



HORIZONTAL DIATHERMIC OIL HEATER MOD. ODE/C

GENERAL

The diathermic oil heater mod. ODE/C is a mono or pluritubular cylindrical boiler, with helically wound tubes, indoor arrangement, pressurized with total screening, of simple structure and safe operation.

The heater is conceived for overpressure combustion; this allows a better adjustment of the exceeding air and a consequent combustion efficiency which is almost constant, while the load varies; in addition, the furnace structure with passing flame and 3 smoke coils makes a very good use of the whole useful surface.

HEATER DESCRIPTION

The heater is made by:

- Combustion chamber of large volume, surrounded by tangent tubes arranged in parallel. The chamber volume allows the complete combustion development without unburnt materials.
- Thanks to its form, the combustion chamber absorbs the max heat quantity through radiator and conduction with a thermal volumetric load which abundantly comes within the safety limits.
- High density rock wool insulation, protected by a aluminium sheet (by request and payment in stainless steel), of a good industrial aesthetics.
- Oil entry and exit pipes ready for connection to the plant.
- Big front door (which can be opened through hinges on pin and hand wheel grips) made of steel, with inner coating made of refractory insulating material, provided with hole and flange for burner connection and flame check pilot light.
- Back cleaning door.
- Lifting eyebolts.
- Sturdy base made of steel profiles.

CONSTRUCTIVE PARTICULARS OF THE "STANDARD" SUPPLY

- Door opening from on only side, from the left to the right (hinge on the right side).
- Delivery connections, return and discharge on the left side looking for the boiler front.
- Horizontal back smokes exit, without flanging.

POSSIBLE MODIFICATIONS BY REQUEST (TO SPECIFY IN THE ORDER)

- Door opening from the right to the left from mod.2500.
- Delivery connections, return and discharge on the right side.
- Vertical back flanged smokes exit, with extra price.

KIT OF ACCESSORIES :

- n. 1 Differential pressure switch for oil circulation safety of primary manufacturer with on-off cocks
- n. 1 Discharge valve, stainless steel blower seal.
- n. 2 Manometers in glycerine bath on delivery and return.

ACCESSORIES ON REQUEST

PREWIRED OIL SUPPLY UNIT, consisting of :

n.1 Oil circulation electric pump, made of spheroidal cast iron, resistant to high temperatures, air cooling

COMPLETE of:

- filter of imperities collection.
- valve of interception on delivery of pmp with bellows in stainless steel.
- Discharged valve with bellows in stainless steel.
- manometer in glycerine bath with refrigerating coil and cutoff cock, on suction head.
- expansion compensators on pump suction and delivery.

CONTROL BOARD:

- control board, wall execution, voltage 400 v. - 50 Hz - according to the protection type IP 54, fire painted sheet steel shell, doors with rubber seals, locks with triangular keys, complete with digital thermoregulator of safety and regulation, check and control devices arranged in a visible way, raceway wiring with terminal board marked on the assembly plate.
- The electric board is subjected to functional check and final test.
- Kit of wiring diagrams.



PANEL VISIBLE INSTRUMENT of safety and funzional (in alternative at elettrical board)

- Instrument panel in box of plastic materials at high quality(120°) with grade of protection IP 55, vo ltage 230 V – 50 Hz, complete of wiring and marked terminal board with the following instrumentation:
 1. N.1 Digital thermoregulator which operating thermostat with 2 set of intervention with visualization of the delivery oil temperaure and max safety temperature allarm.
 2. N.1 general switch, n.1 on-off switch, n.1 manual reset push button of allarms.
 3. The instrument panel is subjected to funzional and final controll.
 4. Kit of wiring diagrams.

EXPANSION TANK for the diathermic fluid free expansion, made of carbon steel, vertical execution, with antirust paiting, complete with connections and with:

- steel level indicator with trasparent glass (to be protected against any water infiltrations).
- safety level regulator with foat (for arrangement in the electrical board).
- Digital thermoregulator of visualization and max oli temperature allarm (to insert in the elettrical board).

PLANT FILLING PUMP for the loading (with controll preset in the elettrical board).

On request: group of operating valves of load pump.

DIATHERMIC OIL COLLECTION TANK, made of carbon steel, horizontal execution, complete with manhole, and connections.

ELETTRICAL AND HYDRAULIC CONNECTIONS between heater of diathermic oil, oil pump group, elettrical board.

UTILITIES :

elettrical energy:

potential line (trifase)	:	400	V. -	50	Hz.
For instrumentation (monofase)	:	230	V. -	50	Hz.
accessory	:	24	V.		

Air instrument:

pressure	:	6	bar.
temperature	:	environment	20 °C.
separated the oil	:		and dewatered

RULES, CODES

Of supply (project and construction)

Materials	:	UNI-ASTM
Scale and gangway	:	ENPI
Elettrical parts (protections)		
Elettrical motors	:	IP 55
boards	:	IP 54
Elettrical system	:	CEI

FINISHING

Sandblasting	:	don't scheduled.
Painting	:	1 finishing hand
Outer cover of boiler block finishing	:	steel sheet or stainless sheet on request and on payment in inox a richiesta e a pagamento