| TUVRheinland®<br>CERT<br>ISO 9001   | DATA SHEETTech PovHall Effect Voltage SensorComport |                    |  |  |  |  |
|---|---|--------------------|--|--|--|--|
| PN : BJHVS-AS3.3  |   | VPN = 1200V - 500V |  |  |  |  |
| Features  |   |                    |  |  |  |  |
| Closed loop   | Supply voltage : +3,3V                              | DC •               | PCB mounting   |  |  |  |
| High accuracy   | Voltage output                                      | •                  | Can be customized  |  |  |  |
| Very good linearity   | •   |                    |  |  |  |  |
| <ul> <li>Low response time</li> </ul>   |   |                    |  |  |  |  |
| <ul> <li>Low temperature drift</li> </ul>   |   |                    |  |  |  |  |
|   |   | U. 1.7 C ×         | <sup>۲</sup> «روز» « ۲ « ۲ « ۲ « ۲ « ۲ « ۲ « ۲ « ۲ « ۲ « |  |  |  |
| Applications  |   |                    |  |  |  |  |
| <ul> <li>AC/DC variable speed motor driver</li> <li>Battery applications</li> </ul> |   |                    | COMPLIANT  |  |  |  |
| Uninterruptible power supplies (UPS)  |   |                    |  |  |  |  |
| <ul> <li>Power supplies for weiding applicatio</li> </ul>                           | ns  |                    | <b>REACh</b> ✓   |  |  |  |
|   |   |                    |  |  |  |  |
| ELECTRICAL DATA   |   |                    |  |  |  |  |
| BJHVS-AS3.3   |   | 5                  | 10   |  |  |  |
| Measuring voltage V <sub>PN</sub> (V)   | 12  | :00                | 500  |  |  |  |
| Nominal rms current I <sub>PN</sub> (mA)  |   | 5                  | 10   |  |  |  |
| Measuring range I <sub>PM</sub> (mA)  | 1   | 0                  | 20   |  |  |  |

| ACCURACY DYNAMIC PERFORMANCE                                   |                       | GENERAL & ISOLATION CHARACTERISTICS |                                |             |    |
|--|-----------------------|-------------------------------------|--------------------------------|-------------|----|
| Overall accuracy X <sub>G</sub> @ V <sub>PN</sub> , T=25℃      | ± 0,5                 | %                                   | Operating temperature          | -40 to +85  | C  |
| Zero offset voltage V <sub>OE</sub> @ I <sub>P</sub> =0, T=25℃ | 1,65 <sup>±0,5%</sup> | V                                   | Storage temperature            | -40 to +125 | C  |
| Offset voltage drift V <sub>OE</sub> @ -40℃ to +85℃            | ≤ ± 1                 | mV/℃                                | Weight (05/10)                 | 27/22       | g  |
| Linearity error $\epsilon_L$                                   | ≤ 1                   | % FS                                | Insulation voltage (50Hz, 1mn) | 2,5         | KV |
| Response time tr   | ≤ 5                   | μs                                  |                                |             |    |

50<sup>±0,1%</sup> 25 PPM

2500:1000

 $V_{OE} \pm 0,625$ 

+3,3<sup>±5%</sup>



Measuring resistance  $R_M(\Omega)$ 

Coil turns ratio K (P<sup>ry</sup>:S<sup>ry</sup>) Rated output voltage V<sub>O</sub> (V)

Supply voltage V<sub>C</sub> (Vdc)

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50<sup>±0,1%</sup> 25 PPM

1250:1000

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## DIMENSIONS



## **MECHANICAL CARACTERISTICS**

| General tolerance                   | ± 0,2 mm               |
|-------------------------------------|------------------------|
| Fastening and connection of primary | 2 pins 0,8 mm x 0,8 mm |
| Terminal connection                 | 3 pins 0,8 mm x 0,8 mm |

## Cautions :

• The choice of R1 is important, the best accuracy of the sensor is achieve when the current flowing through R1 is near the rated primary current;

- Considering the resistance of primary coil (compared with R1 and temperature difference kept as low as possible);
- Do respect electrical isolation within measure range;
- For the required connection circuit, see the drawing above.

## WARNING : Incorrect wiring may cause damage to the sensor.



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