

Technical specifications

Model	Flow rate at max. working pressure m ³ /min	Pressure loss bar	Effective power consumption kW	Refrigerant	Electrical connection	Air connection (inner thread)	Condensate outlet	Dimensions W x D x H mm	Mass kg	Refrigerant fill capacity kg	CO ₂ equivalent t	Hermetic refrigerant circuit
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...up to 45 bar*

Model	Flow rate	Pressure loss	Effective power consumption	Refrigerant	Electrical connection	Air connection	Condensate outlet	Dimensions	Mass	Refrigerant fill capacity	CO ₂ equivalent	Hermetic refrigerant circuit
THP 85-45	8.5	0.26	1	R-513A	400V 3 Ph 50 Hz	DN 25	R 1/2	1036 x 1128 x 1277	168	1.5	0.95	–
THP 142-45	14.2	0.4	1.46			DN 25			172	2.0	1.26	–
THP 212-45	21.2	0.5	1.6			DN 40			211	2.5	1.58	–
THP 283-45	28.3	0.81	2.55			DN 50		218	2.7	1.58	–	
THP 354-45	35.4	0.74	3.9	R-513A	400V 3 Ph 50 Hz	DN 50	R 1/2	1036 x 1144 x 1277	288	6.0	3.61	–
THP 496-45	49.6	0.65	5.3			DN 80			465	7.5	4.73	–
THP 565-45	56.6	0.59	7.4			DN 80		590	7.5	4.73	–	
THP 850-45	85	0.61	9.2			DN 80		710	14.0	8.83	–	

...up to 50 bar*

Model	Flow rate	Pressure loss	Effective power consumption	Refrigerant	Electrical connection	Air connection	Condensate outlet	Dimensions	Mass	Refrigerant fill capacity	CO ₂ equivalent	Hermetic refrigerant circuit
THP 8-50	0.8	0.25	0.25	R-513A	230V 1 Ph 50 Hz	R 1/2	R 1/4	501 x 521 x 660	39	0.28	0.18	–
THP 13-50	1.3	0.2	0.29						41	0.29	0.18	–
THP 18-50	1.8	0.22	0.44						43	0.30	0.19	–
THP 27-50	2.7	0.27	0.59			48		0.35	0.22	–		
THP 40-50	4	0.25	0.70			R 1/2		651 x 500 x 955	114	0.38	0.24	–
THP 50-50	5	0.28	0.99						127	0.60	0.38	–

Max. compressed air inlet temperature 50/43 °C; | The max. working pressure is reduced to 40 bar for inlet temperatures of +50 °C and higher | Refrigerant R-513A; GWP 631

Performance data as per ISO 7183, Option A1: Reference point 1 bar(abs), 20 °C, rel. humidity 0 % – Reference point: max. working pressure 45/50 bar | bar(g), Compressed air inlet temperature +35 °C, Ambient temperature 25 °C, Inlet compressed air rel. humidity 100 %, Pressure dew point +3 °C

Correction factors for other operating conditions (Flow rate as per DIN / ISO in m³/min x Correction factor k...)

Correction factors for other working pressures...

...for pressures up to 45 bar

Working pressure (bar)	20	25	30	35	40	45
Pressure loss multiplied by	0.88	0.92	0.94	0.96	0.98	1.00

...for pressures up to 50 bar

20	25	30	35	40	45	50
0.88	0.92	0.94	0.96	0.97	0.98	1.00

Correction factors for...

...other inlet air temperatures

Temperature (°C)	30	35	40	45	50	55	60
k _{T1}	1.18	1.0	0.84	0.73	0.64	0.55	0.49

...other ambient temperatures

25	30	35	40	45
1	0.95	0.89	0.84	0.78

(Please consult KAESER regarding other correction factors)



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