



# IS interfaces

## 6. Digital inputs – transistor outputs




Principle of a galvanic insulation and reminders concerning I.S.

General specifications for galvanic insulation interfaces

Selection guide

Use of galvanic insulation

Table of equivalent references according to type of assembly

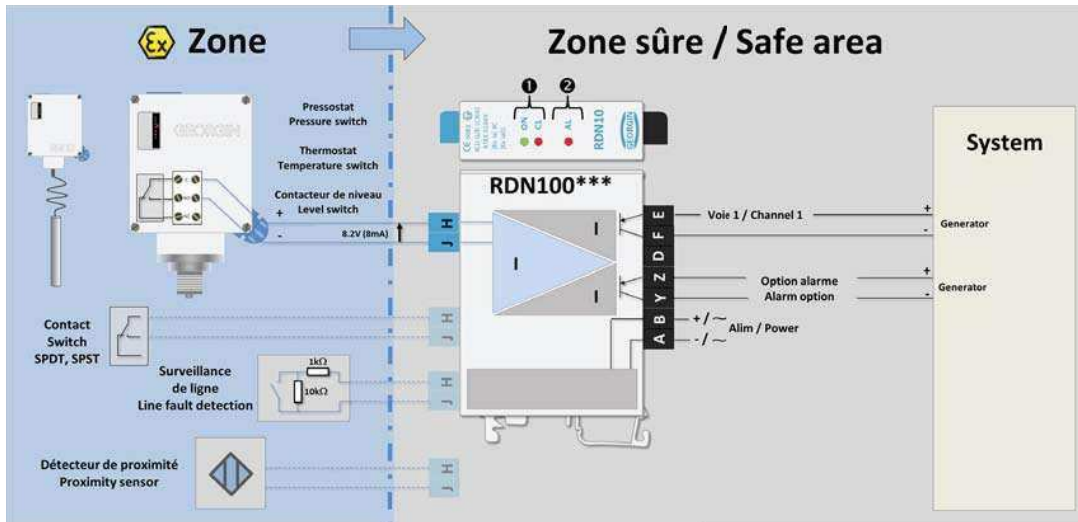
Ref.	Description (see technical data sheet for further information)	IS parameters ATEX marking																											
RDN100	<p>The RDN is an intrinsically safe, galvanic-isolated relay for switches or proximity sensors. The RDN powers switches in a hazardous area (8.2 V at 8 mA). Here the relay output (F E) is transistor, in contrast to the RDN110 (equipped with a relay).</p> <table border="1"> <thead> <tr> <th>Type</th> <th>Number of channels</th> <th>Options</th> <th>Power supply</th> </tr> </thead> <tbody> <tr> <td rowspan="5">RDN</td> <td rowspan="5">100</td> <td rowspan="5">1 channel 1 transistor output</td> <td>00</td> <td>No alarm</td> <td>0</td> <td>230 V AC</td> </tr> <tr> <td>AL</td> <td>With alarm</td> <td>1</td> <td>110 V AC</td> </tr> <tr> <td>B0</td> <td>Screw terminals</td> <td>2</td> <td>24/48 V DC</td> </tr> <tr> <td>BL</td> <td>Alarm + screw terminals</td> <td>7</td> <td>12 V DC</td> </tr> <tr> <td>--</td> <td>Other options (see technical data sheet)</td> <td></td> <td></td> </tr> </tbody> </table> <p> <ol style="list-style-type: none"> <li>Green LED to indicate power is supplied to the module. Red LED to indicate that the output transistor is conductive.</li> <li>Red LED (AL) to indicate that the alarm transistor is conductive. It becomes conductive when the proximity sensor (Namur) input is outside of its operating range.</li> </ol> </p>	Type	Number of channels	Options	Power supply	RDN	100	1 channel 1 transistor output	00	No alarm	0	230 V AC	AL	With alarm	1	110 V AC	B0	Screw terminals	2	24/48 V DC	BL	Alarm + screw terminals	7	12 V DC	--	Other options (see technical data sheet)			<p><b>HJ terminals:</b>  <b>U<sub>o</sub>:</b> 12 V  <b>I<sub>o</sub>:</b> 25 mA  <b>P<sub>o</sub>:</b> 150 mW  <b>Co:</b> 1410 nF  <b>Lo:</b> 45 mH</p> <p><b>Marking:</b>            II(1)G [Ex ia] IIC            II(1)D [Ex iaD] IIC            Certificate:            02ATEX6104X</p> 
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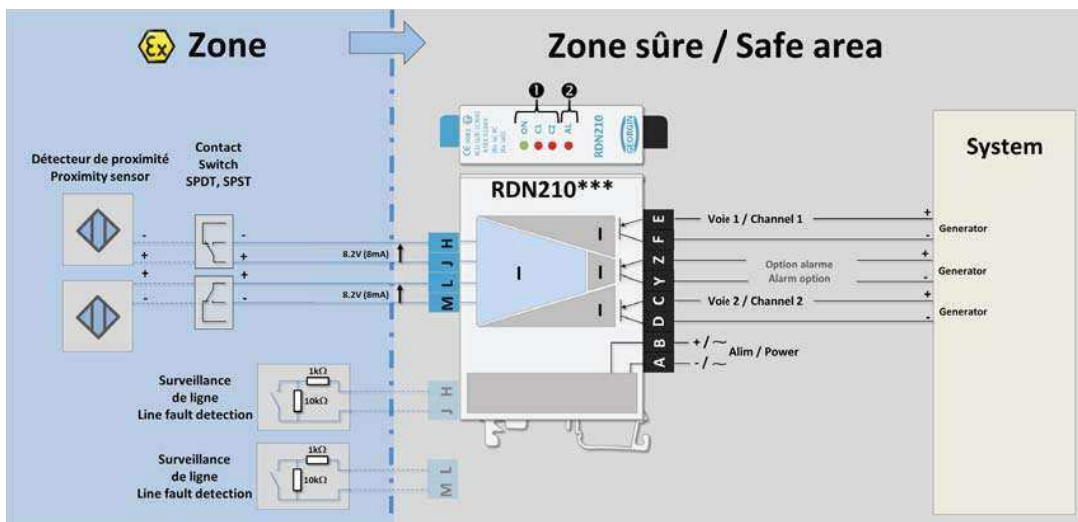


## Explanatory diagram

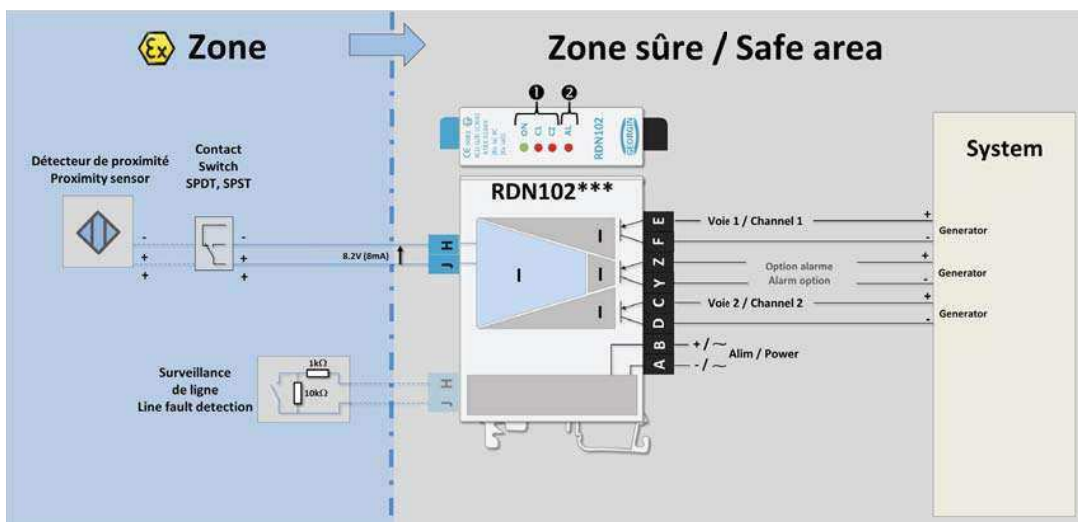
I/O



1 Input / 1 transistor Output



2 Inputs / 2 transistor Outputs



1 Input / 2 transistor Outputs

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