



Type-1

Type-2

8208-XP

8-Channel Ex-Proof Scanner



Masibus model 8208-XP Scanner, is the Ex-proof version of model 8208, and is certified for use in Hazardous areas and is available in two types of enclosures.

8208-XP is the most compact multi-point scanner available in the market; designed with the latest Touch Sense Keys to give full programmability and ease of operation.

8208-XP comes in density of 4 or 8 channels; each channel input type is universal and has 4 fully programmable relay output for Alarm/Trip purpose. The unit has separate Numeric displays for Channel, Group and PV. All Configuration and Calibration can be done from front panel keypad

The 4 relays can be freely mapped as Alarm, Trip or control set point. User has option to program set-points and logic individually or group wise. Channels can be configured up to 4 groups with one relay per group; 2 groups with 2 relays per group or 1 group with 4 relays per group. Two discrete LEDs are provided per channel and one LED per relay for status indication.

8208-XP has built-in Isolated RS485 serial communication port with Modbus RTU protocol and provides optional analog retransmission output with group Max/ Min to further interface with PLC/DAS/DCS/ SCADA.

8208-XP is available in two options Type-1 and Type-2 Wall Mount Enclosure. 8208-XP Type-1 Enclosure has maximum 8 glands possibility, whereas 8208-XP Type-2 Enclosure has maximum of 12 glands possibility and also has Rotary Switch for on/off.

Features

- Universal input per channel
- Ex-proof protection for Gas groups IIA & IIB, IP65, Zone-1
- Operation by front Touch sense keys
- Fast Sampling rate with instantaneous relay action
- Four relays for alarm/trip
- RS485 Serial communication port for remote monitoring
- Comprehensive Alarm/Trip logic programming
- Multiple Levels of configuration and password protection
- Analog Retransmission

Applications

- Hazardous areas like Chemical / Oil & Gas Petrochemical Industries
- Pharma application
- Gas compressors
- Mining Equipment monitoring and protection
- Gas detection
- Fire detection and annunciation
- As a distributed I/O module for interface with PLC/DCS/DAS etc

TECHNICAL SPECIFICATIONS

Input		Isolation (Withstanding voltage)	
No of Input	4 or 8	Between primary terminals* and secondary terminals**: At least 1500 V AC for 1 minute	
Input Type	Thermocouple (E, J, K, T, B, R, S, N), RTD (Pt100), Current, Voltage	Between primary terminals* and grounding terminal: At least 1500 V AC for 1 minute	
Display Range	Refer Table-1	Between grounding terminal and secondary terminals**: At least 1500 V AC for 1 minute	
ADC Resolution	17 bits	Between secondary terminals**: At least 500 V AC for 1 minute	
Display Resolution	0.1 / 1.0°C	* Primary terminals indicate power terminals and relay output terminals.	
Sampling Rate	TC and Linear Input :100mSec/per channel RTD Input: 200mSec/per channel	** Secondary terminals indicate I/O signal and Communication O/P.	
Accuracy	±(0.1% of Full Scale +1digit)	Insulation resistance: 50MΩ @ 500V DC or more between power terminals and grounding terminal.	
CJC Error	±2.0° C		
T/C Burnout current	0.25μA		
RTD Excitation current	1 mA (Approx.)		
NMRR	> 40dB	Enclosure	Aluminium Alloy LM-6
CMRR	> 120dB		Type-1* : Type-1 Enclosure do not have Rotary Switch and max upto 8 glands only possible
Temp-co	< 100ppm/°C		Type-2 : Type-2 Enclosure has On/Off Rotary Switch and max upto 12 glands possible
Input Impedance	> 1MΩ	Weight (without glands)	8208-XP Type 1: 5 Kg
Max Voltage	20VDC		8208-XP Type 2: 8 Kg
Display & keys		Dimension in mm (HxWxD)	8208-XP Type 1: 220 X 220 X 140 8208-XP Type 2: 265 X 265 X 150
Process Value	4-digit, 0.56", Red seven segment LED	Type of Protection	Gas Groups IIA & IIB, IP65, Zone: 1, 2
Channel No.	2-digit, 0.56", Green seven segment LED	Cable Entry Size	3/4" ET
Group No.	1-digit, 0.56", Red seven segment LED	Cable Entry No	8208-XP Type 1: Max 8 glands 8208-XP Type 2: Max 12 glands
Status	4 Red LEDs for Relay status, 1 Red LED Auto/Manual mode status, 2 Green LEDs for Communication, 1 Red LED for Fault, 16 Red LEDs for Alarms	Mounting	Wall Mount
Keys	Menu, Escape / A/M, Increment, Shift/Down/ ACK	Environmental	
Output		Operating Temperature	0-70° C
Relay		Storage Temperature	0-80° C
		Humidity	30-95% RH non-condensing
No of Relays	4	Table 1: Display Range	
Type	Single Change over (C, NO, NC)	Input Type	
Rating	2A@250VAC / 30VDC	Range	
Time Delay	1 to 99 secs	Thermocouple	E
Retransmission Output			J
			K
			T
			B
Current	0/4-20mA @ 500Ω Max		R
Voltage	0/1-5V, 0-10V @3KΩ Min		S
Accuracy	0.25% of FS	N	
Selection	Max or Min Reading of Channels	RTD	Pt-100
Communication Output		Linear	0 - 75mV
			0 - 100mV
Interface	RS485		0.4 - 2V DC
Protocol	Modbus RTU		4-20 mA (Ext.100Ω)
Baud Rate	9600, 19.2K		0 - 2 VDC
Power Supply			0 - 20mA (Ext.100Ω)
Standard	85-265VAC @ 50 Hz / 60 Hz, 110-290VDC		0 - 5V
Optional	18-36VDC		1 - 5V
Consumption	15VA Max		0 - 10V
			-10 - 20mV

ORDERING CODE

Model	No of Input	Enclosure Type	Input Type	Auxilliary Power Supply	No of Glands	Retransmission Output Type	Gas Group
8208-XP	4 4 Channels	T1	Type-1*	U1 85-265 VAC / 110-290VDC	4 4 Glands	N	1 IIA/IIB
	8 8 Channels	T2	Type-2	U2 18-36 VDC	6 6 Glands	1 4-20mA	
			3 K		8 8 Glands	2 0-20mA	
			4 T		12 12 Glands*	3 1-5 V	
			5 B			4 0-5 V	
			6 R			5 0-10 V	
			7 S				
			8 N				
			9 Pt-100				
			A -10 to 20mV				
			B 0-75 mV				
			C 0-100 mV				
			D 0.4-2 V				
			E 0-2 V				
			F 0-5 V				
			G 1-5 V				
			H 0-10 V				

* Max upto 8 glands only possible in Type-1 Enclosure

12 glands is possible only in Type-2 Enclosure