



Health &
Safety
Executive

BASEEFA

British Approvals Service for Electrical Equipment in Flammable Atmospheres

1. **CERTIFICATE OF CONFORMITY**

2. BAS No Ex 842278

3. This certificate is issued for the intrinsically safe electrical system:

EUROBLOC-90 SHUNT DIODE SAFETY BARRIER SYSTEM

4. submitted for certification by:

SAFETY TECHNOLOGY LTD
of Feltham, Middlesex

5. This electrical system and any acceptable variation thereto is specified in the Schedule to this Certificate and the documents therein referred to.

6. BASEEFA confirms that the system has been found to comply with European Standard BS 5501:Part 9:1982 EN50 039

Relevant examination and test requirements are recorded in confidential Test Report No 84(i)164 dated 6 September 1984)

7. This system is coded

EEx ia IIC T4

8. The supplier and/or user, of the intrinsically safe electrical system referred to in this certificate, has the responsibility to ensure that the system conforms to the specification laid down in the Schedule to this certificate and has satisfied routine verifications and tests specified therein.



: SPA/12/621/07

DIRECTOR Sheet 1/4
6 September 1984

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

NUMBER Ex 842278

DATED 6 September 1984

SYSTEM

A EUROBLOC-90 SHUNT DIODE SAFETY BARRIER SYSTEM comprises:-

1. Apparatus located in a non-hazardous area (Safe Area).
 - 1.1 A Eurobloc-90 Shunt Diode Safety Barrier (Certificate No Ex 84B2235).
 - 1.2 Apparatus which is unspecified except that it must not be supplied from nor contain in normal or abnormal conditions a source of potential with respect to earth in excess of 250 volts r.m.s. or 250 volts d.c.
2. Apparatus which may be located in a Hazardous Area.
 - 2.1 Devices meeting the requirements of Clause 1.3 of BS 5501: Part 1: 1977 EN50 014 and installed in accordance with BS 5501: Part 7: 1977 EN50 020 Clause 4.1 and 5.
3. Permissible Interconnecting Cables.
 - 3.1 The Capacitance and Inductance OR Inductance to Resistance (L/R) ratio of the cables connected to the output (hazardous area) terminals of the Eurobloc-90 Shunt Diode Safety Barrier must not exceed the values listed in Table 1.

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TABLE 1

BARRIER TYPE	CONFIGURATION	CAPACITANCE in μF	INDUCTANCE OR L/R RATIO in mH	L/R RATIO in $\mu\text{H ohm}$	REMARKS
E911	A	10,000	0.2	62	
E912	A	10,000	0.2	62	
E913	B	10,000	0.2	62	
	C	10,000	0.2	62	
	D	10,000	0.055	23	
E914	B	10,000	0.2	62	
	C	10,000	0.2	62	
	D	10,000	0.055	23	
	E	1.8	0.2	30	
E921	A	1.6	0.8	58	
E921 (R)	A	1.6	0.8	58	
E922	A	1.6	0.8	58	
E923	B	1.6	0.8	58	
	C	1.6	0.8	58	
	D	1.6	0.17	21	
E924	B	1.6	0.8	58	
	C	1.6	0.8	58	
	D	1.6	0.17	21	
E925	B	0.13	4.2	55	
	C	1.6	0.8	58	
	D	0.13	0.4	33	
E925 (R)	CABLE PARAMETERS FOR THIS BARRIER ARE THE SAME AS TYPE 925				
E931	A	0.42	1.4	47	
E932	A	0.42	1.4	47	
E933	A	0.42	1.4	47	
	C	0.42	1.4	47	
	D	0.42	0.19	18.4	
E934	B	0.42	1.4	47	
	C	0.42	1.4	47	
	D	0.42	0.19	18.4	

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TABLE 2 (contd)

BARRIER TYPE	CONFIGURATION	CAPACITANCE	INDUCTANCE OR L/R RATIO		REMARKS
		in μF	in mH	in μH ohm	
E938	B	0.42	42	189	
	C	0.42	42	189	
	D	0.42	11	66	
	E	0.07	42	95	
E941	A	0.25	2.1	52.6	
E943	B	0.25	2.1	52.6	
	C	0.25	2.1	52.6	
E945	A	0.25	7.4	89	
E946	B	0.25	7.4	89	
	C	0.25	7.4	89	
	D	0.25	1.7	25	
E951	A	0.13	4.2	55	
E953	B	0.13	4.2	55	
	C	0.13	4.2	55	
E955	A	0.13	16	103	
E956	B	0.13	16	103	
	C	0.13	16	103	
	D	0.13	4.2	40	
E961	A	0.13			
E963	B	0.13			
	C	0.13			
E965	B	0.13	4.2	55	
	C	0.13			
	D	0.13	4.2	55	