

AMAZON CHIP

Unvented Hot Water Cylinders

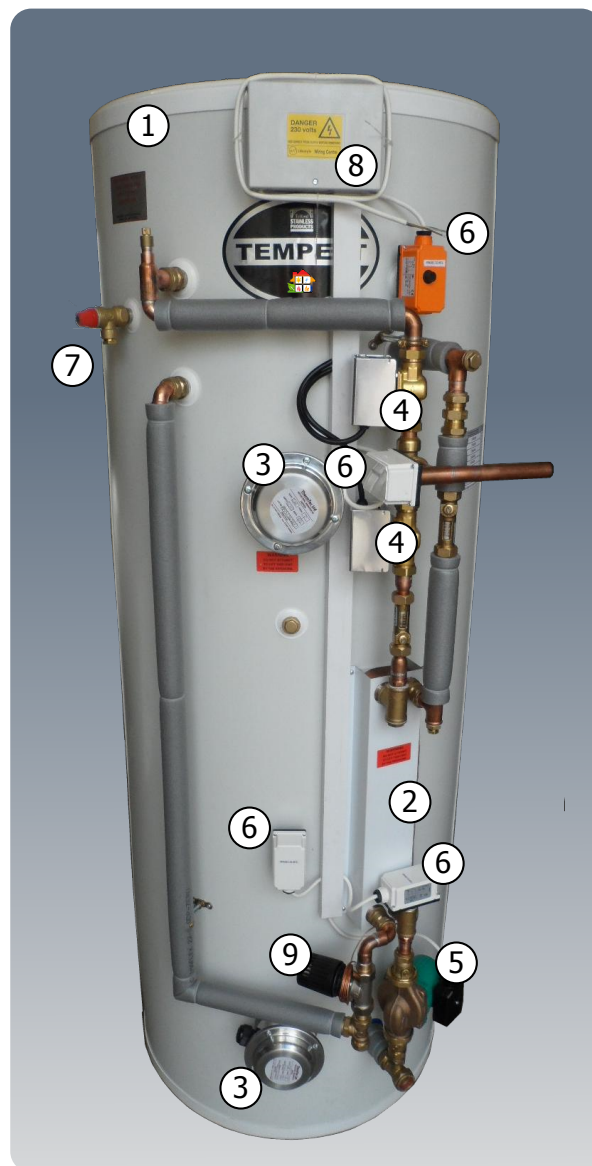
The Amazon CHIP Unvented Cylinder has been specifically designed for CHP systems running on oils, where a CHP pre-heat is required.

An HXIN plate heat exchanger recovery system is used to get the lowest possible return temperatures to the CHP, while a coil allows heat at the top of the store to be fed back to the CHP unit to warm it up prior to start-up, thereby ensuring a reliable start and reducing wear.

To make further use of available electricity, as well as to provide multiple levels of redundancy, the system is fitted with two 12kW electric elements. These ensure that the system can still provide hot water in the case of a plant failure.

Key:

1. Amazon Cylinder, 500 litre
2. Plate Heat Exchanger
3. Immersion Heaters, 12kW
4. Motorised Valves
5. Cylinder recovery pump
6. Control and Safety Thermostats
7. Temperature & Pressure Relief Valve
8. Wiring Centre with Internet Monitoring
9. Thermostatic Control Valve



Case Study: KFC Wincanton

KFC's flagship renewables branch makes use of a novel CHP generator that runs off waste cooking oil to provide electricity and

Our challenge was to deliver a high output unvented cylinder that maximised extraction of heat from the CHP and providing two additional levels of 12kW electric backup - to be without hot water for even a few hours results in a potential store closure.

The system has remote monitoring, and has performed as expected since 2014.



We are converting our waste cooking oil into electricity to provide hot water and lighting.