



17. Digital inputs – opto-isolator output signal isolator

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

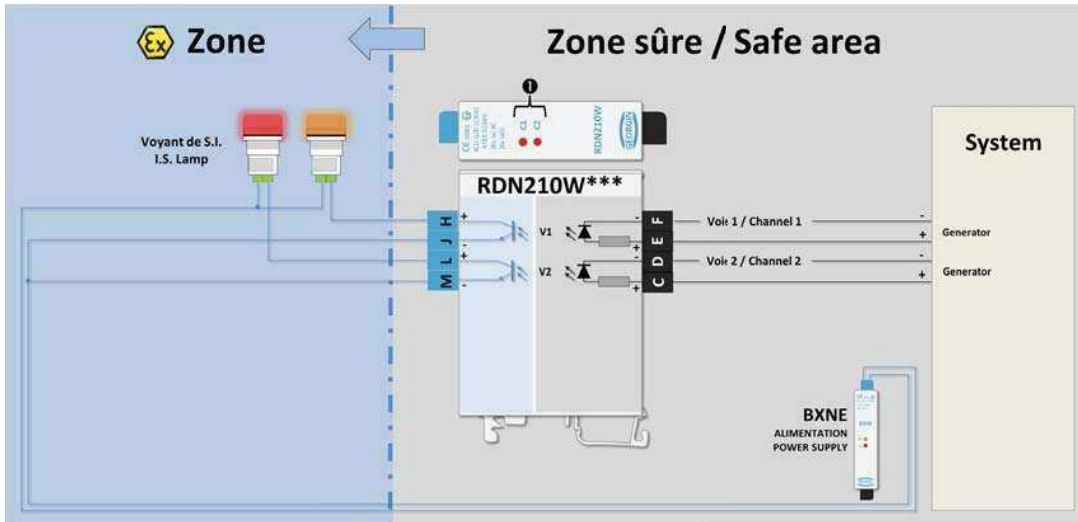
Ref.	Description (see technical data sheet for further information)	IS parameters ATEX marking																												
RDN210W	<p>The RDN210W is an intrinsically safe, galvanic insulated digital signal separator. This device does not have an external power supply. The opto-isolator output transistors (H+J-) or (L+M-) are controlled by an input voltage (E+F-) for channel 1 and (C+D-) for channel 2.</p> <table border="1"> <thead> <tr> <th>Type</th> <th>Model</th> <th>Number of channels</th> <th>Options</th> <th>Power supply</th> </tr> </thead> <tbody> <tr> <td rowspan="2">RDN</td> <td rowspan="2">210</td> <td rowspan="2">Opto-isolator IS input / NIS output</td> <td>W</td> <td>2 channels</td> <td>00</td> <td>Cage clamp terminals</td> <td>3</td> <td>24 V DC</td> </tr> <tr> <td></td> <td></td> <td>B0</td> <td>Screw terminals</td> <td>7</td> <td>12 V DC</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>8</td> <td>5 V DC</td> </tr> </tbody> </table> <p>① Red LED for each channel indicating if the output transistor is conductive or closed.</p>	Type	Model	Number of channels	Options	Power supply	RDN	210	Opto-isolator IS input / NIS output	W	2 channels	00	Cage clamp terminals	3	24 V DC			B0	Screw terminals	7	12 V DC							8	5 V DC	<p>Maximum current on intrinsic safety circuit: 100 mA</p> <p>Marking: II(1)G [Ex ia] IIC II(1)D [Ex iaD] IIC Certificate: 02ATEX6104X</p>
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RDN210V	<p>The RDN210V is an intrinsically safe, galvanic insulated digital signal separator. Identical to the RDN210W, the RDN210V has four channels.</p> <table border="1"> <thead> <tr> <th>Type</th> <th>Model</th> <th>Number of channels</th> <th>Options</th> <th>Power supply</th> </tr> </thead> <tbody> <tr> <td rowspan="2">RDN</td> <td rowspan="2">210</td> <td rowspan="2">Opto-isolator IS input / NIS output</td> <td>V</td> <td>4 channels</td> <td>00</td> <td>Cage clamp terminals</td> <td>3</td> <td>24 V DC</td> </tr> <tr> <td></td> <td></td> <td>B0</td> <td>Screw terminals</td> <td>7</td> <td>12 V DC</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>8</td> <td>5 V DC</td> </tr> </tbody> </table> <p>① Red LED for each channel indicating if the output transistor is conductive or closed.</p>	Type	Model	Number of channels	Options	Power supply	RDN	210	Opto-isolator IS input / NIS output	V	4 channels	00	Cage clamp terminals	3	24 V DC			B0	Screw terminals	7	12 V DC							8	5 V DC	<p>Maximum current on intrinsic safety circuit: 100 mA</p> <p>Marking: II(1)G [Ex ia] IIC II(1)D [Ex iaD] IIC Certificate: 02ATEX6104X</p>
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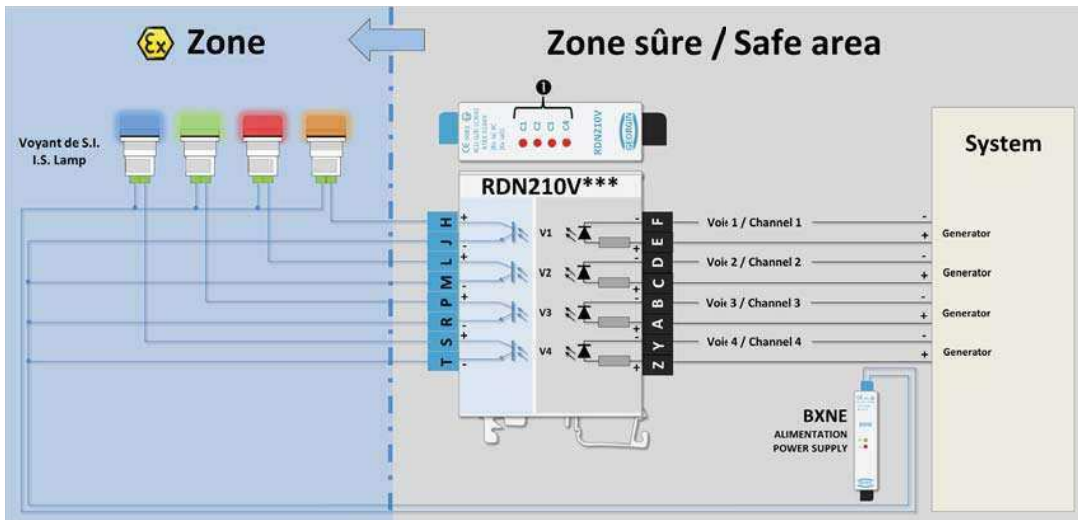


Explanatory diagram

I/O



2 opto-isolator channels



4 opto-isolator channels

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