

Description

621 analogue addressable single input modules provide the interface to connect an electrically isolated dry-contact switched input to Numens 2-wire addressable fire detection control and indicating equipment. Up to 125 modules can be connected to each alarm zone loop.

One model uses a parallel resistive input filter, allowing multiple states to be monitored at the input. The states are converted to the loop communications protocol by the module, to enable them to be displayed on the control and indicating equipment. A companion model includes an integral isolator that protects other devices connected to the same transmission path. The isolator activates in the event of a short circuit in the loop wiring.

A separate model provides a switched DC 24 V output that falls to 0 V during a Reset Condition, allowing the power-off reset of connected equipment.

The 621 input module provides fire detection and alarm system designers with a Standards-compliant, premium product for life safety and property protection applications.

Features

- Single electrically isolated input for connection to dry contacts
- Separate indications for Quiescent and Alarm conditions
- Multi-state model available to monitor four distinct input states:
 - Normal
 - Alarm
 - Open-circuit (reported as a Fault signal)
 - Short-circuit (reported as a Fault signal)
- Integral isolator model available with isolation active indicator
- Switched external DC 24 V output (0 V during Reset Condition) model available
- Switched external DC 24 V output model may be configured to operate with non-addressable control and indicating equipment
- DC 24 V operation
- Convenient 2-wire connection
- Surface-mount device (SMD) circuit board design
- Available with 125 usable address settings per loop when connected to Numens addressable control and indicating equipment
- Easy installation with simple address setting DIP switches
- Low maintenance



621 analogue addressable input module (isolator model shown)

Compliance

621 input modules have the following compliance ^a.

	EN 54-18 ^b	EN 54-17 ^c	CE ^c
621-001	✓	—	✓
621-005	✓	✓	✓
621-007	✓	—	✓

^a Third-party conformance assessment has not been undertaken.

^b EN 54-18 *Fire detection and fire alarm systems — Input/output devices*

^c EN 54-17 *Fire detection and fire alarm systems — Short-circuit isolators*

^d Conformité Européenne

Specifications

Power	621-001	621-005	621-007
Operating voltage	DC (17 ~ 30) V		
Start-up current	≤ 400 μA	≤ 1.5 mA	≤ 650 μA
Start-up time	≤ 10 s		
Input voltage (pulsed)	DC (5 ~ 9) V		
Switched external DC supply	—		DC 24 V 0 V during Reset Condition
Quiescent Condition			
Quiescent condition input resistance	(8k2 ~ 47k) Ω		—
Quiescent current with 22 kΩ EOL fitted	≤ 400 μA	≤ 700 μA	≤ 650 μA
Sampling time	1 s		
Polling indicator	Flashing green		
Input Alarm			
Alarm condition input resistance	(2k2 ~ 8k2) Ω		0 Ω
Alarm current	3 mA	2 mA	
Alarm indicator	Red		
Fault Condition			
Input short-circuit Fault condition resistance	≤ 2k2 Ω		—
Input open-circuit Fault condition resistance	≥ 47 kΩ		—
Isolator			
Switching current (max)	—	1.0 A	—
Switching resistance (max)	—	0.3 Ω	—
Isolator indicator	—	Yellow	—
Environmental			
Operating temperature	(-10 ~ +50)°C		
Operating humidity	(0 ~ 95) % RH, non-condensing		
Storage temperature	(-25 ~ +80)°C		
Storage humidity	(0 ~ 98) % RH, non-condensing		
Miscellaneous			
Number of inputs	1		
Usable addresses per alarm loop	125		125 ^a
Terminal wiring	(0.4 ~ 2.5) mm ²		
Dimensions (h × w × d)	(95 × 95 × 42) mm		
Ingress protection rating	IP-54		

^a Not applicable when connected to non-addressable control and indicating equipment.

Ordering Information

	Isolator	Multi-state Monitored Input	Switched External DC Supply
621-001	—	✓	—
621-005	✓	✓	—
621-007	—	—	✓

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