7. Digital inputs – output relays with input memory

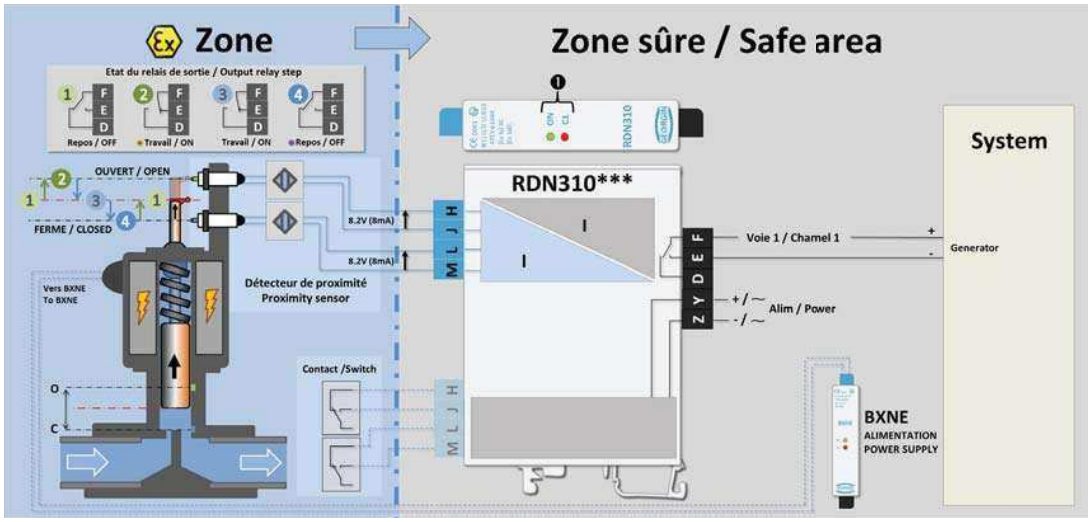
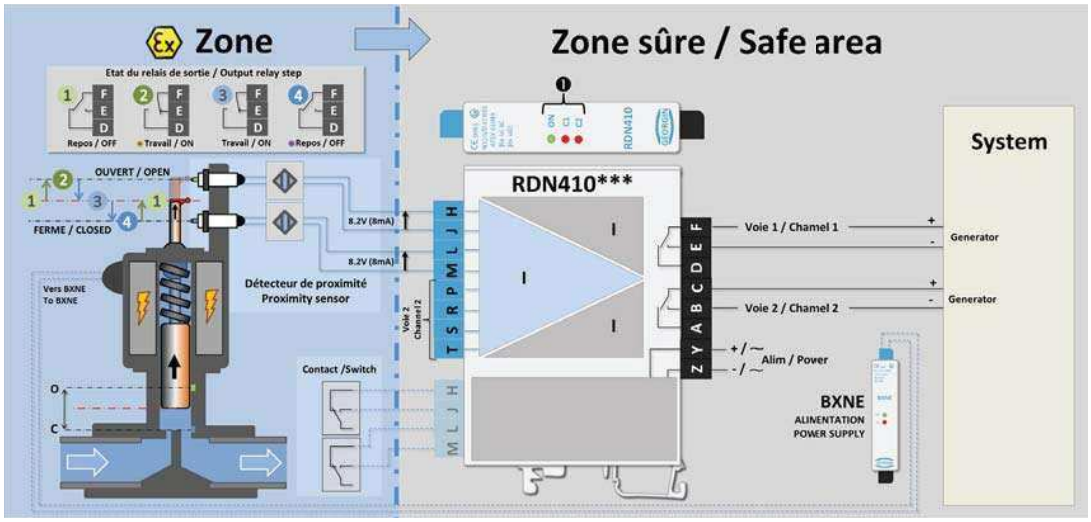
Ref.	Description (see technical data sheet for further information)	IS parameters ATEX marking
RDN310	The RDN310 is an intrinsically safe, galvanic-isolated bistable relay for switches or proximity sensors. It is used in the example shown opposite to interface stroke-end switches or proximity sensors on a solenoid valve. The benefit of this device is that it enables the last state detected on the input to be memorised on the output. When the first proximity sensor changes state, the RDN relay input detects this and the output relay also changes state. The output relay retains its state as long as the second RDN input does not detect a change of state by proximity sensor no. 2.	**HJ terminals**: **Uo**: 8.6 V **Io**: 9 mA **Po**: 19 mW **Co**, IIC: 6200 nF **Lo**, IIC: 350 mH **Marking**: II(1)G [Ex ia] IIC II(1)D [Ex iaD] IIC Certificate: 02ATEX6104X
RDN410	The RDN410 is an intrinsically safe, galvanic-isolated bistable relay for switches or proximity sensors. Identical to the RDN310, it has two channels (i.e. 4 inputs).	**HJ terminals**: **Uo**: 8.6 V **Io**: 9 mA **Po**: 19 mW **Co**, IIC: 6200 nF **Lo**, IIC: 350 mH **Marking**: II(1)G [Ex ia] IIC II(1)D [Ex iaD] IIC Certificate: 02ATEX6104X

Type	Number of channels		Options		Power supply	
RDN	310	2 Inputs - 1 Output	00	No alarm	0	230 V AC
			B0	Screw terminals	1	110 V AC
					2	24/48 V DC

❶ Green LED to indicate power is supplied to the module.
Red LED to indicate that the C1 output relay is excited.

Type	Number of channels		Options		Power supply	
RDN	410	4 Inputs - 2 Outputs	00	No alarm	0	230 V AC
			B0	Screw terminals	1	110 V AC
					2	24/48 V DC

❶ Green LED to indicate power is supplied to the module.
2 x red LED to indicate that the output relays (C1 and C2) are excited.

Explanatory diagram	I/O
	2 Inputs / 1 relay Output
	4 Inputs / 2 relay Outputs