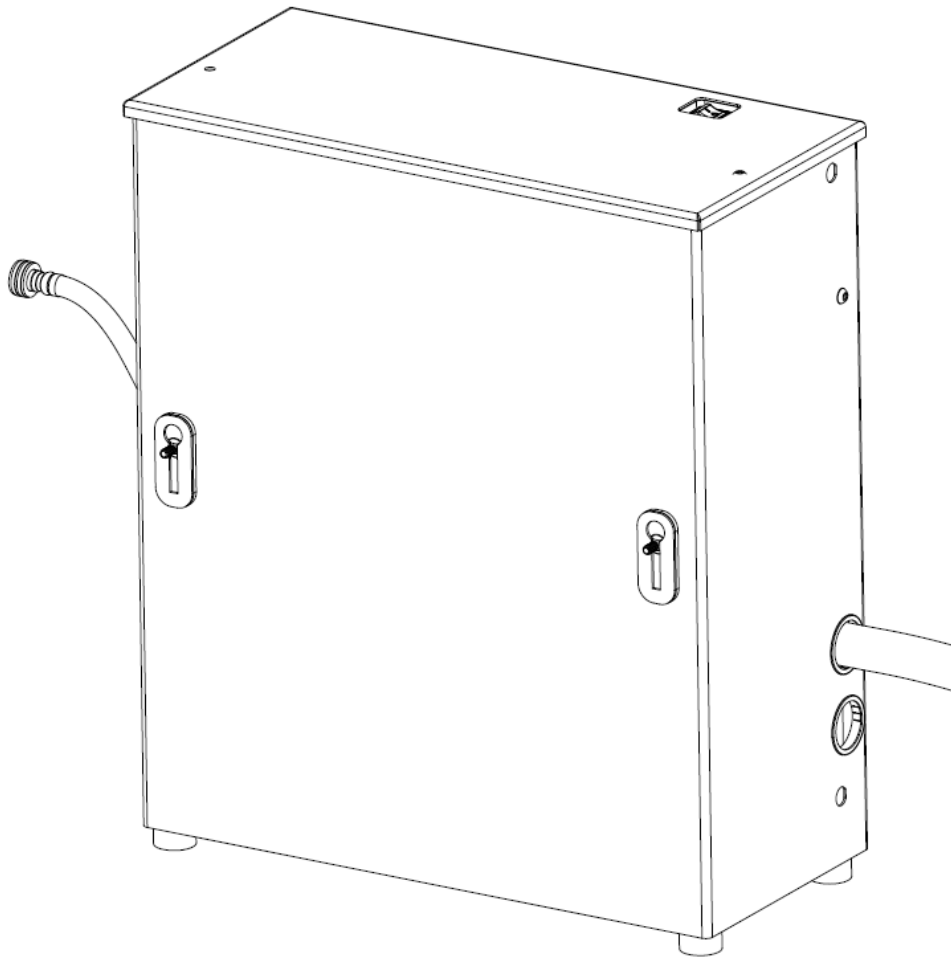


# TRITON

## WATER PRESSURE MANAGEMENT SYSTEM

**Site Preparation, Installation and Usage Guide**  
**120 VAC Booster (DE16-0434)**  
**230 VAC Booster (DE16-0440)**



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## Introduction

This Instruction for Use (IFU) is the most comprehensive source of information for your product. Keep and consult this reference manual during the life of the product.

This manual is available at [www.TritonPowered.com](http://www.TritonPowered.com).

## Contact Information

[www.TritonPowered.com](http://www.TritonPowered.com)

## Description

Triton is a water pressure boosting system which provides an EN13077 & UK Regulation 4-compliant AB air gap to protect facility supply water from contamination by downstream process water.















The system:

- boosts outlet water pressure.
- boost volumetric flow rate of outlet.
- provides a reserve capacity of water.
- has integrated safeguards for overflow, insufficient inlet volume/dry run, over current, overheat, and repeated rapid on-off cyclic loading.

(See Specification section for details)

## Symbol Definitions

The symbols defined below are used throughout this document to bring attention to subjects of particular importance.

	<b>DANGER</b> Indicates a hazardous situation which, if not avoided, will result in death or serious personal injury.		<b>WARNING</b> Indicates a hazardous situation which, if not avoided, could result in death or serious personal injury.
	<b>CAUTION</b> Indicates a hazardous situation which, if not avoided, could result in minor or moderate personal injury		Crushing of feet Minor or moderate personal injury.
	Electric shock Death or serious personal injury		<b>WARNING</b> Flammable material Death or serious personal injury
	Tips and advice that make the work easier.		If these instructions are not observed, it may result in malfunction or damage to the equipment.
	A red or grey circle with a diagonal bar, possibly with a black graphical symbol, indicates that an action must not be taken or must be stopped.		Observe local regulations.
	Power ON		Alternating Current (AC)
	Power OFF		Protective Earth Ground

## WARNINGS:

### General

- Before using the Triton Booster, read and understand the instructions. Pay attention to WARNING information. Become familiar with the system components prior to use.
- Upon initial receipt and before each use, inspect each component for damage. DO NOT use any equipment if damage is apparent or the inspection criteria are not met. See the Inspection and Maintenance section for inspection criteria.
- DO NOT disassemble, modify, service, or repair any system component or accessory, unless otherwise specified.
- ALWAYS operate the equipment within the specified environmental condition values. See the Specifications section.
- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.
- Children shall not play with the appliance.
- Cleaning and user maintenance shall not be performed by children without supervision.

### Electrical Safety

- Use only Triton Booster approved system components and accessories.



ELECTRICAL SHOCK HAZARD – Turn off power switch and disconnect plug from wall before starting any work on product.



ELECTRICAL SHOCK HAZARD – ALWAYS connect this equipment to a suitable grade, facility power receptacle with protective earth (ground). Failure to comply may cause electrical shock and result in operator injury.



We recommend that you fit the permanent installation with a residual-current circuit breaker (RCCB; also known as GFCI/GFI) with a tripping current of 30 mA or less.

- Installation should be performed by a licensed professional in accordance with all local regulations.

### Environmental/Biological

- FIRE HAZARD – DO NOT use this equipment in areas in which flammable agents are mixed with air, oxygen or nitrous oxide. Failure to comply may cause a fire and result in burn injury or property damage.
- BLOODBORNE PATHOGEN HAZARD
  - The Bloodborne Pathogens Standard provided by the United States Occupational Safety and Health Association (US OSHA 29 CFR 1910.1030) requires those with employees having occupational exposure to potentially infectious materials to establish a written Exposure Control Plan. The Exposure Control Plan is designed to eliminate or minimize employee exposure through use of personal protective equipment (PPE), appropriate vaccinations (e.g. hepatitis B), and other control measures.
  - ALWAYS wear PPE when operating or handling this equipment.
  - ALWAYS follow local regulations regarding proper handling and disposal of biohazard waste.
- Failure to comply may cause infection and result in injury.
- CONTAMINATION HAZARD – ALWAYS follow local regulations for safe handling, recycling, and disposal of biohazard fluid waste and equipment. See Disposal/Recycle section. Failure to comply may cause environmental contamination and result in injury.

## Instructions:



**HEAVY EQUIPMENT** – ALWAYS have more than one person lift this equipment from the shipping pallet. See the Specifications section for product weight. Failure to comply may result in personal injury.



### CAUTIONS:

Follow all mounting, installation and usage guidance in this document to reduce chances of personal injury or damage to equipment or facilities.



### NOTE:

- Only individuals trained and experienced in the maintenance of plumbing and electrical devices should install, inspect, and test this equipment.  
See the Specifications section for electrical power, water, and drainage requirements.

## Unpacking:

- Remove unit from box
- Remove lid fasteners (retain for reassembly) and lid.
- Remove materials from inside the tank
  1. Power Cord
  2. Key slot nuts, bolts, washer (2)
  3. Water Inlet Hose
  4. Water Outlet Hose
  5. Overflow Tube
  6. Water Level Sight Tube/Drain
- Bottom surface of tank, Wall bracket and pump handle can be used as lift point. Do not use hoses, float valve or other items as lift points

## Installation Location:

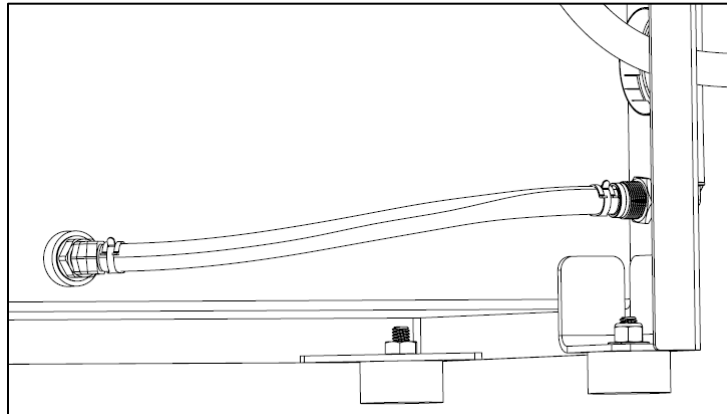
- The Triton Booster can be installed remotely or fastened to other system devices.
- The owner and installer of this equipment are responsible for the preparation of the installation site and the availability of utilities.
- The chosen location must provide the following:
  - Mounting location must be flat, level and stable.
  - Electrical power with correct protection, voltage and current capabilities (see specifications).
  - Water source.
  - Drain for the overflow.
  - Install unit only in area with suitable floor drain to prevent flooding.
  - Power Switch, sight tube and overflow tube must be accessible and visible.

### Connect Hoses & Cable to Triton:

- Make sure the plumbing configuration is NOT susceptible to water hammer conditions.
- ! • Do not exceed inlet pressure of booster. A pressure reducing valve may be required to ensure inlet pressure does not exceed max pressure (see specifications).
- Inlet water temperature cannot exceed specification of booster (see specifications). Ideal water inlet temperature is 60-70°F (room temperature). A mixing valve may be required to achieve water inlet temperature.

#### Sight Tube

- 💡 • The sight tube may be located on the left or right side of the tank for better visibility
- Install fitting (55) into bottom tank port. Turn fitting clockwise until o-ring is compressed. Turn counterclockwise, only as far as needed, until fitting is oriented toward sight tube side location. Tighten jam nut until o-ring is compressed and nut is secure.
- Install 2 couplers (57) to top-most and bottom-most holes on the sight tube side of the tank. Note: Align coupler flat to flat in mounting hole.
- Secure couplers with jam nuts provided. Do not damage couplers by over tightening!
- Connect rear sight tube (26) to the tank outlet fitting (55) and secure with clamp (69)
- Slide second hose clamp (69) over free end of hose.
- Attach free end of hose to bottom coupler and secure with hose clamp
  - Top coupler will not have anything attached to it as height of coupling is above overflow weir (drain).
- To install the side sight tube, first make sure coupler release tabs are depressed and locked in open position. Align sight tube connectors and insert into tank connectors at top and bottom of unit.



#### Outlet Hose:

- Connect booster outlet hose (16) to downstream equipment.
- Hose may be routed behind tank or through the grommeted holes in side of booster.

#### Inlet Hose:

- Connect Booster inlet hose (16) to facility water supply.
- Ensure pressure, flow and temperatures of water are within allowable limits (see specifications).

#### Overflow Hose:

- ! • Locate an appropriate drain location and route overflow drain hose (25).
- Overflow hose routing must not exceed height of catch can.

**Mounting:**

Unit **MUST** be supported from bottom (e.g. floor or top of OEM device).

Unit **MUST** be secured to the wall to prevent tipping.



ALWAYS align the mounting hardware (not supplied) with the wall studs to make sure the Triton booster is mounted to the wall securely. Failure to comply may cause inadvertent booster movement and result in wall or product damage.



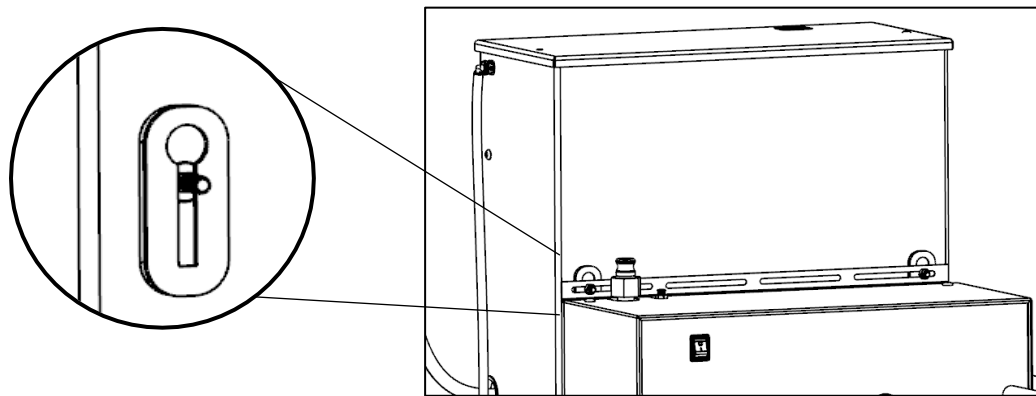
**Wall mounting hardware is not supplied with unit. Wall bracket slot compatible with M8 (Imperial: 5/16" diam.) fasteners.**

**Floor mount:**

- Ensure mounting location is flat and level.
- Sit unit on the four mounting feet (50)
- Unit must be fastened to the wall using that wall bracket (4). ALWAYS align the mounting hardware (not supplied) with the wall studs to make sure the unit attached securely. Failure to comply may cause inadvertent booster movement and result in injury, wall or product damage.

**Rear Mount:**

- Floor mount booster (per above)
- Use front anchors on booster to secure downstream equipment.
- Insert head of 5/16" carriage bolt (62) into hole, orient bolt flats and slide bolt down slot (2 places).
- Secure with nut (63) and washer (64).

**Top Mount:**

- Only use this option when necessary due to space constraints. Only top mount the Triton Booster to equipment as allowed by the OEM.
- Remove rubber feet and hardware (50, 63, 64).
- Use rear foot pads to secure booster to equipment.
- Booster and downstream equipment must be secured to the wall (see floor mount instructions)



## Electrical connection



ALWAYS use the correct power cord.

- Ensure switch (31,32) is set to the off (0) position.
- Connect cord (38-42) to power entry point (33) of the booster electrical box (30).
- Secure cord with retaining wire.
- Cord may be routed behind tank or through one of the four grommets (51) on the side of the tank.
- Connect cord to facility power ensuring correct voltage and current (see specifications).
- Connection must be grounded, and ground fault protected and meet all other applicable local regulations.
- We recommend that you fit the permanent installation with a residual-current circuit breaker (RCCB; also known as GFCI/GFI) with a tripping current of 30 mA or less.



### Start up:

- Turn on water supply.
  - Water will start to flow immediately through the float valve (19).
- !
- **Check all connection points and fully inspect tank for any leaks. If a leak is found, turn off the water supply and drain the tank immediately.**
  - Water will stop flowing when tank level is high enough to activate the float valve. This occurs when the water level is approximately ½" from tank overflow. If water does not turn off automatically, turn off the water supply and refer to trouble shooting section of this document.
  - Electrical power may now be applied by turning the switch to the ON (1) position.
  - The pump will start automatically after a 10 sec (approx.) pause. The pump (14,15) will run until the three following conditions are met:
    - Pressure on the outlet reaches the set point (approx. 60psi)
    - Flow out of the pump stops (no demand downstream)
    - 10 second off delay expires.
  - Check the outlet hose and connection to the downstream equipment for any leaks. If a leak is found, turn off electric switch, turn off the water supply, and repair the leak.
  - The Triton Booster is now fully operational and can be left on continuously.
  - The tank cover should now be re-installed, and fasteners tightened firmly with a wrench (3/16").

### Operation:

- Check sight tube for adequate water level for downstream processes.
- Operate downstream equipment as normal.
- Pump starts automatically in response to downstream water demand.
- Pump stop automatically as described in startup.
- Pressure is maintained in outlet hose even when pump is not running.

### Draining Procedure:

#### Normal drain:

- Disconnect top sight tube quick coupler.
- Rotate sight tube about the centerline of the bottom coupler.
- Place top end of sight tube into a suitable drain or container.
- Water will drain to height of sight tube outlet. Residual water will remain in tank.

#### Fast drain:

- This process should be completed by experienced technical staff.
- Push power switch to OFF "0" position.

- Disconnect outlet hose from downstream equipment.
- Place outlet hose end into a suitable container or drain.
- Hose must be secured to prevent hose whip which could cause injury or property damage.
- Press power switch ON "1" (pump will start after approx. 10 seconds).
- Pump will run and water flow from outlet tube until pump float switch detects low water level.

### Shut Down Procedure:

The Triton Booster does not need to be shut down between uses. To shut down, push the power switch to the OFF "0" position. Disconnect electric cord from facility outlet before service or as needed.

### Cleaning:

#### CAUTIONS:



- DO NOT allow liquids or moisture to enter any electrical connection.
- DO NOT sterilize any system component.
- DO NOT use solvents, lubricants, or other chemicals, including glutaraldehyde or similar chemical cleaners, unless otherwise specified.
- Use of unapproved disinfectants may cause system damage.

#### Recommended Cleaning Equipment

- Personal Protective Equipment (PPE) as recommended by the disinfectant supplier.
- Soft, lint-free cloth
- Approved disinfectants: Sodium Hypochlorite Based - Clorox® Clean-Up® Disinfectant Cleaner with Bleach (EPA Reg. #67619-1)
- Quaternary Ammonium Based - CaviCide® (EPA Reg. #46781-6)

#### Instructions

- Wipe the external surfaces with a soft, lint-free cloth moistened with a non-abrasive, disinfectant prepared according to the manufacturer's instructions. Make sure all surfaces remain visibly wet at room temperature.
- Remove any excess disinfectant solution using a soft, lint-free cloth moistened with water if required by the instructions supplied by the disinfectant manufacturer.
- Do not add cleaners or disinfectants to interior of tank or directly to water in tank.

## Inspection and Maintenance

#### WARNINGS:

- Upon initial receipt and before each use, inspect each component for damage. DO NOT use any equipment if damage is apparent or the inspection criteria are not met.
- DO NOT disassemble, modify, any system component or accessory.
- Only individuals trained and experienced in the maintenance of electrical and plumbing devices should inspect, test and service this equipment

#### NOTES:

- Replacement parts available at [www.tritonpower.com](http://www.tritonpower.com)

INTERVAL	INSPECTION CRITERIA	ACTION
Before use and after each cleaning	Check equipment for damage or missing components.	If damage is apparent, replace the equipment.
	Check power cord for cuts.	
	Check power cord receptacle for bent pins or bent contacts.	
	Check all hoses for leaks or damage	
Six months	Check all water connections for leaks or damage.	Repair any plumbing to stop leakage as required. Replace leaking hoses as required
	Fully inspect tank (specifically the weld seams) for leak or corrosion	If damage is apparent, replace the equipment
	Inspect/clean pump inlet screen	If damage is apparent, replace the equipment. Otherwise, remove, clean, reinstall screen and restart system (follow applicable start up instructions)
Inspect/clean inlet screen		
As required	Check pump output pressure	If pump output pressure or flow is low: <ul style="list-style-type: none"> <li>• Check inlet screen for restrictions.</li> <li>• Check inlet voltage is in tolerance.</li> <li>• Check outlet lines for kinks or obstructions.</li> <li>• Replace pump as needed.</li> </ul>
	Test inlet flow	Check facility supply. Check inlet screen for restrictions. Check outlet lines for kinks or obstructions. Replace inlet assembly as needed.
	Test pump float switch	With pump running push float down: Pump should turn off once float is below horizontal. Allow float to rise: Pump should restart once float is above horizontal. Replace pump as required
	Test float valve	Gently push float down (be careful not to damage float arm). Water should turn on when float is in down position. Replace inlet assembly as needed.
	Inspect and clean float valve screen	
	Inspect and test inlet switch/breaker	Cycle switch between OFF (0) and ON (1) position. If switch will not actuate or detent in last position, stop using booster and repair.

## Troubleshooting

	<b>Fault</b>		<b>Cause</b>	<b>Remedy</b>
1	The pump does not run.	a)	Unit circuit breaker has tripped.	Reset circuit breaker by turning OFF(0) then back ON(1)
		b)	No power supplied.	Check facility power, repair as needed.
		c)	The motor protection has cut off the power supply due to overload.	Check if the pump is blocked. 1) Switch off the power supply to the pump. 2) Remove the rubber plug (25). See Pump Assembly diagram. 3) Try to turn the pump shaft with a screwdriver. 4) If the pump shaft is stuck, follow the instructions in point 1, G. Note: Remember to refit the rubber plug (25).
		d)	The pump or the power supply cable is defective.	Repair or replace the pump or cable.
		e)	The float switch is in dry-running position.	Check the water level and the float switch for free movement.
		f)	The dry-running protection of the pump has stopped the pump.	Check the water level. Switch off the power supply and wait 2 minutes before switching it back on.
		g)	The pump is blocked.	Check and clean the pump. 1) Switch off the power supply to the pump. 2) Remove the eight screws (84b), See Pump Assembly diagram, with a cross-head screwdriver. 3) Clean the inlet strainer and hydraulic parts with a brush and a water jet. 4) Remove the pump base (56). See figures 1 and 2 on Pump Assembly diagram. 5) Reassemble the pump.
2	The pump runs but gives no water.	a)	Outlet hoses are blocked or kinked.	Clear restriction.
		b)	No water or too low water level in tank.	Allow tank to fill.
		c)	The non-return valve is stuck in its closed position.	Pull out the pump, and clean or replace the valve. See Pump Assembly diagram.
		d)	The inlet strainer is clogged.	Pull out the pump and clean the inlet strainer with a brush and a water jet.
		e)	The pump is defective.	Repair or replace the pump.

	<b>Fault</b>		<b>Cause</b>	<b>Remedy</b>
3	The pump runs at reduced performance.	a)	Outlet hoses are blocked or kinked.	Clear restriction.
		b)	The outlet pipe is partly blocked by	Clean or replace the pipe.
		c)	The non-return valve in the outlet pipe is partly blocked.	Clean or replace the valve.
		d)	The pump and outlet pipe are partly blocked by impurities.	Pull out the pump. Check and clean or replace the pump. Clean the pipes.
		e)	The inlet strainer is clogged.	Clean the inlet strainer.
		f)	The pump is defective.	Repair or replace the pump.
		g)	Leakage in the pipework.	Check and repair the pipework.
		h)	The outlet pipe is defective.	Replace the outlet pipe.
		i)	Under voltage has occurred.	Check the power supply.
4	Frequent starts and stops.	a)	The float switch has not been adjusted correctly.	Adjust the float switch to ensure suitable time between the cutting-in and cutting- out of the pump.
		b)	Expansion Vessel pressure is out of range.	Turn off pump, disconnect outlet hose to release outlet water pressure. Check air pressure in expansion vessel. Pressure should be 29-31 psi. Adjust pressure as needed.
		c)	The non-return valve is leaking or stuck open.	Clean or replace the non-return valve (#151)
		d)	The supply voltage is unstable.	Check the power supply.
		e)	The motor temperature is too high.	Check the water temperature.
		f)	The pump is blocked.	Check and clean the pump. 1) Switch off the power supply to the pump. 2) Remove the eight screws (84b) with a cross-head screwdriver, see Pump Assembly diagram. 3) Remove the pump base (56). See figures 1 and 2 on Pump Assembly diagram. 4) Clean the inlet strainer and hydraulic parts with a brush and a water jet. 5) Reassemble the pump.
		g)	Leakage in the pipework.	Check and repair the pipework

	<b>Fault</b>		<b>Cause</b>	<b>Remedy</b>
5	No inlet flow	a)	No water supply	Check for water from facility.
				Check inlet hose for obstruction
				Check inlet screen
		b)	No water from float valve	Manually cycle valve by gently pushing float down
				If valve functions manually, check water pressure.
				Check valve for obstructions

## Disposal/Recycle



**WARNING: BLOODBORNE PATHOGEN AND CONTAMINATION HAZARDS – ALWAYS follow local regulations for safe handling, recycling, and disposal of biohazardous fluid waste. Failure to comply may cause environmental contamination or infection and result in personal injury.**



To comply with European Community Waste Electrical and Electronic Equipment (WEEE) Directive 2012/19/EU, this device should be collected separately for recycling. Do not dispose of as unsorted municipal waste. Contact local distributor for disposal information. Ensure infected equipment is decontaminated prior to recycling.

## Specifications

### Inlet Water:

- Pressure: 5 to 145psig (.03 to 10 Bar, 35kPa to 1000kPa)
- Temperature: 50 to 70°F (10 to 20°C)
- Inlet hose: 3/8" ID (DN10) (provided)
- Fitting: 3/4" BSPP/NPT
- Flow limiter (integrated): 2.1 Gal/min (5 LPM)

### Water Output:

- Min pressure: 30 psig (2.2 bar, 207 kPa)
- Pressure (max) 60 psig (4.14 bar, 414 kPa)
- Flow (rated) 12.46 gpm @ 42.8 psig (2.83 m<sup>3</sup>/h @ 30.1 m)

### Tank capacity:

16 Gal (60L) (approx.)

### Reserve capacity:

9.96 gal (37.7L)

### Dimensional:

28 x 24.6 x 12in (710 x 625 x 305mm)

### Weight:

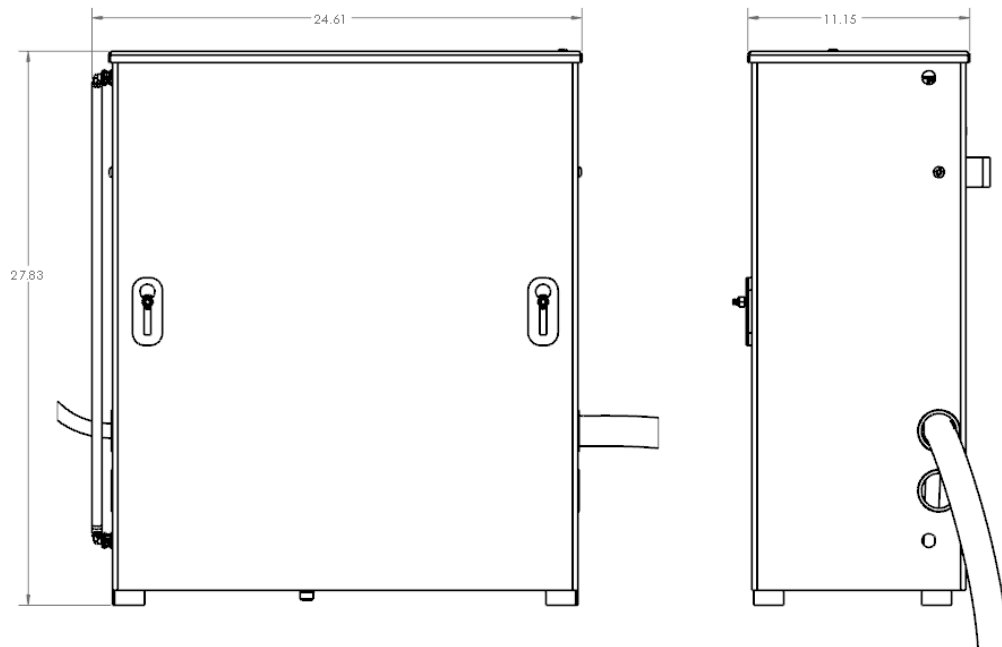
75lbs (35kg)

### Packaging:

Standard industrial packaging

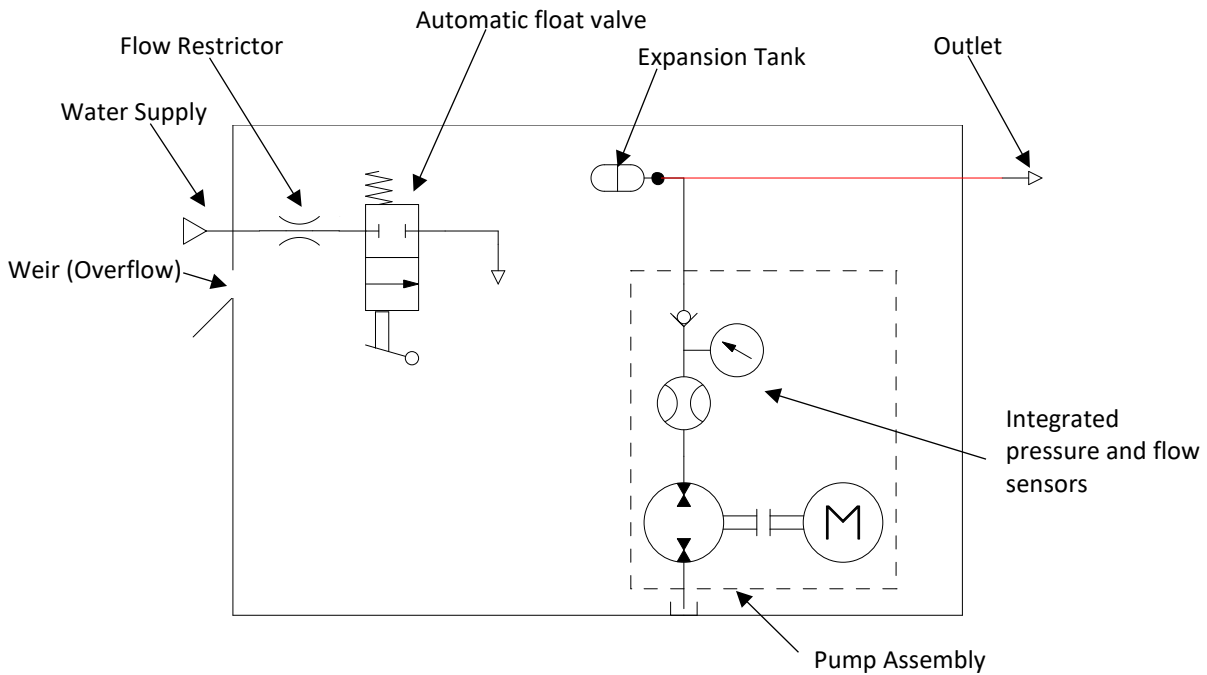
### Approvals:

WRAS Type AB air gap per EN13077, CE

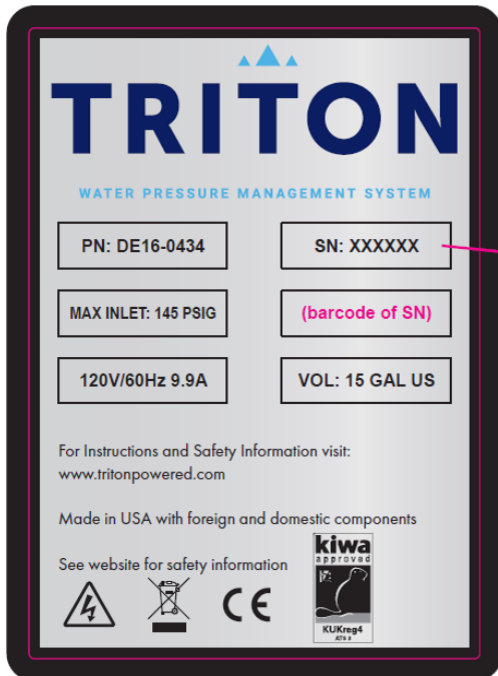




System Schematic:



Product Label (located on rear of tank):



## Switch

## General information:

- Product name: Thermal circuit breaker
- Product Number: TA35-C34 4 F 180 C0 CZM25 (120 VAC)  
TA35-C34 4 F 100 C0 CZM25 (230 VAC)
- Description: 2-pole, positively trip-free release, Illuminated
- Approvals: IEC 60934, UL 1077, CSA C22.2 No. 235, GB 17701

## Technical:

- Rated Voltage AC: 240 V; 50/60 Hz
- Rated current range AC: 0.05 - 20 A
- Conditional short circuit cap.: 0.05...20 A: 2 kA, SC (C1) @ 240 VAC
- Degree of Protection: from front side IP 40 acc. to IEC 60529
- Dielectric Strength: 50 Hz: > 2.5 kV  
Impulse 1.2/50  $\mu$ s: > 4 kV
- Insulation resistance: 500 VDC > 100 M $\Omega$
- Endurance typical: mechanical: 50'000 switching cycles  
AC: 1 x I<sub>r</sub>, cos  $\phi$  0.6: 50'000 switching cycles  
DC: 1 x I<sub>r</sub>, L/R = 2 - 3 ms, 50'000 switching cycles
- Overload: IEC: min. 40 trips @ 6 x I<sub>r</sub>, cos  $\phi$  0.6  
UL / CSA: min. 50 trips @ 1.5 x I<sub>r</sub>, cos  $\phi$  0.75

## Installation:

- Ambient temperature: -30 °C to 60 °C
- Vibration Resistance:  $\pm$  0.75 mm @ 10 - 60 Hz acc. to IEC 60068-2-6, test Tc  
10 G @ 60- 500Hz acc. to IEC 60068-2-6, test Tc
- Shock Resistance: 30 G / 18 ms acc. to IEC 60068-2-27, test Ea
- Tripping Type: Thermal
- Actuation Type: Rocker

## Pump

### General information:

- Product name: Triton Booster
- Approvals: CE, C-TICK, CSA, GOST

### Technical:

- Rated flow: 2.83 m<sup>3</sup>/h
- Rated head: 30.1 m
- Impeller nom: 102 mm
- Type of impeller: CLOSED
- Impellers: 4
- Maximum particle size: 1 mm
- Curve tolerance: ISO9906:2012 3B
- Start pressure: Automatic

### Materials:

- Pump housing: PP30GF
- Impeller: PPO20GF

### Installation:

- Max. ambient temperature: 50 °C
- Type of suction: STRAINER

### Liquid:

- Pumped liquid: Water
- Liquid temperature range: 0 .. 40 °C
- Liquid temp: 20 °C
- Density: 998.2 kg/m<sup>3</sup>
- pH-value range: 4-9

### Electrical data:

- C run: 13 µF
- Mains frequency: 50 Hz
- Rated voltage: 1 x 220-240 V
- Rated current: 4.8 A
- Starting current: 12 A
- Cos phi: 0,94
- Rated speed: 2800 rpm
- Capacitor size - run: 13 µF/450 V
- Enclosure class (IEC 34-5): IP68
- Insulation class (IEC 85): F
- Motor protection: YES
- Cable type: H07RN-F 3G1

### Controls:

- Flow switch: yes

## Service Instructions

### Tank Draining (Normal Method)

- Disconnect top quick connect coupler at top of sight tube
- Lower sight tube and male coupler into suitable drain. Hose must be lower than bottom of tank to maximize water removal.
- Reassemble in reverse order of disassembly

### Tank Draining (Quick method)

- Turn switch to OFF (0)
- Release pressure from outlet by cycling downstream equipment
- Disconnect outlet hose from downstream equipment
- Place hose in suitable drain
- Make sure hose is securely restrained
- Turn switch to ON (1) and allow pump to evacuate tank. Pump will turn off when the float switch senses a low water level.
- Turn switch to OFF (0)
- Reassemble in reverse order of disassembly

### Inlet screen cleaning

- Turn off inlet water
- Remove inlet hose
- Remove filter from float inlet by pulling on screen tab with needle nose pliers.
- Clean or replace screen
- Reassemble in reverse order of disassembly

### Float valve replacement

- Turn off inlet water
- Remove inlet hose
- Remove (qty 2), float valve bracket screws
- Disconnect float valve outlet hose
- Remove float valve
- Reassemble in reverse order of disassembly

### Baffle replacement

- Loosen thumb nuts
- Tip baffle up and slide out for bracket
- Inspect, clean or replace as needed
- Reassemble in reverse order of disassembly

### Pump replacement

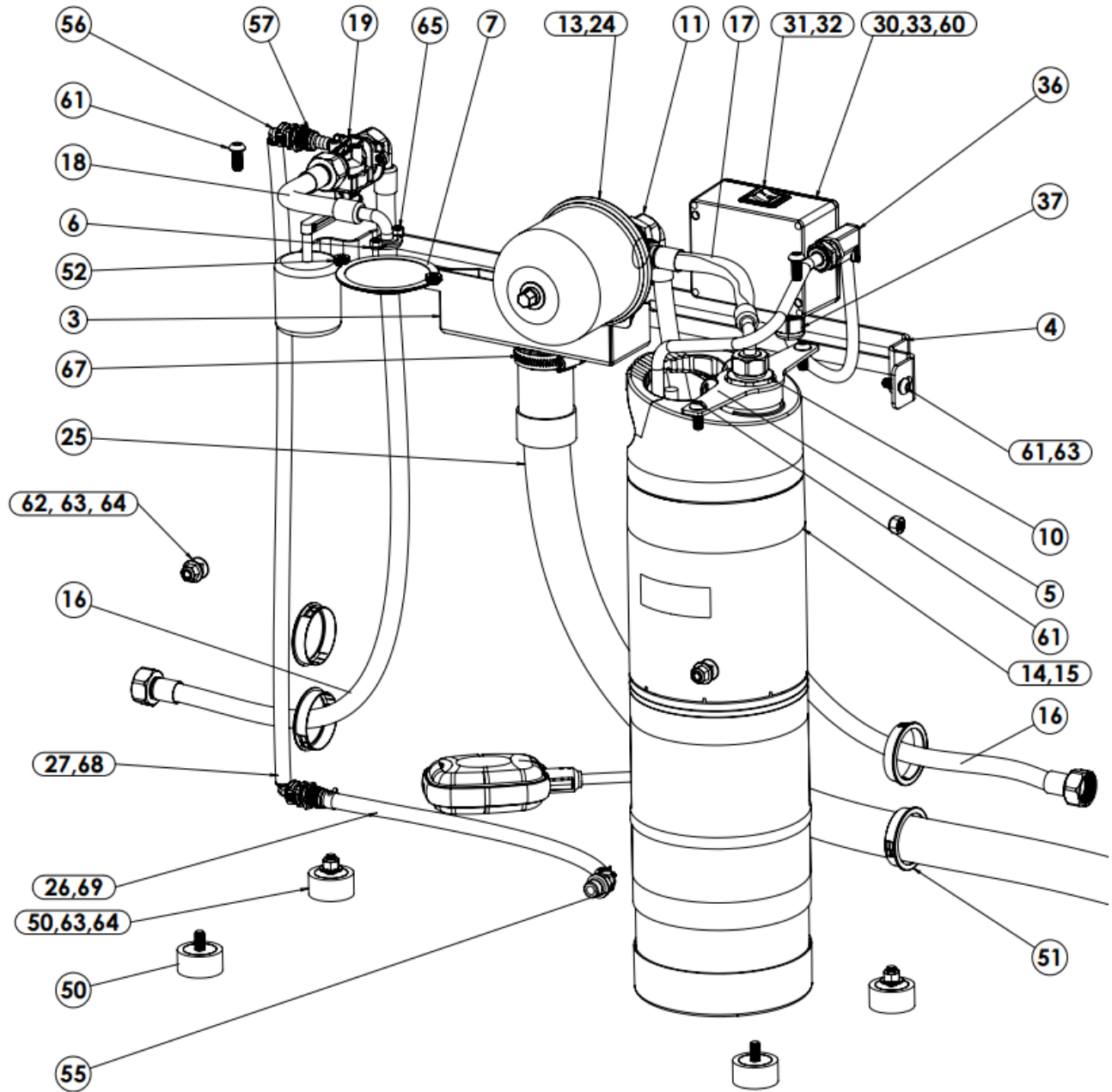
- Turn off unit on/off switch
- Disconnect electric cord from supply
- Break clamp on pump outlet hose fitting and disconnect hose from fitting
- Remove pump bracket screws and pump bracket
- Remove both fittings from pump outlet
- Open junction box (30)
- Disconnect brown, blue and ground wire
- Loosen cable glands on tank and junction box
- Pull pump cord to remove from both glands

- Lift pump by handle and remove from tank
- Install replacement pump and reassemble in reverse order of disassembly
- Seals may be lubricated with a soapy water solution to aid reassembly
- Reinstall hose and install new clamp

## Component List

1	DE16-0434-1	Tank Asy	1
2	DE16-0434-2	Tank Lid	1
3	DE16-0434-3	Overflow	1
4	DE16-0434-4	Wall Bracket	1
5	DE16-0434-5	Pump Bracket	1
6	DE16-0434-6	Hose Clip	1
7	DE16-0434-7	Baffle	1
10	DE16-0434-10	Bushing - Special 1" NPT to 3/4 BSPP	1
11	DE16-0434-11	Fitting - Bulkhead Tee, 3/4 x 1/2 BSPP, Special	1
13	DE16-0434-13	Washer, Sealing, EPDM	
14	DE16-0434-14	Pump 120VAC	1
15	DE16-0434-15	Pump 230VAC	
16	DE16-0434-16	Hose, 3/4 BSPP, DN10, 2400mm	2
17	DE16-0434-17	Hose, 3/4 BSPP, DN10, 185mm	1
18	DE16-0434-18	Hose, 3/4 BSPP, DN10, 185mm one nut	1
19	DE16-0434-19	Float Valve, Mount, Flow Limiter 5 L/M	1
20	DE16-0434-19-1	Flow Limiter, MR04, 5L/M, (replacement)	1
21	DE16-0434-19-2	Bracket, Stainless nuts, (replacement)	1
22	DE16-0434-19-3	Screen, (replacement)	1
23	DE16-0434-19-4	Float (replacement)	1
24	DE16-0434-20	Expansion Vessel, 0.5L	1
25	DE16-0434-21	Overflow Tube, 1.5", Straight Cuff	1
26	DE16-0434-22	Sight Tube, Rear - length needs to be specified	1
27	DE16-0434-23	Sight Tube, Side - length needs to be specified	1
30	DE16-0434-30	Junction Box Light Grey	1
31	DE16-0434-31	Breaker (120V)	1
32	DE16-0434-32	Breaker (240V)	
33	DE16-0434-33	Power Entry Module - Includes Bail Wire	1
34	DE16-0434-34	Connector, Female quick disconnect, 16/14, Insulated	7
35	DE16-0434-35	Terminal, Ring	1
36	DE16-0434-36	Strain Relief, Right Angle	1
37	DE16-0434-37	Strain Relief, Straight	1
38	DE16-0434-38	Cord, UK, Type G	
39	DE16-0434-39	Cord, EU, Type E/F	
40	DE16-0434-40	Cord, Italy, Type E/F	
41	DE16-0434-41	Cord, Denmark, Type K (red)	
42	DE16-0434-42	Cord, Switzerland, Type J	
50	DE16-0434-50	Rubber Foot 5/16-18 Male Stud	4
51	DE16-0434-51	Bushing, Snap in, Black	4
52	93886A120	Thumb nut, #8-32	2
55	Q1795HB-6-6	SAE -6 to bead 45°	1
56	40AC-PB4-06	Coupler, Male, 3/8"	2
57	40ACV-SB3-06	Coupler, Female, Valved 3/8"	2
58	83GH-12-12	Adapter, 3/4" FGH to 3/4" MNPT	1
59	901GH-12	Gasket, 3/4" GH	1
60	SHCSS8-32F3/8SS	SHCS 8-32 x 3/8 stainless	2
61	BHCSS5/16-18F3/4SS	BHCS 5/16 -18 x 3/4" stainless	6
62	CB5/16-18F3/4SS	Carriage Bolt, 5/16-18 x 3/4" stainless	2
63	HNH5/16-18SSNL	Nut, Nylon Lock, 5/16-18, stainless	8
64	FL5/16SS0.750X0.050	Washer, 5/16 ID, Stainless	4
65	HNH8-32SSNL	Nut, Nylon Lock, #8-32, stainless	2
66	BHCSSM4x0.7F8SS	BHCS M6 x 0.7 x 8mm stainless	2
67	30020	Clamp, worm, stainless 2"	1
68	16700016	Clamp, Ear (13.2-15.7mm)	2
69	CTL-8STZD	Spring Clamp	2

Parts Diagram (Tank hidden for clarity)



Pump Assembly (for reference/troubleshooting)

