CHWS

TECHNICAL PRODUCT SUBMITTAL

ProPak Thermal Plus 5031DS - Semi Instantaneous Packaged Plate Heat Exchanger

Product Description

WRAS Approved Packaged Plate Heat Exchanger suitable for Domestic Hot Water Generation.

The ProPak Thermal range of packaged plate heat exchangers are suitable for the generation of domestic hot water in commercial and industrial applications. Each WRAS approved unit is constructed with Stainless Steel AISI 316 plate heat exchangers, has a MODBUS interface and fully modulating ERP A rated primary pumps.

ProPak ® Thermal Range: Features

- Full WRAS Approval (WRAS Approval Number 1711338)
- Heat outputs: 75 – 800kw
- Stainless Steel AISI 316 Plates
- EPDM Gaskets
- ERP A rated fully modulating Primary Pumps
- PID Controller with MODBUS Interface
- Fast acting Siemens 3-port valve
- High Density, Semi-Rigid Insulation

ProPak ® Thermal Range: Options

- Skid Mounting with pre-connected Buffer Vessel
- High Pressure: 16 bar option
- High Outputs: 1mw + options

2 YEAR WARRANTY – 2 YEAR WARRANTY

WRAS APPROVED PRODUCT

Technical Specification

Maximum Duty with Primary Flow & Return @ 80°C/45°C	500 kW
DHW Flow Rate ΔT 50°C	8568 litres/hour
Plate Construction Material	AISI 316L Stainless Steel
Gasket Construction Material	EPDM - PRX Gasket
Press Plate and Mounting Frame Construction Material	Epoxy Coated Quality Mild Steel
Ancilliaries Mounting Pipework	AISI 316L Stainless Steel
Insulating Jacket Material	30mm High Density Semi - Rigid Polyolefin Foam (PO)
Full PID Control Unit - (Maximum Full Load Current)	MODBUS RTU/RS 485 BMS Interface - (10 Amp)
Primary Circuit Motorised 3 Port Control Valve	Siemens VXF 32.50 - 40 / SAX 61.03 Actuator
Primary Circulation Pumps (x2)	Yonos Para Hi - Flow 50 / 12
Secondary Circuit Shunt Pump	Grundfos TP 50 - 60
Total Height (A)	1310 mm
Total Length (B)	974 mm
Total Width (C)	793 mm
Weight	285 kg
Maximum Operating Pressure - Primary	10 bar
Maximum Operating Pressure - Secondary	10 bar
WRAS Approval Number	1711338

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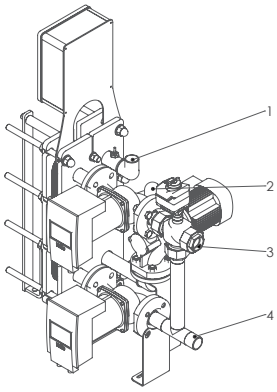

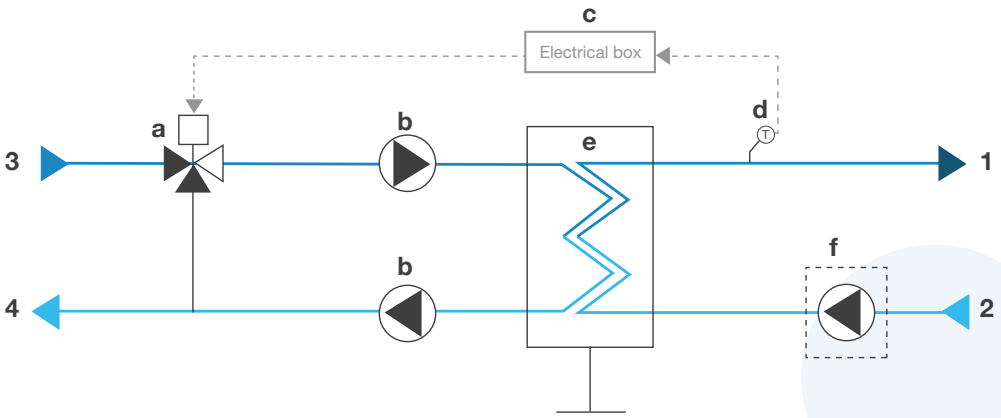

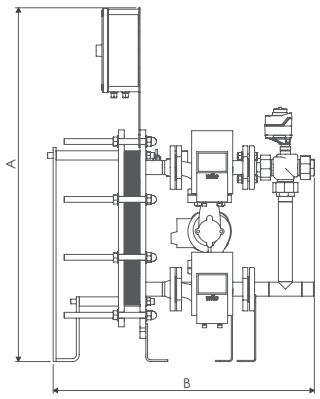

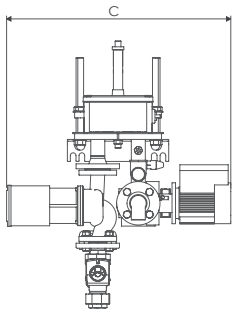

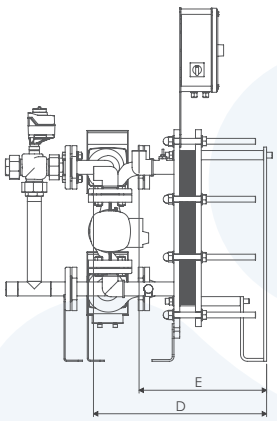

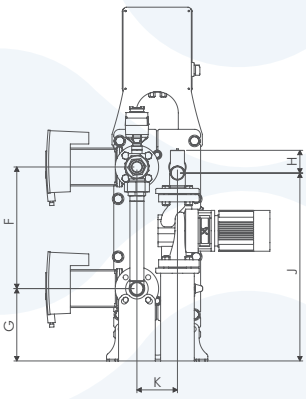

Primary Flow & Return Temp @	80°C/45°C
Heat Load Required / Max Duty	500 kW
DHW Flow Rate/Hour ΔT 50°C	8568 litres
Secondary Circuit Flow Rate	2.38 lit/sec
Secondary Pressure Drop (Peak)	14.50 kPA
Primary Circuit Flow Rate	3.51 lit/sec
Primary Pressure Drop (Peak)	28.30 kPA
Primary Circuit Fluid	Water

Dimensions (mm)	
A	1310
B	974
C	793
D	659
E	451

Connections (mm)	
1	Secondary Outlet Connection - DN50
2	Secondary Inlet Connection - DN50
3	Primary Inlet Connection - DN50
4	Primary Outlet Connection - DN50

Primary Flow & Return Temp @	80°C/60°C
Heat Load Required / Max Duty	300 kW
DHW Flow Rate/Hour ΔT 50°C	5148 litres
Secondary Circuit Flow Rate	1.43 lit/sec
Secondary Pressure Drop (Peak)	5.52 kPA
Primary Circuit Flow Rate	3.69 lit/sec
Primary Pressure Drop (Peak)	30.00 kPA
Primary Circuit Fluid	Water

Dimensions (mm)	
F	420
G	250
H	9
J	719
K	140

Schematic Drawing Key	
a	Motorised 3 Port Control Valve
b	Primary Circulation Pumps (x2)
c	PID Control Unit - MODBUS / BMS Interface
d	Control Temperature Sensor - PT100
e	Gasketed Plate Heat Exchanger
f	Secondary Circulation Pump

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CIBSE PATRONS

WRAS APPROVED PRODUCT

7 YEAR WARRANTY

"Commercial Hot Water Solutions Ltd (CHWS Ltd) are a Bosch recognised supplier of high quality commercial and industrial hot water generators and storage vessels for use with the Bosch Commercial and Industrial range of boilers and water heaters"