



PROSTOR XS

SINGLE COIL INDIRECT VESSEL

Operation & Maintenance Manual

User Instructions

Your system will run automatically in normal use it will however require regular servicing, it is essential that servicing is undertaken by competent installer. It is advisable that servicing of the vessel is timed to coincide with the servicing of your heat source.

Water flowing through the tundish indicates that there is a fault, if the water is hot turn the heat source off and allow water to cool (flow may stop) call out a competent plumber.

Installation Instructions

What follows is essential for warranty validity.

It is the responsibility of the user and/or installer to ensure that the unit is installed and operated safely, and in accordance with the instructions supplied below.

- The installation should also be in accordance with the British Standard Codes of Practice, current Building Regulations, i.e. Health & Safety Document No. 635 (The Electricity At Work Regulations 1989), and the Water Supply (Water fittings) Regulations, BS 5449:1990 Forced circulation hot water systems , BS 6700:2006 Design, installation, testing and maintenance of services supplying water. The relevant regulations are: England and Wales – Building Regulation G3; Scotland – Technical Standard P3; North Ireland – Building Regulation P5
- Installation must be in accordance with the relevant requirements of the Building regulations, IEE Regulations and the Water Supply (Water Fittings) Regulations. It should also be in accordance with any relevant requirements of the Local Authority
- Must be undertaken by a qualified installer
- Must be supplied, with a Temperature/ Pressure safety valve usually located at the top of the vessel. An unvented kit to be located on the cold water supply (refer to installation diagram).
- A circulation pump (optional) maybe installed on the secondary return to reduce water wastage (refer to installation diagram).
- Lifting - on larger vessels lifting eyes are available, do not use straps or chains which may result in damage to the vessel
- Do not lift a vessel using the insulation where fitted straps may crush or damage the insulation casing
- Siting, - ensure that the surface the vessel is located on is firm and level to prevent settling, pipe strain or distortion of the vessel. Adequate space to enable installation and servicing and access to the inspection hatch and all connections must be allowed for
- Pipework/connections - ensure threaded/flanged connections from the pipework is square on to the connections on the vessel. Flanged connections, ensure that the bolts are not tightened consecutively around the flange but diametrically opposite.

Pipework connections must be adequately supported to prevent any stress to the vessel

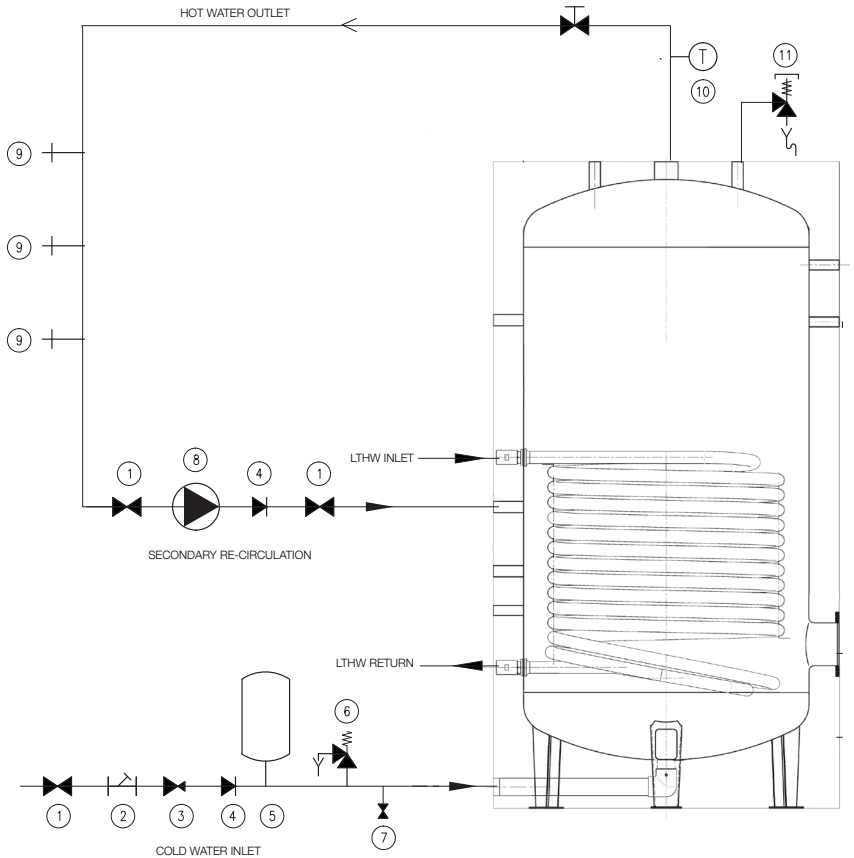
- Before start up/testing and after installation, check and if necessary tighten the hydraulic connections where a heat exchanger is fitted
- tightening of the bolts should be in a criss cross sequence, any leaks must be rectified before start up
- All unvented systems must be fitted with devices to accommodate the expansion of water during the heating cycle it is essential that an unvented kit is located on the cold water supply during installation
- Direct electrically heated (immersions) must be fitted together with a dual thermostat incorporating an independent high limit cut out thermostat & a control thermostat
- All electrical work must be undertaken by a qualified electrician
- Gradually fill the system ensure adequate venting for air removal during filling and that the drain valve is closed, slowly open other system connections where appropriate
- When the vessel is operating at working temperature and pressure visually check all connections and gaskets, if necessary tighten bolts on the system.
- The working temperature of the vessel should not exceed 99°C and the working pressure should not exceed 8 bar

Maintenance

Maintenance will consist of testing and checking if all components are working properly, before attempting any internal inspection/maintenance drain contents of vessel, if fitted with an electrical immersion ensure the immersion is switched off

- Annual internal cleaning of the vessel should be carried out to avoid corrosion
- Undo Bolts from inspection hatch (as previously described) check for wear of gasket, replace if necessary
- If fitted with a heat exchanger, the heat exchanger should be inspected in situ annually, however, where the water is particularly aggressive, it is advisable that inspections should be carried out every 6 months or so. Lime scale build up on the heat exchanger will reduce performance regular cleaning using a suitable descaling agent will avoid performance drop off
- Ensure all hydraulic connections are secured and leak tested before and during vessel refill
- Check that the Pressure/temperature relief valve is operating any hot water from the PT valve must be discharged in a safe way reflecting the requirements of current legislation
- Ensure Immersion(s) are heating the water to the correct temperature
- Electrical checks/tests on the immersion and dual control thermostats must be carried out by a qualified electrician

INSTALLATION DIAGRAM



Key

- | | |
|---------------------------|--------------------------------|
| ① Isolating Valve | ⑦ Drain |
| ② Strainer | ⑧ Circulation Pump (Optional) |
| ③ Pressure Reducing Valve | ⑨ Draw-off Points |
| ④ Non Return Valve | ⑩ Temperature Gauge (Optional) |
| ⑤ Expansion Vessel | ⑪ T&P Valve |
| ⑥ Safety Relief Valve | |

| CONNECTOR TYPE | | MODEL | | | | | |
|----------------|----------------------------|---------|---------|---------|---------|---------|---------|
| | | 300 | 500 | 800 | 1000 | 1500 | 2000 |
| 1 | Domestic Cold Water Inlet | 1 1/2" | 2" | 2" | 2" | 2 1/2" | 2 1/2" |
| 2 | Coil Heat Exchanger Outlet | 1" | 1" | 1 1/4" | 1 1/4" | 1 1/4" | 1 1/4" |
| 3 | Sensor Tappings x 3 | 1/2" | 1/2" | 1/2" | 1/2" | 1/2" | 1/2" |
| 4 | Destratification Outlet | 3/4" | 3/4" | 3/4" | 3/4" | 1" | 1" |
| 5 | Domestic Hot Water Return | 3/4" | 3/4" | 3/4" | 3/4" | 1" | 1" |
| 6 | Coil Heat Exchanger Inlet | 1" | 1" | 1 1/4" | 1 1/4" | 1 1/4" | 1 1/4" |
| 7 | Destratification Inlet | 3/4" | 3/4" | 3/4" | 3/4" | 1" | 1" |
| 8 | Domestic Hot Water Outlet | 1 1/2" | 2" | 2" | 2" | 2 1/2" | 2 1/2" |
| 9 | T&P Relief Valve | 1/2" | 3/4" | 3/4" | 3/4" | 1" | 1" |
| 10 | Optional Immersion Heater | 1/2" | 1 1/2" | 1 1/2" | 1 1/2" | 1 1/2" | 1 1/2" |
| 11 | Flanged Inspection Hatch | 180/120 | 180/120 | 300/220 | 300/220 | 300/220 | 300/220 |

MAXIMUM WORKING PRESSURE 8 bar, MAXIMUM WORKING TEMPERATURE 99 C

GENERAL SPECIFICATIONS

| | Unit | XS 300 | XS 500 | XS 800 | XS 1000 | XS 1500 | XS 2000 |
|-------------------------|--------|--------|--------|--------|---------|---------|---------|
| Contents | litres | 300 | 500 | 800 | 1000 | 1500 | 2000 |
| Empty weight | kg | 68 | 88 | 120 | 160 | 205 | 260 |
| Heat Loss | W | 43 | 62 | 61 | 71 | 94 | 114 |
| Max. operating pressure | bar | 8 | 8 | 8 | 8 | 8 | 8 |
| Max. water temperature | °C | 99 | 99 | 99 | 99 | 99 | 99 |

DIMENSIONS

| | Unit | XS 300 | XS 500 | XS 800 | XS 1000 | XS 1500 | XS 2000 |
|--------------------------------------|------|--------|--------|--------|---------|---------|---------|
| Total height | mm | 1742 | 1890 | 1815 | 2140 | 2385 | 2455 |
| Diameter (without insulation) | mm | 480 | 630 | 800 | 800 | 950 | 1100 |
| Diameter (with insulation) | mm | 580 | 730 | 970 | 970 | 1120 | 1270 |
| Height to Centre of Inspection Hatch | mm | 390 | 445 | 460 | 460 | 550 | 550 |
| Coil Heat Exchanger Inlet | mm | 780 | 901 | 1070 | 1070 | 1276 | 1311 |
| Height to Sensor Tapping | mm | 490 | 515 | 555 | 555 | 590 | 625 |
| Height to Sensor Tapping | mm | 1190 | 1215 | 1365 | 1535 | 1745 | 1815 |
| Height to Sensor Tapping | mm | 1480 | 1611 | 1525 | 1815 | 2025 | 2095 |
| Height to Destratification Inlet | mm | 1430 | 1526 | 1370 | 1660 | 1870 | 2015 |
| Height to Secondary Return | mm | 950 | 1201 | 845 | 845 | 880 | 915 |
| Height to Optional Immersion | mm | 390 | 445 | 460 | 460 | 550 | 550 |
| Height to Destratification Outlet | mm | 600 | 645 | 665 | 665 | 700 | 735 |
| Coil Heat Exchanger Outlet | mm | 340 | 355 | 395 | 395 | 430 | 465 |

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