



# MODEL AFS-7000

## TRANSFORMER FILTRATION SYSTEM

### SAFE, RELIABLE, AND ECONOMICAL OIL FILTRATION FOR ENERGIZED POWER TRANSFORMERS

(Patent #6,476,723)



The Filmmax AFS-7000 is a high performance, robust and reliable Advanced Filtration System designed to clean and purify insulating oil in transformers up to 7000 gallons. The AFS-7000 rapidly removes dissolved water and particulate contamination in transformer insulating oil without heat or vacuum. The AFS-7000 provides the most economical and cost effective filtration to continuously maintain transformers dry of moisture with the most advanced safety features with Filmmax's Patented Oil Spill Containment System.

#### PERFORMANCE CHARACTERISTICS

- Remove dissolved water to less than 10 ppm.
- Remove particulate contamination down to 1 micron.
- Increase thermal Insulation life.
- Increase oil dielectric strength.
- Improve transformer power factor.
- Extends oxidation inhibitor life.
- Extends insulating oil life.
- Extends transformer service life.
- Reduce transformer maintenance cost.
- Safely operates for unattended operation.
- Manufactured for transformer in service filtration.
- Air Venting system for filter change.
- Air Purge system for installation to energized transformers.
- Compact unit design for easy installation.

#### FEATURES

- Filmmax's Patented Oil Spill Containment System
- Spill Containment Reservoir to collect oil internally and externally (inlet and outlet hoses) and to automatically shutdown unit, send alarm and isolate filtration unit from transformer.
- Two (2), Twenty Five (25') coaxial hoses consisting of 25' of 1/2" High Pressure Internal Hose shielded with 25' of 1 1/2" clear industrial hose to ensure and protect any leakage drains into Spill Containment Reservoir.
- Coaxial hoses are manufactured with N.C. solenoid valves for transformer connections and wired to main control circuit to automatically shut down and isolate the filtration unit in the event of any oil leakage, oil spill, or loss of power.
- Manufactured for SCADA connection to Transformers low oil level alarm to automatically shutdown and isolate filtration unit from the transformer.
- Automatic High Pressure Shutdown and High Oil Level Containment Shutdown with Alarm indicator lamp.
- Automatic Low Pressure Shutdown (loss of oil flow) with indicator lamp.
- Quick filter change capabilities.

**REDUCING YOUR COSTS TODAY TO INCREASE YOUR PERFORMANCE AND PRODUCTIVITY TOMORROW**

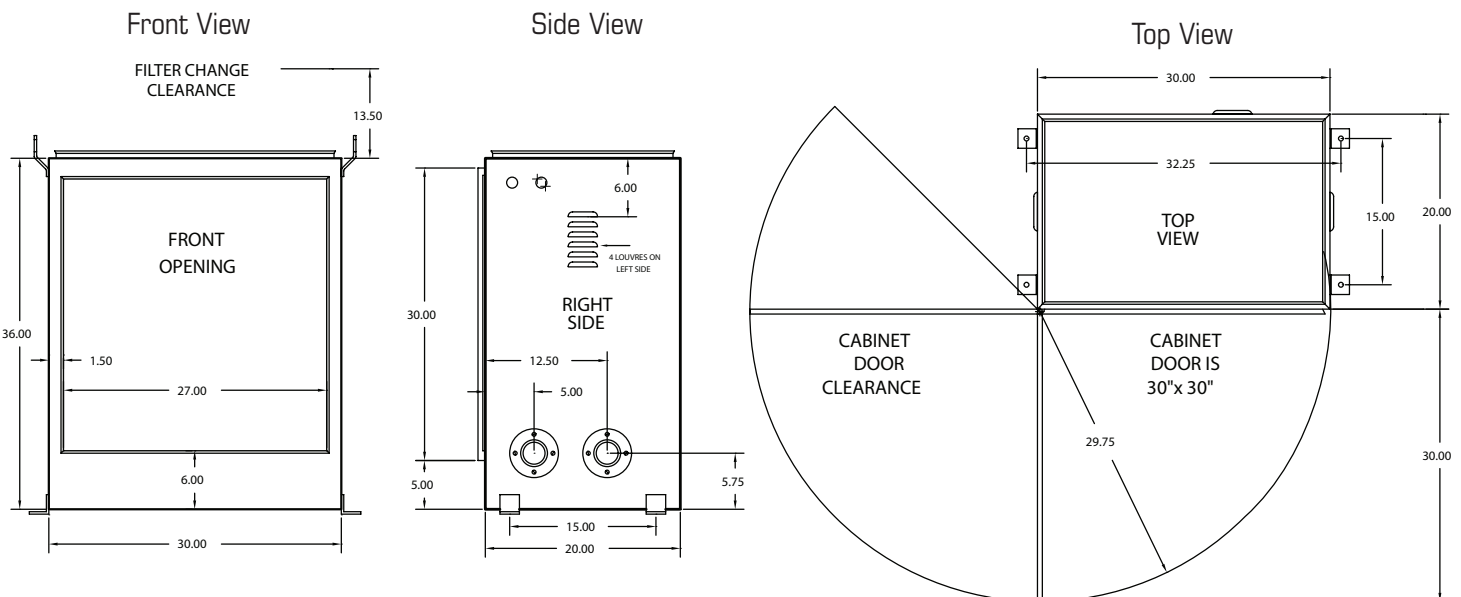
## PERFORMANCE SPECIFICATIONS

- Custom NEMA 3R enclosure 30"w x 20"d x 36"h. Powder Baked ANSI 61 Gray with removable top panel, hinged front opening door and enclosure lift hooks.
- Two (2) Polyurethane Powder Baked F-1000 Element Housings.
- ½ HP TEFC Baldor Motor, 120 VAC Single-Phase, 60hz with Thermal Overload Protection.
- 5 GPM Viton Mechanical Sealed Positive Displacement Pump with Internal Relief Valve.
- Suction Wye-Strainer to protect pump from large debris.
- Internally plumbed with all brass fittings and High Pressure Wire Reinforced Hose with crimped fittings.
- Wired 120 VAC, 1 Phase with all electrical components manufactured in a separate NEMA 12 enclosure.
- Automatic high pressure shut down system at 40 PSI and low pressure shutdown system at 10 PSI with indicator lamps.
- Two alarms, one for high shutdown and one for low shutdown that can be wired for one common alarm, normally open dry contact, resistive rating of 10 Amp @ 120 VAC, 10 Amp @ 30VDC.
- Automatic high oil level shutdown system.
- 3-Way Inlet Valve to allow simple adding of make up oil to transformer and for quick draining of filter housings.
- Two (2) 0-100 PSI Glycerin filled pressure gauges.
- In line double window site glass with ball float for fluid monitoring.
- Hour meter to monitor and record equipment run time.
- Digital Resettable Flow Meter to measure flow rate and cumulative fluid pumped.
- Control Circuit complete requiring only power, alarm, and solenoid valve connections.
- Drain valve for oil sampling at pump outlet.
- Completely self-contained unit provided with (25) feet of 12/3 power cable.

### OPTIONS:

- In-Line Monitoring Moisture Sensor with LCD display of oil temperature, water PPM and relative saturation.
- Thermostatically controlled 400 watt Heater with continuous operating fan.

## PHYSICAL DIMENSIONS



Approximate Shipping Weight: 510 lbs.

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Product status and specifications are subject to change.

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