

Doc. No.: TI.IDS-217	<b>KAESER SECOTEC™ REFRIGERATED CYCLING DRYERS</b>	Date: 08/25/2022
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Version: 1.1	<b>TE SERIES</b>	Page 1 of 1
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MODEL	TE 102	TE 122	TE 142
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**I. MINIMUM-MAXIMUM OPERATING CONDITIONS**

Maximum inlet air pressure (compressed air at inlet to dryer) [psig]	232	232	232
Maximum inlet air temperature (compressed air at inlet to dryer) [°F]	140	140	140
Min-Max ambient temperature [°F]	Air-cooled 38-110		
Nominal pressure drop at rated flow [psid]	1.5	1.7	1.6
Rated dew point* [°F]	39	39	39
Rated capacity* [scfm^]	370	410	490

**II. REFRIGERATION SYSTEM DATA**

BTU/HR - Refrigeration ASHRAE	16500	19500	22600
Refrigerant type	R-513A	R-513A	R-513A
Refrigerant charge [lb]	3.4	3.5	3.5
Air flow across condenser [cfm]	1725	1725	1725

**III. ELECTRICAL DATA**

Nominal Voltage	575/3/60	575/3/60	575/3/60
Min-Max voltage	518V-633V**	518V-633V**	518V-633V**
Unit Protection fuse size [amps]	6	10	10
Amperage Draw + **	3.2	3.3	4.5
Compressor Full Load Amps	3.2	3.5	5.0
Compressor Locked Rotor Amps	26	32	45
Branch circuit fuse size [amps]	-	-	-
Max Power consumption [kW]	2.42	2.5	3.4
Power Consumption according to ISO 7183 Option A2 [kW]	1.8	1.9	2.4

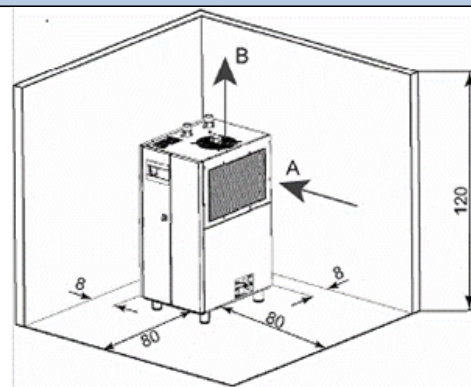
**IV. GENERAL INFORMATION**

Envelope dimensions - W x D x H [in]	28 x 40-3/4 x 64 5/8	28 x 40-3/4 x 64 5/8	28 x 40-3/4 x 64 5/8
Weight [lb]	505	507	549
Noise level measured in dB(A) at 1 m (approx. 40 in) ***	61	61	61
Control Cabinet Class [NEMA]	12	12	12
Air inlet/outlet connections	2 NPT	2 NPT	2 NPT
Drain connection [in]	1/4	1/4	1/4

**V. SERVICE/AIRFLOW CLEARANCES<sup>1</sup> (inches)**

<sup>1</sup>If Clearances cannot be met, please consult factory.

Cooling airflow: "A" = inlet  
"B" = outlet



\* 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  
 \*\*\* Sound pressure level as per EN ISO 11203 and the basic standard ISO 9614-2  
 Note: See Service Manual for complete details



# DRYER DATA SHEET

Doc. No.: TI-IDS-218	<b>KAESER SECOTEC™ REFRIGERATED CYCLING DRYERS</b>	Date: 08/25/2022
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Version: 1.1	<b>TF SERIES - Air-cooled</b>	Page: 1 of 1
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MODEL	TF 174	TF 230	TF 280	TF 340
<b>I. MINIMUM-MAXIMUM OPERATING CONDITIONS</b>				
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] ***	Air-cooled			
Nominal pressure drop at rated flow [psid]	1.6	1.9	2.4	2.2
Rated dew point* [°F]	39	39	39	39
Rated capacity* [scfm <sup>^</sup> ]	550	740	900	1130

<b>II. REFRIGERATION SYSTEM DATA</b>				
BTU/HR - Refrigeration <b>ARI</b>	22600	33800	39950	49350
Refrigerant type	R-513A	R-513A	R-513A	R-513A
Refrigerant charge [lbs]	6.2	6.4	7.5	9.9
Air flow across condenser (cfm)	3100	3100	4600	4600

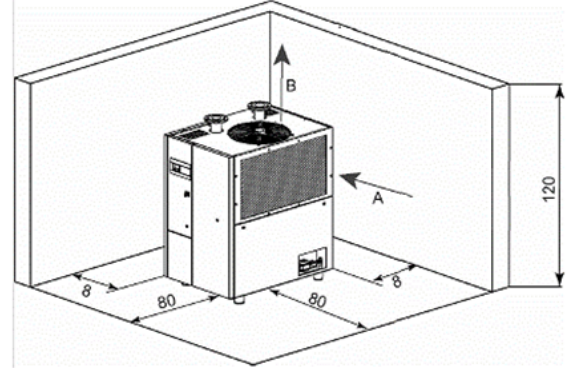
<b>III. ELECTRICAL DATA</b>				
Nominal Voltage	575/3/60	575/3/60	575/3/60	575/3/60
Min-max voltage	518V-633V**	518V-633V**	518V-633V**	518V-633V**
Unit Protection fuse size (amps)	10	10	15	15
Amperage Draw** + ***	4.5	6.6	6.6	8.3
Compressor Full Load Amps	4.9	6.9	6.7	8.7
Compressor Locked Rotor Amps	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] ***	3.5	5.0	5.3	6.7
Power Consumption according to ISO 7183 Option A2 [kW] ***	2.6	3.47	4.1	4.7

<b>IV. GENERAL INFORMATION</b>				
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]	765	830	865	925
Noise level measured in dB(A) at 1 m (approx. 40 in) ****	70	70	72	72
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
Drain connection	1/4" NPT	1/4" NPT	1/4" NPT	1/4" NPT

**V. SERVICE/AIRFLOW CLEARANCES<sup>1</sup> (inches)**

<sup>1</sup>If Clearances cannot be met, please consult factory.

Cooling airflow: "A" = inlet  
"B" = outlet



\* 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

+ 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

# DRYER DATA SHEET

Doc. No.: TI-IDS-219	KAESER SECOTEC™ REFRIGERATED CYCLING DRYERS	Date: 08/25/2022
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Version: 1.1	TF SERIES - Water-cooled	Page: 1 of 1
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MODEL	TF 174	TF 230	TF 280	TF 340
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### 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 <sup>^</sup> ]	570	850	990	1200

### II. REFRIGERATION SYSTEM DATA

BTU/HR - Refrigeration ARI	22600	33800	39950	49350
Refrigerant type	R-513A	R-513A	R-513A	R-513A
Refrigerant charge [lbs]	6.7	6.2	7.8	9.7

### III. ELECTRICAL DATA

Nominal Voltage	575/3/60	575/3/60	575/3/60	575/3/60
Min-max voltage	518V-633V**	518V-633V**	518V-633V**	518V-633V**
Unit Protection fuse size (amps)	10	10	15	15
Amperage Draw** + ***	3.9	4.8	5.5	7.2
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] ***	2.8	4.5	4.5	5.7
Power Consumption according to ISO 7183 Option A2 [kW] ***	1.75	2.4	2.8	3.5

### IV. GENERAL INFORMATION

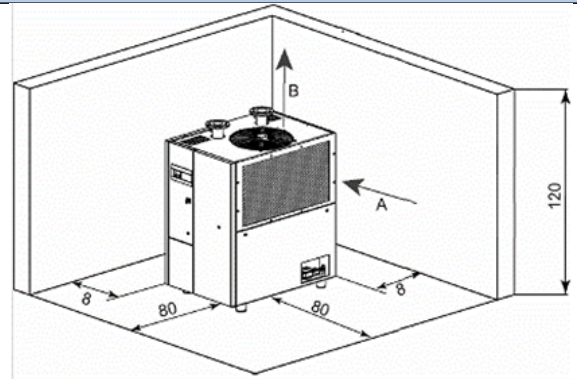
Envelope dimensions - W x D x H [in]	32-7/8 x 48-3/8 x 78-3/4	32-7/8 x 48-3/8 x 78-3/4	32-7/8 x 48-3/8 x 78-3/4	32-7/8 x 48-3/8 x 78-3/4
Weight [lbs]	775	840	875	935
Noise level measured in dB(A) at 1 m (approx. 40 in) ****	70	70	70	70
Control Cabinet Class [NEMA]	12	12	12	12
Air inlet/outlet connections	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. WALL CLEARANCES

<sup>1</sup>If Clearances cannot be met, please consult factory.

Cooling airflow: "A" = inlet  
"B" = outlet

For water-cooled units, disregard "A" and "B"



### VI. WATER-COOLING DATA

Cooling water flow rate with 85°F water [gal/min]	2.5	3.4	5.6	5.6
Cooling water pressure drop at rated flow [psi]	2.9	4.5	6.5	8.6
Cooling water temperature rise [°F]	20	10	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

<sup>^</sup> 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

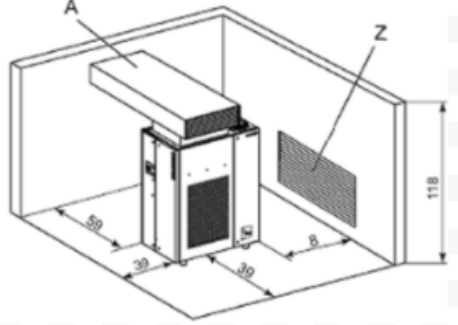
\*\*\* without high ambient option

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

Note: See Service Manual for complete details



# DRYER DATA SHEET

Doc. No.: TI-IDS-220	KAESER SECOTEC™ REFRIGERATED CYCLING DRYERS					Date: 08/25/2022
Version: 1.1	TG SERIES - Air-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]	1.5	2.1	1.2	1.9	2.9	
Rated dew point* [°F]	39	39	39	39	39	
Rated capacity* [scfm <sup>^</sup> ]	1340	1550	1910	2330	3070	
<b>II. REFRIGERATION SYSTEM DATA</b>						
BTU/HR - Refrigeration ARI	45210	55980	67600	98610	147920	
Refrigerant type	R-513A	R-513A	R-513A	R-513A	R-513A	
Refrigerant charge [lbs]	9.5	9.6	14.1	13.3	17.5	
<b>III. ELECTRICAL DATA</b>						
Nominal Voltage	575/3/60	575/3/60	575/3/60	575/3/60	575/3/60	
Min-max voltage	518V-633V****	518V-633V****	518V-633V****	518V-633V****	518V-633V****	
Unit Protection fuse size (amps)	20	20	25	30	50	
Total full load amps ****	11	12.5	13.9	16.9	28	
Compressor full load amps	10.3	12.2	13.9	17.6	29.3	
Compressor locked rotor amps	45	60	70	74	74	
Branch circuit fuse size (amps)	3.2	3.2	3.2	3.2	3.2	
	primary					
	secondary	--	--	--	--	
Max power consumption [kW]	8.7	9.9	10.6	13.6	22.4	
Power consumption according to ISO 7183 Option A2 [kW]	5.1	6.0	7.2	9.0	14.9	
<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]	1405	1450	1555	1545	1685	
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 [flange]	4" ASME class 150	4" ASME class 150	6" ASME class 150	6" ASME class 150	6" ASME class 150	
Drain connection	1/4 NPT	1/4 NPT	1/4 NPT	1/4 NPT	1/4 NPT	
<b>V. DUCTING INFORMATION</b>						
Max. Additional Pressure Drop for Ducts [in. of Water Column]	5/8	5/8	5/8	5/8	5/8	
Exhaust Air Opening Reference Dimensions (L x W) [in] A***	39.3 x 33.1	39.3 x 33.1	39.3 x 33.1	39.3 x 33.1	39.3 x 33.1	
Air Inlet Opening [sq. ft. free area] (A/C) Z	6.5	7.5	8.6	9.7	14.0	
Air flow across condenser (cfm)	2940	3880	4180	5000	7360	
<b>VI. SERVICE/AIRFLOW CLEARANCES<sup>1</sup> (inches)</b>						
<p><sup>1</sup>If Clearances cannot be met, please consult factory.</p> <p>Cooling airflow: "A" = Exhaust Air Opening "Z" = Air Inlet Opening</p> 						
<p>* Rated conditions = inlet air pressure of 100 psig, inlet air temperature of 100°F, 100% Relative Humidity, and max. ambient temperature of 100°F</p> <p><sup>^</sup> SCFM = Standard Cubic Foot per Minute at 68°F, 0% Relative Humidity, and 14.5 psia</p> <p>** Sound pressure level as per EN ISO 11203 and the basic standard ISO 9614-2</p> <p>*** See drawing for actual dimensions. The actual individual duct dimension will vary for every installation based on actual length, number and type of bends, accessories etc.</p> <p>**** 575V uses transformer from 460V</p> <p>Note: See Service Manual for complete details</p>						



# DRYER DATA SHEET

Doc. No.: TI-IDS-221	KAESER SECOTEC™ REFRIGERATED CYCLING DRYERS					Date: 08/25/2022
Version: 1.1	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^]	1589	1836	2190	2684	3355	
<b>II. REFRIGERATION SYSTEM DATA</b>						
BTU/HR - Refrigeration ARI	45210	55980	67600	98610	147920	
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	575/3/60	575/3/60	575/3/60	575/3/60	575/3/60	
Min-max voltage	518V-633V***	518V-633V***	518V-633V***	518V-633V***	518V-633V***	
Unit Protection fuse size (amps)	20	20	25	30	50	
<b>Total full load amps ***</b>	<b>8.6</b>	<b>10</b>	<b>11.5</b>	<b>13.8</b>	<b>22.5</b>	
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	3.2	3.2	3.2	3.2	3.2
	secondary	--	--	--	--	--
Max power consumption [kW]	6.5	7.8	9.0	10.6	17.6	
Power consumption according to ISO 7183 Option A2 [kW]	4.3	4.8	5.6	6.6	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. WALL CLEARANCES</b>						
<p>*If Clearances cannot be met, please consult factory.</p> <p>Cooling airflow: "A" = Exhaust Air Opening "Z" = Air Inlet Opening</p> <p><b>Ducting not required for water-cooled units</b></p> <p>For water-cooled units, disregard "A" and "Z"</p>						
<b>VI. 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	
<p>* Rated conditions = inlet air pressure of 100 psig, inlet air temperature of 100°F, 100% Relative Humidity, and max. ambient temperature of 100°F</p> <p>^ SCFM = Standard Cubic Foot per Minute at 68°F, 0% Relative Humidity, and 14.5 psia</p> <p>** Sound pressure level as per EN ISO 11203 and the basic standard ISO 9614-2</p> <p>*** 575V uses transformer from 460V</p> <p>Note: See Service Manual for complete details</p>						



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Amendments

Revision Date	Revisions Made
5/13/2021	Created 575V sheets - TE-TG
8/23/22	Updated amperages for TG AC and WC. Added transformer note