

APPROVED Data Sheet UFS-600A Rev 6.00 Page 1 of 2

Effective: December 2024



NITROGEN-PAC MODEL SC

FEATURES

FM Approved	 Single or multiple riser capable 		
 CSFM Listing No. 7510-2143:0501 	Nominal 20 gallon nitrogen receiverDigital compressor runtime monitor		
 Fully factory assembled, adjusted, and tested 			
 No field assembly required 	 Visual indicators of system status: 		
 Just attach AC power and run piping to sprinkler riser 	 GREEN = Normal (system is supplying nitrogen) 		
Built-in UL Listed oilless air compressor	 RED = Bypass (system is supplying air for initial fill) Leveling feet Rugged steel construction 		
 UL Listed refrigerated dryer delivers -40°F dew point air 			
Membrane-based nitrogen generation			
Built-in particulate and coalescing filters	 Mechanical enclosure door equipped with lift-off hinges for easy removal 		
BENEFITS			
 Saves installation, assembly, and testing time Smallest footprint complete nitrogen system available today 	 Best available air drying and filtration for long life and low maintenance 		

- Smallest footprint complete nitrogen system available today
- Quicker commissioning just place, connect, and it's ready
- Nitrogen generation and sprinkler initial fill (per NFPA 13) from one unit

DESCRIPTION

The UNITED Fire Systems NITROGEN-PAC™ Model SC is a completely self-contained nitrogen-based sprinkler corrosion inhibiting system. The unit is factory assembled and tested, and is ready for connection to the sprinkler system riser. The assembly consists of a compressor, refrigerated air dryer, nitrogen generator, and nitrogen receiver. The assembly provides dry air for system initial fill and nitrogen for filling the interior of a dry or preaction sprinkler system with nitrogen at 98% or greater purity

TECHNICAL SPECIFICATIONS

Model	Initial Fill* Capacity to 40 PSIG (gal.)	Initial Fill* Capacity to 20 PSIG (gal.)	Total System Capacity N₂ Generation** (gal.)	Recommended Number of Sprinkler Risers (max)
SC-1S	300	600	900	3
SC-1M	300	600	1600	5
SC-1L	300	600	4000	5
SC-2M	475	950	1600	3
SC-2L	475	950	4000	5

* Initial fill capacity in 30 minutes or less with air per NFPA 13 – 2016 7.2.6.3.2.
** Maximum capacity values are based on sprinkler piping leakage not exceeding NFPA 13 – 2016 25.2.2 acceptance requirement of maximum 1-1/2 PSIG air pressure loss in 24 hours starting at 40 PSIG.

- Approximate shipping weight = 450 lbs.
- Approximate installed weight = 385 lbs.
- Refrigerated dryer capacity = 7 Standard Cubic Feet per Minute
- Nitrogen receiver = 20 gallons, ASME Coded
- Compressor motor and refrigerated dryer power = 115 VAC single phase
- Approximate current draw = 12.9 amps

IMPORTANT

UNITED Fire Systems recommends performing a leakage test on each fire sprinkler system, and correcting excess leakage, before designing, installing, and commissioning a NITROGEN-PAC™ system.

For downloadable architect's specifications and drawing details, go to: www.unitedfiresystems.com/sc-series

UNITED Fire Systems

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Reliable, long lasting nitrogen generation

Reliable, dependable protection that functions as designed

Easy inspection and maintenance

This literature is provided for informational purposes only. UNITED Fire S tems assumes no responsibility for the product's suitability for a particular application. The product must be properly applied to perform as intended. The information in this document is believed to be correct at the time of publication. UNITED Fire Systems reserves the right to add to, delete, or revise any information in this document without notice

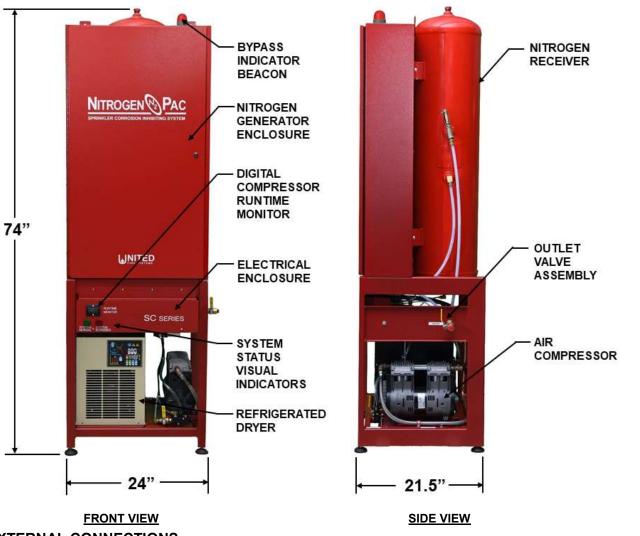


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EXTERNAL CONNECTIONS

- Qty. (1) Outlet for Air / Nitrogen
- Qty. (1) 5 Foot Length of Flexible Conduit and Wire for Single-Point Connection of 115 VAC Single Phase Power for All Power Requirements Accessible from Either Side
- Qty. (1) Single-Point Drain Connection for Refrigerated Dryer, Nitrogen Generator, and Nitrogen Receiver Drains

ORDERING INFORMATION

Model SC Nitrogen Generators include:

- Qty. (1) NITROGEN-PAC[™] SC assembly
- Qty. (1) Installation Kit with:
 - Outlet Valve Assembly
 - Flexible Hose
- Qty. (1) Installation, Commissioning, and Maintenance Manual

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