



# HEATPAC<sup>®</sup> CBM

## Brazed plate heat exchanger

The HEATPAC CBM heater is designed mainly for use in the following applications:

- Preheating of fuel oil prior to centrifugal separation.
- Preheating of lube oil prior to centrifugal separation.

The heater uses either steam, thermal oil or hot water as a heating medium.

The HEATPAC CBM heater is type approved by all the leading marine classification societies and can be delivered with a classification certificate.

### Working principle and design

The HEATPAC CBM heater contains a series of corrugated stainless steel plates mounted together to form channels through which the heating medium and the oil flow in opposite directions. Heat is efficiently transferred from the heating medium to the oil through the corrugated surface of the plates.

The media are kept apart in the unit by a brazed seal around the edge of the plates. The contact points of the plates are also brazed to withstand the pressure of the heating medium.

### Features

- Efficient heat transfer
- No replacement parts
- Flanged connections
- Compact design
- Low weight

### Benefits

- Cost effective, low investment
- Optimal use of space
- Easy to install
- Easy to fit into existing systems
- Virtually maintenance-free



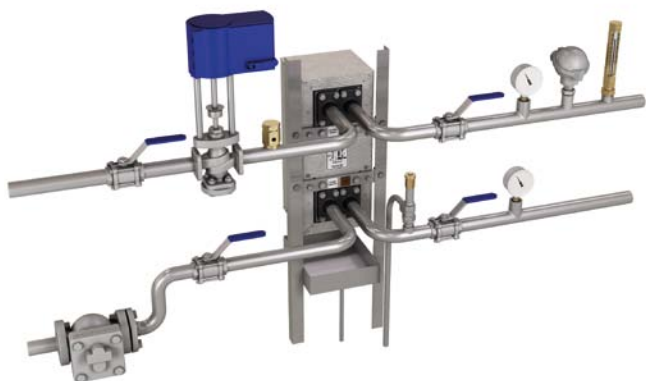
### Heater capacity

Up to 30 m<sup>3</sup>/h, for preheating. Actual capacity depends on temperature programme, permitted pressure drop, properties of the heating media.

The HEATPAC CBM is available in two types: CBM 30 and CBM 110. Each type is available with 20, 40, 60, 80 or 100 plates.

### Scope of supply and installation

The HEATPAC CBM heater can be installed either vertically or horizontally when thermal oil or hot water are used. When using steam as a heating medium the HEATPAC CBM can be installed vertically.



### Technical data

Working temperature	max. 225°C
Working pressure	max. 16 bar
Material, plates	stainless steel AISI 316
Material, connections	steel SS 1430
Brazing material	copper

### Standard accessories

Insulation  
Counterflanges including gaskets and bolts

### Technical documentation

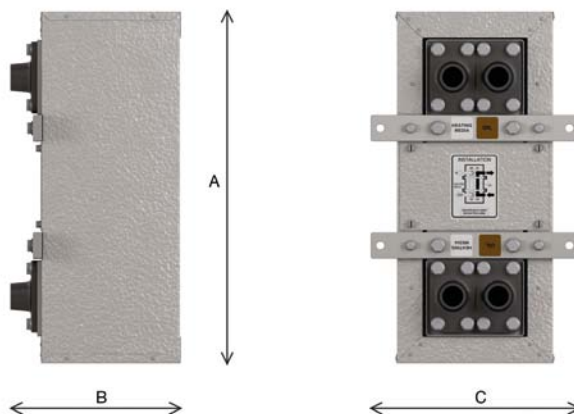
Complete documentation is provided in the instruction book accompanying each HEATPAC CBM delivery.

### Optional equipment

Temperature control equipment  
Regulating valve  
Relief valve  
Thermometer  
Steam trap  
Vacuum breaker  
Pressure indicators  
Shut-off valves

### Dimensions

Type	Dimensions (mm)			Connections		Weight (kg)
	A	B	C	(mm)	(inch)	
CBM 30-20	400	160	240	25	1	10
CBM 30-40	400	160	240	25	1	13
CBM 30-60	400	260	240	25	1	15
CBM 30-80	400	260	240	25	1	17
CBM 30-100	400	310	240	25	1	19
CBM 110-20	700	190	320	40	1½	27
CBM 110-40	700	190	320	40	1½	35
CBM 110-60	700	310	320	40	1½	44
CBM 110-80	700	310	320	40	1½	47
CBM 110-100	700	370	320	40	1½	55



### How to contact Alfa Laval

Contact details for all countries are continually updated on our web site. Please visit [www.alfalaval.com](http://www.alfalaval.com) to access the information direct.