

Spector Addressable Beacon System (SABS)

In areas of high ambient noise it is necessary to fit visual warning devices to alert personnel to critical life safety voice alarm messages. To assure the operator that the visual warning is functional at all times a SABS diagnostic system is fitted which automatically monitors the integrity of each visual warning flashing beacon.



The arrangement operates by automatically activating the beacon networks for several seconds at timed intervals and retrieving status of each device on an addressable basis. The timing between beacon testing can be set between minutes, hours or days; a usual test interval is one day.

The SABS configuration comprises of a SABS frame, which is located within the host ACE public address cubicle (ACE 18 or 100), and Beacon termination units - BTU1 sited inside each flashing beacon. BTU1 is a small processor module that is designed to operate in conjunction with a LAK6 xenon discharge tube light source beacon.

When a SABS test cycle is initiated the SABS frame activates all beacons connected to the system. During this time the BTU1 compares the voltage signature across the xenon tube assembly with parameters of a healthy xenon tube held in the processor memory.

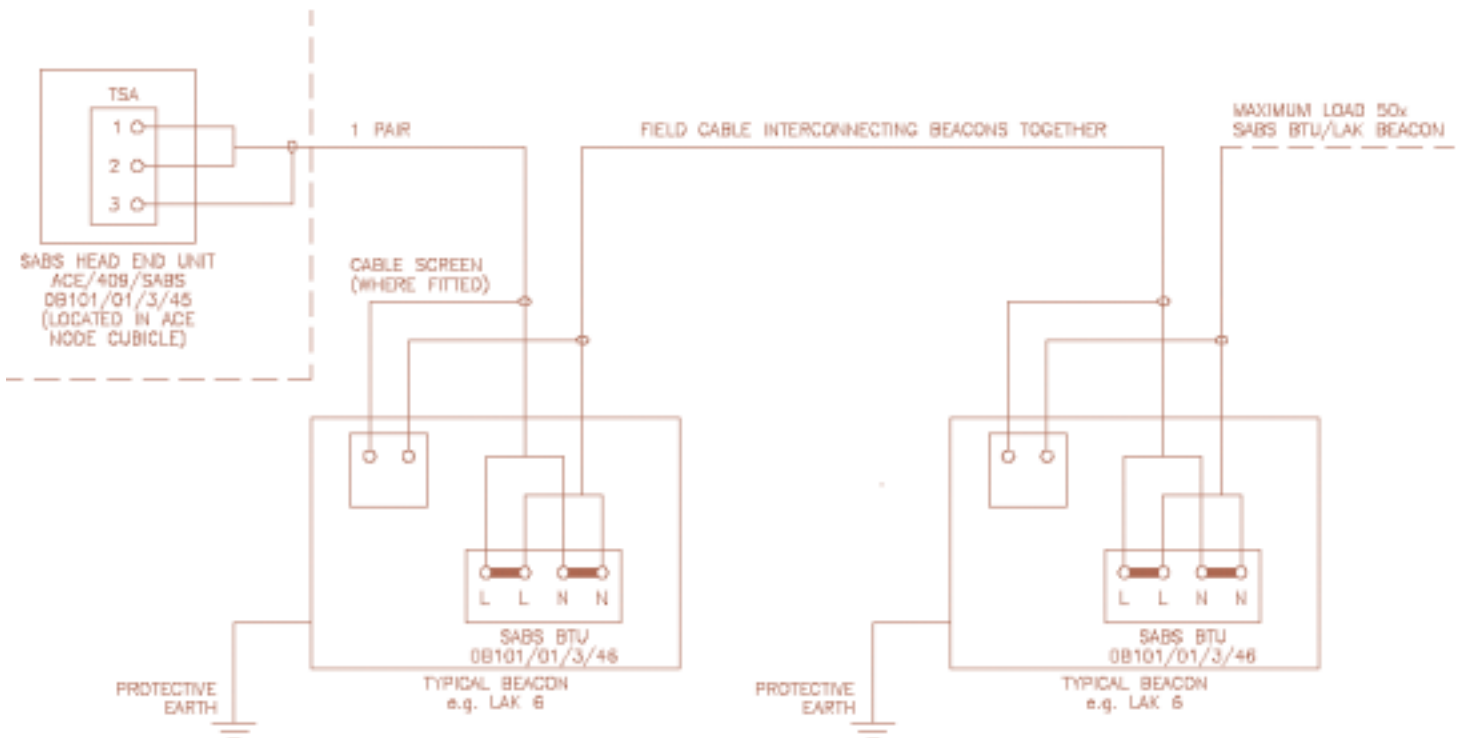
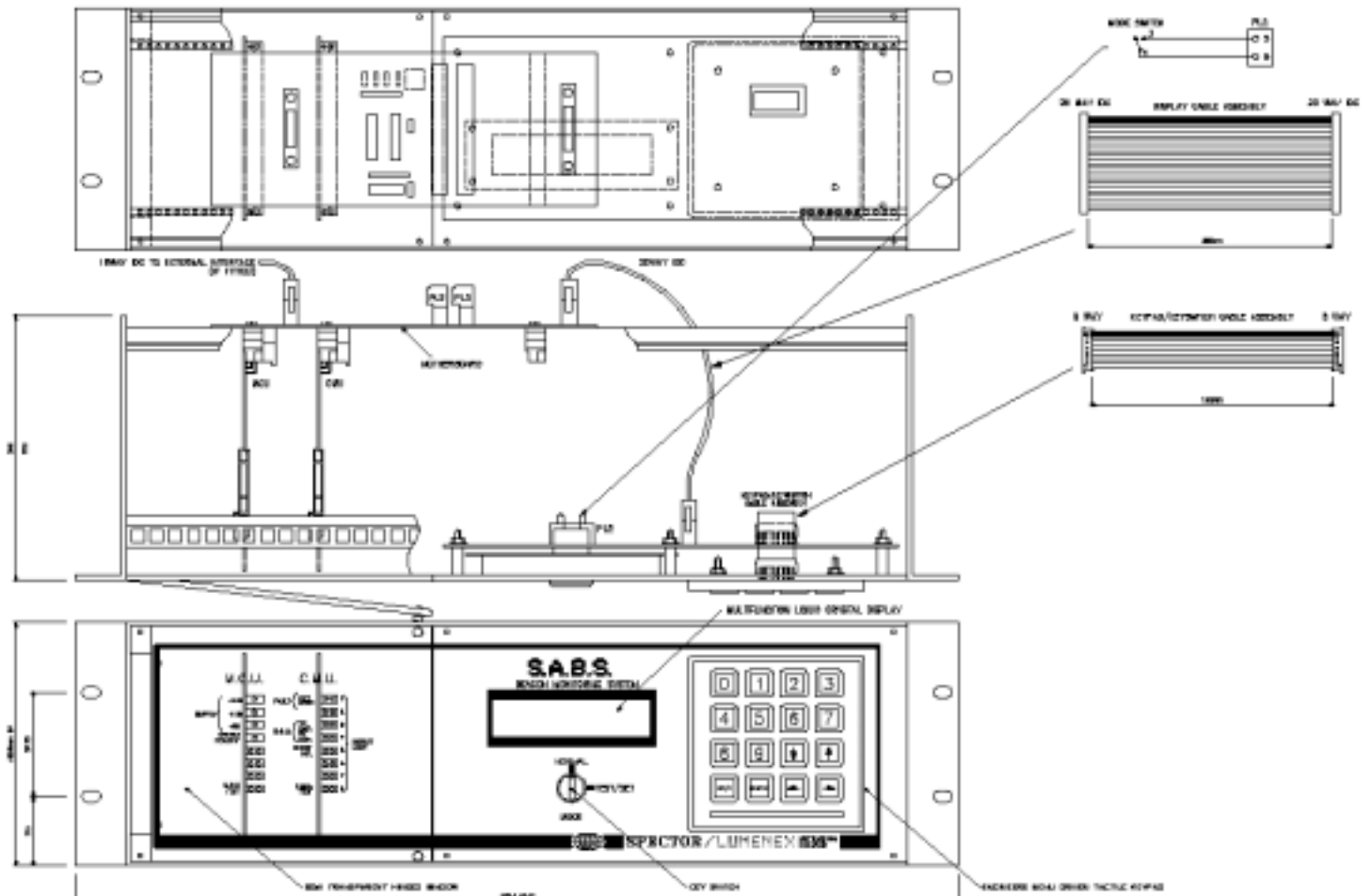
As the xenon tube ages it's internal impedance rises to the point where the device is no longer serviceable and this is reflected in the voltage monitored by the BTU1. Each flashing beacon requires D.C. or AC mains supply which is switched on and off under control of either the host ACE system, for normal operation or the SABS for test cycles. In addition a separate cable pair establishes data communication to each flashing beacon on a time division multiplex principle. Up to fifty flashing beacons BTU1 modules can be connected to a single data pair. The SABS frame has facility to extend up to eight data lines giving a maximum of four hundred beacons supportable by a single frame.

Electrical Specification

Maximum number of beacons BTU on one data bus	50
Data communications	Half duplex
Cable requirement	Single twisted pair min CSA / conductor 1.5mm ² up to 1000 metres.

Mechanical Specification

Dimensions	133mm (3 units high) 270mm deep 483mm wide 19 inch rack mount
Colour	Semi gloss black with silk screen white legends



NOTES

- 1) ALL CONDUCTORS EARTH FREE.
- 2) WHERE BEACONS ARE INSTALLED IN HAZARDOUS AREAS, ENSURE EQUIPMENT INSTALLATION MEETS BS 5345.

Spector Lumenex have a policy of continuous product improvement therefore this information is subject to change without notice.

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