

HeatPak

Module to combine LTHW heating with Condensing and Hybrid Water Heaters



Suitable for use with the following product ranges:

- EcoCharger Gas-fired Condensing Water Heater; ECH models
- EcoCharger Hybrid Water Heater; HWH/HWHC models



Lochinvar[®]
HIGH EFFICIENCY BOILERS & WATER HEATERS

Lochinvar HeatPak LTHW module

Benefits of using HeatPak Module

A single EcoCharger/EcoCharger Hybrid with HeatPak can be used for both the DHW and heating demand, the appliance requires one flue outlet and a single gas connection. The system requires a smaller footprint within the plant room compared to a separate boiler and water heater.

The EcoCharger/EcoCharger Hybrid control works with the HeatPak to control both the heating and DHW system. Service and maintenance are reduced with just a single EcoCharger/EcoCharger Hybrid providing DHW and heating.



- Reduced capital cost due to using a single appliance
- Reduced footprint required within the plant room
- Optional BMS Interface can be used to give detailed system information through a Modbus protocol
- A single supplier for all the equipment
- Can be integrated with Solar Thermal using the EcoCharger Hybrid range

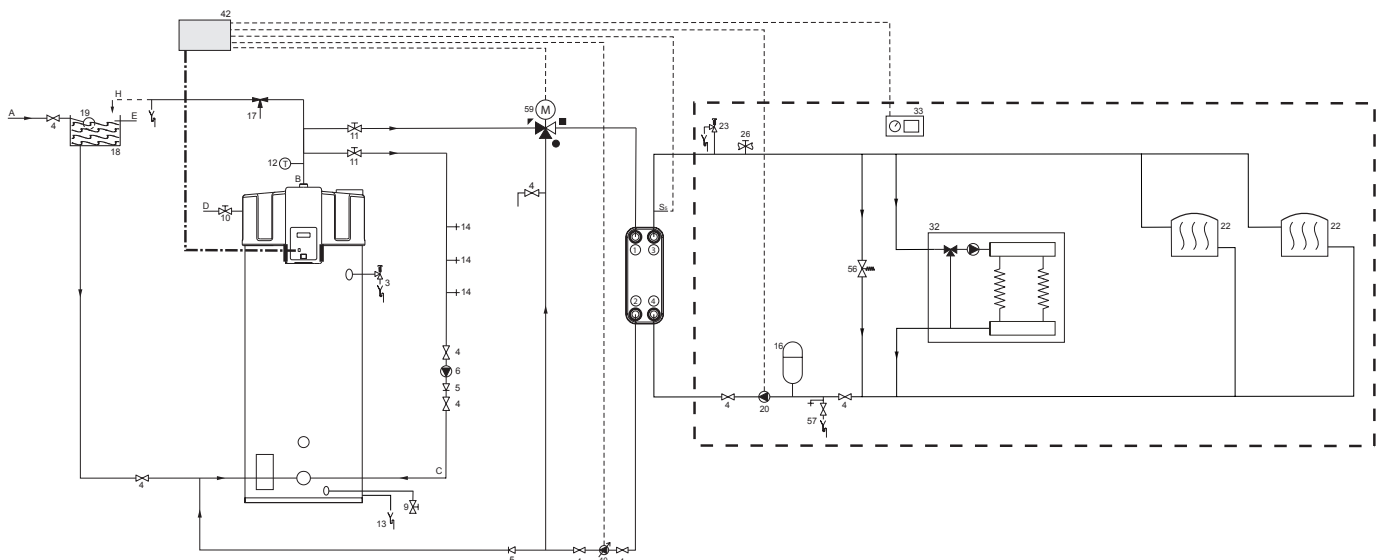
Key Facts

- Module to combine central heating with a high efficiency water heater
- For applications with relatively small heating demand compared to the hot water demand
- Components for the HeatPak are supplied in kit form
- The maximum distance between the appliance and the plate heat exchanger can be up to 5 meters (in a system with a pipe diameter of 22mm)
- Initial investment, service and maintenance costs are considerably lower than a stand-alone boiler
- Ancillary Options: BMS Interface for monitoring up to 50 parameters through the Building Management System

Installation Drawing

HeatPak with three-way mixing valve and DHW pump in combination with an EcoCharger Gas-fired Condensing Storage Water Heater (Vented).

For a drawing of the HeatPak in combination with an EcoCharger Hybrid Water Heater, please refer to our website.



HeatPak LTHW module for EcoCharger Gas-fired Condensing Water Heater and EcoCharger Hybrid Water Heater

Buildings that have a large hot water demand over a short period of time, such as sports facilities and school kitchens, often leave the gas-fired condensing water heater standing for extended periods of time without any hot water demand. By adding the Lochinvar HeatPak we can provide up to 40kW of LTHW working in conjunction with our EcoCharger/EcoCharger Hybrid Water Heater which results in shorter periods of non use during the heating season.

The HeatPak consists of a plate heat exchanger with a primary domestic hot water (DHW) pump, a three way mixing valve, a temperature sensor with clip, and the control* and required connection materials. The intelligent control uses the available hot water within the EcoCharger/EcoCharger Hybrid efficiently to meet the heating demand without compromising comfort levels. HeatPak can be used for both under floor and radiator circuits with temperatures available up to 70°C flow.

The master control operates the DHW pump and three way mixing valve to reach the programmed set point. By reducing the speed of the DHW pump (by up to 50%) and utilising the three way mixing valve to mix return water with the water from the EcoCharger/EcoCharger Hybrid the heating output can be accurately matched to the heating demand. The HeatPak control allows the DHW and heating set points to be configured independently of each other.

Legend for Installation Drawing

3	T&P Valve (mandatory)
4	Stop Valve (recommended)
5	Non-return Valve (mandatory)
6	Circulation Pump (optional)
9	Drain Valve
10	Manual Gas Valve (mandatory)
11	Service Stop Valve (recommended)
12	Temperature Gauge (optional)
13	Condensation Drain
14	Draw-off Point
16	Expansion Vessel (mandatory)
17	3-way Aeration Valve (recommended)
18	Cold Water Head Tank
19	Float Switch
20	Heating Pump (mandatory)
22	Radiator
23	Pressure Valve (mandatory)
26	Heating Filling Tap (recommended)
32	Floor Heating
33	Room Thermostat
40	DHW Pump
42	Control HeatPak Module
56	Pressure Valve (recommended)
57	Filling and Draining Valve (mandatory)
59	3-way Mixing Valve (mandatory)

HEATPAK MODULE FOR ECOCHARGER/ECOCHARGER HYBRID



- Plate heat exchanger – single separation (a double separated plate heat exchanger can be delivered upon request)
- Control with communication cable*
- Primary DHW pump
- Temperature sensor with cable incl. clip
- Three-way mixing valve including cables
- Instruction manual

* HeatPak modules for the EcoCharger Hybrid do not include a control module, this is included within the solar control module supplied with the EcoCharger Hybrid water heater.

A	Cold Water Supply
B	Hot Water Supply
C	Circulation Pipe
D	Gas Supply
E	Overflow Pipe
H	Overflow Protection
▴	Hot water supply 3-way mixing valve from water heater
■	Outlet 3-way mixing valve to plate heat exchanger
●	Return water to 3-way mixing valve from plate heat
Ss	Heating system sensor

Technical Specification

Part No. EcoCharger Water Heater	Part No. EcoCharger Hybrid Water Heater	kW CH capacity	ΔT CH system
HP 20 06	H 20 06	20	06
HP 20 10	H 20 10	20	10
HP 20 20	H 20 20	20	20
HP 30 06	H 30 06	30	06
HP 30 10	H 30 10	30	10
HP 30 20	H 30 20	30	20
HP 40 06	H 40 06	40	06
HP 40 10	H 40 10	40	10
HP 40 20	H 40 20	40	20

Note. For installations that require more than 40kW heating capacity, please contact our offices.

Please use the table below for selecting the CH pump

Part No. EcoCharger Water Heater	Part No. EcoCharger Hybrid Water Heater	ΔT CH system	Specifications plate heat exchanger heating side	
			Flow (m ³ /h)	ΔP (kPa)
HP 20 06	H 20 06	36-30	2,9	8
HP 20 10	H 20 10	40-30	1,7	9
HP 20 20	H 20 20	70-50	0,9	2,5
HP 30 06	H 30 06	36-30	4,3	10
HP 30 10	H 30 10	40-30	2,6	6,5
HP 30 20	H 30 20	70-50	1,3	5
HP 40 06	H 40 06	36-30	5,8	17
HP 40 10	H 40 10	40-30	3,5	11
HP 40 20	H 40 20	70-50	1,8	9



For further information on the HeatPak, including ICM & User Instructions and our full Warranty Terms and Conditions, please visit our website: www.lochinvar.ltd.uk

