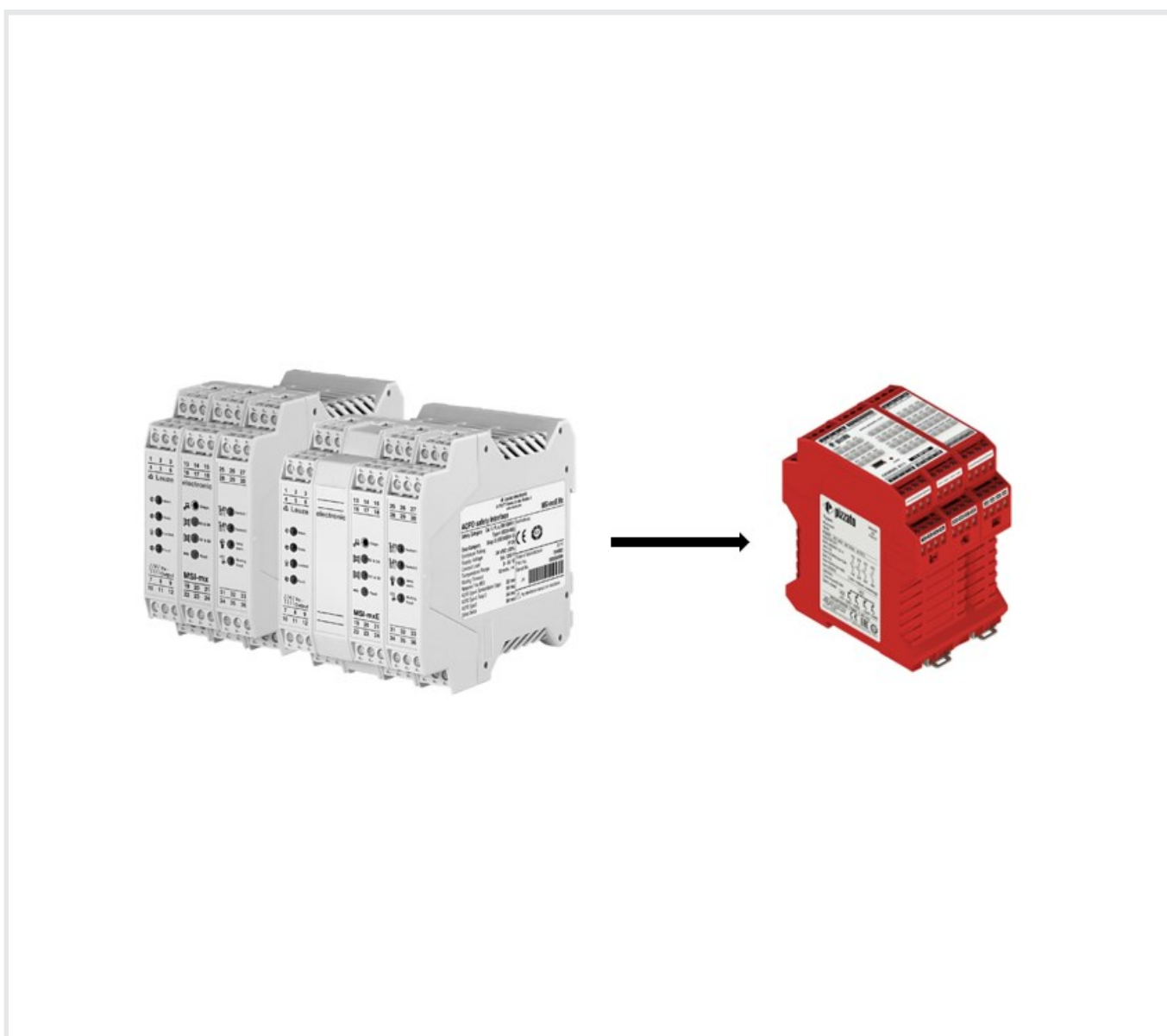



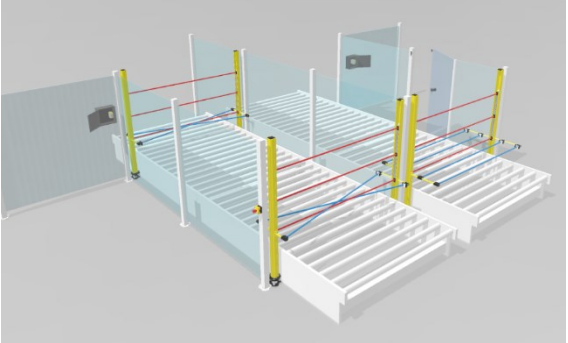
Stay flexible safely

S0018 MSI-m and MSI-mx replacement





## S0018 MSI-m and MSI-mx replacement

The current MSI-m(E)/R and MSI-mx(E)/Rx series will be phased out by November 2024 without a direct replacement. Due to the large number of used MSI-m devices in the market, there is an option to use the Pizzato CS MP306MO device with pre-programmed software as a replacement. The necessary rewiring is shown in the following tables.

<b>NOTICE</b>	
	<p>Two versions of the software were created. The customer must be specific, which version of SW is needed.</p> <ul style="list-style-type: none"> <li>- SW for Sequence muting (4 sensors opposite to each other)</li> <li>- SW for Parallel and double parallel muting (2 sensors across)</li> </ul> <div style="text-align: center;">  </div>

Rewiring MSI.. for Pizzato CS MP306MO				
MSI-m/R clamp	MSI-mx/RX clamp	Pizzato CS MP306MO	Identifier	Signal name/comments
22	22	I21	S1	AOPDs
23	23	I22	/ S2	AOPD
“read notice”	16	I23	S3	AOPDs
	17	I24	S4	AOPD
“read notice”	25	I15	1.1	Safety Switches
	26	I16	1.2	Safety Switches
“read notice”	34	I17	2.1	Safety Switches
	35	I18	2.2	Safety Switches
14 (0 VDC)	14 (0 VDC)	I37 (24 VDC)	EDM	EDM

<b>NOTICE</b>	
	<p>MSI-m/R does not have clamps 16, 17, 25, 26, 34 and 35, so Pizzato CS MP306MP has to be rewired:</p> <ul style="list-style-type: none"> <li>- I23 and I24 have to be connected with 24 VDC</li> <li>- I15 and I17 have to be connected with T11</li> <li>- I16 and I18 have to be connected with T12</li> </ul>

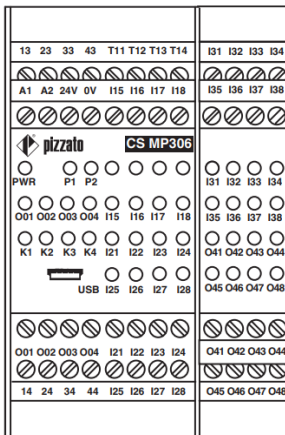
<b>NOTICE</b>	
	<p>Please, note the different logic of the EDM – I37. 24 VDC must be used for activation the EDM and not 0 VDC as in the previous solution.</p>

Rewiring MSIxx for Pizzato CS MP306MO				
MSI-m/R clamp	MSI-mx/RX clamp	Pizzato CS MP306MO	identifier	signal name/comments
15/	15/	T11/	T1/	Test pulses
24	24	T12	T2	
20	20	I25	M1	Muting Sensor
21	21	I26	M2	
31	31	I27	M3	
32	32	I28	M4	
13	13	I38	Reset	Reset
11/	11/	13/	OSSD1	potential free contact
10	12	14	OSSD1	
2/	2/	23/	OSSD2	
1	1	24	OSSD2	
-	18	O41	MSI-fault	Status
19	19	O42	S1 - S2 (S4)	
-	27	O43	1.1 - 2.2	
-	36	O44	Muting	
33	33	O45	Muting failure	
28	28	O1	Mutinglamp1	-
29	29	O2	Mutinglamp2	-
7	7	O3	State Relays	-
6	6	O4	locked	Status
4	4	24VDC and A1	24VDC	-
9	9	0VDC and A2	0V	-
MU1	MU1	I31	Muting zone 0V: S1/S2 24V: S1/S2 & S3/S4 (only for parallel muting)	Work mode
MU2	MU2	I32	0V: max. Muting time 10 min 24V: max. Muting time 100h	
DS2	DS2	I35	0V: EDM ON 24V: EDM OFF	
-	2 - 3	-33 - 34	SSD	
-	10	-	OSSD3 (NC)	It will not be reconnected.
30	30	-	Warning	
-	5	-	Warning (relays switching cycles)	
-	-	Bridged I34-O47	Internal error Feedback (Only for sequence muting)	Bridged because of internal reasons.
-	-	Bridged I36-O48	Internal OSSD Feedback	

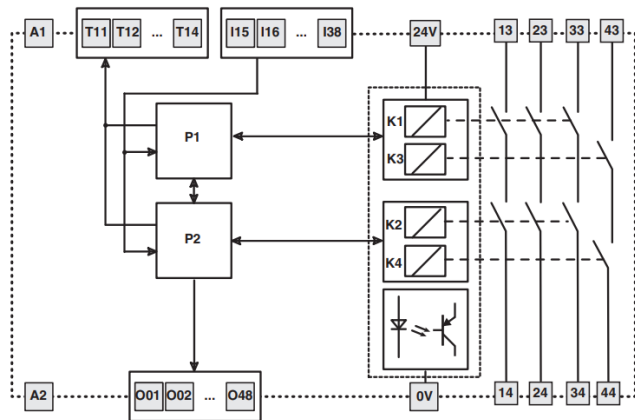
# Pizzato CS MP306MO

Example of pin assignment and internal wiring diagram of Pizzato CS MP306MO

### Pin assignment

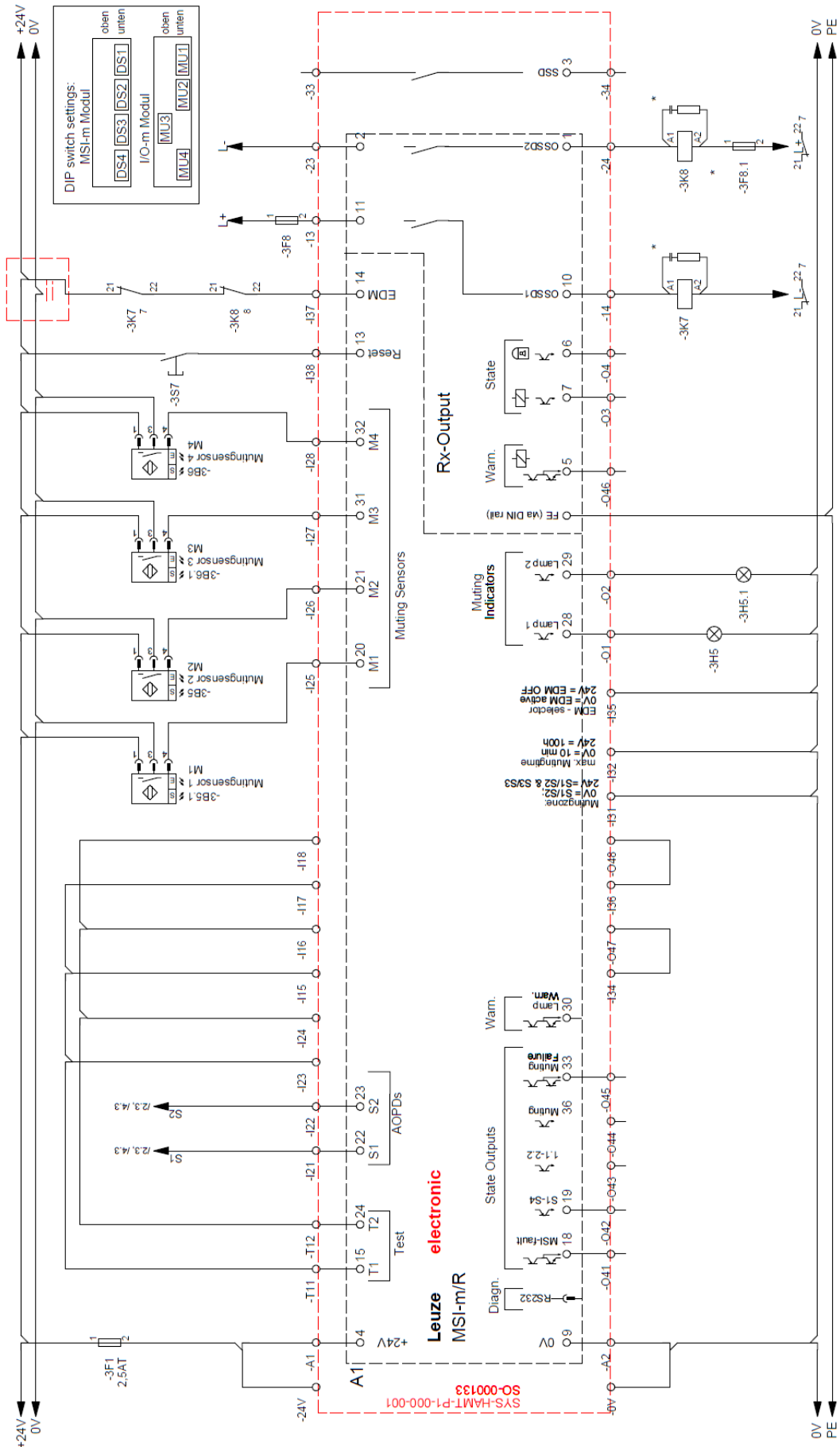


### Internal wiring diagram



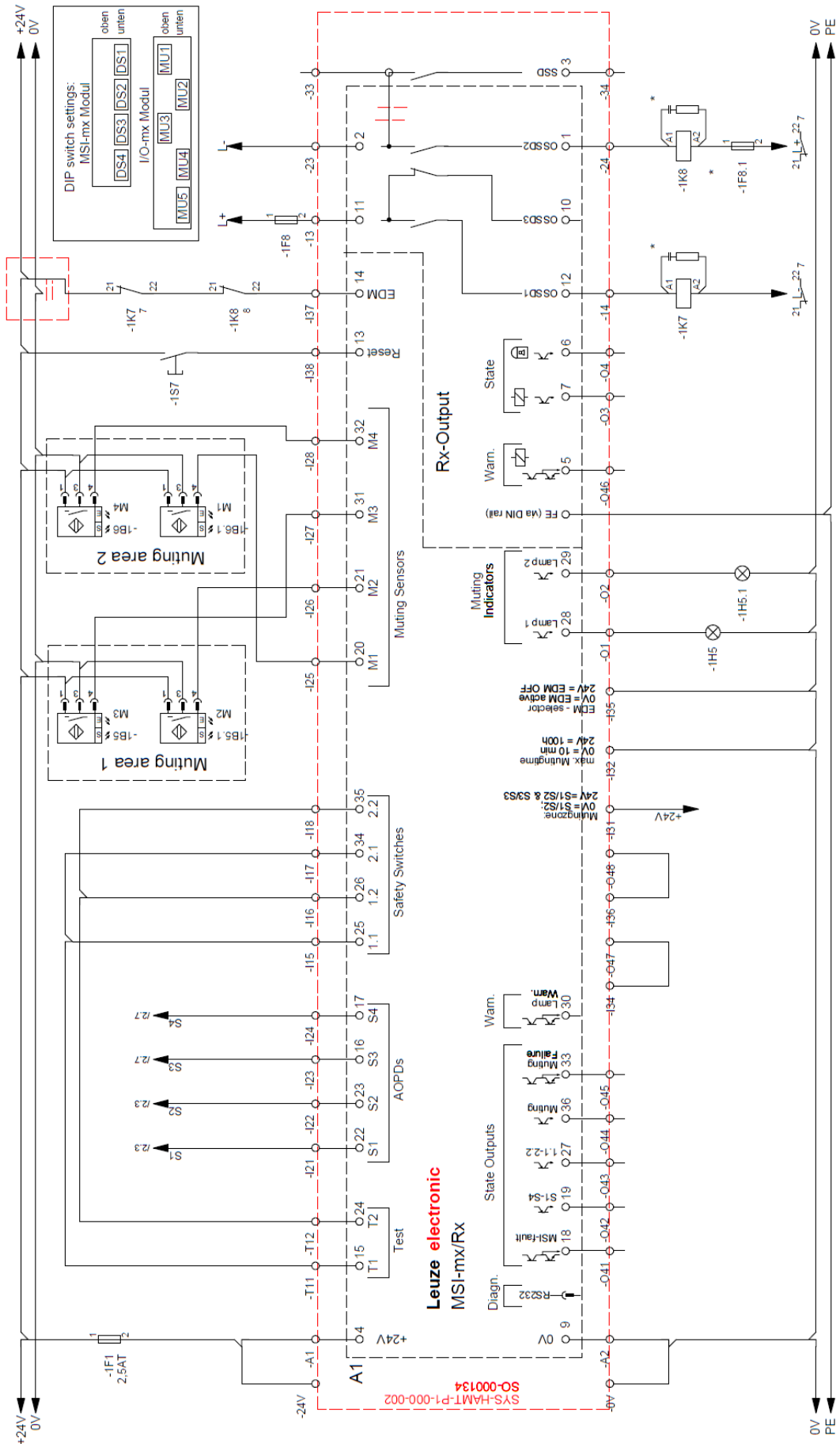
Pizzato signalization		
PWR LED	LEDs P1, P2	Possible fault cause
Off	Off	No power supply, incorrect connections, power wires cut, external fuses broken. Module fault
Green	Off	Normal operation
Green	Red	Non-restorable fault. Recommended action: try to restart the module, If the fault persists, send the module to be repaired.
Green	Red x 1 Blue x 1	Restorable fault: overcurrent on Tx or Ox outputs. Recommended action: disconnect the semiconductor signalling outputs (Ox) and the test outputs (Tx) to check whether an external short circuit is present.
Green	Red x 1 Blue x 2	Restorable fault: problem detected on OSx (short circuit towards earth or positive pole, or else short circuit between two OSx). Suggested action: Disconnect the safety outputs to check if there are any problems on the external connections of the OSx outputs.
Green	Red x 1 Blue x 3	Restorable fault: module temperature outside the limits. Suggested action: restore module temperature to within permissible limits.
Green	Red x 1 Blue x 4	Restorable fault: No power on 24V-0V terminals. Recommended action: Check electrical connections.
Green	Blue x N	Module entered ERROR state at the request of the application program. Error code N. Typically due to incorrect input conditions (external short circuit, status not permitted). Suggested action: disconnect the inputs to find any short circuits. Check the documentation supplied with the application program for further details.

# Pizzato version for MSI-m/R connection



MSI-m/R legacy with four sensor parallel - Muting  
Observe the operating instructions for the components!

# Pizzato version for MSI-mx/Rx connection



MSI-mx/Rx legacy with two times two sensor X - Muting  
Observe the operating instructions for the components!