



# Badge Reader

SBR

Data sheet: DS/EL/0006/EN Ed. 09-2017

SBR is a radio frequency proximity badge reader (contactless), ATEX and IECEx certified, used for driver identification in loading bays of oil storage tank terminals.

Contactless badge reading, high degree of mechanical protection (IP66) and ATEX and IECEx certification guarantee:

- no wearing and consequent long operating life
- safe use in hazardous area

SBR reads badges at 125 kHz with a ISO 7816 size standard (like credit cards).

Badge reading is performed by inserting the card into the front pocket.

Badge code is transmitted via serial communication line:

- to a TAS (Terminal Automation System) with SBR/A slave version (transmission upon request)
- to an electronic counter VEGAI / VEGAT or VEGA 3 with SBR/B master version (spontaneous transmission).

SBR is also equipped with three leds indicating:

- red: power ON
- green: correct reading of the badge
- yellow: output relay status

### **SBR/A SLAVE version** (transmission upon request)

In this case the TAS constantly asks the badge reader to check:

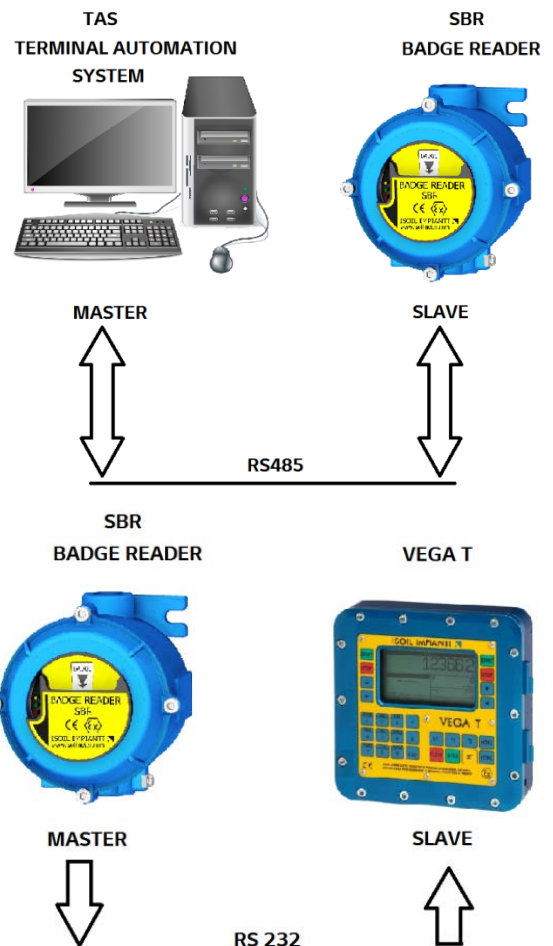
- if the badge is in the pocket
- badge code

The TAS can also drive one relay, placed in the badge reader, to control an external device such as a bar or a traffic light.

### **SBR/B MASTER version** (spontaneous transmission)

In this case the badge reader spontaneously and continuously transmits the code of the badge in the pocket.

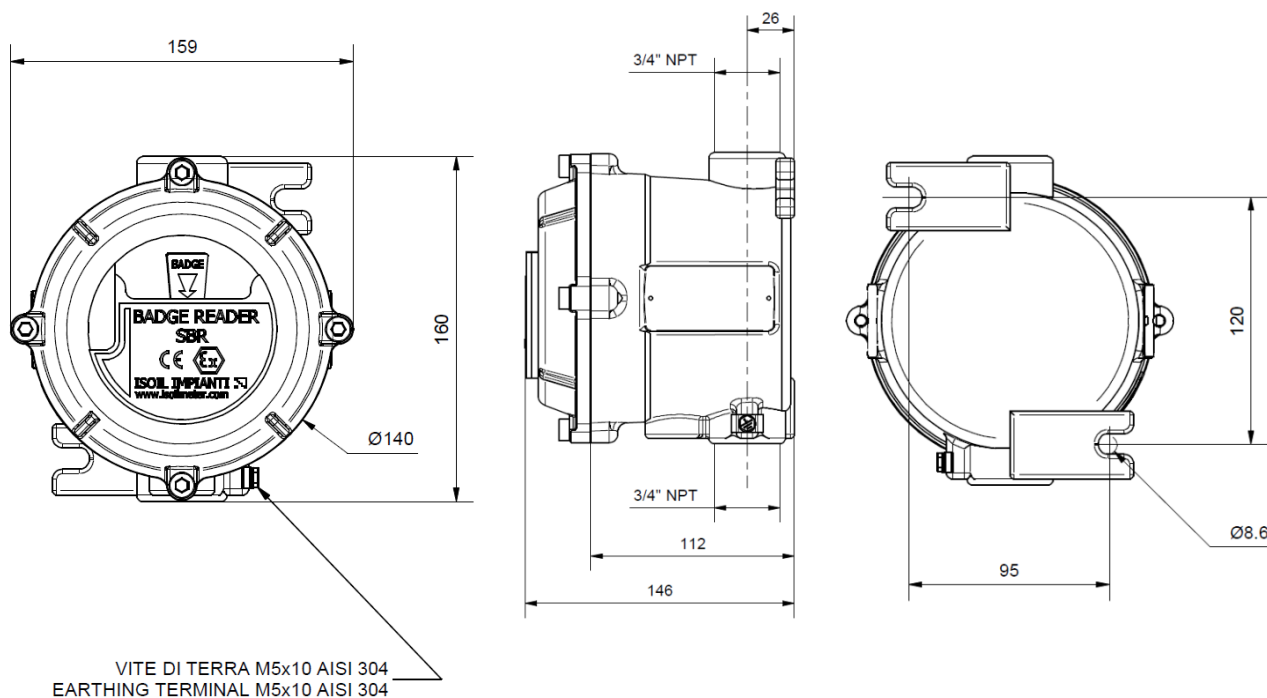
This version can also be used when there is no TAS and the use of the loading bay must be limited to operators provided with a badge enabled by a specific procedure on VEGAI / VEGAT or VEGA 3.



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## Dimensions

Dimensions in mm.



## Technical Characteristics

|                            |  |
|----------------------------|--|
| Power supply voltage:      | 115/230 Vac 50÷60 Hz   |
| Power consumption:         | 11 W max   |
| Operating temperature:     | -40 ÷ +60°C  |
| Umidity:                   | 0÷98% without condensation   |
| Mechanical protection:     | IP66   |
| Ex protection:             | II 2 G Ex d IIC T6 Gb (gas)<br>II 2 D Ex tb IIIC T85°C Db IP66 (dust)  |
| Custody alloy:             | Fusion of aluminium  |
| Weight:                    | 1.6 Kg   |
| Fixing:                    | Wall mounting two screws   |
| Cable entries:             | 2 cable entries 3/4" NPT   |
| Serial communication line: | <ul style="list-style-type: none"> <li>RS232, 9600 bauds, 8 bit for model SBR/A</li> <li>RS485, two wires, 9600 bauds, 8 bit for model SBR/B</li> </ul>                      |
| Mechanical relay output:   | 1 free contact NO (Normally Open), NC (Normally Closed), C (Common) <ul style="list-style-type: none"> <li>Voltage max 260 Vac / 220 Vdc</li> <li>Current max 5 A</li> </ul> |
| Badge:                     | <ul style="list-style-type: none"> <li>Frequency 125 kHz (Supported Tag: UNIQUE, Q5, T5577)</li> <li>Dimension ISO/IEC 7816</li> </ul>                                       |