

NIC-1

ECS Protector Nitrogen Interface Controller



Features

ECS Protector Nitrogen Interface Controller (U.S. Patents No. 9,144,700 and 9,186,533)

- Use for systems with different operating pressures
- Use in conjunction with a nitrogen gas source
- No nitrogen gas storage

General Description

The ECS Protector Nitrogen Interface Controller (NIC-1) is designed to facilitate the Dry Pipe Nitrogen Inerting (DPNI) process for controlling oxygen corrosion in dry pipe and preaction fire sprinkler systems when used in conjunction with a nitrogen gas source. Where a house/plant nitrogen supply is available, the NIC-1 interfaces with the nitrogen gas source to provide maintenance gas for dry pipe and preaction fire sprinkler systems. Where dry pipe and preaction fire sprinkler systems are operating at two (2) different maintenance gas pressures, the NIC-1 can be used with any ECS nitrogen generator to provide corrosion control with supervisory nitrogen gas; thereby eliminating the need for two (2) separate nitrogen sources.

The nitrogen source is controlled by the NIC-1 to inert the sprinkler systems within fourteen (14) days and then automatically provide nitrogen gas for pressure maintenance. The NIC-1 includes a bypass valve that allows for maintenance or “fast fill” needs to meet the NFPA 13 30-minute fill requirement for dry pipe and preaction fire sprinkler systems. When paired with either the Protector Dry Vent (PAV-D/DQ) or the Protector Dry SMART Vent (PSV-D/DE) installed on the sprinkler riser, the NIC-1 controls the nitrogen gas to facilitate the patented “fill and purge” breathing process.

The NIC-1 is designed to be used in conjunction with the following components as part of the complete ECS Dry Pipe Nitrogen Inerting (DPNI) system. House/plant nitrogen source when fire sprinkler systems are operating at one (1) system pressure, or with ECS Protector nitrogen generator when two different operating pressures are required. Air maintenance device with on board adjustable regulator (see AMD Requirements sheet).

Riser-mounted ECS Protector Vent (PAV-D/DQ), AdvancedIQ Vent Controller (AVC-6), or ECS Protector Dry SMART Vent (PSV-D/DE). ECS Protector SMART Gas Analyzer (SGA-1), one per nitrogen generator is recommended. ECS In-Line Corrosion Detector (ILD), monitoring at least one per sprinkler system is recommended.

Specifications

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| Dimensions | 14" (W) x 16" (H) x 6" (D) |
| Weight | 36 Lbs (16 kg) |
| Temperature Range | 40°F - 105°F (5°C - 40°C) |
| Power Supply (Dedicated Circuit) | 120-240VAC/1 phase/50-60Hz |
| Power Consumption | <2 Amps |
| Nitrogen/ Air Connection | Inlet: ½" NPTF Outlet: ½" NPTF |

Installation

The ECS Nitrogen Interface Controller is designed to be mounted directly to the wall in the appropriate installation location. Allow access to the front of the cabinet for service, access to nitrogen source, power supply, and sprinkler risers being supplied from the NIC-1.



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