



# DRYER DATA SHEET

Doc. No.: TI-DS-143	KAESER SECOTEC™ REFRIGERATED CYCLING DRYERS					Date: 01/09/2023
Version: 1.4	TG SERIES - Water-cooled					Page: 1 of 1
MODEL	TG 450	TG 520	TG 650	TG 780	TG 980	
<b>I. MINIMUM-MAXIMUM OPERATING CONDITIONS</b>						
Maximum inlet air pressure (compressed air at inlet to dryer) [psig]	232	232	188	188	188	
Maximum inlet air temperature (compressed air at inlet to dryer) [°F]	140	140	140	140	140	
Min-Max ambient temperature [°F]	38-120	38-120	38-120	38-120	38-120	
Nominal pressure drop at rated flow [psid]	2.0	2.8	1.5	2.2	3.5	
Rated dew point* [°F]	39	39	39	39	39	
Rated capacity* [scfm <sup>^</sup> ]	1589	1836	2190	2684	3355	
<b>II. REFRIGERATION SYSTEM DATA</b>						
BTU/HR - Refrigeration ARI 540 HAT	45210	55980	67600	98610	147920	
Refrigeration compressor horsepower	7.11	8.37	9.76	11.4	17.1	
Refrigerant type	R-513A	R-513A	R-513A	R-513A	R-513A	
Refrigerant charge [lbs]	9.0	8.8	13.5	12.6	17.2	
<b>III. ELECTRICAL DATA</b>						
Nominal Voltage	460V/3/60	460V/3/60	460V/3/60	460V/3/60	460V/3/60	
Min-max voltage	414V-506V	414V-506V	414V-506V	414V-506V	414V-506V	
Unit Protection fuse size (amps)	15	20	20	25	45	
Total full load amps	10.4	12.1	13.9	16.8	27.3	
Compressor full load amps	10.4	12.1	13.9	16.8	27.3	
Compressor locked rotor amps	45	60	70	74	74	
Branch circuit fuse size (amps)	primary 3.15	3.15	3.15	3.15	3.15	
	secondary --	--	--	--	--	
Supply Cable (not included)	14 AWG	14 AWG	14 AWG	12 AWG	8 AWG	
Max power consumption [kW]	6.5	7.9	9.0	10.7	17.6	
Power consumption according to ISO 7183 Option A2 [kW]	4.27	4.75	5.63	6.56	10.6	
<b>IV. GENERAL INFORMATION</b>						
Envelope dimensions - W x D x H [in]	40-3/8 x 65-1/8 x 83-3/4	40-3/8 x 65-1/8 x 83-3/4	40-3/8 x 65-1/8 x 83-3/4	40-3/8 x 65-1/8 x 83-3/4	40-3/8 x 65-1/8 x 83-3/4	
Weight [lbs]	1372	1418	1519	1511	1650	
Noise level measured in dB(A) at 1 m (approx. 40 in) **	70	70	70	70	70	
Control cabinet class [NEMA]	12	12	12	12	12	
Air inlet/outlet connections	4" ASME class 150	4" ASME class 150	6" ASME class 150	6" ASME class 150	6" ASME class 150	
Water inlet/outlet connections	1-1/4" NPT	1-1/4" NPT	1-1/4" NPT	1-1/4" NPT	1-1/4" NPT	
Drain connection	1/4 " NPT	1/4 NPT	1/4 NPT	1/4 NPT	1/4 NPT	
<b>V. WATER-COOLING DATA</b>						
Cooling water flow rate with 85°F water [gal/min]	7.2	7.5	11.3	16.2	17.4	
Cooling water pressure drop at rated flow [psi]	6.5	7.1	4.5	8.7	10.2	
Cooling water temperature rise [°F]	16.6	18.4	14.0	11.7	16.6	
Maximum inlet pressure (cooling water) [psi]	145	145	145	145	145	
Maximum pressure drop between inlet and outlet (cooling water) [psi]	50	50	50	50	50	

\* Rated conditions = inlet air pressure of 100 psig, inlet air temperature of 100°F, 100% Relative Humidity, and max. ambient temperature of 100°F

<sup>^</sup> SCFM = Standard Cubic Foot per Minute at 68°F, 0% Relative Humidity, and 14.5 psia

\*\* Sound pressure level as per EN ISO 11203 and the basic standard ISO 9614-2

Note: See Service Manual for complete details