

# OHP SERIES

## HIGH PRESSURE COMPRESSED AIR DRYERS

operating pressure	<b>50 (45) bar</b>
operating temp.range	<b>1,5 to 65 °C</b>
pressure dew points	<b>3°C</b>
flow rate	<b>25 to 5010 Nm<sup>3</sup>/h</b>

### APPLICATIONS

- high pressure compressed air systems

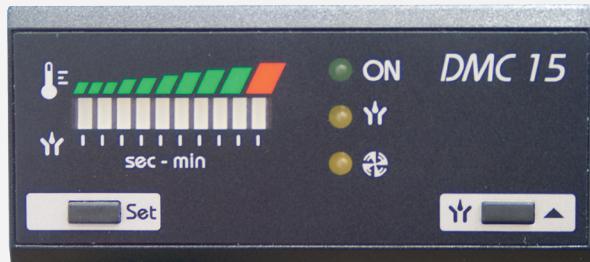
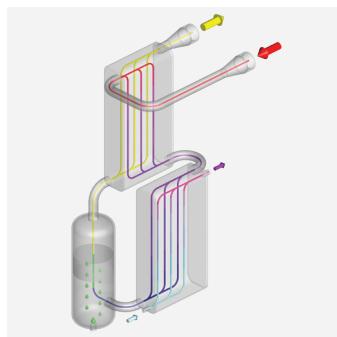
### DESCRIPTION

OHP series (high pressure dryers for compressed air systems up to 50 barg) makes the most of manufacturing and functional advantages of brazed plate heat exchangers, which are more suitable for high pressure working conditions (on models OHP 90-3000).

Main features are:

- simple and ergonomic component layouts guarantee functionality and efficiency;
- excellent performance due to low pressure drop and constant pressure Dew Point;
- dryer design is very attractive both aesthetically with a two tone cabinet and practically with a robust casing.





#### TECHNICAL DATA

Type	Air flow	Max. inlet pressure	Power supply	Dimensions			Zero loss drain (option)	Air connections	Mass net-gross [kg]
	[m³/h]	bar		A [mm]	B [mm]	C [mm]			
<b>OHP 25</b>	25	50	1/230V/50Hz	370	515	475	OBK 1/50	G 3/8" BSP-F	28-32
<b>OHP 45</b>	45	50	1/230V/50Hz	370	515	475	OBK 1/50	G 3/8" BSP-F	29-33
<b>OHP 70</b>	72	50	1/230V/50Hz	370	515	475	OBK 1/50	G 3/8" BSP-F	32-36
<b>OHP 90</b>	90	50	1/230V/50Hz	345	420	740	OBK 1/50	G 3/4" BSP-F	38-42
<b>OHP 135</b>	135	50	1/230V/50-60Hz	345	420	740	OBK 1/50	G 3/4" BSP-F	39-43
<b>OHP 180</b>	180	50	1/230V/50Hz	485	455	825	OBK 1/50	G 3/4" BSP-F	50-57
<b>OHP 240</b>	240	50	1/230V/50-60Hz	485	455	825	OBK 1/50	G 3/4" BSP-F	53-60
<b>OHP 315</b>	315	50	1/230V/50Hz	555	580	885	OBK 1/50	G 1" BSP-F	89-101
<b>OHP 450</b>	450	50	1/230V/50-60Hz	555	580	885	OBK 1/50	G 1" BSP-F	101-113
<b>OHP 600</b>	615	50	1/230V/50-60Hz	555	580	885	OBK 1/50	G 1" BSP-F	115-128
<b>OHP 800</b>	810	50	1/230V/50Hz	665	725	1105	OBK 1/50	G 1 1/2" BSP-F	156-176
<b>OHP 1000</b>	1008	50	1/230V/50-60Hz	665	725	1105	OBK 1/50	G 1 1/2" BSP-F	190-210
<b>OHP 1250</b>	1260	50	3/400V/50Hz	790	1000	1465	OBK 2/50	G 2" BSP-F	252-293
<b>OHP 1600</b>	1620	45	3/400V/50Hz	790	1000	1465	OBK 2/50	G 2" BSP-F	265-306
<b>OHP 2250</b>	2280	45	3/400V/50Hz	790	1000	1465	OBK 2/50	G 2" BSP-F	391-432
<b>OHP 2400</b>	2430	45	3/400V/50Hz	1135	1205	1750	OBK 2/50	Flange ANSI 3"	444-497
<b>OHP 3000</b>	3030	45	3/400V/50Hz	1135	1205	1750	OBK 2/50	Flange ANSI 3"	461-514
<b>OHP 4000</b>	4020	45	3/400V/50Hz	1135	1205	1750	OBK 2/50	Flange ANSI 3"	486-539
<b>OHP 5000</b>	5010	45	3/400V/50Hz	1135	1205	1750	OBK 2/50	Flange ANSI 3"	552-605

#### CORRECTION FACTOR FOR OPERATING PRESSURE CHANGES

Operat. pressure [bar]	15	20	25	30	35	40	45	50
Correction factor $C_{OP}$	0,57	0,7	0,8	0,88	0,94	1	1,05	1,1

#### CORRECTION FACTOR FOR AMBIENT TEMPERATURE CHANGES

Temperature [°C]	≤25	30	35	40	45	50
Correction factor $C_{AT}$	1	0,96	0,9	0,82	0,72	0,6

#### CORRECTION FACTOR FOR INLET AIR TEMPERATURE CHANGES

Temperature [°C]	≤25	30	35	40	45	50	55	60	65
Correction factor $C_{IT}$	1,2	1,12	1	0,83	0,69	0,59	0,5	0,44	0,39

#### CORRECTION FACTOR FOR DEW POINT CHANGES

Temperature [°C]	3	5	7	10
Correction factor $C_{DP}$	1	1,09	1,19	1,37

To calculate the correct capacity of a given filter based on actual operating conditions, multiply the nominal flow capacity by the appropriate correction factor(s).

CORRECTED CAPACITY = NOMINAL FLOW CAPACITY  $\times C_{OP} \times C_{AT} \times C_{IT} \times C_{DP}$

Data refers to the following nominal conditions: Ambient temperature of 25°C, with inlet air at pressure 40 barg and 35°C - pressure dew point of 3°C.

Max. operating condition : Ambient temperature 50°C , Inlet air temperature 65°C and inlet air pressure 50 barg (45 barg from OHP 1600).