

SYSTEMS APPROVALS PTY.LTD.

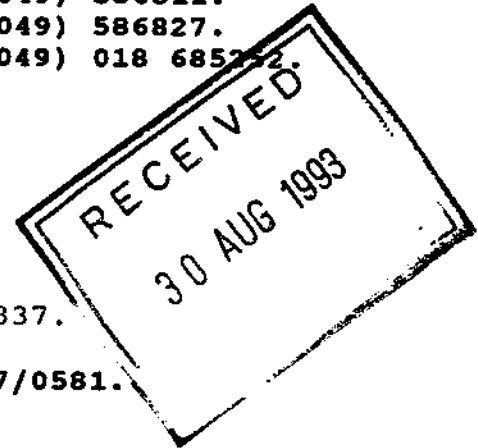
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The Manager,
Bramco Electronics
P.O.Box 15,
LAMBTON. N.S.W. 2299.



OUR REF: SA337.

FILE REF: M87/0581.

ATTENTION: Mr GIL LEISHMAN.

DATE: 26/08/1993.

SUPPLEMENTARY APPROVAL OF APPARATUS

Dear Sir,

APPARATUS: 3300 VOLT, 3 CHANNEL BARRIER, FOR USE
WITH CPM-1 ELECTRICAL PROTECTION SYSTEM.

TYPE: B 3300.

PREVIOUS APP No.: MDA Ex.ib.1842.

SUPPLEMENTARY APP No.: MDA Ex.ib.1842.

I refer to your application for approval of modifications to the above apparatus for use in coal mines of New South Wales as required by the Coal Mines Regulation Act, 1982.

Please find enclosed herewith the relevant supplementary approval documentation.

Yours Faithfully,

A handwritten signature in black ink, appearing to read "A.J. Weeks".

A.J.Weeks
Assessing Authority
No. MDA-A2507
FOR THE CHIEF INSPECTOR OF COAL MINES.

encl.

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New South Wales

Department of Mineral Resources
Accredited Assessing Authority MDA-M2507

**COAL MINES REGULATION ACT, 1982.
NOTICE OF SUPPLEMENTARY APPROVAL**

NEW APPROVAL No.: Ex.ib.1842.

FILE No.: M87/0581.

DATE.: 26/08/1993.

It is hereby notified that the Chief Inspector of Coal Mines, pursuant to the provisions of Clause 6 of the Coal Mines Regulation (Approval of Items) Regulation, 1984, and for the purposes of Clause 27 of the Coal Mines Regulation (Electrical-Underground Mines) Regulation, 1984, approves of variations to the apparatus listed herein as being in compliance with the requirements of, and for the purposes of the said Clause 27.

Description: 3300 Volt, 3 CHANNEL BARRIER, FOR USE WITH CPM-1 ELECTRICAL PROTECTION SYSTEM.

Old Identification: Type B 3300.

New Identification: Type B 3300.

Category (Clause 27): EXPLOSION PROTECTED.

Sub Category: INTRINSICALLY SAFE.

This supplementary is issued to;

Name: BRAMCO ELECTRONICS.

Address: P.O.BOX 15, LAMBTON. NSW. 2299.

The original or previous Approval No.: MDA Ex.ib.1842. was issued to:

Name: BRAMCO ELECTRONICS.

Address: P.O.BOX 15, LAMBTON. NSW. 2299.

It is the responsibility of this approval holder to ensure that the above apparatus or cable is modified, tested, and supplied in accordance with the requirements of this approval, and where applicable the original approval.

This approval does not in any way reduce the need for manufacturers to comply with the Occupational Health and Safety Act No. 20, 1983 Section (18) Division 1, Part III.

A.J. Weeks

Assessing Authority

No.MDA-A2507

FOR THE CHIEF INSPECTOR OF COAL MINES

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New South Wales

Department of Mineral Resources
Accredited Assessing Authority MDA-M2507

**COAL MINES REGULATION ACT, 1982
NOTICE OF SUPPLEMENTARY APPROVAL**

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DATE.: 26/08/1993.

APPROVED VARIATIONS.

The use of a Bramco Electronics, 3300 Volt, 3 Channel Barrier, designated Type: B 3300, in conjunction with the previously approved Bramco Electronic CPM-1 Electrical Protection System.

The Barrier supplies power for Earth Fault Lockout and Loss of Vacuum/Freeze Contacts protection.

The Type: B 3300 Barrier has high impedance inductors connected to the input of each channel. The Inductors may be mounted internally or externally to the Barrier Unit.

Barrier Parameters

Max Input Voltage $U_m = 3300$ Volts.
Max Output Voltage $U_o = 15.75$ Volts.
Max Output Current $I_o = 1$ mAmp. (Standard Version)
Max Output Current $I_o = 16$ mA. (Apprvd. Infallible Transformer)

Total Parameters for connecting Inductors & Barrier to Supply.

Max Output Capacitance $C_o = 14$ μ F.
Max Output Inductance $L_o = 1000$ mH.

DRAWINGS.

0594189 Original Dated 07/05/1993.
0594190 Original Dated 07/05/1993.
0594191 Original Dated 18/05/1993.
0514192 Original Dated 07/05/1993.

A.J. Weeks
Assessing Authority
No. MDA-A2507
FOR CHIEF INSPECTOR OF COAL MINES

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New South Wales

Department of Mineral Resources

Accredited Assessing Authority MDA-M2507

**COAL MINES REGULATION ACT, 1982
NOTICE OF SUPPLEMENTARY APPROVAL**

APPROVAL No.: Ex.ib.1842.

FILE No.: M87/0581.

DATE.: 26/08/1993.

APPROVAL CONDITIONS

1. A copy of this approval shall be supplied with any of this apparatus supplied to a coal mine in New South Wales.
2. The Chief Inspector of Coal Mines has the right to vary or revoke this approval at any time.
3. Any repair to this apparatus that may affect its explosion protected properties shall be carried out only at a workshop registered for the purpose.
4. The manufacturer shall on his own responsibility carry out such tests and examinations as are necessary to ensure that this apparatus provides satisfactory operation in service.
5. The mains transformer was tested as an infallible type in accordance with Clause 3.2.2 of AS2380.7 and as a result of the provisions of Clause 4.3 of AS2380.7 the barrier assembly may be exempted from the need to be earthed when used in conjunction with the protection/monitoring, monitoring.

MARKING OF APPARATUS

The manufacturers name/mark, and approval number **MDA Ex.ib.1842.** shall be inscribed in a durable manner in a prominent position on the apparatus.

**A.J. Weeks
Assessing Authority
No. MDA-A2507
FOR CHIEF INSPECTOR OF COAL MINES**

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