

On-Line Oil Filtration for Load Tap Changer Compartments

The TP2 was developed in response to the utility industry's desire to reduce operation and maintenance costs and increase system reliability. On-line oil filtration has proven to be an effective means of combating LTC problems. Tap changers retrofitted with a TP2 enjoy the following:

- Consistent high oil dielectric strength
- Extended maintenance/inspection intervals
- Reduced contact wear and coking
- Extended oil life
- Reduced contact erosion via reduced restrikes during tap changing

The Velcon TP2 is recommended for installation on tap changers that:

- Perform a high number of operations
- Exhibit consistent sludging conditions
- Have a high tap to tap voltage difference
- Require frequent attention

Quality components and comprehensive design features have made the TP2 an industry standard for on-line filtration. All components are fully enclosed in a temperature controlled NEMA 4 cabinet. Operation of the unit is unattended and controlled by a user programmable timer. 3 gpm flow rate keeps turbulence in the reservoir to a minimum and allows for maximum filter life.



FEATURES

Self Draining – Reversible pump allows quick, no mess, filter changeout. No tools required.

Automatic Shut-off – Pressure switch turns the system off when filter is plugged. Relay can be wired to remote alarm or indicator light.

Oil Make-up – LTC reservoir can be topped off using 3-way valve oil make-up port.

Flexible Operation – Digital electronic timer can be programmed for multiple operating sequences. Internal battery keeps program in memory during power loss.

Hour Meter – Records run time of system to assure user of consistent operation.

Temperature Controlled – Cabinet heaters and fans keep extreme temperatures from affecting service and prevent condensation build up.



SPECIFICATIONS

Mechanical

Flow Rate: 3 gallons per minute (USGPM).

Cabinet: NEMA 4 enclosure, galvanized steel, painted grey acrylic, easy-opening handle with lock and 3-point latch, with louvers and filters, UL/CSA approved.

Pump: Heavy duty self-priming positive displacement pump with built in pressure relief valve.

Piping: Stainless steel tubing, JIC hydraulic fittings. External connections are 1/2" female npt.

Filter Vessel: Velcon Model VF-71E with manual vent and static pressure gauge is epoxy coated internally and externally. No tools required for filter changeout.

Filter: Velcon Model FO-718PL1/2 comes installed for removal of carbon contamination.

Sight Glass: 150 psi maximum working pressure for oil flow indication.

Electrical

Motor: 1/2 hp, 120V, 1-phase, 1740 rpm, TEFC.

Control Box: NEMA 12 with high pressure switch, latching relay, forward/reverse switch, programmable timer, magnetic contactor, hour meter, and manual starter/disconnect with 10 amp heater overload.

Wiring: 16 ga., all terminal connections are XLA grade.

Power Requirements: 120 vac, single-phase, 10 amps.

Heater and Fan: Adjustable setting, thermostatically controlled.

ORDERING INFORMATION

Specify model number as shown below.
Units are shipped with cartridge installed.

System Part Number: TP2-1 120 v, 1 ph, 60 Hz

Also Available: 3 phase power, 50 Hz power
(contact factory)

Weight: 250 lbs

Shipping Weight: 325 lbs

Height: 43", **Width:** 30", **Depth:** 12"

Crated Dimensions: Height: 47", Width: 34", Depth: 31"

OPTIONS & ACCESSORIES

643Y051	Door Mounted View Window
241X051	3/4" JIC Port Connections (2 ea required)
723Y005	No-Flow Shut-Off Switch
552Y025	Stainless Steel Valve Upgrade
605Y020	Timed Run Via Remote Start Signal
031Y104	From Tap Change
031Y104	0.5 micron AC-7181/2 Cartridge for particle and free water removal
031Y105	0.3 micron AC-718P3 Cartridge for particle and free water removal
031Y106	0.3 micron FO-718PLP3 Cartridge for particle removal
031Y102	0.3 micron SD-718P3 Superdri ® Cartridge for particle and dissolved water removal

RECOMMENDED SPARES

FO-718PL1/2	Filter Cartridge, box of 6 ea (or:)
FO-718PLP3	Filter Cartridge, box of 6 ea (or:)
AC-7181/2	Aquacon ® Cartridge, box of 6 ea (or:)
AC-718P3	Aquacon Cartridge, box of 6 ea (or:)
SD-718P3	Superdri Cartridge, box of 6 ea
G-1016	Filter Housing Lid Gasket, 1 ea



Velcon products are sold and serviced by a world-wide representative network. To order, contact Headquarters or your **LOCAL REPRESENTATIVE**:

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