

**Technical Description for** Quotation No. 52215254 [GSI Darmstadt]
Date: 19<sup>th</sup> September 2013

# **Technical Description**

# **Thermo Fisher Heating and Drying Ovens**

# Type OMH 100



Heratherm series (approx. 60 l, 100l, 180l) with powder coated outer casing



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# Pos. 10 Type OMH 100 HERATHERM Heating and Drying Ovens

Technical data

Convection technology: Mechanical convection (with fan)

Temperature range: ambient temperature RT+10 °C to 250 °C (factory limited)

Heating up time to 330 °C: 36 min

(in empty state, on 38 % of the end value,

with closed supply air flap)

Temperature deviation: ambient +/- 1,3K (150°C)
Temperature deviation: over time +/- 0,2K (150°C)

Chamber volume: 97 l

Dimensions chamber (mm): Width = 464 Height = 608 Depth = 343

Access port: Ø 19 mm rear side, right-top

Wire mesh shelves: 2 pcs. (max. 16 pcs. possible)
Dimensions: Width = 448 Depth = 336 mm

Max. shelf load: max. 25 kg Max. load per unit: max. 50 kg

Dimension exterior (mm): Width = 640 Height = 820 Depth = 565

Nominal voltage: 1/N/PE AC, 230 V; 50/60 Hz

Nominal power: 3.060 W

**Energy consumption** 

at 150 °C: 358 W (with closed supply air flap)

Order No. 51028734



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Optionally we offer you:				

Pos. 20

1 Piece

Lockable Access port Ø 24 MM

On center of top of unit

Order No. 51901000

Pos. 30

1 Piece

Lockable Access port Ø 58 MM

On center of right side of unit.

Order No. 51900999

## Important note!

In general access ports influences the thermal conditions within the chamber working space. Therefore, these ports always have to be closed or sealed properly. Arrangements for safe operations when using the access ports have to be provided by the customer.

#### Special equipment

Pos. 40

#### Note!

The required load of  $2 \times 40$  kg on one charging level is not possible with the offered unit. Therefore we offer you the following equipment:



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#### 2 Pieces

#### Reinforcement for offered wire mesh shelves OMH 100

In special design. Sealed version with additional tilt safety device for wire mesh shelves.

Max. load for each shelf approx. 40 kg – but total max. load of unit 80 kg.

Material: stainless steel 1.4301 (or comparable), electro polished mesh

#### Pos. 50

1 Piece

#### External setpoint setting 4...20 mA

Consisting of an extension board additional to the standard control board in special design and connection via plug as per EN 60130-9 incl. 3,0 m connection cable on rear side of unit.

#### Pos. 60

1 Piece

#### Additional over temperature protection

Temperature limit cut-out class 2 according to EN 12 880.

Independently from the temperature controller and also from the automatically over temperature alarm with setting possibility on the bottom of unit (door area).





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Pos. 70

1 Piece

#### Inner container gas tight

With inert gas connection (hose nozzles on supply and exhaust air ducts)

#### Note!

Adjustable fresh air flap will not apply



## Inert gas connection according to EN 8542

for non flammable, non toxic gases of group A according to VDI 2046 (only recommended with gas tight inner tank)

- Limited protective gas operation possible
- Residual oxygen at OMH-units to < 5 % possible

#### Note!

The required evaluation possibilities incl. 8 flexible temperature sensors are not part of our product range.



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#### For your budget planning we offer you:

Pos. 80

1 Piece

## VT 6130 MP VACUUM- Heating Drying Oven

In special design:

- with 1 pc. heated shelf made of steel casting, grinded and hard-chrome plated

Nominal temperature: 300 °C,

max. load: 80 kg (laminary)

higher nominal power: 2,0 kW

- as well as with an additional jacket heating, nominal temperature: 200 °C,

Nominal power: 2,2 kW

Nominal voltage: 3/N/PE AC, 400 V; 50/60 Hz

Chamber volume: 128 l

Dimensions chamber: W / H / D mm: 495 / 489 / 529

- Temperature controller JUMO Image 500
   With colour display as well as two control loops (heated shelf and jacket heating)
   With two analogue input interfaces 4...20 mA for external setpoint setting
- Temperature limit cut-out class 2.0 according to EN 12880 As well as for heated shelf and jacket heating
- Digital product sensor display flexible temperature sensor Pt 100 as well as additional connection possibilities for external temperature registration
- analogue pressure display
- Vacuum shut-off valve and quick release valve for manual operation
- Inert gas connection with dose and overpressure safety valve
- 2 pcs. additional ducts DN 25 KF for customer use, due to jacket heating on rear side of unit.



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Pos. 90

1 Piece

#### Diaphragm pump MD 12H, three-phase

Kit with an oil-free vacuum pump in aluminium-/VITON seal

#### **Technical data**

Saugvermögen: 9,6 m³/h Endvakuum (absolut): 2,0 mbar Motorleistung: 0,39 kW

Nennspannung: 220 - 240 V AC / 50/60 Hz

#### Pump equipment

incl. condensate separator and components

Alternatively to Pos. 90 we offer you:

Pos. 100

1 Piece

#### **VACUCENTER 1 with MD 12H vacuum pump**

In modified design

400 V/2N AC, 50/60 Hz. in connection with VT 6060 M/P and VT 6130 M also operation with 230 V AC 50/60 Hz possible.

- Laterally cased vacuum pumping station with large front door
- Central power and same main switch for vacuum chamber and pump
- Operation hours counter for control of oil change intervals at rotary vane pumps



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Equipped with:

1 Piece

Diaphragm pump MD 12H, three-phase

Kit with an oil free vacuum pump in aluminium-/VITON seal

#### **Technical Data**

Pumping speed: 9,6 m³/h Final vacuum (absolute): 2,0 mbar Motor power: 0,39 kW

Nominal voltage: 220 - 240 V AC / 50/60 Hz

## Pump equipment

incl. condensate separator and components