

Description

621 analogue addressable single input/output 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.

A parallel resistive input filter allows 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.

The range includes a model with 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.

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

Features

- Single voltage-free relay output
- Single input for connection to dry contact inputs
- Output relay for 621-002 can be powered internally, or externally to conserve loop power load (selectable at installation)
- Monitors and signals three distinct input states
 - Normal
 - Alarm
 - Open-circuit
- Polling indicator shows quiescent operation
- Separate indicators for Quiescent, Alarm and Fault conditions
- Integral isolator model available
- Surface-mount device (SMD) circuit board design
- DC 24 V operation
- Easy installation with simple address setting DIP switches
- Convenient 2-wire connection
- Available with 125 usable address settings per loop when connected to Numens control and indicating equipment
- Low maintenance

Compliance

621 input modules have the following compliance.

	EN 54-18 ^{a, b}	CE ^c
621-002	✓	✓
621-006	✓	✓

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

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

^c Conformité Européenne



621 analogue addressable input/output module

Specifications

Power	621-002	621-006
Operating voltage	DC (17 ~ 30) V	
Start-up current	≤ 400 μA	≤ 1.5 mA
Input voltage (pulsed)	DC (5 ~ 9) V	
Quiescent Condition		
Quiescent condition input resistance	(8k2 ~ 47k) Ω	
Quiescent current with 22 kΩ EOL fitted	≤ 400 μA	≤ 700 μA
Sampling time	1 s	
Polling indicator	Flashing green	
Input Alarm		
Alarm condition input resistance	(2k2 ~ 8k2) Ω	
Alarm current	3 mA	2 mA
Alarm indicator	Red	
Output		
Output relay type	SPDT. 1 A @ DC 30 V / 1 A @ AC 240 V	SPDT. 2 A @ DC 30 V / 0.5 A @ AC 125 V
Output relay wetting current	10 μA @ DC 10 mV	
Output relay active indicator	Red	
Output relay active current	9 mA ^a	2 mA
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	

^a With output relay internally powered.

Specifications

Miscellaneous	
Number of inputs	1
Number of outputs	1
Usable addresses per alarm loop	125
Terminal wiring	(0.4 ~ 2.5) mm ²
Dimensions (h × w × d)	(95 × 95 × 42) mm
Ingress protection rating	IP-54

Ordering Information

Isolator	
621-002	—
621-006	✓

View the complete range of products at
www.numens.com

