DRYER DATA SHEET

Doc. No.: TI-IDS-144	KAESER SECOTEC™ REFRIGERATED CYCLING DRYERS	Date: 01/09/2023
Version: 1.6	TF SERIES - Water-cooled	Page: 1 of 1

MODEL	TF 174	TF 230	TF 280	TF 340
I. MINIMUM-MAXIMUM OPERATING CONDITIONS				
Maximum inlet air pressure (compressed air at inlet to dryer) [psig]	230	230	230	230
Maximum inlet air temperature (compressed air at inlet to dryer) [°F]	140	140	140	140
Min-Max ambient temperature [°F] *** Water-Cooled	38-120	38-120	38-120	38-120
Nominal pressure drop at rated flow [psid]	1.8	2.5	2.8	2.5
Rated dew point* [°F]	39	39	39	39
Rated capacity* [scfm^]	570	850	990	1200
II. REFRIGERATION SYSTEM DATA				
BTU/HR - Refrigeration ARI 540 HAT	22600	33800	39950	49350
Refrigeration compressor horsepower	2.92	4.18	4.88	5.7
Refrigerant type	R-513A	R-513A	R-513A	R-513A
Refrigerant charge [lbs]	6.61	6.17	7.72	9.70
III. ELECTRICAL DATA				
Nominal Voltage	208V	208V	208V	208V
Min-max voltage	187V-229V**	187V-229V**	187V-229V**	187V-229V**
Unit Protection fuse size (amps)	25	30	30	40
Amperage Draw + ***	10.7	13.2	15.3	20.0
Nominal Voltage	230V	230V	230V	230V
Min-max voltage	207V-253V**	207V-253V**	207V-253V**	207V-253V**
Unit Protection fuse size (amps)	20	25	30	35
Amperage Draw + ***	9.7	12.0	13.9	18.1
Nominal Voltage	460V/3/60	460V/3/60	460V/3/60	460V/3/60
Min-max voltage	414V-506V	414V-506V	414V-506V	414V-506V
Unit Protection fuse size (amps)	10	15	15	20
Amperage Draw + ***	4.6	5.7	6.6	8.6
Supply Cable (not included)	14 AWG	14 AWG	14 AWG	14 AWG
Compressor Full Load Amps	4.6	5.7	6.6	8.6
Compressor Locked Rotor Amps	45	60	70	74
Branch circuit fuse size (amps) primary	0.5	0.5	0.5	0.5
secondary	2	2	2	2
Max Power Consumption [kW] ***	2.7	3.5	4.3	5.4
Power Consumption according to ISO 7183 Option A2 [kW] ***	1.67	2.3	2.7	3.22
IV. GENERAL INFORMATION				
Envelope dimensions - W x D x H [in]	32-7/8 x 48-3/8 x 78-3/4	32-7/8 x 48-3/8 x 78-3/4	32-7/8 x 48-3/8 x 78-3/4	32-7/8 x 48-3/8 x 78-3/4
Weight [lbs]	775	840	875	935
Noise level measured in dB(A) at 1 m (approx. 40 in) ****	70	70	70	70
Control Cabinet Class [NEMA]	12	12	12	12
Air inlet/outlet connections	2 1/2" ASME class 150	3" ASME class 150	3" ASME class 150	3" ASME class 150
Water inlet/outlet connections [NPT]	1 1/4"	1 1/4"	1 1/4"	1 1/4"
Drain connection	1/4 " NPT	1/4 NPT	1/4 NPT	1/4 NPT
V. WATER-COOLING DATA				
Cooling water flow rate with 85°F water [gal/min]	2.42	3.92	5.55	5.59
Cooling water pressure drop at rated flow [psi]	0.72	1.31	3.05	3.19
Cooling water temperature rise [°F]	20	18	14	17
Maximum inlet pressure (cooling water) [psi]	145	145	145	145
Maximum pressure drop between inlet and outlet (cooling water) [psi]	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

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

\+ 460V: Total full load amps, Other Voltages: Total full load amps of transformer

** with transformer

*** without high ambient option

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

Note: See Service Manual for complete details