MI8O2 I/O EXPANSION MODULE

The MI8O2 expansion module provides the MOSAIC system with:

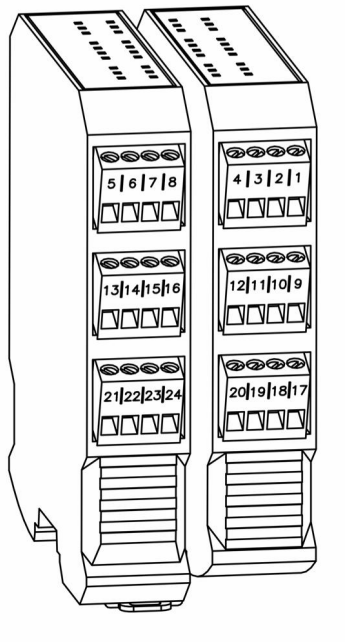
- 8 Digital inputs programmable with the *Mosaic Safety Designer* software.
- 2 Digital outputs programmable with the *Mosaic Safety Designer* software.
- 2 pairs of solid state safety outputs (OSSD).
- 4 output test to monitor short-circuits or overloads.
- 2 Start/Restart interlock input + external relais Feedback (EDM).
- Connection to M1 via MSC 5-way ReeR proprietary bus.
- Amovible terminal blocks for the electrical connections with external devices.

MI8O2 Safety module

Technical Data

Model	MI8O2
PFHd (IEC 61508:1998)	5.72E-9
Rated voltage	24VDC ± 20%
Dissipated power	3W max
Digital INPUT (n°/description)	8 / PNP active high (EN 61131-2)
Start/Restart interlock INPUT	2 + external relais Feedback (EDM)
Digital OUTPUT (n°/description)	2 / programmable - PNP active high
OUTPUT test (n°/description)	4 / to monitor short-circuits, overloads
OSSD (n°/description)	Solid state safety outputs PNP active high: 400mA@24VDC max
M1 > module connection	ReeR proprietary 5-pole bus (MSC)
Connection cable cross-section	0,5 ÷ 2,5 mm^2 / AWG 12÷30 (solid/stranded)
Max length of connections	100m
Operating temperature	-10 ÷ 55°C
Max surrounding air temperature	55°C
Storage temperature	-20 ÷ 85°C
Relative humidity	10% ÷ 95%
Enclosure material	Polyamide
Enclosure protection class	IP 20
Terminal blocks protection class	IP 2X
Fastening	Quick coupling to rail according to EN 60715
Dimensions (h x l x d)	108 x 22,5 x 114,5

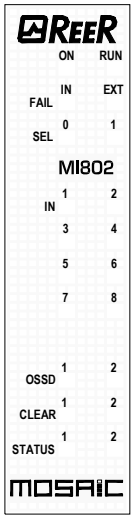
Electrical Connections



MI8O2

PIN	MIO82	
	SIGNAL NAME	OPERATION
1	24VDC	24VDC Power Supply
2	NODE_SEL0	Node Selection
3	NODE_SEL1	
4	GND	0VDC Power Supply
5	OSSD1_A	Static output 1
6	OSSD1_B	
7	RESTART_FBK1	Feedback/Restart 1
8	OUT_STATUS1	Programmable digital output
9	OSSD2_A	Static output 2
10	OSSD2_B	
11	RESTART_FBK2	Feedback/Restart 2
12	OUT_STATUS2	Programmable digital output
13	OUT_TEST1	Short circuit detected output
14	OUT_TEST2	Short circuit detected output
15	OUT_TEST3	Short circuit detected output
16	OUT_TEST4	Short circuit detected output
17	INPUT1	Digital Input 1
18	INPUT2	Digital Input 2
19	INPUT3	Digital Input 3
20	INPUT4	Digital Input 4
21	INPUT5	Digital Input 5
22	INPUT6	Digital Input 6
23	INPUT7	Digital Input 7
24	INPUT8	Digital Input 8

Light signals



MI8O2

OPERATION	LED							
	RUN GREEN	IN FAIL RED	EXT FAIL RED	IN1÷8 YELLOW	SEL ORANGE	OSSD1/2 RED/GREEN	CLEAR1/2 YELLOW	STATUS1/2 YELLOW
NORMAL OPERATION	OFF if the unit is waiting for the first communication	OFF	OFF	INPUT condition	Shows the NODE_SEL0/1 signal table	RED with output OFF	ON waiting for RESTART	OUTPUT condition
	FLASHES if no INPUT or OUTPUT requested by the configuration		ON incorrect external connection detected	only the number of the INPUT with the incorrect connection flashes		GREEN with output ON	Flashes NO feedback	
	ON if INPUT or OUTPUT requested by the configuration							