



Data Sheet UFS-600A

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Effective: May 2023

NITROGEN-PAC MODEL SC-1 & SC-2

FEATURES

- **FM Approved**
- CSFM Listing No. 7510-2143:0501
- Fully factory assembled, adjusted, and tested
- No field assembly required
- Just attach AC power and run piping to sprinkler riser
- Built-in UL Listed oilless air compressor
- UL Listed refrigerated dryer delivers -40°F dew point air
- Membrane-based nitrogen generation
- Built-in particulate and coalescing filters

- Single or multiple riser capable
- Nominal 20 gallon nitrogen receiver
- Digital compressor runtime monitor
- Visual indicators of system status:
 - **GREEN** = Normal (system is supplying nitrogen)
 - **RED** = Bypass (system is supplying air for initial fill)
- Leveling feet
- Rugged steel construction
- 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
- Quicker commissioning just place, connect, and it's ready
- Nitrogen generation and sprinkler initial fill (per NFPA 13) from one unit
- Best available air drying and filtration for long life and low maintenance
- Reliable, long lasting nitrogen generation
- Easy inspection and maintenance
- Reliable, dependable protection that functions as designed

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 (gallons)	Initial Fill* Capacity to 20 PSIG (gallons)	Total System Capacity N ₂ Generation** (gallons)	Recommended Number of Sprinkler Risers (max)
SC-1S	300	600	900	3
SC-1M	300	600	1600	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



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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:
 - o Outlet Valve Assembly
 - o Flexible Hose
- Qty. (1) Installation, Commissioning, and Maintenance Manual

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www.unitedfiresystems.com

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