirety and without any change, schedule included.

BASEEFA List Keywords
2TERMBOX



SUPPLEMENTARY EC-TYPE EXAMINATION CERTIFICATE

**Equipment or Protective System Intended for use
in Potentially explosive atmospheres
Directive 94/9/EC**

Supplementary EC-Type Examination Certificate Number: **BAS98ATEX3090X/1**

Equipment or Protective System: **TYPE GB RANGE OF TERMINAL BOXES**

Manufacturer: **BARTEC (UK) LTD**

Address: **Station Road, Facit, Whitworth, Rochdale, Lancashire, OL12 8LN**

This supplementary certificate extends EC-Type Examination Certificate No. BAS98ATEX3090X to apply to equipment or protective systems 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.

This certificate may only be reproduced in its entirety and without any change, schedule included.

File No: EECS 1412/03/011

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.



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DIRECTOR
3 February 1999



Schedule

SUPPLEMENTARY EC-TYPE EXAMINATION CERTIFICATE N° BAS98ATEX3090X/1

Description of the Variation to the Equipment or Protective System

Variation One

To permit the following optional changes:-

- (1) Use of alternative nylon insulating mounting pillars for the QS Earth Bar(s). They take the form of a single or two single combined pillars. These may be fitted inboard from their original mounting positions into M6 inserts.

When used the ambient temperature range is limited to -20°C to +65°C.

This allows the provision of a “clean” earth separate from the main earth connection which is provided via the earth continuity plate [ECP], rail mounted terminal or base plate mounted earth terminal.

- (2) As (1) above but the pillars are made from zinc plated brass or zinc plated/passivated mild steel. This allows the optional provision of the main earth inboard from its original mounting position and by using longer pillars gives additional clearance for cable entries on faces C & D.

When used the ambient temperature range is unchanged i.e. as per the original schedule.

- (3) Fitting of up to two M50 entries into each face of the GB-400 Terminal Box.

When two are fitted the ambient temperature range is limited to -20°C to +65°C.

Special Conditions For Safe Use

As per the original schedule, and additionally:-

1. For (1) and (3) above the ambient temperature range is limited to -20°C to +65°C.

Essential Health and Safety Requirements

As per the original schedule.

DRAWINGS

Number	Sheet	Issue	Date	Description
1784/A3	-	B	25.1.99	General Arrangement GB-400
1830/A3	1	A	25.1.99	Bartec QS Earth Bars Special Mounting Arrangements
1830/A3	2	A	25.1.99	Bartec QS Earth Bars Special Mounting Arrangements
1830/A3	3	A	25.1.99	Bartec QS Earth Bars Special Mounting Arrangements

This certificate may only be reproduced in its entirety and without any change, schedule included.



SUPPLEMENTARY EC-TYPE EXAMINATION CERTIFICATE

**Equipment or Protective System Intended for use
in Potentially explosive atmospheres
Directive 94/9/EC**

Supplementary EC-Type Examination Certificate Number: **BAS98ATEX3090X/2**

Equipment or Protective System: **TYPE GB RANGE OF TERMINAL BOXES**

Manufacturer: **BARTEC (UK) LIMITED**

Address: **Station Road, Facit, Whitworth, Rochdale, Lancashire, OL12 8LN**

This supplementary certificate extends EC-Type Examination Certificate No. BAS98ATEX3090X to apply to equipment or protective systems 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.

This certificate may only be reproduced in its entirety and without any change, schedule included.

File No: EECS 1412/03/011

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.



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



TP
I M CLEARE
DIRECTOR
30 June 2000



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Schedule

14 SUPPLEMENTARY EC-TYPE EXAMINATION CERTIFICATE N° BAS98ATEX3090X/2

Description of the Variation to the Equipment or Protective System

VARIATION TWO

To allow five entry holes, either 16 or 20mm, to be drilled in the lid of type GB-220 enclosures as specified on drawings 1867A3 sheets 1 and 2. The holes can either be tapped or clearance holes.

The lid may additionally be fitted with an internal earth continuity plate (ECP) made from either 3mm brass or 1.2mm steel plate.

The holes in the brass ECP are already tapped and require clearance holes in the lid of the enclosure.

Clearance holes are drilled in the steel ECP so the enclosure lid can either have tapped or clearance holes. A locking nut is required on the cable entry device when a steel ECP is used.

Report Nos.

None

Special Conditions For Safe Use

As per the original schedule, subsequent variations, and additionally:-

1. When holes are drilled in the lid the terminal box must be protected against impact by installation within a larger enclosure.

Essential Health and Safety Requirements

See original certificate.

DRAWINGS

Number	Sheet	Issue	Date	Description
1867/A3	1	A	22/6/00	Special lid for GB-220
1867/A3	2	A	22/6/00	Special lid for GB-220
1868/A3		A	22/6/00	Brass continuity plate for GB-220 lid
1869/A3		A	22/6/00	Steel continuity plate for GB-220 lid

This certificate may only be reproduced in its entirety and without any change, schedule included.



1 **SUPPLEMENTARY TYPE EXAMINATION CERTIFICATE**

2 **Equipment Intended for use in Potentially Explosive Atmospheres**
3 **Directive 94/9/EC**

3 Supplementary Type Examination Certificate Number: **BAS98ATEX3090X/3**

4 Equipment: **TYPE GB RANGE OF TERMINAL BOXES**

5 Manufacturer: **BARTEC (UK) LIMITED**

6 Address: **Rochdale, Lancashire, OL12 8LN**

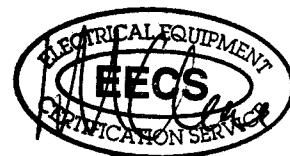
7 This supplementary certificate extends Type Examination Certificate No. BAS98ATEX3090X to apply to equipment designed and constructed in accordance with the specification set out in the Schedule of the said Certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

This Supplementary Certificate shall be held with the original Certificate.

This certificate may only be reproduced in its entirety and without any change, schedule included.

File No: EECS 1412/03/011

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.



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I M CLEARE
DIRECTOR
22 January 2001



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Schedule

14

SUPPLEMENTARY TYPE EXAMINATION CERTIFICATE N° BAS98ATEX3090X/3

Description of the Variation to the Equipment

VARIATION THREE

A specific arrangement for use in the GB220 is specified as defined in the drawing 1882/A4. In this arrangement the ambient range is specified as +70°C to -55°C. The input current is limited to 10A maximum and the output circuits carry 1.25A.

In this specific arrangement the internal dissipated power is 0.66W.

Report No.

None.

Special Conditions For Safe Use

As per the original schedule and additionally:

The input circuits are limited to 10A maximum.

Essential Health and Safety Requirements

See original certificate.

DRAWING

Number	Issue	Date	Description
1882/A4	A	17-1-01	Specific wiring arrangement for GB220

This certificate may only be reproduced in its entirety and without any change, schedule included.



1 SUPPLEMENTARY EC - TYPE EXAMINATION CERTIFICATE

**2 Equipment or Protective System Intended for use in Potentially Explosive Atmospheres
Directive 94/9/EC**

3 Supplementary EC - Type Examination Certificate Number: **BAS98ATEX3090X/4**

4 Equipment or Protective System: **TYPE GB RANGE OF TERMINAL BOXES**

5 Manufacturer: **BARTEC (UK) LIMITED**

6 Address: **Station Road, Facit, Whitworth, Rochdale, Lancashire, OL12 8LN**

7 This supplementary certificate extends EC – Type Examination Certificate No. BAS98ATEX3090X to apply to equipment or protective systems 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.

The original certificate was issued by The Electrical Equipment Certification Service, Notified Body Number 0600, which retains responsibility for its original documentation. Baseefa (2001) Ltd., Notified Body Number 1180, is responsible only for the additional work relating to this supplementary certificate and any other supplementary certificate it has issued.

This certificate may only be reproduced in its entirety, without any change, schedule included.

Baseefa (2001) Ltd. Customer Reference No. 1412

Project File No. 03/0538

This certificate is granted subject to the general terms and conditions of Baseefa (2001) Ltd. It does not necessarily indicate that the equipment may be used in particular industries or circumstances.

Baseefa (2001) Ltd.

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R S SINCLAIR

DIRECTOR
On behalf of
Baseefa (2001) Ltd.



13

Schedule

14

Certificate Number BAS98ATEX3090X/4

15 Description of the variation to the Equipment or Protective System

Variation 4.1

To include ATEX component certified terminals from Weidmuller, Phoenix, Weco and Bartec as specified on the drawings listed below.

16 Report Number

None.

17 Special Conditions for Safe Use

As those listed previously and as shown below:

1. For the DFG type earth terminal, the insulation shall not extend more than 3mm from the metal in the terminal throat and the bared end of each lead shall not extend beyond the other side of the slot by more than 2mm.
2. The DFG type earth terminal shall not be used in ambient temperatures above 40°C.
3. The DFG type terminal may only be fitted with a maximum of two conductors.
4. The BET2 earth terminal caps, used and unused, shall be tightened down with a torque of between 2 and 6 Nm maximum.

18 Essential Health and Safety Requirements

Compliance with the Essential Health and Safety Requirements is not affected by this variation.

19 Drawings and Documents

Number	Sheet	Issue	Date	Description
1153/A3	1	F	12/09/2003	TERMINAL SCHEDULE FOR TYPE GB-122
1153/A3	2	D	12/09/2003	TERMINAL SCHEDULE FOR TYPE GB-122
1153/A3	3	C	12/09/2003	TERMINAL SCHEDULE FOR TYPE GB-122
1153/A3	4	C	12/09/2003	TERMINAL SCHEDULE FOR TYPE GB-122
1155/A3	1	E	12/09/2003	TERMINAL SCHEDULE FOR TYPE GB-160
1155/A3	2	D	12/09/2003	TERMINAL SCHEDULE FOR TYPE GB-160
1155/A3	3	C	12/09/2003	TERMINAL SCHEDULE FOR TYPE GB-160
1155/A3	4	C	12/09/2003	TERMINAL SCHEDULE FOR TYPE GB-160
1168/A3	1	E	12/09/2003	TERMINAL SCHEDULE FOR TYPE GB-260
1168/A3	2	D	12/09/2003	TERMINAL SCHEDULE FOR TYPE GB-260
1168/A3	3	C	12/09/2003	TERMINAL SCHEDULE FOR TYPE GB-260
1174/A3	1	E	12/09/2003	TERMINAL SCHEDULE FOR TYPE GB-255
1174/A3	2	D	12/09/2003	TERMINAL SCHEDULE FOR TYPE GB-255
1174/A3	3	C	12/09/2003	TERMINAL SCHEDULE FOR TYPE GB-255



Number	Sheet	Issuc	Date	Description
1180/A3	1	F	12/09/2003	TERMINAL SCHEDULE FOR TYPE GB-400
1180/A3	2	D	12/09/2003	TERMINAL SCHEDULE FOR TYPE GB-400
1180/A3	3	B	12/09/2003	TERMINAL SCHEDULE FOR TYPE GB-400
1624/A3	-	D	12/09/2003	TERMINAL SCHEDULE FOR TYPE GB-80 & GB-110
1625/A3	1	C	12/09/2003	TERMINAL SCHEDULE FOR TYPE GB-220
1625/A3	2	D	12/09/2003	TERMINAL SCHEDULE FOR TYPE GB-220
1625/A3	3	B	12/09/2003	TERMINAL SCHEDULE FOR TYPE GB-220
1625/A3	4	A	12/09/2003	TERMINAL SCHEDULE FOR TYPE GB-220
1625/A3	5	A	12/09/2003	TERMINAL SCHEDULE FOR TYPE GB-220
1626/A3	1	C	12/09/2003	TERMINAL SCHEDULE FOR TYPE GB-400/2
1626/A3	2	C	12/09/2003	TERMINAL SCHEDULE FOR TYPE GB-400/2
1626/A3	3	A	12/09/2003	TERMINAL SCHEDULE FOR TYPE GB-400/2
1801/A3	-	B	12/09/2003	TERMINAL SCHEDULE FOR TYPE GB-122 (Bartec)
1802/A3	-	B	12/09/2003	TERMINAL SCHEDULE FOR TYPE GB-160 (Bartec)