RoHS

9000Ex-44

Switching Repeater

One-channel with LFD Relay

masibus
A Sonepar Company

SPECIFICATION

HAZARDOUS -AREA INPUT

Connection side	Field Side (Hazardous Area)
Input	Inputs conforming to BS EN60947–5–6:2001 standards for proximity detectors (NAMUR)
No. of Input Channels	1
Location of Switch	Zone 0, IIC, T6 hazardous area Div.1, Group A, hazardous location
Location of Proximity Detector	Zone 0, IIC, T4–6 hazardous area, if suitably certified Div.1, Group A, hazardous location
Sensor Voltage	7 to 9V dc from 1kΩ ±10%
Switching Points	In normal phase, Outputs closed if input > 2.1mA (< 2kΩ in input circuit) and Outputs open if input < 1.2mA (> 10kΩ in input circuit)
Switching hysteresis	200µA (650Ω) nominal

SAFE-AREA OUTPUT

Connection Side	Control Side (Safe Area)
No. of Output Relay	1 (SPDT)
Relay Contact rating	250V ac, 2A, cosØ >0.7, 30V dc, 2A, resistive load, 40V dc, 1.2A, resistive load Note: Reactive loads must be adequately suppressed
Response time	≤ 10mS
Indication LED	Yellow: channel status, on when output energized Red: LFD indication, on when line fault detected
Line fault detection (LFD)	User selectable by switches on the side of the module. - Open-circuit alarm on if I_{in} < 50µA, Open-circuit alarm off if I_{in} > 250µA - Short-circuit alarm on if R_{in} < 100Ω, Short-circuit alarm off if R_{in} > 360Ω Note: Resistors must be fitted when using the LFD facility with a contact input 500Ω to 1kΩ in series with switch, 20kΩ to 25kΩ in parallel with switch
LFD Relay	1 (SPDT) - Line fault relay is energized and channel output relay de-energized if input line-fault detected
Output Phase reversal	User selectable by switches on the side of the module.

POWER SUPPLY

Voltage	20 to 35 VDC
Power Consumption	≤0.6W@24V
Power Dissipation	≤0.6W@24V
Power ON status LED	Green

ISOLATION

Between Power to Input and Relay outputs: Galvanic Isolation of 2KVAC for 1 minute
Between Input to Relay outputs: Galvanic Isolation of 2KVAC for 1 minute
Between one Relay output to second Relay output: Galvanic Isolation of 2KVAC for 1 minute
Insulation resistance: >200MΩ@500V DC between All Ports

PHYSICAL

Mounting Type	DIN Rail (35 mm)
Terminal Block	UL, CSA standard
Terminal Cable Size	2.5mm^2
Enclosure Material	PA66
IP Rating	IP20
Dimension (in mm)	17.6(W)x108(H)x114(D) mm
Weight	≤150 g

ENVIRONMENTAL

Operating temperature	-20 to 60°C
Storage temperature	-20° to 70°C
Relative Humidity	30% to 95% RH (Non-Condensing)
Protection	Conformal Coating on PCB

SIDE DIP SWITCH FUNCTION

SW1	Phase Reversal
SW2	LFD Enable
SW3	NA
SW4	NA

MARKING AND ENTITY PARAMETERS

Marking: [Ex ia Ga] IIC

Hazardous Area Input Terminals:
- Terminals 10 w.r.t. 11
  Uo = 10.5V, Io = 14mA, Po = 37mW, Ci = 0, Li = 0

Safe Area Terminals:
- Terminals 7 w.r.t. 8 (Supply)
  Um = 253Vrms (Attention! Um is not rated voltage)
- Terminals 1 to 6 (Output)
  Um = 253Vrms (Attention! The rated voltage can be lower)

Certificate Report No.:KLPL/Ex/25-102, Issue No.00
PESO Approval No.: A/P/HQ/GA/104/5538

SAFETY/WARNING PRECAUTIONS

To avoid Electrostatic Discharge (ESD) to the transmitter, that may cause permanent damage, Operator must operate device using ESD safe tools and clothing.

Terminal wiring:
Check that all cables are correctly connected according to the connection diagram. Before installation or beginning of any troubleshooting Procedures, the power to all equipment must be turned off and isolated. Units suspected of being faulty must be Disconnected and removed first and brought to a Masibus authorised service center for testing and repair.

Component replacement and internal adjustments must be done by Masibus authorised service center. Wiring must be carried out by skilled personnel and correct tools.

All wiring must confirm with standards of good practice and local codes and regulations. Wiring must be suitable for voltage, current, and temperature rating of the system. Beware not to over-tighten the terminal screws.

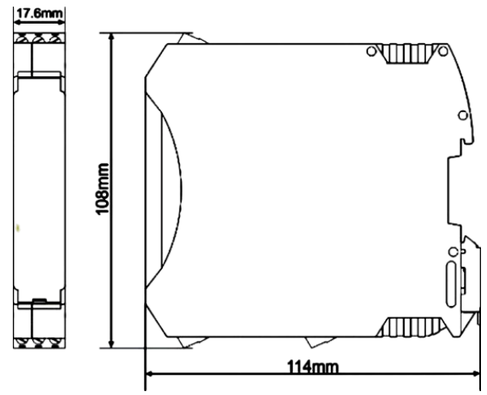
WARRANTY

Warranty does not apply to defects resulting from action of the user such as misuse, improper wiring, operation outside of specification, improper maintenance or repair, or unauthorized modification.

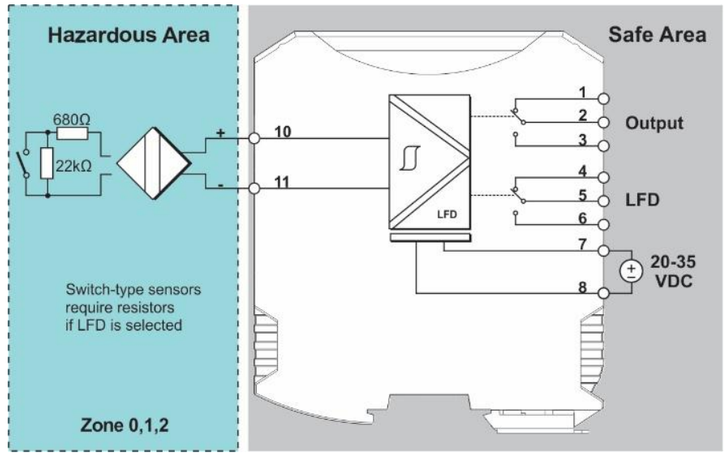
Masibus is not liable for special, indirect or consequential damages or for loss of profit or for expenses sustained as a result of a device malfunction, incorrect application or adjustment.

Masibus total liability is limited to repair or replacement of the product. The warranty set forth above is inclusive and no other warranty, whether written or oral, is expressed or implied.

DIMENSIONS



BLOCK DIAGRAM & TERMINAL CONNECTION



TROUBLE SHOOTING

Unit Not Turn ON:
If Green LED at the front side is not turned "ON", the device is not getting sufficient power supply, or the connections are not as per terminal details.

If still problem, contact Masibus.

masibus
A Sonepar Company
C-6, Phase 1-A, Verna Industrial Estate,
Verna, Salcette – 403722, Goa, India
☎ +91 9673111059
Email: support@masibus.com
Web: www.masibus.com