

HIGH PRESSURE REFRIGERATION DRYER

FOR OPERATING PRESSURES UP TO 50 BAR

BTHD series high pressure refrigeration dryers offer present a reliable, cost-effective and, above all, simple solution. With this program, exceptional benefits are combined in a success-

ful approach. Development was focused primarily on optimum safety, the lowest possible operating costs, compact design and environmental sustainability.

+ Stainless steel plate heat exchangers for operating pressures up to 50bar
+ Lowest differential pressures
+ Constant pressure dew points

Maximum heat transmission via air-to-air heat exchanger: This has a direct effect on energy use reduction

Vertically arranged stainless steel demister for safe separation. Wet compressed air is automatically channeled into the automatic steam trap

The exchange of heat in the countercurrent and generous dimensions permit complete evaporation of the refrigerant

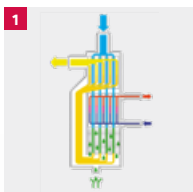


The generously sized cross sections of the flow channels in the heat exchanger result in low flow rates and low energy requirements.

A high-volume settling chamber prevents the carrying away of condensation.

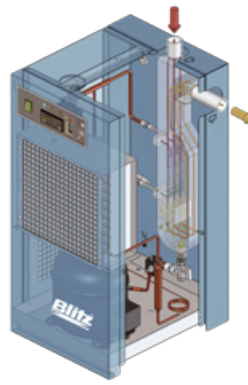
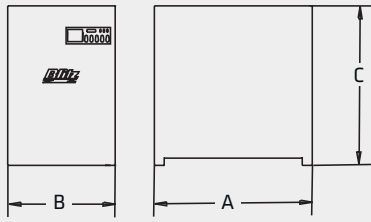
Illustration shows: BTHD high temperature refrigeration dryer

HIGHLIGHTS IN DETAIL



- 1 Air/Air and refrigerant/Air heat exchanger including demister integrated in single casing to save space.
- 2 Potential-free contact integrated in the controls as standard.

AIR DRYER BTHD 25-3030 M³/H



Model	BTHD								
Max. volume flow (m ³ /h)*	25	45	72	90	135	180	240	315	450
Operating pressure (bar)	50	50	50	50	50	50	50	50	50
Power consumption (kW)	0,2	0,24	0,25	0,35	0,67	0,67	0,95	1,1	1,4
Power supply (V/Hz)	230/50-60	230/50-60	230/50-60	230/50-60	230/50	230/50	230/50	230/50	230/50
Connection (inch)	G 3/8	G 3/8	G 3/8	G 1/2	G 1/2	G 1/2	G 3/4	G 1	G 1
A Length (mm)	515	515	515	420	420	455	455	580	580
B Width (mm)	370	370	370	365	365	485	485	555	555
C Height (mm)	475	475	475	740	740	825	825	885	885
Weight (kg)	28	29	32	36	37	54	59	84	87
Article number	115028	115029	115030	115031	115032	115033	115034	115035	115036

Model	BTHD							
Max. volume flow (m ³ /h)*	615	810	1008	1200	1620	2010	2430	3030
Operating pressure (bar)	50	50	50	50	50	50	50	50
Power consumption (kW)	1,5	1,7	2,5	3,9	5,1	5,15	7,1	8,6
Power supply (V/Hz)	230/50	230/50	400/50	400/50	400/50	400/50	400/50	400/50
Connection (inch)	G 1	G 1 1/2	G 1 1/2	G 2	G 2	G 2	FLANSI 2 1/2	FLANSI 2 1/2
A Length (mm)	580	725	725	1000	1000	1000	1205	1205
B Width (mm)	555	665	665	790	790	790	1135	1135
C Height (mm)	885	1105	1105	1465	1465	1465	1745	1745
Weight (kg)	109	133	140	232	238	260	550	580
Article number	115037	115038	115039	115040	115041	115042	115043	115044

*according to ISO 7183: volume flow m³/h referred to +20°C at 1bar; operating pressure 7bar; compressed air inlet temperature +35°C; ambient temperature +25°C; pressure dew point +5°C

Correction factor	BTHD								
Inlet pressure	bar	15	20	25	30	35	40	45	50
Correction factor		0,74	0,82	0,87	0,92	0,96	1,00	1,03	1,06
Ambient temperature	°C	25	30	35	40	45	50		
Correction factor		1,00	0,99	0,97	0,93	0,88	0,81		
Inlet temperature		25	30	35	40	45	50	55	60
Correction factor		1,27	1,120	1,00	0,88	0,78	0,70	0,62	0,55
Pressure dew point		3		5		7		10	
Correction factor		1,00		1,09		1,19		1,37	

ACCESSORIES



- 1** Optionally available pre- and after filter
- 2** Compressed air bypass (optional)