

PUMPING AND PREHEATING UNITS
HOT BOX HB-500...2000 R Series



group

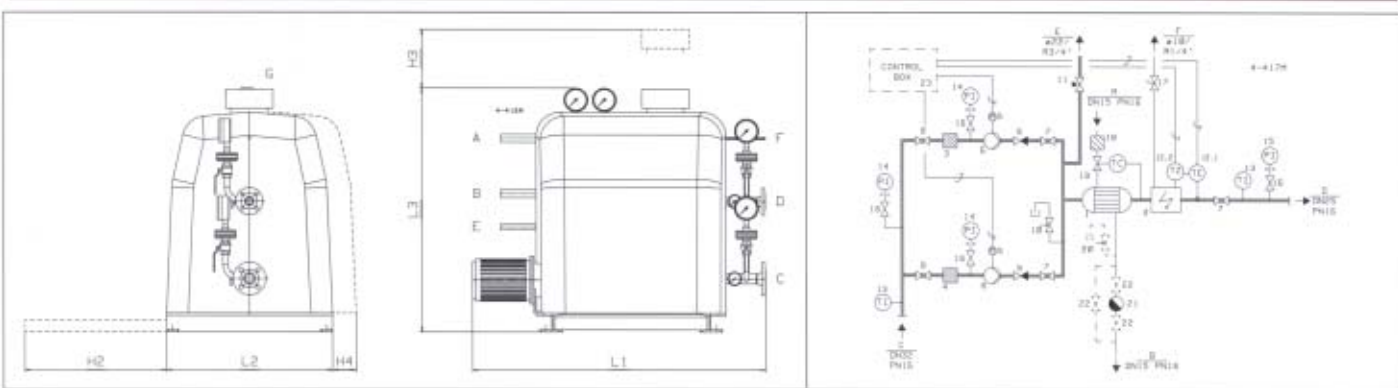
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Oilon

oilon® PUMPING AND PREHEATING UNITS

HOT BOX HB-500...2000 R Series



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|---------------------------------|--------------------------|------------------------------|----------------------------------|---|
| Connections | Height from floor | 1 Water/steam heat exchanger | 14 Pressure gauge | In steam drive there is also a pressure regulator as optional extra, if the steam pressure exceeds 6 bar. |
| A Incoming heating water/steam | A = 830 mm | 2 Electric heat exchanger | 15 Pressure gauge | |
| B Outgoing heating water /steam | B = 556 mm | 3 Oil filter | 16 Gauge valve | In R2 types pressure transmitters are in pressure gauges. |
| C Oil suction | C = 226 mm | 4 Oil filter | 17 Degassing valve | |
| D Oil to burner | D = 553 mm | 5 Electric motor | 18 Strainer [†] | |
| E Oil return to oil tank | E = 433 mm | 6 Pump | 19 Temperature regulator | |
| F Degassing to oil tank | F = 810 mm | 7 Shut-off valve | 20 Relief valve ^{*)} | |
| G Connection box | | 8 Shut-off valve | 21 Steam trap [†] | |
| | | 9 Non-return valve | 22 Shut-off valve ^{**)} | |
| Measures | Maintenance space | 10 Relief valve | 23 Control box ^{*)} | |
| L1 = 1230 mm | H2 = 700 mm | 11 Regulating valve | | |
| L2 = 700 mm | H3 = 800 mm | 12.1 Limit thermostat | | |
| L3 = 1050 mm | H4 = 100 mm | 12.2 Double thermostat | | |
| | | 13 Thermometer | | |
- [†] steam drive only
^{*)} optional extra
^{**)} optional extra, steam drive

TECHNICAL DATA

Type	HB-500 R1/R2	HB-800 R1/R2	HB-1350 R1/R2	HB-2000 R1/R2
Water heat exchanger	120-9	120-9	120-15	120-23
Heating example 1				
- oil 40 → 70 °C	kg/h 500	500	1350	2000
- water 90 → 75 °C	kg/h 450	700	1200	1800
Heating example 2				
- oil 40 → 85 °C	kg/h 500	800	1350	2000
- water 110 → 95 °C	kg/h 650	1100	1800	2600
Steam heat exchanger	120-9	120-9	120-15	120-23
Heating example 1				
- oil 40 → 85 °C	kg/h 500	800	1350	2000
- steam	kg/h 20	30	50	76
Heating example 2				
- oil 40 → 110 °C	kg/h 500	800	1350	2000
- steam	kg/h 30	50	80	120
Oil pump				
4 bar (400 mm ² /s)				
- type	SPF 20R46	SPF 20R56	SPF 20R56	SPF 20R46
- output kg/h	685	960	1495	2160
Motor				
3- 50 Hz 400 V				
- output kW	0,55	0,55	0,75	1,50
- current A	1,9	1,9	2,0	4,8
- speed rpm	900	900	1380	2640

Type	R1	R2
Electric heat exchanger		
3- 400/230 V		
- output kW	4,5	11
- current A	6,9	15,9
Dry weight kg	280	280

Ensure trouble-free operation of your oil burner with a correctly designed pumping unit. The unit takes care of rough filtering and preheating of oil, and equipped with extra accessories, it can also take care of the right temperature and pressure of the oil.

The units in R series are meant to be used mainly in oil heating plants equipped with pressure atomizing burners.

The unit includes accessories shown in the PI-diagram above. The delivery includes also an oil tray.

Oil filters with large filtering area improve operation safety and reduce need of service. They can be opened and cleaned easily.

The units have a welded plate heat exchanger, where the plates are made of corrugated, acid-proof steel. Pressure loss over the primary side of the heat exchanger is max. 0,5 bar. If the unit is equipped with a temperature regulator, this must be dimensioned according to the available pressure difference. Construction pressure of the primary side is 16 bar and construction temperature +180 °C.

For the start-up of the heating plant the R1 models are equipped with a thermostat operated and R2 models with a thyristor operated electric heat exchanger.

There must be 800 mm free space above the unit so that the electric resistors can be withdrawn. The oil tray needs a space of 700 mm. Further more there must be space behind and in front of the unit for mounting of the housing.

The pumps are screw pumps.

The thermal insulation of units in R series is carried out as a housing solution, where the insulation is made of urethane foam. The surface of the cover is deep-drawn ABS-plastics.

In addition to the units in R series we manufacture units, where the heat exchanger operates with low or high-pressure steam. Units for higher output we manufacture according to customer's desires.

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We reserve the right to make technical modifications without notice.