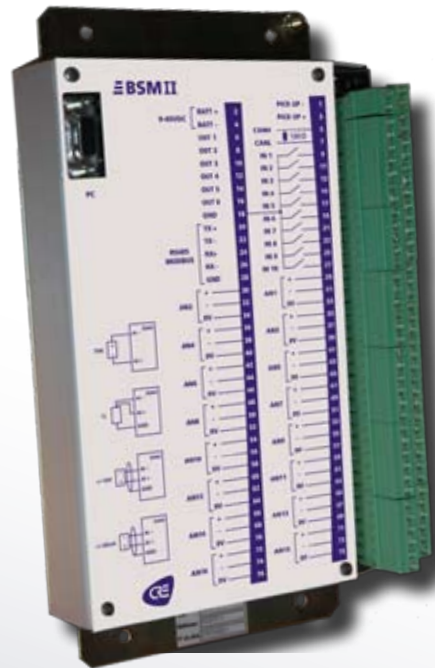


BSM II



Archiving, monitoring and remote surveillance

- Archiving, monitoring and remote surveillance
- Acquisition and processing of signals from all types of digital or analog sensors : K and J thermocouples, PT 100, Ω , 0-20 A, 0-10 VDC
- Embedded PLC
- Extended communication ports
- CAN bus, RS485 Modbus



CRE provides a global solution for engine diagnostics, control and maintenance: the BSM II.

A complete configurable electronic unit that integrates all the functions necessary for the control of an engine powered installation in a compact module.

INTERNAL PLC

The embedded PLC enables the processing of internal or external variables and the writing of equations to generate thresholds, events, and alarms, or to detect faults.

DATA MONITORING

Data monitoring can be done via an Internet browser or standard spreadsheet software (PC connection or electronic diary).

Thanks to its integrated HTML web server communication, the BSM II is compatible with all operating systems.

YEARS OF RECORDS

The parameters can be recorded and archived indefinitely in the BSM II memory (FIFO), thus preserving the "life history" of the plant or engine.

This memory is password protected. The data is stored in a flash memory. An internal backup battery maintains time and date for 3 years.

ARCHIVING MODES

The archiving function has 4 options:

Circular archiving:

Parameters which are chosen by the user are recorded with date and hour at specified intervals.

Event archiving:

Selected parameter values are stored before and after the event. The user can choose the number of records and the interval between each of them.

Counter:

Records and counts the number of operating hours. Other counters such as the number of starts can be programmed easily with equations.

Identification plate:

Records details of the plant and the engines such as serial number, engine type, dates...

EVENTS AND MAINTENANCE

Archiving upon event:

Recording is programmed for events such as faults. The electronic unit stores the parameters and their evolutions before and after the fault.

Maintenance:

Equations are programmed to generate a maintenance management schedule. The maintenance alarms occur according to the number of engine operating hours or according to the user's schedules.

Maintenance helper:

During maintenance and commissioning, the BSM II is used as a real time recorder. The datas recorded during on site tests are available for immediate use or for later drawing-up reports.

CONTROL AND SAFETY

The thresholds, which are programmable by channel, enable the control of a sequence, the triggering of an emergency stop or the signalling of a fault.

ACCESS AND USE

The BSM II can be configured with any Internet browser.

Configuration:

Simple and safe to program, any non computer savvy person can configure the module thanks to its pre programmed templates.

Data access:

The stocked data is recovered using any PC browser linked to Internet. The data can be accessed immediately using standard spreadsheet softwares.

The BSM II measurements can be displayed in real time.

Communication:

Modbus can be connected to a PLC, a PC or a modem. Via its integrated control unit and web server, the BSM II can be used to send e-mails upon events or according to the user's schedule.

INPUT/OUTPUT SIGNALS

16 configurable analog inputs:

- Thermocouples: type K, J...
- Current inputs: 0-1 mA, 0-20 mA, 4-20 mA, ± 20 mA or every direct current with or without external supply.
- Voltage Inputs: 0-5 V, 0-10 V, ± 1 VDC, ± 10 V, every direct or alternating voltage.
- Resistive inputs: PT100, sensors (Jaeger, VDO, etc.).

Speed or frequency input:

Configurable for either resistive sensors or the W terminal of a charge alternator. Ranges from 10Hz to 15 KHz, 0.2 VAC minimum.

10 digital inputs:

2 available configurations: normally open or normally closed.

6 digital outputs:

Solid state outputs which are normally energized or de-energized.

CHARACTERISTICS

- Temperature: 0° to + 70°C (Lloyd's norm).
- Supply: 8-38 VDC (EC norms).
- Vibrations: tested from 5 to 500Hz at 25G.
- EMC: CE Marked
- Waterproof: IP65 (optional).
- Humidity: 95% at 35°C.
- Dimensions (mm): 260 x 160 x 90.
- Communication ports: RS 232, RS485, CAN bus

PART NUMBER

A43Z3

SOFTWARE

Embedded website

ASSOCIATED PRODUCTS

Advanced: BSD / BSD PLUS

Complementary: GENSY 2.0

The screenshot shows a web browser window with the address bar displaying 'http://bsm/c001.htm'. The page title is 'BSM II - Analog Input 01'. The configuration section includes fields for Label (analog_in_1), Unit (° Celsius), Type (PT1000), Threshold 1 (1006 = '>' 0), Validity (1502 = Never), Timing (1943 = 0 s), Function (1011 = Unused), Threshold 2 (1008 = '>' 0), Validity (1503 = Never), Timing (1944 = 0 s), and Function (1012 = Unused). Below this is a 'Calibration' section with a table of 11 points, each with a value of 0. The table has columns for Point number, Point ID, and Value. At the bottom of the calibration table are buttons for 'Save', '<<', '>>', and 'Esc'.

Point	Point ID	Value
Point 1	1013	0
Point 2	1014	0
Point 3	1015	0
Point 4	1016	0
Point 5	1017	0
Point 6	1018	0
Point 7	1019	0
Point 8	1020	0
Point 9	1021	0
Point 10	1022	0
Point 11	1023	0

BSMII visualisation