

37MPRA

**Outdoor Unit Single Zone Ductless System
Sizes 6 to 18**



Product Data



Fig. 1 – Typical Unit

A220408

NOTE: Images are for illustration purposes only. Actual models may differ slightly.

TABLE OF CONTENTS

INDUSTRY LEADING FEATURES / BENEFITS	1
BENEFITS	1
MODEL NUMBER NOMENCLATURE	2
STANDARD FEATURES AND ACCESSORIES	3
DIMENSIONS	4
Table 4 – Dimensions and Weights	4
CLEARANCES	6
SPECIFICATIONS	6
Table 5 – Specifications	7
ELECTRICAL DATA	9
Table 6 – Electrical Data	9
Table 7 – Performance Data	9
COOLING PERFORMANCE - HIGH WALL	10
Table 8 – 6K Cooling Performance	10
Table 9 – 9K Cooling Performance	16
Table 10 – 12K Cooling Performance	22
Table 11 – 18K Cooling Performance	28
HEATING PERFORMANCE	34
Table 12 – 6K Heating Performance	34
Table 13 – 9K Heating Performance	36
Table 14 – 12K Heating Performance	38
Table 15 – 18K Heating Performance	40
APPLICATION DATA	42
Table 16 – Additional Charge	42
WIRING	42
WIRING DIAGRAMS	43
GUIDE SPECIFICATIONS	45

Humidity Control – Running the system for longer periods and continuously varying the compressor speed enhances the humidity

INDUSTRY LEADING FEATURES / BENEFITS

A PERFECT BLEND BETWEEN BUDGET LIMITS, ENERGY SAVINGS AND COMFORT

The ductless systems are a matched combination of an outdoor condensing unit and an indoor fan coil unit connected only by refrigerant tubing and wires.

The ductless system permits creative solutions to design problems such as:

- **Add-ons to current space (an office or family room addition)**
- **Special space requirements**
- **When changes in the load cannot be handled by the existing system**
- **When adding air conditioning to spaces that are heated by hydronic or electric heat and have no ductwork**
- **Historical renovations or any application where preserving the look of the original structure is essential.**

The ideal compliment to your ducted system when it is impractical or prohibitively expensive to use ductwork.

The compact indoor fan coil units take up very little space in the room and do not obstruct windows. The fan coils are attractively styled to blend with most room decors. Advanced system components incorporate innovative technology to provide reliable cooling performance at low sound levels.

BENEFITS

Inverter Technology

The inverter driven compressor is designed to run at various input power frequencies (Hz) which controls the compressor's motor speed.

Ductless systems are inherently economical to operate. Individual rooms are heated or cooled only when required, and since the air is delivered directly to the space, there is no need to use additional energy to move the air in the ductwork. This economical operation is enhanced further when the inverter system output matches the load resulting in a more efficient system.

Even Temperature – The control package, including the inverter, monitors the outdoor and indoor temperatures as they relate to the selected indoor set point and adjusts the compressor speed to match the load and keep the system operating continuously rather than cycling and creating temperature swings. This translates to higher comfort levels for the occupants.

Rapid Pull Down/Warm-Up – Comfort is increased by the inverter system's ability to ramp up the compressor speed enabling the system to reach the user selected room temperature set point quicker.

control.

Individual Room Comfort

Maximum comfort is provided because each space can be controlled individually based on the usage pattern.

Low Sound Levels

When noise is a concern, ductless systems are the answer. The indoor units are whisper quiet. There are no compressors indoors, either in the conditioned space or directly over it, and there is none of the noise usually generated by air being forced through the ductwork.

When sound ordinances and proximity to neighbors demand quiet operation, the ductless systems unit is the right choice. With the inverter technology, these units run at lower speeds most of the time resulting in reduced sound levels.

Easy-To-Use Controls

The systems have microprocessor-based controls to provide the ultimate in comfort and efficiency. The user friendly wired and wireless remote controls provide the interface between the user and the unit.

Secure Operation

If security is an issue, outdoor and indoor units are connected only by refrigerant piping and wiring to prevent intruders from crawling through ductwork or wall openings. In addition, since the ductless system can be installed close to an outside wall so coils are protected from vandals and severe weather.

Fast Installation

This compact ductless system is simple to install. Only wires and piping need to run between the indoor and outdoor units. These units are fast and easy to install ensuring minimal disruption to customers in homes or

the workplace. This makes the ductless systems the equipment of choice for retrofit applications.

Simple Servicing and Maintenance

Removing the top panel of the outdoor unit provides immediate access to the control compartment, providing the service technician access to the diagnostic LEDs to facilitate the troubleshooting process. In addition, the draw-thru design of the outdoor unit means that dirt accumulates on the outside surface of the coil. Coils can be cleaned quickly from the inside using a pressure hose and detergent.

On the indoor units, service and maintenance expense is reduced due to the permanent easy to clean filters. Also, error codes are displayed on the front panel to alert the user to certain system malfunctions.

Built-in Reliability

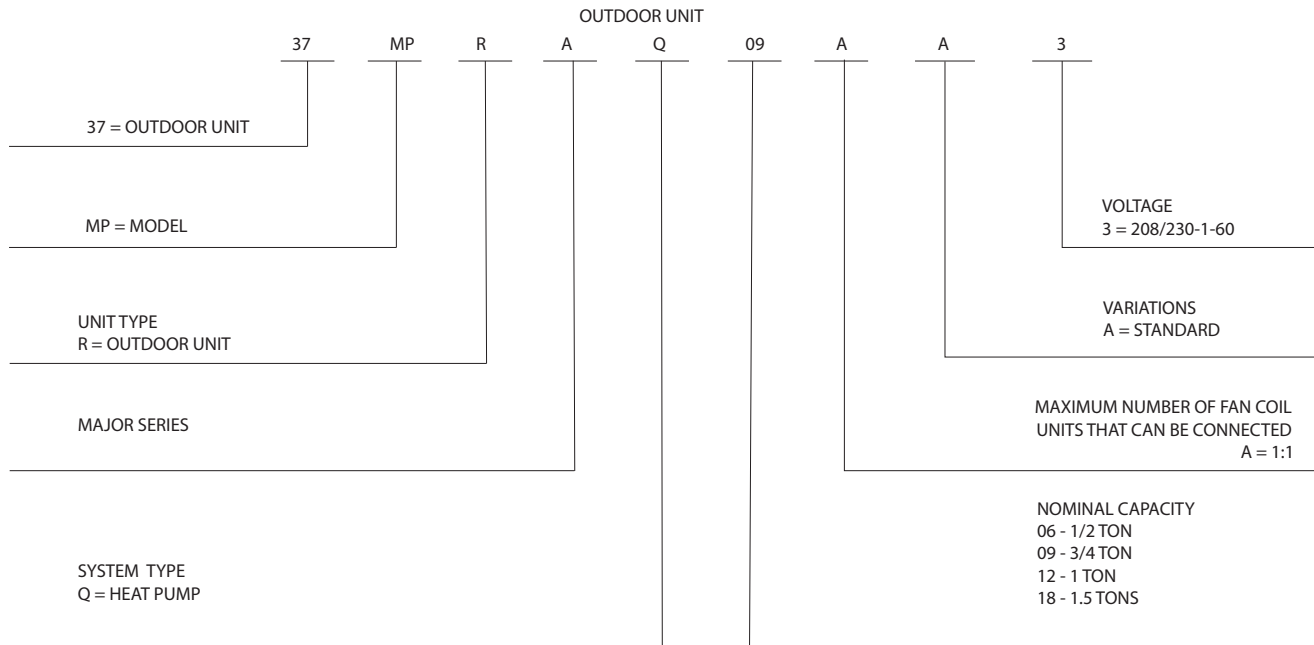
Ductless system indoor and outdoor units are designed to provide years of trouble-free operation. Both the indoor and outdoor units are well protected. Whenever the microprocessor detects abnormal conditions, the unit stops and an error code appears.

Inverter systems provide additional reliability due to the soft start. This refers to the ability of the inverter to start the compressor motor using reduced voltage and reduced current. This feature is beneficial from an electrical standpoint (eliminates current spikes) as well as an overall reliability standpoint due to reduced stress on all associated system components.

Agency Listings

All systems are listed with AHRI (Air conditioning, Heating, and Refrigeration Institute) and are certified per UL 60335-2-40 standard.

MODEL NUMBER NOMENCLATURE



Use of the AHRI Certified TM Mark indicates a manufacturer's participation in the program. For verification of certification for individual products, go to www.ahridirectory.org.



STANDARD FEATURES AND ACCESSORIES

Ease Of Installation	
Low Voltage Controls	S
Comfort Features	
Microprocessor Controls	S
Auto Restart Function	S
Auto Changeover	S
Low Ambient Cooling	S
Low Ambient Heating	S
Energy Saving Features	
Inverter Driven Compressor	S
Safety And Reliability	
3 Minute Time Delay For Compressor	S
High Compressor Discharge Temperature	S
Low Voltage Protection	S
Compressor Overload Protection	S
Compressor Over Current Protection	S
IPM Module Protection	S
Condenser High Temp Protection in Cooling Mode	S
Aluminum Golden Hydrophilic pre-coated fins	S
Ease Of Service And Maintenance	
Diagnostics	S
Liquid Line Pressure Taps	S
Application Flexibility	
Crankcase Heater	S
Base pan Heater	S

Legend

S - Standard

A - Accessory

Table 1 — Accessories

PART NAME	QTY.
Outdoor unit	1
Literature package including installation instructions	1
Mounting parts for the outdoor unit (helps with vibration prevention during unit operation)	4
Drain Joint	1
Drain Hose	1

Table 2 — Basepan Plugs

Outdoor Unit Model Number	Basepan Base Rubber Plugs RCD Part Number	Quantity per unit
37MPRAQ06AA3	12600801A00077	25
37MPRAQ09AA3		
37MPRAQ12AA3		
37MPRAQ18AA3	12600801A00117	5

NOTE: The base pan is built in with multiple holes for proper drainage during defrost. For applications where it is required to seal the holes and re-direct the condensate drain, rubber plugs are available through RCD.

Outdoor Units

Crankcase Heater

The crankcase heater is standard on all unit sizes. Heater clamps must be placed around the compressor oil sump.

Base pan Heater

The base pan heater is standard on all unit sizes.

Unit Sizes

Table 3 — Unit Sizes

SYSTEM TONS	kBTU/h	VOLTAGE - PHASE	OUTDOOR MODEL
0.5	6,000	208/230-1	37MPRAQ06AA3
0.75	9,000	208/230-1	37MPRAQ09AA3
1	12,000	208/230-1	37MPRAQ12AA3
1.5	18,000	208/230-1	37MPRAQ18AA3

DIMENSIONS

Table 4 – Dimensions and Weights

System Size		6K	9K	12K	18K
		(208/230 V)	(208/230 V)	(208/230 V)	(208/230 V)
Height (H)	in (mm)	26.50 (673)	26.50 (673)	26.50 (673)	31.89 (810)
Width (W)	in (mm)	35.04 (890)	35.04 (890)	35.04 (890)	37.24 (946)
Depth (D)	in (mm)	13.46 (342)	13.46 (342)	13.46 (342)	16.14 (410)
Weight -Net	lbs. (kg)	99.65 (45.2)	99.65 (45.2)	99.65 (45.2)	130.29 (59.1)

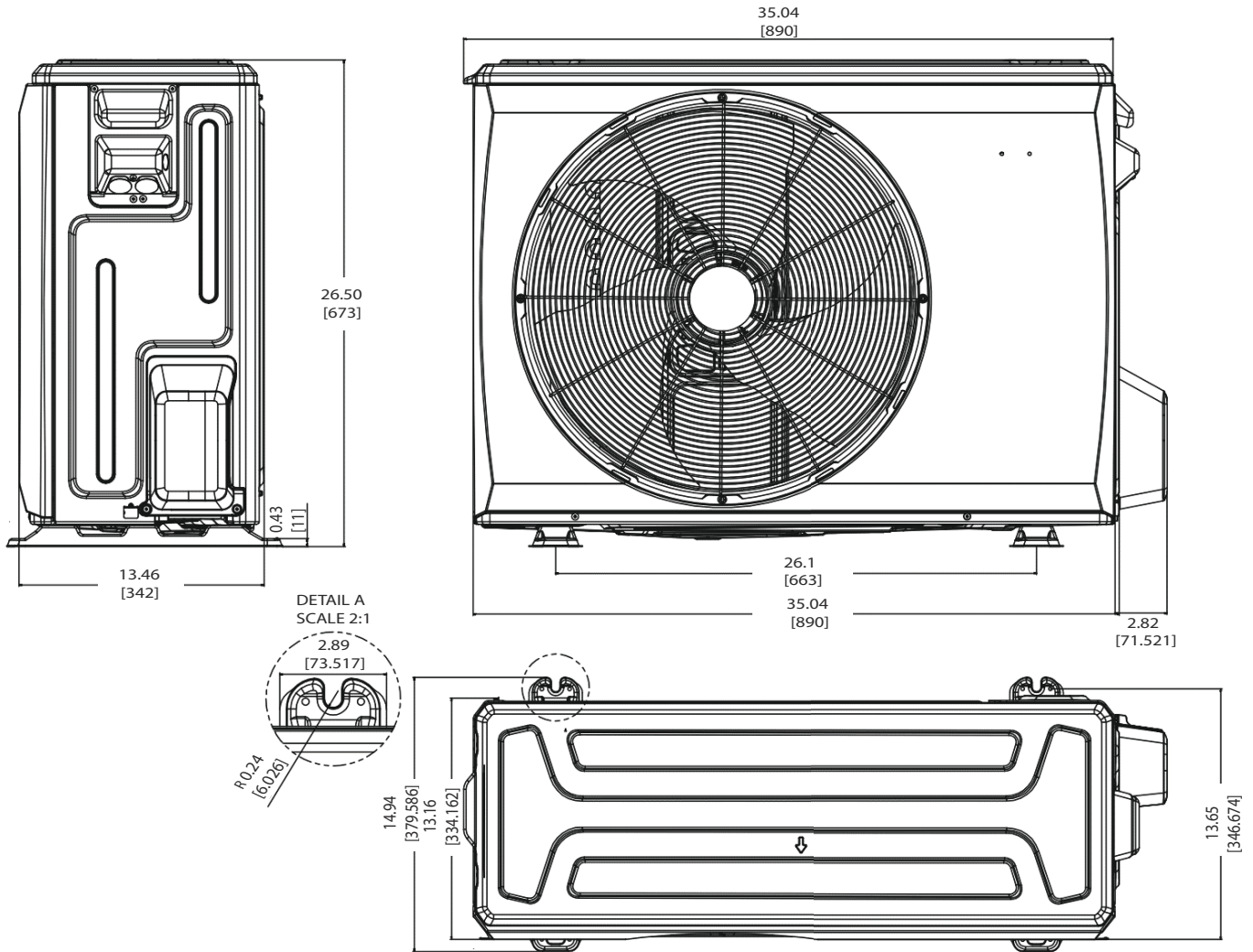


Fig. 2 – Size 6K/9K/12K

DIMENSIONS (CONT.)

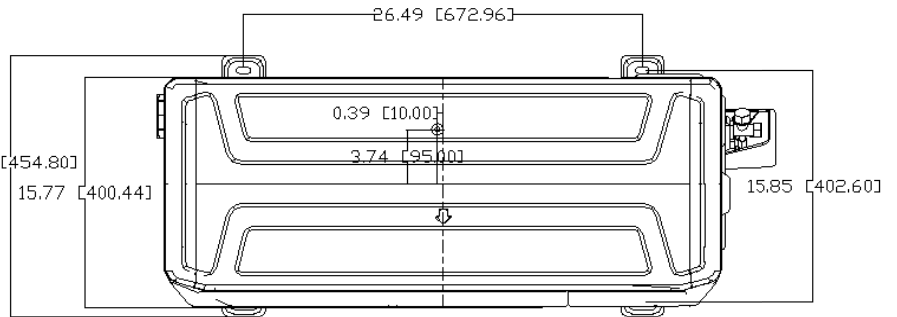
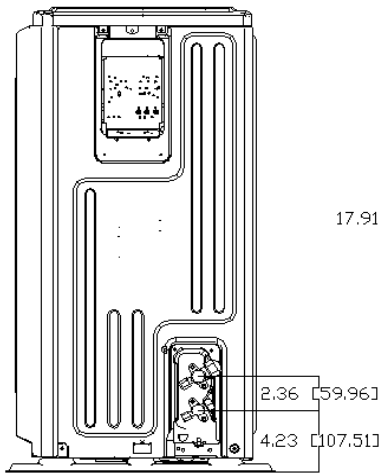
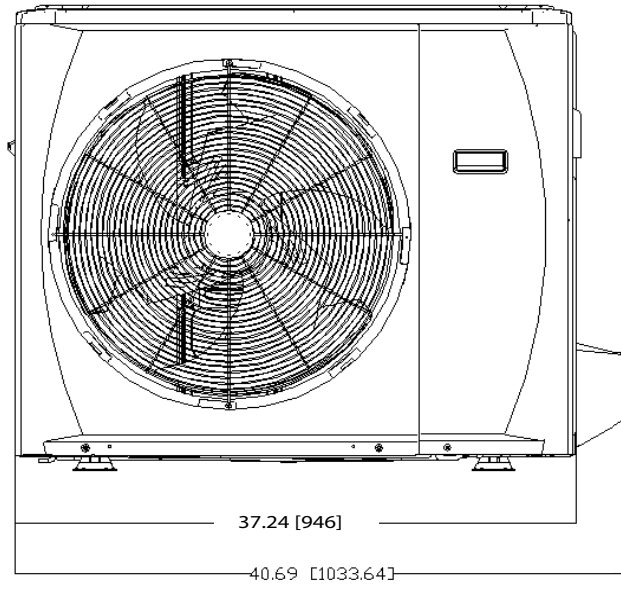
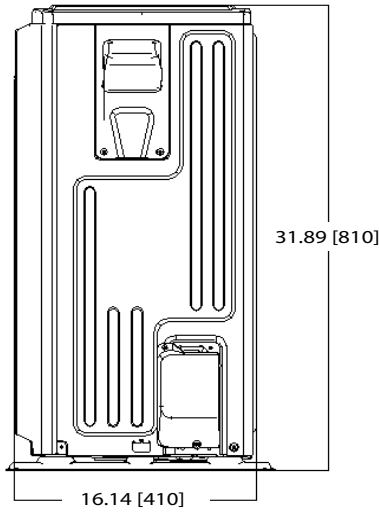


Fig. 3 – Sizes 18K

CLEARANCES

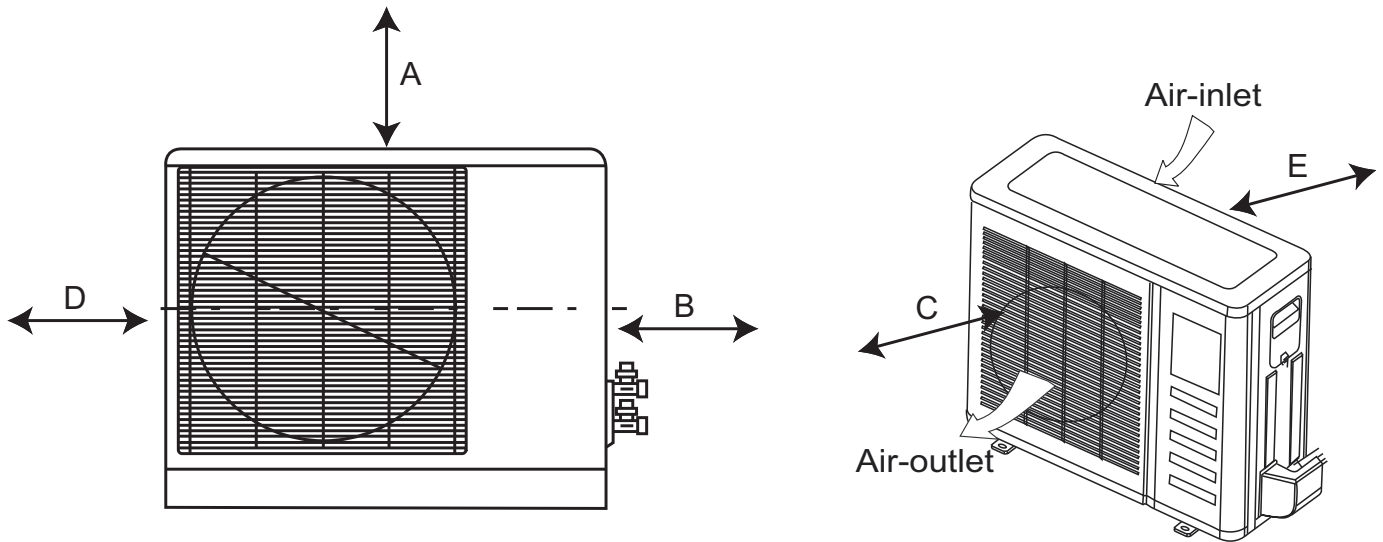


Fig. 4 – Unit Clearances

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UNIT	MINIMUM VALUE in. (mm)
A	24 (610)
B	24 (610)
C	24 (610)
D	4 (101)
E	4 (101)

NOTE: The outdoor unit must be mounted at least 2in. (50mm) above the maximum anticipated snow depth.

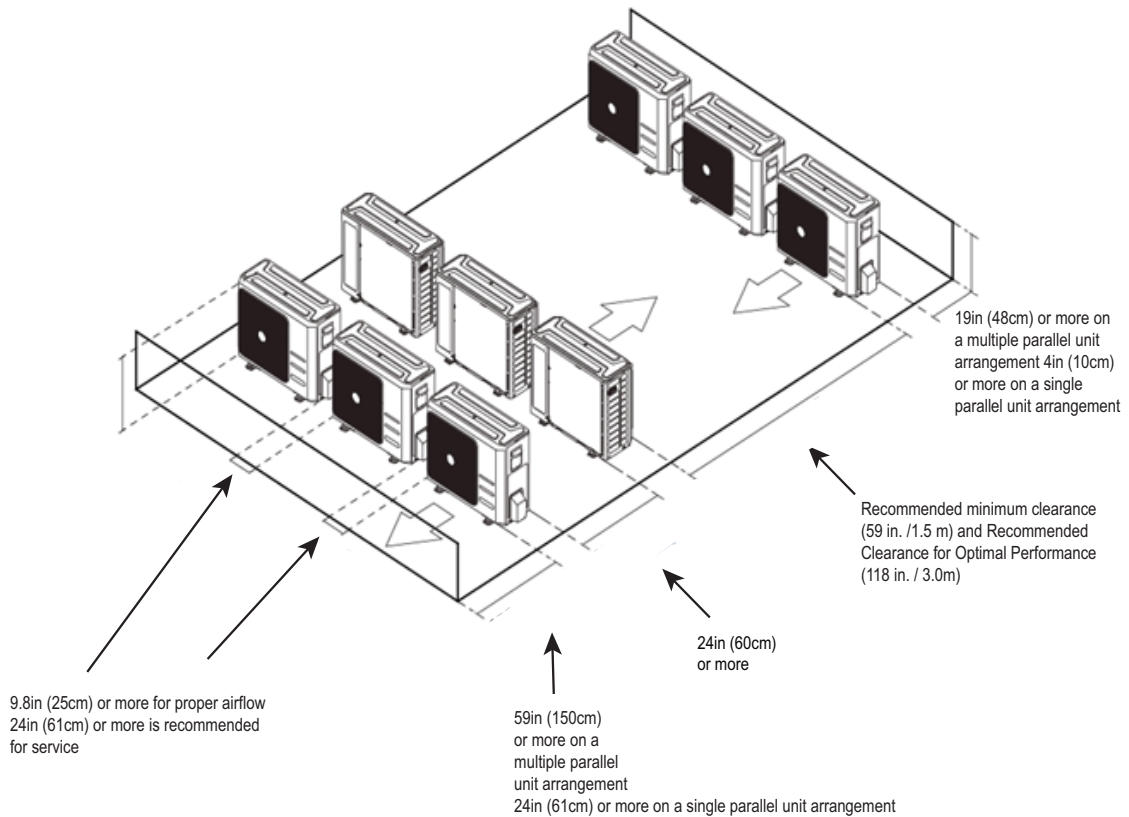


Fig. 5 — Clearances for multiple units

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SPECIFICATIONS

Manufacturer reserves the right to change, at any time, specifications and designs without notice and without obligations.

Table 5 – Specifications

Outdoor model		37MPRAQ06AA3	37MPRAQ09AA3	37MPRAQ12AA3	37MPRAQ18AA3	
Power supply		V;Ph;Hz				
		208/230V;1Ph;60HZ				
COMPRESSOR SPECIFICATIONS	Model	KTM110D79UFZA3	KTM110D79UFZA3	KTM110D79UFZA3	KTM240D46UKT2	
	Type	ROTARY				
	Brand	GMCC				
	Capacity	W	3437	3437	3437	7600
		Btu/h	11727	11727	11727	25931
	Input	W	867	867	867	2045
	RLA	A	7	7	7	9.30
	Refrigerant Oil	ESTER OIL				
	Oil Type	VG74				
Oil Charge	fl. Oz	16.91	16.91	16.91	20.97	
OUTDOOR FAN SPECIFICATIONS	Material	Acrylonitrile Styrene +20%GF				
	Type	ZL-535*133*12-3KFN	ZL-535*133*12-3KFN	ZL-535*133*12-3KFN	ZL-560*139*12-3KN	
	Diameter	inch	21.1	21.1	21.1	22.0
		mm	535	535	535	560
	Height	inch	5.2	5.2	5.2	5.5
mm		133	133	133	139	
OUTDOOR MOTOR SPECIFICATIONS	Model	ZKFN-80-10-1L	ZKFN-80-10-1L	ZKFN-80-10-1L	ZKFN-120-8-2	
	Type	DC				
	Input	W	75.0	75.0	75.0	120
	Max. input	W	291.4	291.4	291.4	176
	Output	W	56.3	56.3	56.3	90
	FLA	A	0.7	0.7	0.7	1.3
	Rated HP	HP	0.08	0.08	0.08	0.12
	Range of current	Amps	0.38~2.18	0.38~2.18	0.38~2.18	0.79~1.67
	RLA	Amps	0.69	0.69	0.69	1.30
	Speed	rev/min	700/600/450	700/600/450	700/600/450	950/800/500
	Rated RPM	rev/min	700	700	700	950
	Insulation class	-	B	B	B	E
Safe class	-	IP24	IP24	IP24	IPX4	

Table 5 – Specifications (Continued)

Outdoor model		37MPRAQ06AA3	37MPRAQ09AA3	37MPRAQ12AA3	37MPRAQ18AA3	
OUTDOOR REFRIGERANT COIL SPECIFICATIONS	Number of rows	Rows	1.6	1.6	1.6	2
	Tube outside dia.	inch	0.276	0.276	0.276	0.276
		mm	Φ7	Φ7	Φ7	Φ7
	Nominal Tube Wall	mm	0.00945 (0.24)	0.00945 (0.24)	0.00945 (0.24)	0.00945 (0.24)
	Tube Enhancement	Yes/No	Yes	Yes	Yes	Yes
	Tube Material		Copper			
	Tube pitch (a)x row pitch (b)	inch	0.83× 0.87	0.83× 0.87	0.83× 0.87	1× 0.87
		mm	21x22	21x22	21x22	25.4x22
	Fin Spacing	FPI	20	20	20	20
		mm	1.3	1.3	1.3	1.3
	Fin type		Plain fin			
	Fin Material		Gold hydrophilic aluminum			
	Coil length x height x width	inch	35.43x23.98x0.87+21.26x23.98x0.87	35.43x23.98x0.87+21.26x23.98x0.87	35.43x23.98x0.87+21.26x23.98x0.87	39.17x30x1.73
		mm	900*609*22+540*609*22	900*609*22+540*609*22	900*609*22+540*609*22	995x762x44
	Face area	ft2	5.90	5.90	5.90	8.16
Number of circuits	#	4	4	4	8	
High Burst Pressure	Psi (MPa)	550(3.79)	550(3.79)	550(3.79)	550(3.79)	
Low Burst Pressure	Psi (MPa)	340(2.34)	340(2.34)	340(2.34)	340(2.34)	
PIPING AND REFRIGERANT INFORMATION	Refrigerant Type	Type	R454B	R454B	R454B	R454B
	Charge Amount	lb. (kg)	2.76(1.25)	2.76(1.25)	2.76(1.25)	3.97(1.80)
	Additional refrigerant charge	Oz/ft (g/m)	0.16(15)	0.16(15)	0.16(15)	0.32(30)
	Liquid Pipe (size - connection type)	In (mm)	1/4in (6.35mm)	1/4in (6.35mm)	1/4in (6.35mm)	3/8in (9.52mm)
	Suction Pipe (size - connection type)	In (mm)	3/8in (9.52mm)	3/8in (9.52mm)	3/8in (9.52mm)	5/8in (15.9mm)
	Min. Piping Length	ft. (m)	9.8 (3)	9.8 (3)	9.8 (3)	9.8 (3)
	Standard Piping Length	ft. (m)	24.6 (7.5)	24.6 (7.5)	24.6 (7.5)	24.6 (7.5)
	Max. Piping Length with no additional refrigerant charge per System	ft. (m)	24.6 (7.5)	24.6 (7.5)	24.6 (7.5)	24.6 (7.5)
	Total Maximum Piping Length per system	ft. (m)	82.02(25)	82.02(25)	82.02(25)	164.04(50)
	Max. outdoor-indoor height difference (OU higher than IU)	ft. (m)	49.21(15)	49.21(15)	49.21(15)	82.02(25)
	Max. outdoor-indoor height difference (IU higher than OU)	ft. (m)	49.21(15)	49.21(15)	49.21(15)	82.02(25)
AIRFLOW SPECS	Outdoor (CFM)	CFM	1472.3	1472.3	1472.3	2235.29
SOUND DATA	Outdoor Sound Pressure Level	dB(A)	57	57	57	61.5

ELECTRICAL DATA**Table 6 – Electrical Data**

Electrical Data					
Outdoor Unit		6K	9K	12K	18K
		(208/230V)	(208/230V)	(208/230V)	(208/230V)
Minimum Circuit Ampacity (MCA)	A	16	16	16	24.9
Maximum Overcurrent Protection Ampacity (MOP)	A	20	20	20	25
Voltage-Phase-Frequency		208/230-1-60			
Max – Min Voltage Range		253-187			
Cooling (with high tier high wall IDU)					
RLA	(A)	2.1	3.1	3.7	5.5
Power consumption	(W)	343	529	840	1200
Heating (with high tier high wall IDU)					
RLA	(A)	3.9	4.3	4.3	5.9
Power consumption	(W)	660	977	977	1332

PERFORMANCE - HIGH WALL**Table 7 – Performance Data**

Indoor Unit Type			High Tier High Wall Indoor Units			
Indoor Model			45MPHAQ06XA3	45MPHAQ09XA3	45MPHAQ12XA3	45MPHAQ18XA3
Outdoor Model			37MPRAQ06AA3	37MPRAQ09AA3	37MPRAQ12AA3	37MPRAQ18AA3
Power supply		V;Ph;Hz	208/230V;1Ph;60HZ			
Performance Data	Cooling Rated Capacity (DOE A2 - 95°F)	Btu/h	6000	9000	12000	18000
	Cooling Capacity Range	Btu/h	3100~16500	3100~16500	3100~16500	12600~27900
	SEER2	Btu/h.W	35.1	33.5	29.5	25.8
	EER2 (DOE A2 - 95°F)	Btu/h.W	17.5	17	14.3	15
	Heating Rated Capacity (DOE H12 - 47°F)	Btu/h	9000	12000	12000	20000
	Heating Capacity Range	Btu/h	4100~17200	4100~17200	4100~17200	9700~29700
	COP (DOE H12 - 47°F)	W/W	4	3.6	3.6	4.4
	HSPF2 IV	Btu/h.W	30	22	14.5	16.2
	HSPF2 V	Btu/h.W	25	16	10	12.9
	Cooling Rated Capacity (DOE B2 - 82°F)	Btu/h	6900	9500	13200	19500
	EER2 (DOE B2 - 82°F)	Btu/h.W	25.8	25.6	20.8	21
	Heating Rated Capacity (DOE H32 - 17°F)	Btu/h	11000	11000	11000	19300
	COP (DOE H32 - 17°F)	W/W	2.4	2.4	2.4	3.01
	Heating Maximum Capacity (17°F)	Btu/h	14500	14500	14500	23200
	Heating Rated Capacity (ODE H42 - 5°F)	Btu/h	13500	13500	13500	22600
	COP (DOE H42 - 5°F)	W/W	2	2	2	2.34
Heating Maximum Capacity (5°F)	Btu/h	13500	13500	13500	22600	

COOLING PERFORMANCE - HIGH WALL

Table 8 – 6K Cooling Performance

AIRFLOW (CFM)	OUTDOOR DB (°F)	ID WB (°F)	60.8°F(16.0°C)					64.4°F(18.0°C)					67°F(19.4°C)					71.6°F(22.0°C)					
			ID DB (°F)	73.4°F	77.0°F	80.0°F	80.6°F	84.2°F	73.4°F	77.0°F	80.0°F	80.6°F	84.2°F	73.4°F	77.0°F	80.0°F	80.6°F	84.2°F	73.4°F	77.0°F	80.0°F	80.6°F	84.2°F
				°C	23.0°C	25.0°C	26.7°C	27.0°C	29.0°C	23.0°C	25.0°C	26.7°C	27.0°C	29.0°C	23.0°C	25.0°C	26.7°C	27.0°C	29.0°C	23.0°C	25.0°C	26.7°C	27.0°C
152	-22°F(-30.0°C)	TC	4500	4506	4511	4511	4517	4772	4777	4782	4783	4789	5057	5063	5069	5070	5075	5361	5367	5373	5374	5380	
		S/T	0.23	0.27	0.30	0.30	0.34	0.24	0.28	0.32	0.32	0.37	0.25	0.30	0.34	0.34	0.39	0.27	0.32	0.36	0.36	0.41	
		PI	0.25	0.25	0.26	0.26	0.26	0.27	0.27	0.27	0.27	0.27	0.29	0.29	0.29	0.29	0.29	0.30	0.30	0.30	0.30	0.30	
	-13°F(-25.0°C)	TC	4875	4882	4887	4887	4894	5169	5175	5180	5181	5188	5478	5485	5491	5492	5498	5808	5814	5821	5822	5829	
		S/T	0.23	0.27	0.30	0.30	0.35	0.24	0.28	0.32	0.32	0.37	0.26	0.30	0.34	0.34	0.39	0.27	0.32	0.36	0.36	0.41	
		PI	0.28	0.28	0.28	0.28	0.28	0.29	0.29	0.29	0.29	0.29	0.31	0.31	0.31	0.31	0.31	0.33	0.33	0.33	0.33	0.33	
	-4°F(-20.0°C)	TC	5250	5257	5263	5263	5270	5567	5573	5579	5580	5587	5899	5907	5914	5915	5921	6255	6262	6268	6269	6277	
		S/T	0.23	0.27	0.31	0.31	0.35	0.24	0.29	0.32	0.32	0.37	0.26	0.30	0.34	0.34	0.39	0.27	0.32	0.36	0.36	0.42	
		PI	0.30	0.30	0.30	0.30	0.30	0.31	0.32	0.32	0.32	0.32	0.33	0.33	0.33	0.33	0.33	0.35	0.35	0.35	0.35	0.36	
	0°F(-17.8°C)	TC	5417	5424	5430	5430	5438	5743	5750	5756	5757	5764	6087	6095	6101	6102	6109	6453	6460	6467	6468	6476	
		S/T	0.23	0.27	0.31	0.31	0.35	0.24	0.29	0.33	0.33	0.37	0.26	0.30	0.34	0.34	0.39	0.27	0.32	0.37	0.37	0.42	
		PI	0.31	0.31	0.31	0.31	0.31	0.32	0.33	0.33	0.33	0.33	0.34	0.34	0.35	0.35	0.35	0.37	0.37	0.37	0.37	0.37	
	5°F(-15.0°C)	TC	5625	5633	5639	5639	5647	5964	5971	5977	5979	5986	6321	6329	6336	6337	6344	6702	6709	6716	6717	6726	
		S/T	0.23	0.27	0.31	0.31	0.35	0.25	0.29	0.33	0.33	0.37	0.26	0.30	0.35	0.35	0.39	0.28	0.32	0.37	0.37	0.42	
		PI	0.32	0.32	0.32	0.32	0.32	0.34	0.34	0.34	0.34	0.34	0.36	0.36	0.36	0.36	0.36	0.38	0.38	0.38	0.38	0.38	
	14°F(-10.0°C)	TC	6006	6015	6021	6021	6029	6368	6376	6382	6384	6391	6749	6758	6765	6766	6774	7156	7163	7171	7172	7181	
		S/T	0.23	0.27	0.31	0.31	0.35	0.25	0.29	0.33	0.33	0.37	0.26	0.31	0.35	0.35	0.40	0.28	0.32	0.37	0.37	0.42	
		PI	0.68	0.68	0.68	0.68	0.68	0.72	0.72	0.72	0.72	0.72	0.76	0.76	0.76	0.76	0.77	0.81	0.81	0.81	0.81	0.81	
	17°F(-8.3°C)	TC	6133	6142	6148	6149	6157	6503	6511	6517	6519	6526	6892	6901	6908	6910	6917	7307	7315	7323	7324	7333	
		S/T	0.23	0.27	0.31	0.31	0.35	0.25	0.29	0.33	0.33	0.37	0.26	0.31	0.35	0.35	0.40	0.28	0.32	0.37	0.37	0.42	
		PI	0.80	0.80	0.80	0.80	0.80	0.85	0.85	0.85	0.85	0.85	0.90	0.90	0.90	0.90	0.90	0.95	0.95	0.95	0.95	0.96	
	23°F(-5.0°C)	TC	5843	5851	5857	5857	5865	6195	6202	6209	6210	6217	6565	6574	6581	6582	6590	6961	6968	6976	6977	6986	
		S/T	0.23	0.27	0.31	0.31	0.36	0.25	0.29	0.33	0.33	0.38	0.26	0.31	0.35	0.35	0.40	0.28	0.33	0.37	0.37	0.42	
		PI	0.70	0.70	0.70	0.70	0.70	0.74	0.74	0.74	0.74	0.74	0.78	0.79	0.79	0.79	0.79	0.83	0.83	0.83	0.83	0.83	
35°F(1.7°C)	TC	5262	5269	5275	5275	5282	5579	5586	5591	5592	5599	5912	5920	5927	5928	5934	6269	6275	6282	6283	6291		
	S/T	0.23	0.28	0.31	0.31	0.36	0.25	0.29	0.33	0.33	0.38	0.26	0.31	0.35	0.35	0.40	0.28	0.33	0.37	0.37	0.42		
	PI	0.50	0.50	0.50	0.50	0.50	0.53	0.53	0.53	0.53	0.53	0.56	0.56	0.56	0.56	0.56	0.59	0.59	0.59	0.59	0.59		
41°F(5.0°C)	TC	6007	6015	6021	6022	6030	6369	6376	6383	6384	6391	6749	6758	6765	6767	6774	7156	7164	7171	7173	7181		
	S/T	0.24	0.28	0.31	0.31	0.36	0.25	0.29	0.33	0.33	0.38	0.26	0.31	0.35	0.35	0.40	0.28	0.33	0.37	0.37	0.43		
	PI	0.55	0.55	0.55	0.55	0.55	0.58	0.58	0.59	0.59	0.59	0.62	0.62	0.62	0.62	0.62	0.66	0.66	0.66	0.66	0.66		
47°F(8.3°C)	TC	6751	6760	6768	6768	6777	7158	7167	7174	7175	7184	7586	7596	7604	7606	7614	8043	8052	8061	8062	8072		
	S/T	0.24	0.28	0.31	0.31	0.36	0.25	0.29	0.33	0.33	0.38	0.27	0.31	0.35	0.35	0.40	0.28	0.33	0.37	0.37	0.43		
	PI	0.61	0.61	0.61	0.61	0.61	0.64	0.64	0.64	0.64	0.64	0.68	0.68	0.68	0.68	0.68	0.72	0.72	0.72	0.72	0.72		
50°F(10.0°C)	TC	6716	6725	6732	6733	6742	7121	7129	7136	7138	7146	7546	7556	7564	7566	7574	8001	8010	8018	8020	8030		
	S/T	0.24	0.28	0.32	0.32	0.36	0.25	0.29	0.34	0.34	0.38	0.27	0.31	0.36	0.36	0.40	0.28	0.33	0.38	0.38	0.43		
	PI	0.57	0.57	0.57	0.57	0.58	0.61	0.61	0.61	0.61	0.61	0.64	0.64	0.65	0.65	0.65	0.68	0.68	0.68	0.68	0.69		
59°F(15.0°C)	TC	6610	6619	6626	6626	6635	7008	7017	7024	7025	7033	7427	7437	7445	7447	7455	7875	7883	7892	7893	7903		
	S/T	0.24	0.28	0.32	0.32	0.36	0.25	0.30	0.34	0.34	0.38	0.27	0.31	0.36	0.36	0.41	0.28	0.33	0.38	0.38	0.43		
	PI	0.48	0.48	0.48	0.48	0.48	0.50	0.51	0.51	0.51	0.51	0.54	0.54	0.54	0.54	0.54	0.57	0.57	0.57	0.57	0.57		
68°F(20.0°C)	TC	6504	6513	6520	6520	6529	6896	6904	6911	6913	6921	7308	7318	7326	7327	7335	7748	7757	7765	7767	7776		
	S/T	0.24	0.29	0.33	0.33	0.37	0.26	0.30	0.35	0.35	0.39	0.27	0.32	0.37	0.37	0.42	0.29	0.34	0.39	0.39	0.44		
	PI	0.38	0.38	0.38	0.38	0.38	0.40	0.40	0.40	0.40	0.40	0.43	0.43	0.43	0.43	0.43	0.45	0.45	0.45	0.45	0.45		
77°F(25.0°C)	TC	6398	6407	6414	6414	6423	6784	6792	6799	6800	6808	7189	7198	7206	7208	7216	7622	7631	7639	7640	7650		
	S/T	0.25	0.29	0.33	0.33	0.38	0.26	0.31	0.35	0.35	0.40	0.28	0.33	0.37	0.37	0.42	0.30	0.35	0.39	0.39	0.45		
	PI	0.28	0.28	0.28	0.28	0.28	0.30	0.30	0.30	0.30	0.30	0.32	0.32	0.32	0.32	0.32	0.34	0.34	0.34	0.34	0.34		

Manufacturer reserves the right to change, at any time, specifications and designs without notice and without obligations.

Table 8 – 6K Cooling Performance (Continued)

152	82°F(27.8°C)	TC	6439	6448	6455	6455	6464	6827	6835	6842	6843	6851	7235	7244	7252	7254	7262	7671	7679	7688	7689	7698	
		S/T	0.25	0.29	0.33	0.33	0.38	0.27	0.31	0.35	0.35	0.40	0.28	0.33	0.38	0.38	0.43	0.43	0.30	0.35	0.40	0.40	0.45
		PI	0.29	0.29	0.29	0.29	0.29	0.31	0.31	0.31	0.31	0.31	0.31	0.33	0.33	0.33	0.33	0.33	0.35	0.35	0.35	0.35	0.35
	86°F(30.0°C)	TC	6597	6606	6613	6614	6622	6995	7003	7010	7011	7020	7413	7422	7431	7432	7440	7859	7868	7876	7878	7887	
		S/T	0.25	0.30	0.34	0.34	0.39	0.27	0.32	0.36	0.36	0.41	0.29	0.34	0.38	0.38	0.43	0.30	0.36	0.40	0.40	0.46	
		PI	0.38	0.38	0.38	0.38	0.38	0.41	0.41	0.41	0.41	0.41	0.43	0.43	0.43	0.43	0.43	0.46	0.46	0.46	0.46	0.46	
	95°F(35.0°C)	TC	6953	6963	6970	6970	6980	7372	7381	7388	7390	7399	7813	7823	7832	7833	7842	8284	8293	8302	8303	8313	
		S/T	0.25	0.30	0.34	0.34	0.39	0.27	0.32	0.36	0.36	0.41	0.29	0.34	0.38	0.38	0.43	0.30	0.36	0.40	0.40	0.46	
		PI	0.58	0.58	0.59	0.59	0.59	0.62	0.62	0.62	0.62	0.62	0.66	0.66	0.66	0.66	0.66	0.70	0.70	0.70	0.70	0.70	
	104°F(40.0°C)	TC	6592	6601	6608	6609	6617	6990	6998	7005	7006	7014	7407	7417	7425	7426	7435	7853	7862	7871	7872	7882	
		S/T	0.26	0.31	0.35	0.35	0.40	0.28	0.32	0.37	0.37	0.42	0.29	0.34	0.39	0.39	0.44	0.31	0.36	0.41	0.41	0.47	
		PI	0.64	0.64	0.64	0.64	0.64	0.68	0.68	0.68	0.68	0.68	0.72	0.72	0.72	0.72	0.72	0.76	0.76	0.76	0.76	0.76	
	110°F(43.0°C)	TC	6376	6384	6391	6391	6400	6760	6768	6775	6776	6784	7164	7173	7181	7182	7190	7595	7604	7612	7613	7623	
		S/T	0.27	0.32	0.36	0.36	0.41	0.29	0.34	0.38	0.38	0.44	0.30	0.36	0.40	0.40	0.46	0.32	0.38	0.43	0.43	0.49	
		PI	0.67	0.67	0.67	0.67	0.68	0.71	0.71	0.71	0.71	0.72	0.76	0.76	0.76	0.76	0.76	0.80	0.80	0.80	0.80	0.80	
	115°F(46.0°C)	TC	5073	5080	5085	5085	5092	5378	5385	5390	5391	5398	5700	5707	5714	5715	5721	6043	6050	6056	6057	6065	
		S/T	0.27	0.32	0.36	0.36	0.42	0.29	0.34	0.39	0.39	0.44	0.31	0.36	0.41	0.41	0.47	0.33	0.38	0.43	0.43	0.49	
		PI	0.53	0.53	0.53	0.53	0.53	0.56	0.56	0.56	0.56	0.56	0.59	0.60	0.60	0.60	0.60	0.63	0.63	0.63	0.63	0.63	
	122°F(50.0°C)	TC	3335	3340	3344	3344	3348	3536	3541	3544	3545	3549	3748	3753	3757	3757	3762	3974	3978	3982	3983	3988	
		S/T	0.28	0.33	0.37	0.37	0.43	0.30	0.35	0.40	0.40	0.45	0.31	0.37	0.42	0.42	0.48	0.33	0.39	0.44	0.44	0.51	
		PI	0.34	0.34	0.34	0.34	0.34	0.36	0.36	0.36	0.36	0.36	0.38	0.38	0.38	0.38	0.38	0.40	0.40	0.40	0.40	0.40	

Table 8 – 6K Cooling Performance (Continued)

211	-22°F(-3.0°C)	TC	5764	5771	5778	5778	5786	6111	6118	6124	6126	6133	6476	6485	6492	6493	6500	6866	6874	6881	6882	6891
		S/T	0.29	0.34	0.39	0.39	0.44	0.31	0.36	0.41	0.41	0.47	0.33	0.38	0.43	0.43	0.50	0.35	0.41	0.46	0.46	0.53
		PI	0.33	0.33	0.33	0.33	0.33	0.35	0.35	0.35	0.35	0.35	0.35	0.37	0.37	0.37	0.37	0.37	0.39	0.39	0.39	0.39
	-13°F(-25.0°C)	TC	6244	6252	6259	6259	6268	6620	6628	6635	6636	6644	7016	7025	7033	7034	7042	7439	7447	7455	7456	7465
		S/T	0.29	0.34	0.39	0.39	0.44	0.31	0.36	0.41	0.41	0.47	0.33	0.39	0.44	0.44	0.50	0.35	0.41	0.46	0.46	0.53
		PI	0.35	0.35	0.35	0.35	0.35	0.37	0.37	0.38	0.38	0.38	0.40	0.40	0.40	0.40	0.40	0.42	0.42	0.42	0.42	0.42
	-4°F(-20.0°C)	TC	6724	6733	6741	6741	6750	7130	7138	7145	7146	7155	7555	7565	7574	7575	7584	8011	8019	8028	8029	8039
		S/T	0.29	0.34	0.39	0.39	0.45	0.31	0.37	0.42	0.42	0.47	0.33	0.39	0.44	0.44	0.50	0.35	0.41	0.47	0.47	0.53
		PI	0.38	0.38	0.38	0.38	0.38	0.40	0.40	0.40	0.40	0.40	0.43	0.43	0.43	0.43	0.43	0.45	0.45	0.45	0.45	0.45
	0°F(-17.8°C)	TC	6938	6947	6955	6955	6964	7356	7365	7372	7373	7382	7795	7805	7814	7816	7824	8265	8274	8283	8284	8295
		S/T	0.29	0.35	0.39	0.39	0.45	0.31	0.37	0.42	0.42	0.47	0.33	0.39	0.44	0.44	0.50	0.35	0.41	0.47	0.47	0.53
		PI	0.39	0.39	0.39	0.39	0.39	0.42	0.42	0.42	0.42	0.42	0.44	0.44	0.44	0.44	0.44	0.47	0.47	0.47	0.47	0.47
	5°F(-15.0°C)	TC	7205	7214	7222	7222	7232	7639	7648	7655	7657	7666	8095	8106	8115	8116	8125	8583	8592	8602	8603	8614
		S/T	0.30	0.35	0.39	0.39	0.45	0.31	0.37	0.42	0.42	0.48	0.33	0.39	0.44	0.44	0.51	0.35	0.41	0.47	0.47	0.54
		PI	0.41	0.41	0.41	0.41	0.41	0.43	0.43	0.43	0.43	0.43	0.46	0.46	0.46	0.46	0.46	0.49	0.49	0.49	0.49	0.49
	14°F(-10.0°C)	TC	7693	7703	7711	7712	7722	8156	8166	8174	8176	8185	8644	8655	8664	8666	8676	9164	9174	9184	9186	9197
		S/T	0.30	0.35	0.40	0.40	0.45	0.31	0.37	0.42	0.42	0.48	0.33	0.39	0.44	0.44	0.51	0.35	0.41	0.47	0.47	0.54
		PI	0.87	0.87	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.98	0.98	0.98	0.98	0.98	1.04	1.04	1.04	1.04	1.04
	17°F(-8.3°C)	TC	7855	7866	7874	7875	7885	8329	8339	8347	8348	8358	8826	8838	8848	8849	8859	9358	9368	9378	9380	9392
		S/T	0.30	0.35	0.40	0.40	0.45	0.32	0.37	0.42	0.42	0.48	0.33	0.39	0.45	0.45	0.51	0.35	0.42	0.47	0.47	0.54
		PI	1.02	1.02	1.03	1.03	1.03	1.08	1.09	1.09	1.09	1.09	1.15	1.15	1.15	1.15	1.15	1.22	1.22	1.22	1.22	1.22
	23°F(-5.0°C)	TC	7483	7493	7501	7502	7512	7934	7944	7951	7953	7962	8408	8419	8429	8430	8440	8915	8925	8934	8936	8947
		S/T	0.30	0.35	0.40	0.40	0.45	0.32	0.37	0.42	0.42	0.48	0.34	0.39	0.45	0.45	0.51	0.36	0.42	0.48	0.48	0.54
		PI	0.89	0.90	0.90	0.90	0.90	0.95	0.95	0.95	0.95	0.95	1.00	1.01	1.01	1.01	1.01	1.06	1.07	1.07	1.07	1.07
35°F(1.7°C)	TC	6739	6748	6756	6756	6765	7145	7154	7161	7162	7171	7572	7582	7590	7592	7600	8028	8037	8046	8047	8057	
	S/T	0.30	0.35	0.40	0.40	0.46	0.32	0.37	0.42	0.42	0.48	0.34	0.40	0.45	0.45	0.51	0.36	0.42	0.48	0.48	0.54	
	PI	0.64	0.64	0.64	0.64	0.64	0.67	0.67	0.68	0.68	0.68	0.71	0.71	0.72	0.72	0.72	0.76	0.76	0.76	0.76	0.76	
41°F(5.0°C)	TC	7693	7703	7712	7712	7722	8157	8166	8174	8176	8186	8644	8655	8665	8666	8676	9165	9175	9185	9186	9197	
	S/T	0.30	0.35	0.40	0.40	0.46	0.32	0.37	0.43	0.43	0.49	0.34	0.40	0.45	0.45	0.51	0.36	0.42	0.48	0.48	0.55	
	PI	0.71	0.71	0.71	0.71	0.71	0.75	0.75	0.75	0.75	0.75	0.79	0.79	0.79	0.79	0.80	0.84	0.84	0.84	0.84	0.84	
47°F(8.3°C)	TC	8647	8658	8668	8668	8680	9168	9179	9188	9190	9200	9716	9728	9739	9741	9752	10301	10312	10323	10325	10338	
	S/T	0.30	0.35	0.40	0.40	0.46	0.32	0.38	0.43	0.43	0.49	0.34	0.40	0.45	0.45	0.52	0.36	0.42	0.48	0.48	0.55	
	PI	0.78	0.78	0.78	0.78	0.78	0.82	0.82	0.82	0.82	0.83	0.87	0.87	0.87	0.87	0.87	0.92	0.93	0.93	0.93	0.93	
50°F(10.0°C)	TC	8601	8613	8622	8623	8634	9120	9131	9140	9141	9152	9665	9677	9688	9690	9701	10247	10258	10269	10271	10284	
	S/T	0.30	0.36	0.40	0.40	0.46	0.32	0.38	0.43	0.43	0.49	0.34	0.40	0.45	0.46	0.52	0.36	0.42	0.48	0.48	0.55	
	PI	0.73	0.74	0.74	0.74	0.74	0.78	0.78	0.78	0.78	0.78	0.82	0.83	0.83	0.83	0.83	0.87	0.88	0.88	0.88	0.88	
59°F(15.0°C)	TC	8466	8477	8486	8487	8498	8976	8987	8995	8997	9008	9512	9525	9535	9537	9548	10085	10096	10107	10109	10121	
	S/T	0.31	0.36	0.41	0.41	0.46	0.32	0.38	0.43	0.43	0.49	0.34	0.40	0.46	0.46	0.52	0.36	0.43	0.48	0.48	0.55	
	PI	0.61	0.61	0.61	0.61	0.61	0.65	0.65	0.65	0.65	0.65	0.69	0.69	0.69	0.69	0.69	0.73	0.73	0.73	0.73	0.73	
68°F(20.0°C)	TC	8330	8341	8350	8351	8362	8832	8843	8851	8853	8864	9360	9372	9382	9384	9395	9924	9934	9945	9947	9959	
	S/T	0.31	0.37	0.42	0.42	0.48	0.33	0.39	0.44	0.44	0.50	0.35	0.41	0.47	0.47	0.54	0.37	0.44	0.50	0.50	0.57	
	PI	0.49	0.49	0.49	0.49	0.49	0.51	0.52	0.52	0.52	0.52	0.55	0.55	0.55	0.55	0.55	0.58	0.58	0.58	0.58	0.58	
77°F(25.0°C)	TC	8194	8205	8214	8215	8226	8688	8699	8707	8709	8719	9207	9219	9230	9231	9242	9762	9773	9783	9785	9797	
	S/T	0.32	0.37	0.42	0.42	0.48	0.34	0.39	0.45	0.45	0.51	0.36	0.42	0.48	0.48	0.54	0.38	0.44	0.50	0.50	0.57	
	PI	0.36	0.36	0.36	0.36	0.36	0.38	0.38	0.38	0.38	0.38	0.41	0.41	0.41	0.41	0.41	0.43	0.43	0.43	0.43	0.43	
82°F(27.8°C)	TC	8247	8258	8267	8267	8278	8744	8754	8763	8764	8775	9266	9278	9288	9290	9300	9824	9835	9846	9847	9859	
	S/T	0.32	0.38	0.43	0.43	0.49	0.34	0.40	0.45	0.45	0.52	0.36	0.42	0.48	0.48	0.55	0.38	0.45	0.51	0.51	0.58	
	PI	0.37	0.38	0.38	0.38	0.38	0.40	0.40	0.40	0.40	0.40	0.42	0.42	0.42	0.42	0.42	0.45	0.45	0.45	0.45	0.45	
86°F(30.0°C)	TC	8449	8461	8470	8470	8482	8958	8969	8978	8980	8990	9494	9506	9517	9518	9529	10066	10077	10088	10089	10102	
	S/T	0.33	0.38	0.43	0.43	0.49	0.35	0.40	0.46	0.46	0.52	0.37	0.43	0.49	0.49	0.56	0.39	0.45	0.52	0.52	0.59	
	PI	0.49	0.49	0.49	0.49	0.49	0.52	0.52	0.52	0.52	0.52	0.55	0.55	0.55	0.55	0.55	0.58	0.58	0.58	0.58	0.59	

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Table 8 – 6K Cooling Performance (Continued)

211	95°F(35.0°C)	TC	8905	8917	8927	8927	8939	9442	9453	9462	9464	9476	10006	10019	10030	10032	10043	10609	10620	10632	10634	10647	
		S/T	0.33	0.38	0.43	0.43	0.49	0.35	0.40	0.46	0.46	0.52	0.37	0.43	0.49	0.49	0.56	0.39	0.45	0.52	0.52	0.59	
		PI	0.75	0.75	0.75	0.75	0.75	0.79	0.79	0.79	0.79	0.80	0.84	0.84	0.84	0.84	0.84	0.89	0.89	0.89	0.89	0.89	
	104°F(40.0°C)	TC	8443	8454	8463	8464	8475	8952	8962	8971	8973	8984	9487	9499	9509	9511	9522	10058	10069	10080	10082	10094	
		S/T	0.33	0.39	0.44	0.44	0.51	0.35	0.42	0.47	0.47	0.54	0.37	0.44	0.50	0.50	0.57	0.40	0.47	0.53	0.53	0.60	
	110°F(43.0°C)	TC	8166	8176	8185	8186	8197	8658	8668	8676	8678	8688	9175	9187	9197	9199	9209	9728	9738	9749	9750	9762	
		S/T	0.35	0.41	0.46	0.46	0.53	0.37	0.43	0.49	0.49	0.56	0.39	0.46	0.52	0.52	0.59	0.41	0.48	0.55	0.55	0.63	
	115°F(46.0°C)	TC	6497	6505	6513	6513	6522	6888	6896	6903	6905	6913	7300	7309	7317	7319	7327	7740	7748	7756	7758	7767	
		S/T	0.35	0.41	0.47	0.47	0.53	0.37	0.44	0.49	0.49	0.56	0.39	0.46	0.52	0.52	0.60	0.42	0.49	0.56	0.56	0.63	
	122°F(50.0°C)	TC	4272	4278	4282	4282	4288	4529	4535	4539	4540	4545	4800	4806	4811	4812	4818	5089	5095	5100	5101	5107	
		S/T	0.36	0.42	0.48	0.48	0.54	0.38	0.45	0.51	0.51	0.58	0.40	0.47	0.54	0.54	0.61	0.43	0.50	0.57	0.57	0.65	
	423	-22°F(-30.0°C)	TC	7382	7392	7400	7400	7410	7827	7836	7844	7845	7854	8294	8305	8314	8316	8325	8794	8803	8813	8814	8825
			S/T	0.37	0.44	0.50	0.50	0.56	0.39	0.46	0.53	0.53	0.60	0.42	0.49	0.56	0.56	0.63	0.44	0.52	0.59	0.59	0.67
			PI	0.42	0.42	0.42	0.42	0.42	0.44	0.44	0.44	0.44	0.44	0.47	0.47	0.47	0.47	0.47	0.50	0.50	0.50	0.50	0.50
		-13°F(-25.0°C)	TC	7997	8008	8016	8017	8027	8479	8489	8497	8499	8509	8985	8997	9007	9009	9019	9527	9537	9547	9549	9561
			S/T	0.37	0.44	0.50	0.50	0.57	0.40	0.47	0.53	0.53	0.60	0.42	0.49	0.56	0.56	0.64	0.45	0.52	0.59	0.59	0.68
		-4°F(-20.0°C)	TC	8612	8624	8633	8633	8645	9131	9142	9151	9153	9163	9676	9689	9700	9702	9712	10260	10271	10282	10283	10296
			S/T	0.38	0.44	0.50	0.50	0.57	0.40	0.47	0.53	0.53	0.61	0.42	0.50	0.56	0.56	0.64	0.45	0.53	0.60	0.60	0.68
0°F(-17.8°C)		TC	8885	8897	8907	8907	8919	9421	9432	9441	9443	9454	9984	9997	10008	10010	10021	10585	10597	10608	10610	10623	
		S/T	0.38	0.44	0.50	0.50	0.57	0.40	0.47	0.53	0.53	0.61	0.42	0.50	0.57	0.57	0.64	0.45	0.53	0.60	0.60	0.68	
5°F(-15.0°C)		TC	9227	9240	9249	9250	9262	9783	9795	9804	9806	9818	10368	10381	10393	10395	10406	10992	11004	11016	11018	11032	
		S/T	0.38	0.45	0.51	0.51	0.58	0.40	0.47	0.54	0.54	0.61	0.43	0.50	0.57	0.57	0.65	0.45	0.53	0.60	0.60	0.69	
14°F(-1.0°C)		TC	9852	9865	9876	9876	9890	10446	10458	10469	10471	10483	11070	11084	11097	11099	11111	11737	11750	11763	11764	11779	
		S/T	0.38	0.45	0.51	0.51	0.58	0.40	0.47	0.54	0.54	0.61	0.43	0.50	0.57	0.57	0.65	0.45	0.53	0.60	0.60	0.69	
17°F(-8.3°C)		TC	10060	10074	10085	10085	10099	10667	10679	10690	10692	10705	11304	11319	11331	11333	11346	11985	11998	12011	12013	12028	
		S/T	0.38	0.45	0.51	0.51	0.58	0.40	0.47	0.54	0.54	0.61	0.43	0.50	0.57	0.57	0.65	0.45	0.53	0.61	0.61	0.69	
23°F(-5.0°C)		TC	9584	9597	9607	9608	9621	10162	10174	10184	10186	10198	10769	10783	10795	10797	10809	11418	11430	11442	11444	11458	
		S/T	0.38	0.45	0.51	0.51	0.58	0.41	0.48	0.54	0.54	0.62	0.43	0.51	0.57	0.57	0.65	0.46	0.54	0.61	0.61	0.69	
35°F(1.7°C)		TC	8631	8643	8652	8652	8664	9151	9162	9171	9173	9184	9698	9711	9721	9723	9734	10282	10293	10305	10306	10319	
	S/T	0.39	0.45	0.51	0.51	0.59	0.41	0.48	0.54	0.54	0.62	0.43	0.51	0.58	0.58	0.66	0.46	0.54	0.61	0.61	0.70		
41°F(5.0°C)	TC	9853	9866	9876	9877	9890	10446	10459	10469	10471	10484	11070	11085	11097	11099	11112	11737	11750	11763	11765	11779		
	S/T	0.39	0.45	0.51	0.51	0.59	0.41	0.48	0.55	0.55	0.62	0.43	0.51	0.58	0.58	0.66	0.46	0.54	0.61	0.61	0.70		
47°F(8.3°C)	TC	11074	11089	11101	11101	11116	11741	11755	11767	11769	11783	12443	12459	12473	12475	12489	13193	13207	13221	13223	13240		
	S/T	0.39	0.45	0.52	0.52	0.59	0.41	0.48	0.55	0.55	0.62	0.43	0.51	0.58	0.58	0.66	0.46	0.54	0.61	0.61	0.70		
50°F(10.0°C)	TC	11016	11031	11043	11043	11058	11680	11694	11705	11708	11722	12378	12394	12408	12410	12424	13124	13138	13152	13154	13171		
	S/T	0.39	0.46	0.52	0.52	0.59	0.41	0.48	0.55	0.55	0.63	0.44	0.51	0.58	0.58	0.66	0.46	0.54	0.62	0.62	0.70		
		PI	0.94	0.94	0.94	0.94	0.94	1.00	1.00	1.00	1.00	1.00	1.06	1.06	1.06	1.06	1.12	1.12	1.12	1.12	1.12		

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Table 8 – 6K Cooling Performance (Continued)

423	59°F(15.0°C)	TC	10842	10857	10869	10869	10884	11496	11509	11521	11523	11537	12183	12198	12212	12214	12228	12917	12931	12945	12947	12963
		S/T	0.39	0.46	0.52	0.52	0.59	0.41	0.49	0.55	0.55	0.63	0.44	0.52	0.59	0.59	0.67	0.47	0.55	0.62	0.62	0.71
		PI	0.78	0.78	0.78	0.78	0.78	0.83	0.83	0.83	0.83	0.83	0.88	0.88	0.88	0.88	0.88	0.93	0.93	0.93	0.93	0.93
	68°F(20.0°C)	TC	10669	10683	10694	10695	10709	11312	11325	11336	11338	11352	11987	12003	12016	12018	12032	12710	12723	12737	12739	12755
		S/T	0.40	0.47	0.54	0.54	0.61	0.43	0.50	0.57	0.57	0.65	0.45	0.53	0.60	0.60	0.69	0.48	0.56	0.64	0.64	0.73
		PI	0.62	0.62	0.62	0.62	0.62	0.66	0.66	0.66	0.66	0.66	0.70	0.70	0.70	0.70	0.70	0.74	0.74	0.74	0.74	0.74
	77°F(25.0°C)	TC	10495	10509	10520	10521	10535	11127	11140	11151	11154	11167	11792	11807	11821	11823	11836	12503	12516	12530	12532	12547
		S/T	0.41	0.48	0.54	0.54	0.62	0.43	0.51	0.57	0.57	0.65	0.46	0.54	0.61	0.61	0.69	0.48	0.57	0.65	0.65	0.74
		PI	0.46	0.46	0.46	0.46	0.46	0.49	0.49	0.49	0.49	0.49	0.52	0.52	0.52	0.52	0.52	0.55	0.55	0.55	0.55	0.55
	82°F(27.8°C)	TC	10562	10576	10587	10588	10602	11198	11211	11222	11225	11238	11867	11883	11896	11898	11911	12582	12596	12610	12611	12627
		S/T	0.41	0.48	0.55	0.55	0.63	0.44	0.51	0.58	0.58	0.66	0.46	0.54	0.62	0.62	0.70	0.49	0.58	0.65	0.65	0.75
		PI	0.48	0.48	0.48	0.48	0.48	0.51	0.51	0.51	0.51	0.51	0.54	0.54	0.54	0.54	0.54	0.57	0.57	0.57	0.57	0.57
	86°F(30.0°C)	TC	10821	10836	10847	10848	10863	11473	11487	11498	11501	11514	12159	12175	12188	12190	12204	12891	12905	12919	12921	12938
		S/T	0.42	0.49	0.56	0.56	0.63	0.44	0.52	0.59	0.59	0.67	0.47	0.55	0.62	0.62	0.71	0.50	0.58	0.66	0.66	0.75
		PI	0.63	0.63	0.63	0.63	0.63	0.66	0.67	0.67	0.67	0.67	0.70	0.71	0.71	0.71	0.71	0.75	0.75	0.75	0.75	0.75
	95°F(35.0°C)	TC	11405	11421	11433	11433	11449	12093	12107	12119	12121	12136	12815	12832	12846	12848	12863	13587	13602	13617	13619	13636
		S/T	0.42	0.49	0.56	0.56	0.63	0.44	0.52	0.59	0.59	0.67	0.47	0.55	0.62	0.62	0.71	0.50	0.58	0.66	0.66	0.75
		PI	0.96	0.96	0.96	0.96	0.96	1.02	1.02	1.02	1.02	1.02	1.08	1.08	1.08	1.08	1.08	1.14	1.14	1.14	1.14	1.15
	104°F(40.0°C)	TC	10813	10828	10839	10840	10854	11465	11478	11490	11492	11506	12150	12165	12179	12181	12195	12882	12896	12910	12912	12928
		S/T	0.43	0.50	0.57	0.57	0.65	0.45	0.53	0.60	0.60	0.69	0.48	0.56	0.64	0.64	0.73	0.51	0.60	0.68	0.68	0.77
		PI	1.05	1.05	1.05	1.05	1.05	1.11	1.11	1.11	1.11	1.12	1.18	1.18	1.18	1.18	1.18	1.25	1.25	1.25	1.25	1.25
	110°F(43.0°C)	TC	10458	10472	10483	10484	10498	11088	11101	11112	11114	11127	11750	11766	11779	11781	11794	12458	12472	12486	12488	12503
		S/T	0.44	0.52	0.59	0.59	0.67	0.47	0.55	0.63	0.63	0.71	0.50	0.58	0.66	0.66	0.76	0.53	0.62	0.70	0.70	0.80
		PI	1.10	1.10	1.11	1.11	1.11	1.17	1.17	1.17	1.17	1.17	1.24	1.24	1.24	1.24	1.24	1.31	1.32	1.32	1.32	1.32
115°F(46.0°C)	TC	8321	8332	8341	8341	8352	8822	8832	8841	8843	8853	9349	9361	9372	9373	9384	9912	9923	9934	9936	9948	
	S/T	0.45	0.53	0.60	0.60	0.68	0.48	0.56	0.63	0.63	0.72	0.50	0.59	0.67	0.67	0.77	0.53	0.63	0.71	0.71	0.81	
	PI	0.87	0.87	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.97	0.98	0.98	0.98	0.98	1.03	1.03	1.04	1.04	1.04	
122°F(50.0°C)	TC	5471	5478	5484	5484	5492	5801	5808	5813	5814	5821	6147	6155	6162	6163	6170	6518	6525	6532	6533	6541	
	S/T	0.46	0.54	0.61	0.61	0.70	0.49	0.57	0.65	0.65	0.74	0.52	0.60	0.69	0.69	0.78	0.55	0.64	0.73	0.73	0.83	
	PI	0.55	0.55	0.55	0.55	0.56	0.59	0.59	0.59	0.59	0.59	0.62	0.62	0.62	0.62	0.62	0.66	0.66	0.66	0.66	0.66	
558	-22°F(-30.0°C)	TC	9454	9467	9477	9477	9490	10024	10036	10045	10047	10059	10623	10636	10648	10650	10662	11263	11275	11287	11289	11303
		S/T	0.48	0.56	0.63	0.63	0.72	0.50	0.59	0.67	0.67	0.77	0.53	0.63	0.71	0.71	0.81	0.57	0.67	0.76	0.76	0.86
		PI	0.53	0.54	0.54	0.54	0.54	0.57	0.57	0.57	0.57	0.57	0.60	0.60	0.60	0.60	0.60	0.64	0.64	0.64	0.64	0.64
	-13°F(-25.0°C)	TC	10242	10256	10267	10267	10281	10859	10872	10883	10885	10898	11508	11523	11536	11538	11551	12201	12214	12228	12230	12245
		S/T	0.48	0.56	0.64	0.64	0.73	0.51	0.60	0.68	0.68	0.77	0.54	0.63	0.72	0.72	0.82	0.57	0.67	0.76	0.76	0.87
		PI	0.58	0.58	0.58	0.58	0.58	0.61	0.62	0.62	0.62	0.62	0.65	0.65	0.65	0.65	0.65	0.69	0.69	0.69	0.69	0.69
	-4°F(-20.0°C)	TC	11030	11044	11056	11057	11072	11694	11708	11720	11722	11736	12393	12409	12423	12425	12439	13140	13154	13168	13170	13187
		S/T	0.48	0.57	0.64	0.64	0.73	0.51	0.60	0.68	0.68	0.78	0.54	0.64	0.72	0.72	0.82	0.57	0.67	0.77	0.77	0.87
		PI	0.62	0.62	0.63	0.63	0.63	0.66	0.66	0.66	0.66	0.66	0.70	0.70	0.70	0.70	0.70	0.74	0.74	0.74	0.75	0.75
	0°F(-17.8°C)	TC	11380	11395	11407	11408	11423	12066	12080	12092	12094	12108	12786	12803	12817	12820	12834	13557	13572	13586	13588	13605
		S/T	0.48	0.57	0.64	0.64	0.73	0.51	0.60	0.68	0.68	0.78	0.54	0.64	0.72	0.72	0.83	0.58	0.68	0.77	0.77	0.88
		PI	0.64	0.64	0.65	0.65	0.65	0.68	0.68	0.68	0.68	0.69	0.72	0.72	0.73	0.73	0.73	0.77	0.77	0.77	0.77	0.77
	5°F(-15.0°C)	TC	11817	11833	11846	11847	11863	12530	12544	12557	12559	12574	13278	13295	13310	13313	13328	14078	14093	14109	14111	14129
		S/T	0.49	0.57	0.65	0.65	0.74	0.51	0.60	0.69	0.69	0.78	0.55	0.64	0.73	0.73	0.83	0.58	0.68	0.77	0.77	0.88
		PI	0.67	0.67	0.67	0.67	0.67	0.71	0.71	0.71	0.71	0.71	0.75	0.75	0.75	0.75	0.75	0.80	0.80	0.80	0.80	0.80
	14°F(-10.0°C)	TC	12618	12635	12648	12649	12666	13378	13394	13407	13410	13426	14178	14196	14212	14214	14230	15032	15048	15065	15067	15086
		S/T	0.49	0.57	0.65	0.65	0.74	0.52	0.61	0.69	0.69	0.78	0.55	0.64	0.73	0.73	0.83	0.58	0.68	0.77	0.77	0.88
		PI	1.43	1.43	1.43	1.43	1.43	1.51	1.51	1.52	1.52	1.52	1.60	1.60	1.61	1.61	1.61	1.70	1.70	1.70	1.70	1.70
	17°F(-8.3°C)	TC	12885	12902	12916	12917	12934	13661	13677	13691	13694	13710	14477	14496	14512	14515	14531	15350	15366	15383	15386	15405
		S/T	0.49	0.57	0.65	0.65	0.74	0.52	0.61	0.69	0.69	0.79	0.55	0.64	0.73	0.73	0.83	0.58	0.68	0.78	0.78	0.88
		PI	1.68	1.68	1.68	1.68	1.68	1.78	1.78	1.78	1.78	1.78	1.79	1.79	1.79	1.79	1.79	2.00	2.00	2.00	2.00	2.01

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Table 8 – 6K Cooling Performance (Continued)

558	23°F(-5.0°C)	TC	12275	12291	12304	12305	12321	13014	13030	13043	13045	13061	13792	13810	13825	13828	13843	14623	14639	14655	14657	14675
		S/T	0.49	0.58	0.65	0.65	0.75	0.52	0.61	0.69	0.69	0.79	0.55	0.65	0.74	0.74	0.84	0.58	0.69	0.78	0.78	0.89
		PI	1.47	1.47	1.47	1.47	1.47	1.55	1.56	1.56	1.56	1.56	1.65	1.65	1.65	1.65	1.65	1.75	1.75	1.75	1.75	1.75
	35°F(1.7°C)	TC	11054	11069	11081	11081	11096	11720	11734	11746	11748	11762	12420	12437	12450	12453	12467	13169	13183	13197	13199	13216
		S/T	0.49	0.58	0.66	0.66	0.75	0.52	0.61	0.70	0.70	0.79	0.55	0.65	0.74	0.74	0.84	0.59	0.69	0.78	0.78	0.89
		PI	1.04	1.04	1.04	1.04	1.05	1.11	1.11	1.11	1.11	1.11	1.17	1.17	1.17	1.17	1.18	1.24	1.24	1.24	1.24	1.25
	41°F(5.0°C)	TC	12618	12635	12649	12650	12667	13379	13395	13408	13411	13427	14178	14197	14212	14215	14231	15032	15049	15065	15068	15086
		S/T	0.49	0.58	0.66	0.66	0.75	0.52	0.61	0.70	0.70	0.80	0.56	0.65	0.74	0.74	0.84	0.59	0.69	0.78	0.78	0.89
		PI	1.16	1.16	1.16	1.16	1.16	1.23	1.23	1.23	1.23	1.23	1.30	1.30	1.30	1.30	1.31	1.38	1.38	1.38	1.38	1.38
	47°F(8.3°C)	TC	14183	14202	14217	14218	14237	15038	15055	15070	15073	15091	15936	15957	15974	15977	15995	16896	16915	16933	16936	16957
		S/T	0.50	0.58	0.66	0.66	0.75	0.53	0.62	0.70	0.70	0.80	0.56	0.65	0.74	0.74	0.85	0.59	0.69	0.79	0.79	0.90
		PI	1.27	1.27	1.28	1.28	1.28	1.35	1.35	1.35	1.35	1.35	1.43	1.43	1.43	1.43	1.43	1.52	1.52	1.52	1.52	1.52
	50°F(10.0°C)	TC	14109	14128	14143	14143	14163	14959	14977	14991	14994	15012	15853	15873	15891	15894	15912	16808	16826	16844	16847	16868
		S/T	0.50	0.58	0.66	0.66	0.76	0.53	0.62	0.70	0.70	0.80	0.56	0.66	0.75	0.75	0.85	0.59	0.70	0.79	0.79	0.90
		PI	1.20	1.21	1.21	1.21	1.21	1.28	1.28	1.28	1.28	1.28	1.35	1.35	1.36	1.36	1.36	1.43	1.44	1.44	1.44	1.44
	59°F(15.0°C)	TC	13886	13905	13920	13920	13939	14723	14740	14755	14758	14775	15603	15623	15640	15643	15661	16543	16561	16579	16581	16602
		S/T	0.50	0.59	0.67	0.67	0.76	0.53	0.62	0.71	0.71	0.81	0.56	0.66	0.75	0.75	0.86	0.60	0.70	0.80	0.80	0.91
		PI	1.00	1.00	1.00	1.00	1.00	1.06	1.06	1.06	1.06	1.06	1.12	1.13	1.13	1.13	1.13	1.19	1.19	1.19	1.19	1.20
	68°F(20.0°C)	TC	13664	13682	13697	13697	13716	14487	14504	14518	14521	14539	15352	15372	15390	15392	15410	16277	16295	16313	16315	16336
		S/T	0.51	0.60	0.69	0.69	0.78	0.54	0.64	0.73	0.73	0.83	0.58	0.68	0.77	0.77	0.88	0.61	0.72	0.82	0.82	0.93
		PI	0.80	0.80	0.80	0.80	0.80	0.84	0.85	0.85	0.85	0.85	0.90	0.90	0.90	0.90	0.90	0.95	0.95	0.95	0.95	0.95
	77°F(25.0°C)	TC	13441	13459	13474	13474	13492	14251	14268	14282	14285	14302	15102	15122	15139	15142	15159	16012	16030	16047	16050	16070
		S/T	0.52	0.61	0.69	0.69	0.79	0.55	0.65	0.74	0.74	0.84	0.59	0.69	0.78	0.78	0.89	0.62	0.73	0.83	0.83	0.94
		PI	0.59	0.59	0.59	0.59	0.59	0.63	0.63	0.63	0.63	0.63	0.67	0.67	0.67	0.67	0.67	0.71	0.71	0.71	0.71	0.71
82°F(27.8°C)	TC	13527	13545	13559	13560	13578	14342	14359	14373	14376	14393	15199	15218	15235	15238	15255	16114	16132	16149	16152	16172	
	S/T	0.53	0.62	0.70	0.70	0.80	0.56	0.66	0.75	0.75	0.85	0.59	0.70	0.79	0.79	0.90	0.63	0.74	0.84	0.84	0.95	
	PI	0.61	0.62	0.62	0.62	0.62	0.65	0.65	0.65	0.65	0.65	0.69	0.69	0.69	0.69	0.69	0.73	0.73	0.73	0.73	0.73	
86°F(30.0°C)	TC	13859	13878	13893	13893	13912	14694	14712	14726	14729	14747	15572	15592	15610	15613	15630	16510	16528	16546	16549	16569	
	S/T	0.53	0.63	0.71	0.71	0.81	0.57	0.66	0.75	0.75	0.86	0.60	0.70	0.80	0.80	0.91	0.64	0.75	0.85	0.85	0.97	
	PI	0.80	0.80	0.81	0.81	0.81	0.85	0.85	0.85	0.85	0.85	0.90	0.90	0.90	0.90	0.91	0.96	0.96	0.96	0.96	0.96	
95°F(35.0°C)	TC	14607	14627	14642	14643	14663	15487	15506	15521	15524	15542	16413	16434	16452	16455	16474	17401	17420	17439	17442	17464	
	S/T	0.53	0.63	0.71	0.71	0.81	0.57	0.66	0.75	0.75	0.86	0.60	0.70	0.80	0.80	0.91	0.64	0.75	0.85	0.85	0.97	
	PI	1.23	1.23	1.23	1.23	1.23	1.30	1.30	1.30	1.30	1.31	1.38	1.38	1.38	1.38	1.38	1.46	1.46	1.46	1.47	1.47	
104°F(40.0°C)	TC	13849	13867	13882	13883	13902	14683	14701	14715	14718	14735	15560	15581	15598	15601	15618	16498	16516	16534	16536	16557	
	S/T	0.55	0.64	0.73	0.73	0.83	0.58	0.68	0.77	0.77	0.88	0.62	0.72	0.82	0.82	0.93	0.65	0.76	0.87	0.87	0.99	
	PI	1.34	1.35	1.35	1.35	1.35	1.42	1.43	1.43	1.43	1.43	1.51	1.51	1.51	1.51	1.51	1.60	1.60	1.60	1.60	1.61	
110°F(43.0°C)	TC	13394	13412	13426	13427	13445	14201	14218	14232	14234	14251	15049	15069	15085	15088	15105	15956	15973	15991	15993	16013	
	S/T	0.57	0.67	0.76	0.76	0.86	0.60	0.71	0.80	0.80	0.91	0.64	0.75	0.85	0.85	0.97	0.68	0.79	0.90	0.90	1.00	
	PI	1.41	1.41	1.42	1.42	1.42	1.50	1.50	1.50	1.50	1.50	1.59	1.59	1.59	1.59	1.59	1.68	1.69	1.69	1.69	1.69	
115°F(46.0°C)	TC	10656	10671	10682	10683	10697	11299	11312	11323	11325	11339	11974	11989	12003	12005	12018	12695	12709	12723	12725	12741	
	S/T	0.57	0.67	0.77	0.77	0.87	0.61	0.71	0.81	0.81	0.92	0.65	0.76	0.86	0.86	0.98	0.68	0.80	0.91	0.91	1.00	
	PI	1.11	1.11	1.11	1.11	1.12	1.18	1.18	1.18	1.18	1.18	1.25	1.25	1.25	1.25	1.25	1.32	1.33	1.33	1.33	1.33	
122°F(50.0°C)	TC	7007	7016	7024	7024	7034	7429	7438	7445	7447	7456	7873	7883	7892	7893	7902	8347	8356	8365	8367	8377	
	S/T	0.59	0.69	0.78	0.78	0.89	0.62	0.73	0.83	0.83	0.95	0.66	0.77	0.88	0.88	1.00	0.70	0.82	0.93	0.93	1.00	
	PI	0.71	0.71	0.71	0.71	0.71	0.75	0.75	0.75	0.75	0.75	0.80	0.80	0.80	0.80	0.80	0.84	0.84	0.85	0.85	0.85	

LEGEND:

- DB - Dry Bulb
- WB - Wet Bulb
- TC - Total Net Capacity (1000 Btu/hour)
- SC - Sensible Capacity (1000 Btu/hour)
- Input - Total Power (kW)

Table 9 – 9K Cooling Performance

AIRFLOW (CFM)	OUTDOOR DB (°F)	ID WB °F (°C)	60.8°F(16.0°C)					64.4°F(18.0°C)					67°F(19.4°C)					71.6°F(22.0°C)				
		ID DB °F °C	73.4°F 23.0°C	77.0°F 25.0°C	80.0°F 26.7°C	80.6°F 27.0°C	84.2°F 29.0°C	73.4°F 23.0°C	77.0°F 25.0°C	80.0°F 26.7°C	80.6°F 27.0°C	84.2°F 29.0°C	73.4°F 23.0°C	77.0°F 25.0°C	80.0°F 26.7°C	80.6°F 27.0°C	84.2°F 29.0°C	73.4°F 23.0°C	77.0°F 25.0°C	80.0°F 26.7°C	80.6°F 27.0°C	84.2°F 29.0°C
		TC	S/T	PI	TC	S/T	PI	TC	S/T	PI	TC	S/T	PI	TC	S/T	PI	TC	S/T	PI	TC	S/T	PI
152	-22°F(-30.0°C)	TC	4500	4506	4511	4511	4517	4772	4777	4782	4783	4789	5057	5063	5069	5070	5075	5361	5367	5373	5374	5380
		S/T	0.23	0.27	0.30	0.30	0.34	0.24	0.28	0.32	0.32	0.37	0.25	0.30	0.34	0.34	0.39	0.27	0.32	0.36	0.36	0.41
		PI	0.25	0.25	0.26	0.26	0.26	0.27	0.27	0.27	0.27	0.27	0.29	0.29	0.29	0.29	0.29	0.30	0.30	0.30	0.30	0.30
	-13°F(-25.0°C)	TC	4875	4882	4887	4887	4894	5169	5175	5180	5181	5188	5478	5485	5491	5492	5498	5808	5814	5821	5822	5829
		S/T	0.23	0.27	0.30	0.30	0.35	0.24	0.28	0.32	0.32	0.37	0.26	0.30	0.34	0.34	0.39	0.27	0.32	0.36	0.36	0.41
		PI	0.28	0.28	0.28	0.28	0.28	0.29	0.29	0.29	0.29	0.29	0.31	0.31	0.31	0.31	0.31	0.33	0.33	0.33	0.33	0.33
	-4°F(-20.0°C)	TC	5250	5257	5263	5263	5270	5567	5573	5579	5580	5587	5899	5907	5914	5915	5921	6255	6262	6268	6269	6277
		S/T	0.23	0.27	0.31	0.31	0.35	0.24	0.29	0.32	0.32	0.37	0.26	0.30	0.34	0.34	0.39	0.27	0.32	0.36	0.36	0.42
		PI	0.30	0.30	0.30	0.30	0.30	0.31	0.32	0.32	0.32	0.32	0.33	0.33	0.33	0.33	0.33	0.35	0.35	0.35	0.35	0.36
	0°F(-17.8°C)	TC	5417	5424	5430	5430	5438	5743	5750	5756	5757	5764	6087	6095	6101	6102	6109	6453	6460	6467	6468	6476
		S/T	0.23	0.27	0.31	0.31	0.35	0.24	0.29	0.33	0.33	0.37	0.26	0.30	0.34	0.34	0.39	0.27	0.32	0.37	0.37	0.42
		PI	0.31	0.31	0.31	0.31	0.31	0.32	0.33	0.33	0.33	0.33	0.34	0.34	0.35	0.35	0.35	0.37	0.37	0.37	0.37	0.37
	5°F(-15.0°C)	TC	5625	5633	5639	5639	5647	5964	5971	5977	5979	5986	6321	6329	6336	6337	6344	6702	6709	6716	6717	6726
		S/T	0.23	0.27	0.31	0.31	0.35	0.25	0.29	0.33	0.33	0.37	0.26	0.30	0.35	0.35	0.39	0.28	0.32	0.37	0.37	0.42
		PI	0.32	0.32	0.32	0.32	0.32	0.34	0.34	0.34	0.34	0.34	0.36	0.36	0.36	0.36	0.36	0.38	0.38	0.38	0.38	0.38
	14°F(-10.0°C)	TC	6006	6015	6021	6021	6029	6368	6376	6382	6384	6391	6749	6758	6765	6766	6774	7156	7163	7171	7172	7181
		S/T	0.23	0.27	0.31	0.31	0.35	0.25	0.29	0.33	0.33	0.37	0.26	0.31	0.35	0.35	0.40	0.28	0.32	0.37	0.37	0.42
		PI	0.68	0.68	0.68	0.68	0.68	0.72	0.72	0.72	0.72	0.72	0.76	0.76	0.76	0.76	0.77	0.81	0.81	0.81	0.81	0.81
	17°F(-8.3°C)	TC	6133	6142	6148	6149	6157	6503	6511	6517	6519	6526	6892	6901	6908	6910	6917	7307	7315	7323	7324	7333
		S/T	0.23	0.27	0.31	0.31	0.35	0.25	0.29	0.33	0.33	0.37	0.26	0.31	0.35	0.35	0.40	0.28	0.32	0.37	0.37	0.42
		PI	0.80	0.80	0.80	0.80	0.80	0.85	0.85	0.85	0.85	0.85	0.90	0.90	0.90	0.90	0.90	0.95	0.95	0.95	0.95	0.96
	23°F(-5.0°C)	TC	5843	5851	5857	5857	5865	6195	6202	6209	6210	6217	6565	6574	6581	6582	6590	6961	6968	6976	6977	6986
		S/T	0.23	0.27	0.31	0.31	0.36	0.25	0.29	0.33	0.33	0.38	0.26	0.31	0.35	0.35	0.40	0.28	0.33	0.37	0.37	0.42
		PI	0.70	0.70	0.70	0.70	0.70	0.74	0.74	0.74	0.74	0.74	0.78	0.79	0.79	0.79	0.79	0.83	0.83	0.83	0.83	0.83
35°F(1.7°C)	TC	5262	5269	5275	5275	5282	5579	5586	5591	5592	5599	5912	5920	5927	5928	5934	6269	6275	6282	6283	6291	
	S/T	0.23	0.28	0.31	0.31	0.36	0.25	0.29	0.33	0.33	0.38	0.26	0.31	0.35	0.35	0.40	0.28	0.33	0.37	0.37	0.42	
	PI	0.50	0.50	0.50	0.50	0.50	0.53	0.53	0.53	0.53	0.53	0.56	0.56	0.56	0.56	0.56	0.59	0.59	0.59	0.59	0.59	
41°F(5.0°C)	TC	6007	6015	6021	6022	6030	6369	6376	6383	6384	6391	6749	6758	6765	6767	6774	7156	7164	7171	7173	7181	
	S/T	0.24	0.28	0.31	0.31	0.36	0.25	0.29	0.33	0.33	0.38	0.26	0.31	0.35	0.35	0.40	0.28	0.33	0.37	0.37	0.43	
	PI	0.55	0.55	0.55	0.55	0.55	0.58	0.58	0.59	0.59	0.59	0.62	0.62	0.62	0.62	0.62	0.66	0.66	0.66	0.66	0.66	
47°F(8.3°C)	TC	6751	6760	6768	6768	6777	7158	7167	7174	7175	7184	7586	7596	7604	7606	7614	8043	8052	8061	8062	8072	
	S/T	0.24	0.28	0.31	0.31	0.36	0.25	0.29	0.33	0.33	0.38	0.27	0.31	0.35	0.35	0.40	0.28	0.33	0.37	0.37	0.43	
	PI	0.61	0.61	0.61	0.61	0.61	0.64	0.64	0.64	0.64	0.64	0.68	0.68	0.68	0.68	0.68	0.72	0.72	0.72	0.72	0.72	
50°F(10.0°C)	TC	6716	6725	6732	6733	6742	7121	7129	7136	7138	7146	7546	7556	7564	7566	7574	8001	8010	8018	8020	8030	
	S/T	0.24	0.28	0.32	0.32	0.36	0.25	0.29	0.34	0.34	0.38	0.27	0.31	0.36	0.36	0.40	0.28	0.33	0.38	0.38	0.43	
	PI	0.57	0.57	0.57	0.57	0.58	0.61	0.61	0.61	0.61	0.61	0.64	0.64	0.65	0.65	0.65	0.68	0.68	0.68	0.68	0.69	
59°F(15.0°C)	TC	6610	6619	6626	6626	6635	7008	7017	7024	7025	7033	7427	7437	7445	7447	7455	7875	7883	7892	7893	7903	
	S/T	0.24	0.28	0.32	0.32	0.36	0.25	0.30	0.34	0.34	0.38	0.27	0.31	0.36	0.36	0.41	0.28	0.33	0.38	0.38	0.43	
	PI	0.48	0.48	0.48	0.48	0.48	0.50	0.51	0.51	0.51	0.51	0.54	0.54	0.54	0.54	0.54	0.57	0.57	0.57	0.57	0.57	
68°F(20.0°C)	TC	6504	6513	6520	6520	6529	6896	6904	6911	6913	6921	7308	7318	7326	7327	7335	7748	7757	7765	7767	7776	
	S/T	0.24	0.29	0.33	0.33	0.37	0.26	0.30	0.35	0.35	0.39	0.27	0.32	0.37	0.37	0.42	0.29	0.34	0.39	0.39	0.44	
	PI	0.38	0.38	0.38	0.38	0.38	0.40	0.40	0.40	0.40	0.40	0.43	0.43	0.43	0.43	0.43	0.45	0.45	0.45	0.45	0.45	
77°F(25.0°C)	TC	6398	6407	6414	6414	6423	6784	6792	6799	6800	6808	7189	7198	7206	7208	7216	7622	7631	7639	7640	7650	
	S/T	0.25	0.29	0.33	0.33	0.38	0.26	0.31	0.35	0.35	0.40	0.28	0.33	0.37	0.37	0.42	0.30	0.35	0.39	0.39	0.45	
	PI	0.28	0.28	0.28	0.28	0.28	0.30	0.30	0.30	0.30	0.30	0.32	0.32	0.32	0.32	0.32	0.34	0.34	0.34	0.34	0.34	

Manufacturer reserves the right to change, at any time, specifications and designs without notice and without obligations.

Table 9 – 9K Cooling Performance (Continued)

152	82°F(27.8°C)	TC	6439	6448	6455	6455	6464	6827	6835	6842	6843	6851	7235	7244	7252	7254	7262	7671	7679	7688	7689	7698	
		S/T	0.25	0.29	0.33	0.33	0.38	0.27	0.31	0.35	0.35	0.40	0.28	0.33	0.38	0.38	0.43	0.30	0.35	0.40	0.40	0.40	0.45
		PI	0.29	0.29	0.29	0.29	0.29	0.31	0.31	0.31	0.31	0.31	0.31	0.33	0.33	0.33	0.33	0.33	0.35	0.35	0.35	0.35	0.35
	86°F(30.0°C)	TC	6597	6606	6613	6614	6622	6995	7003	7010	7011	7020	7413	7422	7431	7432	7440	7859	7868	7876	7878	7887	
		S/T	0.25	0.30	0.34	0.34	0.39	0.27	0.32	0.36	0.36	0.41	0.29	0.34	0.38	0.38	0.43	0.30	0.36	0.40	0.40	0.40	0.46
		PI	0.38	0.38	0.38	0.38	0.38	0.41	0.41	0.41	0.41	0.41	0.41	0.43	0.43	0.43	0.43	0.43	0.46	0.46	0.46	0.46	0.46
	95°F(35.0°C)	TC	6953	6963	6970	6970	6980	7372	7381	7388	7390	7399	7813	7823	7832	7833	7842	8284	8293	8302	8303	8313	
		S/T	0.25	0.30	0.34	0.34	0.39	0.27	0.32	0.36	0.36	0.41	0.29	0.34	0.38	0.38	0.43	0.30	0.36	0.40	0.40	0.40	0.46
		PI	0.58	0.58	0.59	0.59	0.59	0.62	0.62	0.62	0.62	0.62	0.66	0.66	0.66	0.66	0.66	0.70	0.70	0.70	0.70	0.70	0.70
	104°F(40.0°C)	TC	6592	6601	6608	6609	6617	6990	6998	7005	7006	7014	7407	7417	7425	7426	7435	7853	7862	7871	7872	7882	
		S/T	0.26	0.31	0.35	0.35	0.40	0.28	0.32	0.37	0.37	0.42	0.29	0.34	0.39	0.39	0.44	0.31	0.36	0.41	0.41	0.47	
		PI	0.64	0.64	0.64	0.64	0.64	0.68	0.68	0.68	0.68	0.68	0.72	0.72	0.72	0.72	0.72	0.76	0.76	0.76	0.76	0.76	0.76
	110°F(43.0°C)	TC	6376	6384	6391	6391	6400	6760	6768	6775	6776	6784	7164	7173	7181	7182	7190	7595	7604	7612	7613	7623	
		S/T	0.27	0.32	0.36	0.36	0.41	0.29	0.34	0.38	0.38	0.44	0.30	0.36	0.40	0.40	0.46	0.32	0.38	0.43	0.43	0.49	
		PI	0.67	0.67	0.67	0.67	0.68	0.71	0.71	0.71	0.71	0.72	0.76	0.76	0.76	0.76	0.76	0.80	0.80	0.80	0.80	0.80	0.80
	115°F(46.0°C)	TC	5073	5080	5085	5085	5092	5378	5385	5390	5391	5398	5700	5707	5714	5715	5721	6043	6050	6056	6057	6065	
		S/T	0.27	0.32	0.36	0.36	0.42	0.29	0.34	0.39	0.39	0.44	0.31	0.36	0.41	0.41	0.47	0.33	0.38	0.43	0.43	0.49	
		PI	0.53	0.53	0.53	0.53	0.53	0.56	0.56	0.56	0.56	0.56	0.59	0.60	0.60	0.60	0.60	0.63	0.63	0.63	0.63	0.63	0.63
	122°F(50.0°C)	TC	3335	3340	3344	3344	3348	3536	3541	3544	3545	3549	3748	3753	3757	3757	3762	3974	3978	3982	3983	3988	
		S/T	0.28	0.33	0.37	0.37	0.43	0.30	0.35	0.40	0.40	0.45	0.31	0.37	0.42	0.42	0.48	0.33	0.39	0.44	0.44	0.51	
		PI	0.34	0.34	0.34	0.34	0.34	0.36	0.36	0.36	0.36	0.36	0.38	0.38	0.38	0.38	0.38	0.40	0.40	0.40	0.40	0.40	0.40

Table 9 – 9K Cooling Performance (Continued)

211	-22°F(-30.0°C)	TC	5764	5771	5778	5778	5786	6111	6118	6124	6126	6133	6476	6485	6492	6493	6500	6866	6874	6881	6882	6891	
		S/T	0.29	0.34	0.39	0.39	0.44	0.31	0.36	0.41	0.41	0.47	0.33	0.38	0.43	0.43	0.50	0.35	0.41	0.46	0.46	0.46	0.53
		PI	0.33	0.33	0.33	0.33	0.33	0.35	0.35	0.35	0.35	0.35	0.35	0.37	0.37	0.37	0.37	0.37	0.39	0.39	0.39	0.39	0.39
	-13°F(-25.0°C)	TC	6244	6252	6259	6259	6268	6620	6628	6635	6636	6644	7016	7025	7033	7034	7042	7439	7447	7455	7456	7465	7465
		S/T	0.29	0.34	0.39	0.39	0.44	0.31	0.36	0.41	0.41	0.47	0.33	0.39	0.44	0.44	0.50	0.35	0.41	0.46	0.46	0.46	0.53
		PI	0.35	0.35	0.35	0.35	0.35	0.37	0.37	0.38	0.38	0.38	0.40	0.40	0.40	0.40	0.40	0.42	0.42	0.42	0.42	0.42	0.42
	-4°F(-20.0°C)	TC	6724	6733	6741	6741	6750	7130	7138	7145	7146	7155	7555	7565	7574	7575	7584	8011	8019	8028	8029	8039	8039
		S/T	0.29	0.34	0.39	0.39	0.45	0.31	0.37	0.42	0.42	0.47	0.33	0.39	0.44	0.44	0.50	0.35	0.41	0.47	0.47	0.47	0.53
		PI	0.38	0.38	0.38	0.38	0.38	0.40	0.40	0.40	0.40	0.40	0.43	0.43	0.43	0.43	0.43	0.45	0.45	0.45	0.45	0.45	0.45
	0°F(-17.8°C)	TC	6938	6947	6955	6955	6964	7356	7365	7372	7373	7382	7795	7805	7814	7816	7824	8265	8274	8283	8284	8295	8295
		S/T	0.29	0.35	0.39	0.39	0.45	0.31	0.37	0.42	0.42	0.47	0.33	0.39	0.44	0.44	0.50	0.35	0.41	0.47	0.47	0.47	0.53
		PI	0.39	0.39	0.39	0.39	0.39	0.42	0.42	0.42	0.42	0.42	0.44	0.44	0.44	0.44	0.44	0.47	0.47	0.47	0.47	0.47	0.47
	5°F(-15.0°C)	TC	7205	7214	7222	7222	7232	7639	7648	7655	7657	7666	8095	8106	8115	8116	8125	8583	8592	8602	8603	8614	8614
		S/T	0.30	0.35	0.39	0.39	0.45	0.31	0.37	0.42	0.42	0.48	0.33	0.39	0.44	0.44	0.51	0.35	0.41	0.47	0.47	0.47	0.54
		PI	0.41	0.41	0.41	0.41	0.41	0.43	0.43	0.43	0.43	0.43	0.46	0.46	0.46	0.46	0.46	0.49	0.49	0.49	0.49	0.49	0.49
	14°F(-10.0°C)	TC	7693	7703	7711	7712	7722	8156	8166	8174	8176	8185	8644	8655	8664	8666	8676	9164	9174	9184	9186	9197	9197
		S/T	0.30	0.35	0.40	0.40	0.45	0.31	0.37	0.42	0.42	0.48	0.33	0.39	0.44	0.44	0.51	0.35	0.41	0.47	0.47	0.47	0.54
		PI	0.87	0.87	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.98	0.98	0.98	0.98	0.98	1.04	1.04	1.04	1.04	1.04	1.04
	17°F(-8.3°C)	TC	7855	7866	7874	7875	7885	8329	8339	8347	8348	8358	8826	8838	8848	8849	8859	9358	9368	9378	9380	9392	9392
		S/T	0.30	0.35	0.40	0.40	0.45	0.32	0.37	0.42	0.42	0.48	0.33	0.39	0.45	0.45	0.51	0.35	0.42	0.47	0.47	0.47	0.54
		PI	1.02	1.02	1.03	1.03	1.03	1.08	1.09	1.09	1.09	1.09	1.15	1.15	1.15	1.15	1.15	1.22	1.22	1.22	1.22	1.22	1.22
	23°F(-5.0°C)	TC	7483	7493	7501	7502	7512	7934	7944	7951	7953	7962	8408	8419	8429	8430	8440	8915	8925	8934	8936	8947	8947
		S/T	0.30	0.35	0.40	0.40	0.45	0.32	0.37	0.42	0.42	0.48	0.34	0.39	0.45	0.45	0.51	0.36	0.42	0.48	0.48	0.48	0.54
		PI	0.89	0.90	0.90	0.90	0.90	0.95	0.95	0.95	0.95	0.95	1.00	1.01	1.01	1.01	1.01	1.06	1.07	1.07	1.07	1.07	1.07
35°F(1.7°C)	TC	6739	6748	6756	6756	6765	7145	7154	7161	7162	7171	7572	7582	7590	7592	7600	8028	8037	8046	8047	8057	8057	
	S/T	0.30	0.35	0.40	0.40	0.46	0.32	0.37	0.42	0.42	0.48	0.34	0.40	0.45	0.45	0.51	0.36	0.42	0.48	0.48	0.48	0.54	
	PI	0.64	0.64	0.64	0.64	0.64	0.67	0.67	0.68	0.68	0.68	0.71	0.71	0.72	0.72	0.72	0.76	0.76	0.76	0.76	0.76	0.76	
41°F(5.0°C)	TC	7693	7703	7712	7712	7722	8157	8166	8174	8176	8186	8644	8655	8665	8666	8676	9165	9175	9185	9186	9197	9197	
	S/T	0.30	0.35	0.40	0.40	0.46	0.32	0.37	0.43	0.43	0.49	0.34	0.40	0.45	0.45	0.51	0.36	0.42	0.48	0.48	0.48	0.55	
	PI	0.71	0.71	0.71	0.71	0.71	0.75	0.75	0.75	0.75	0.75	0.79	0.79	0.79	0.79	0.80	0.84	0.84	0.84	0.84	0.84	0.84	
47°F(8.3°C)	TC	8647	8658	8668	8668	8680	9168	9179	9188	9190	9200	9716	9728	9739	9741	9752	10301	10312	10323	10325	10338	10338	
	S/T	0.30	0.35	0.40	0.40	0.46	0.32	0.38	0.43	0.43	0.49	0.34	0.40	0.45	0.45	0.52	0.36	0.42	0.48	0.48	0.48	0.55	
	PI	0.78	0.78	0.78	0.78	0.78	0.82	0.82	0.82	0.82	0.83	0.87	0.87	0.87	0.87	0.87	0.92	0.93	0.93	0.93	0.93	0.93	
50°F(10.0°C)	TC	8601	8613	8622	8623	8634	9120	9131	9140	9141	9152	9665	9677	9688	9690	9701	10247	10258	10269	10271	10284	10284	
	S/T	0.30	0.36	0.40	0.40	0.46	0.32	0.38	0.43	0.43	0.49	0.34	0.40	0.45	0.46	0.52	0.36	0.42	0.48	0.48	0.48	0.55	
	PI	0.73	0.74	0.74	0.74	0.74	0.78	0.78	0.78	0.78	0.78	0.82	0.83	0.83	0.83	0.83	0.87	0.88	0.88	0.88	0.88	0.88	
59°F(15.0°C)	TC	8466	8477	8486	8487	8498	8976	8987	8995	8997	9008	9512	9525	9535	9537	9548	10085	10096	10107	10109	10121	10121	
	S/T	0.31	0.36	0.41	0.41	0.46	0.32	0.38	0.43	0.43	0.49	0.34	0.40	0.46	0.46	0.52	0.36	0.43	0.48	0.48	0.48	0.55	
	PI	0.61	0.61	0.61	0.61	0.61	0.65	0.65	0.65	0.65	0.65	0.69	0.69	0.69	0.69	0.69	0.73	0.73	0.73	0.73	0.73	0.73	
68°F(20.0°C)	TC	8330	8341	8350	8351	8362	8832	8843	8851	8853	8864	9360	9372	9382	9384	9395	9924	9934	9945	9947	9959	9959	
	S/T	0.31	0.37	0.42	0.42	0.48	0.33	0.39	0.44	0.44	0.50	0.35	0.41	0.47	0.47	0.54	0.37	0.44	0.50	0.50	0.50	0.57	
	PI	0.49	0.49	0.49	0.49	0.49	0.51	0.52	0.52	0.52	0.52	0.55	0.55	0.55	0.55	0.55	0.58	0.58	0.58	0.58	0.58	0.58	
77°F(25.0°C)	TC	8194	8205	8214	8215	8226	8688	8699	8707	8709	8719	9207	9219	9230	9231	9242	9762	9773	9783	9785	9797	9797	
	S/T	0.32	0.37	0.42	0.42	0.48	0.34	0.39	0.45	0.45	0.51	0.36	0.42	0.48	0.48	0.54	0.38	0.44	0.50	0.50	0.50	0.57	
	PI	0.36	0.36	0.36	0.36	0.36	0.38	0.38	0.38	0.38	0.38	0.41	0.41	0.41	0.41	0.41	0.43	0.43	0.43	0.43	0.43	0.43	
82°F(27.8°C)	TC	8247	8258	8267	8267	8278	8744	8754	8763	8764	8775	9266	9278	9288	9290	9300	9824	9835	9846	9847	9859	9859	
	S/T	0.32	0.38	0.43	0.43	0.49	0.34	0.40	0.45	0.45	0.52	0.36	0.42	0.48	0.48	0.55	0.38	0.45	0.51	0.51	0.51	0.58	
	PI	0.37	0.38	0.38	0.38	0.38	0.40	0.40	0.40	0.40	0.40	0.42	0.42	0.42	0.42	0.42	0.45	0.45	0.45	0.45	0.45	0.45	
86°F(30.0°C)	TC	8449	8461	8470	8470	8482	8958	8969	8978	8980	8990	9494	9506	9517	9518	9529	10066	10077	10088	10089	10102	10102	
	S/T	0.33	0.38	0.43	0.43	0.49	0.35	0.40	0.46	0.46	0.52	0.37	0.43	0.49	0.49	0.56	0.39	0.45	0.52	0.52	0.52	0.59	
	PI	0.49	0.49	0.49	0.49	0.49	0.52	0.52	0.52	0.52	0.52	0.55	0.55	0.55	0.55	0.55	0.58	0.58	0.58	0.58	0.58	0.59	

Manufacturer reserves the right to change, at any time, specifications and designs without notice and without obligations.

Table 9 – 9K Cooling Performance (Continued)

211	95°F(35.0°C)	TC	8905	8917	8927	8927	8939	9442	9453	9462	9464	9476	10006	10019	10030	10032	10043	10609	10620	10632	10634	10647	
		S/T	0.33	0.38	0.43	0.43	0.49	0.35	0.40	0.46	0.46	0.52	0.37	0.43	0.49	0.49	0.56	0.39	0.45	0.52	0.52	0.59	
		PI	0.75	0.75	0.75	0.75	0.75	0.79	0.79	0.79	0.79	0.80	0.84	0.84	0.84	0.84	0.84	0.89	0.89	0.89	0.89	0.89	
	104°F(40.0°C)	TC	8443	8454	8463	8464	8475	8952	8962	8971	8973	8984	9487	9499	9509	9511	9522	10058	10069	10080	10082	10094	
		S/T	0.33	0.39	0.44	0.44	0.51	0.35	0.42	0.47	0.47	0.54	0.37	0.44	0.50	0.50	0.57	0.40	0.47	0.53	0.53	0.60	
	110°F(43.0°C)	TC	8166	8176	8185	8186	8197	8658	8668	8676	8678	8688	9175	9187	9197	9199	9209	9728	9738	9749	9750	9762	
		S/T	0.35	0.41	0.46	0.46	0.53	0.37	0.43	0.49	0.49	0.56	0.39	0.46	0.52	0.52	0.59	0.41	0.48	0.55	0.55	0.63	
	115°F(46.0°C)	TC	6497	6505	6513	6513	6522	6888	6896	6903	6905	6913	7300	7309	7317	7319	7327	7740	7748	7756	7758	7767	
		S/T	0.35	0.41	0.47	0.47	0.53	0.37	0.44	0.49	0.49	0.56	0.39	0.46	0.52	0.52	0.60	0.42	0.49	0.56	0.56	0.63	
	122°F(50.0°C)	TC	4272	4278	4282	4282	4288	4529	4535	4539	4540	4545	4800	4806	4811	4812	4818	5089	5095	5100	5101	5107	
		S/T	0.36	0.42	0.48	0.48	0.54	0.38	0.45	0.51	0.51	0.58	0.40	0.47	0.54	0.54	0.61	0.43	0.50	0.57	0.57	0.65	
	423	-22°F(-3.0°C)	TC	7382	7392	7400	7400	7410	7827	7836	7844	7845	7854	8294	8305	8314	8316	8325	8794	8803	8813	8814	8825
			S/T	0.37	0.44	0.50	0.50	0.56	0.39	0.46	0.53	0.53	0.60	0.42	0.49	0.56	0.56	0.63	0.44	0.52	0.59	0.59	0.67
			PI	0.42	0.42	0.42	0.42	0.42	0.44	0.44	0.44	0.44	0.44	0.47	0.47	0.47	0.47	0.47	0.50	0.50	0.50	0.50	0.50
		-13°F(-2.5.0°C)	TC	7997	8008	8016	8017	8027	8479	8489	8497	8499	8509	8985	8997	9007	9009	9019	9527	9537	9547	9549	9561
			S/T	0.37	0.44	0.50	0.50	0.57	0.40	0.47	0.53	0.53	0.60	0.42	0.49	0.56	0.56	0.64	0.45	0.52	0.59	0.59	0.68
		-4°F(-20.0°C)	TC	8612	8624	8633	8633	8645	9131	9142	9151	9153	9163	9676	9689	9700	9702	9712	10260	10271	10282	10283	10296
			S/T	0.38	0.44	0.50	0.50	0.57	0.40	0.47	0.53	0.53	0.61	0.42	0.50	0.56	0.56	0.64	0.45	0.53	0.60	0.60	0.68
0°F(-17.8°C)		TC	8885	8897	8907	8907	8919	9421	9432	9441	9443	9454	9984	9997	10008	10010	10021	10585	10597	10608	10610	10623	
		S/T	0.38	0.44	0.50	0.50	0.57	0.40	0.47	0.53	0.53	0.61	0.42	0.50	0.57	0.57	0.64	0.45	0.53	0.60	0.60	0.68	
5°F(-15.0°C)		TC	9227	9240	9249	9250	9262	9783	9795	9804	9806	9818	10368	10381	10393	10395	10406	10992	11004	11016	11018	11032	
		S/T	0.38	0.45	0.51	0.51	0.58	0.40	0.47	0.54	0.54	0.61	0.43	0.50	0.57	0.57	0.65	0.45	0.53	0.60	0.60	0.69	
14°F(-1.0°C)		TC	9852	9865	9876	9876	9890	10446	10458	10469	10471	10483	11070	11084	11097	11099	11111	11737	11750	11763	11764	11779	
		S/T	0.38	0.45	0.51	0.51	0.58	0.40	0.47	0.54	0.54	0.61	0.43	0.50	0.57	0.57	0.65	0.45	0.53	0.60	0.60	0.69	
17°F(-8.3°C)		TC	10060	10074	10085	10085	10099	10667	10679	10690	10692	10705	11304	11319	11331	11333	11346	11985	11998	12011	12013	12028	
		S/T	0.38	0.45	0.51	0.51	0.58	0.40	0.47	0.54	0.54	0.61	0.43	0.50	0.57	0.57	0.65	0.45	0.53	0.61	0.61	0.69	
23°F(-5.0°C)		TC	9584	9597	9607	9608	9621	10162	10174	10184	10186	10198	10769	10783	10795	10797	10809	11418	11430	11442	11444	11458	
		S/T	0.38	0.45	0.51	0.51	0.58	0.41	0.48	0.54	0.54	0.62	0.43	0.51	0.57	0.57	0.65	0.46	0.54	0.61	0.61	0.69	
35°F(1.7°C)		TC	8631	8643	8652	8652	8664	9151	9162	9171	9173	9184	9698	9711	9721	9723	9734	10282	10293	10305	10306	10319	
	S/T	0.39	0.45	0.51	0.51	0.59	0.41	0.48	0.54	0.54	0.62	0.43	0.51	0.58	0.58	0.66	0.46	0.54	0.61	0.61	0.70		
41°F(5.0°C)	TC	9853	9866	9876	9877	9890	10446	10459	10469	10471	10484	11070	11085	11097	11099	11112	11737	11750	11763	11765	11779		
	S/T	0.39	0.45	0.51	0.51	0.59	0.41	0.48	0.55	0.55	0.62	0.43	0.51	0.58	0.58	0.66	0.46	0.54	0.61	0.61	0.70		
47°F(8.3°C)	TC	11074	11089	11101	11101	11116	11741	11755	11767	11769	11783	12443	12459	12473	12475	12489	13193	13207	13221	13223	13240		
	S/T	0.39	0.45	0.52	0.52	0.59	0.41	0.48	0.55	0.55	0.62	0.43	0.51	0.58	0.58	0.66	0.46	0.54	0.61	0.61	0.70		
50°F(10.0°C)	TC	11016	11031	11043	11043	11058	11680	11694	11705	11708	11722	12378	12394	12408	12410	12424	13124	13138	13152	13154	13171		
	S/T	0.39	0.46	0.52	0.52	0.59	0.41	0.48	0.55	0.55	0.63	0.44	0.51	0.58	0.58	0.66	0.46	0.54	0.62	0.62	0.70		
		PI	0.94	0.94	0.94	0.94	0.94	1.00	1.00	1.00	1.00	1.06	1.06	1.06	1.06	1.06	1.12	1.12	1.12	1.12	1.12		

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Table 9 – 9K Cooling Performance (Continued)

423	59°F(15.0°C)	TC	10842	10857	10869	10869	10884	11496	11509	11521	11523	11537	12183	12198	12212	12214	12228	12917	12931	12945	12947	12963	
		S/T	0.39	0.46	0.52	0.52	0.59	0.41	0.49	0.55	0.55	0.63	0.44	0.52	0.59	0.59	0.67	0.67	0.47	0.55	0.62	0.62	0.71
		PI	0.78	0.78	0.78	0.78	0.78	0.83	0.83	0.83	0.83	0.83	0.83	0.88	0.88	0.88	0.88	0.88	0.93	0.93	0.93	0.93	0.93
	68°F(20.0°C)	TC	10669	10683	10694	10695	10709	11312	11325	11336	11338	11352	11987	12003	12016	12018	12032	12710	12723	12737	12739	12755	
		S/T	0.40	0.47	0.54	0.54	0.61	0.43	0.50	0.57	0.57	0.65	0.45	0.53	0.60	0.60	0.69	0.48	0.56	0.64	0.64	0.73	
		PI	0.62	0.62	0.62	0.62	0.62	0.66	0.66	0.66	0.66	0.66	0.70	0.70	0.70	0.70	0.70	0.74	0.74	0.74	0.74	0.74	
	77°F(25.0°C)	TC	10495	10509	10520	10521	10535	11127	11140	11151	11154	11167	11792	11807	11821	11823	11836	12503	12516	12530	12532	12547	
		S/T	0.41	0.48	0.54	0.54	0.62	0.43	0.51	0.57	0.57	0.65	0.46	0.54	0.61	0.61	0.69	0.48	0.57	0.65	0.65	0.74	
		PI	0.46	0.46	0.46	0.46	0.46	0.49	0.49	0.49	0.49	0.49	0.52	0.52	0.52	0.52	0.52	0.55	0.55	0.55	0.55	0.55	
	82°F(27.8°C)	TC	10562	10576	10587	10588	10602	11198	11211	11222	11225	11238	11867	11883	11896	11898	11911	12582	12596	12610	12611	12627	
		S/T	0.41	0.48	0.55	0.55	0.63	0.44	0.51	0.58	0.58	0.66	0.46	0.54	0.62	0.62	0.70	0.49	0.58	0.65	0.65	0.75	
		PI	0.48	0.48	0.48	0.48	0.48	0.51	0.51	0.51	0.51	0.51	0.54	0.54	0.54	0.54	0.54	0.57	0.57	0.57	0.57	0.57	
	86°F(30.0°C)	TC	10821	10836	10847	10848	10863	11473	11487	11498	11501	11514	12159	12175	12188	12190	12204	12891	12905	12919	12921	12938	
		S/T	0.42	0.49	0.56	0.56	0.63	0.44	0.52	0.59	0.59	0.67	0.47	0.55	0.62	0.62	0.71	0.50	0.58	0.66	0.66	0.75	
		PI	0.63	0.63	0.63	0.63	0.63	0.66	0.67	0.67	0.67	0.67	0.70	0.71	0.71	0.71	0.71	0.75	0.75	0.75	0.75	0.75	
	95°F(35.0°C)	TC	11405	11421	11433	11433	11449	12093	12107	12119	12121	12136	12815	12832	12846	12848	12863	13587	13602	13617	13619	13636	
		S/T	0.42	0.49	0.56	0.56	0.63	0.44	0.52	0.59	0.59	0.67	0.47	0.55	0.62	0.62	0.71	0.50	0.58	0.66	0.66	0.75	
		PI	0.96	0.96	0.96	0.96	0.96	1.02	1.02	1.02	1.02	1.02	1.08	1.08	1.08	1.08	1.08	1.14	1.14	1.14	1.14	1.15	
	104°F(40.0°C)	TC	10813	10828	10839	10840	10854	11465	11478	11490	11492	11506	12150	12165	12179	12181	12195	12882	12896	12910	12912	12928	
		S/T	0.43	0.50	0.57	0.57	0.65	0.45	0.53	0.60	0.60	0.69	0.48	0.56	0.64	0.64	0.73	0.51	0.60	0.68	0.68	0.77	
		PI	1.05	1.05	1.05	1.05	1.05	1.11	1.11	1.11	1.11	1.12	1.18	1.18	1.18	1.18	1.18	1.25	1.25	1.25	1.25	1.25	
	110°F(43.0°C)	TC	10458	10472	10483	10484	10498	11088	11101	11112	11114	11127	11750	11766	11779	11781	11794	12458	12472	12486	12488	12503	
		S/T	0.44	0.52	0.59	0.59	0.67	0.47	0.55	0.63	0.63	0.71	0.50	0.58	0.66	0.66	0.76	0.53	0.62	0.70	0.70	0.80	
		PI	1.10	1.10	1.11	1.11	1.11	1.17	1.17	1.17	1.17	1.17	1.24	1.24	1.24	1.24	1.24	1.31	1.32	1.32	1.32	1.32	
	115°F(46.0°C)	TC	8321	8332	8341	8341	8352	8822	8832	8841	8843	8853	9349	9361	9372	9373	9384	9912	9923	9934	9936	9948	
		S/T	0.45	0.53	0.60	0.60	0.68	0.48	0.56	0.63	0.63	0.72	0.50	0.59	0.67	0.67	0.77	0.53	0.63	0.71	0.71	0.81	
		PI	0.87	0.87	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.97	0.98	0.98	0.98	0.98	1.03	1.03	1.04	1.04	1.04	
	122°F(50.0°C)	TC	5471	5478	5484	5484	5492	5801	5808	5813	5814	5821	6147	6155	6162	6163	6170	6518	6525	6532	6533	6541	
		S/T	0.46	0.54	0.61	0.61	0.70	0.49	0.57	0.65	0.65	0.74	0.52	0.60	0.69	0.69	0.78	0.55	0.64	0.73	0.73	0.83	
		PI	0.55	0.55	0.55	0.55	0.56	0.59	0.59	0.59	0.59	0.59	0.62	0.62	0.62	0.62	0.62	0.66	0.66	0.66	0.66	0.66	
	558	-22°F(-30.0°C)	TC	9454	9467	9477	9477	9490	10024	10036	10045	10047	10059	10623	10636	10648	10650	10662	11263	11275	11287	11289	11303
			S/T	0.48	0.56	0.63	0.63	0.72	0.50	0.59	0.67	0.67	0.77	0.53	0.63	0.71	0.71	0.81	0.57	0.67	0.76	0.76	0.86
			PI	0.53	0.54	0.54	0.54	0.54	0.57	0.57	0.57	0.57	0.57	0.60	0.60	0.60	0.60	0.60	0.64	0.64	0.64	0.64	0.64
		-13°F(-25.0°C)	TC	10242	10256	10267	10267	10281	10859	10872	10883	10885	10898	11508	11523	11536	11538	11551	12201	12214	12228	12230	12245
			S/T	0.48	0.56	0.64	0.64	0.73	0.51	0.60	0.68	0.68	0.77	0.54	0.63	0.72	0.72	0.82	0.57	0.67	0.76	0.76	0.87
			PI	0.58	0.58	0.58	0.58	0.58	0.61	0.62	0.62	0.62	0.62	0.65	0.65	0.65	0.65	0.65	0.69	0.69	0.69	0.69	0.69
-4°F(-20.0°C)		TC	11030	11044	11056	11057	11072	11694	11708	11720	11722	11736	12393	12409	12423	12425	12439	13140	13154	13168	13170	13187	
		S/T	0.48	0.57	0.64	0.64	0.73	0.51	0.60	0.68	0.68	0.78	0.54	0.64	0.72	0.72	0.82	0.57	0.67	0.77	0.77	0.87	
		PI	0.62	0.62	0.63	0.63	0.63	0.66	0.66	0.66	0.66	0.66	0.70	0.70	0.70	0.70	0.70	0.74	0.74	0.74	0.75	0.75	
0°F(-17.8°C)		TC	11380	11395	11407	11408	11423	12066	12080	12092	12094	12108	12786	12803	12817	12820	12834	13557	13572	13586	13588	13605	
		S/T	0.48	0.57	0.64	0.64	0.73	0.51	0.60	0.68	0.68	0.78	0.54	0.64	0.72	0.72	0.83	0.58	0.68	0.77	0.77	0.88	
		PI	0.64	0.64	0.65	0.65	0.65	0.68	0.68	0.68	0.68	0.69	0.72	0.72	0.73	0.73	0.73	0.77	0.77	0.77	0.77	0.77	
5°F(-15.0°C)		TC	11817	11833	11846	11847	11863	12530	12544	12557	12559	12574	13278	13295	13310	13313	13328	14078	14093	14109	14111	14129	
		S/T	0.49	0.57	0.65	0.65	0.74	0.51	0.60	0.69	0.69	0.78	0.55	0.64	0.73	0.73	0.83	0.58	0.68	0.77	0.77	0.88	
		PI	0.67	0.67	0.67	0.67	0.67	0.71	0.71	0.71	0.71	0.71	0.75	0.75	0.75	0.75	0.75	0.80	0.80	0.80	0.80	0.80	
14°F(-10.0°C)		TC	12618	12635	12648	12649	12666	13378	13394	13407	13410	13426	14178	14196	14212	14214	14230	15032	15048	15065	15067	15086	
		S/T	0.49	0.57	0.65	0.65	0.74	0.52	0.61	0.69	0.69	0.78	0.55	0.64	0.73	0.73	0.83	0.58	0.68	0.77	0.77	0.88	
		PI	1.43	1.43	1.43	1.43	1.43	1.51	1.51	1.52	1.52	1.52	1.60	1.60	1.61	1.61	1.61	1.70	1.70	1.70	1.70	1.70	
17°F(-8.3°C)		TC	12885	12902	12916	12917	12934	13661	13677	13691	13694	13710	14477	14496	14512	14515	14531	15350	15366	15383	15386	15405	
		S/T	0.49	0.57	0.65	0.65	0.74	0.52	0.61	0.69	0.69	0.79	0.55	0.64	0.73	0.73	0.83	0.58	0.68	0.78	0.78	0.88	
		PI	1.68	1.68	1.68	1.68	1.68	1.78	1.78	1.78	1.78	1.79	1.89	1.89	1.89	1.89	1.89	2.00	2.00	2.00	2.00	2.01	

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Table 9 – 9K Cooling Performance (Continued)

558	23°F(-5.0°C)	TC	12275	12291	12304	12305	12321	13014	13030	13043	13045	13061	13792	13810	13825	13828	13843	14623	14639	14655	14657	14675
		S/T	0.49	0.58	0.65	0.65	0.75	0.52	0.61	0.69	0.69	0.79	0.55	0.65	0.74	0.74	0.84	0.58	0.69	0.78	0.78	0.89
		PI	1.47	1.47	1.47	1.47	1.47	1.55	1.56	1.56	1.56	1.56	1.56	1.65	1.65	1.65	1.65	1.65	1.75	1.75	1.75	1.75
	35°F(1.7°C)	TC	11054	11069	11081	11081	11096	11720	11734	11746	11748	11762	12420	12437	12450	12453	12467	13169	13183	13197	13199	13216
		S/T	0.49	0.58	0.66	0.66	0.75	0.52	0.61	0.70	0.70	0.79	0.55	0.65	0.74	0.74	0.84	0.59	0.69	0.78	0.78	0.89
		PI	1.04	1.04	1.04	1.04	1.05	1.11	1.11	1.11	1.11	1.11	1.17	1.17	1.17	1.17	1.18	1.24	1.24	1.24	1.24	1.25
	41°F(5.0°C)	TC	12618	12635	12649	12650	12667	13379	13395	13408	13411	13427	14178	14197	14212	14215	14231	15032	15049	15065	15068	15086
		S/T	0.49	0.58	0.66	0.66	0.75	0.52	0.61	0.70	0.70	0.80	0.56	0.65	0.74	0.74	0.84	0.59	0.69	0.78	0.78	0.89
		PI	1.16	1.16	1.16	1.16	1.16	1.23	1.23	1.23	1.23	1.23	1.30	1.30	1.30	1.30	1.31	1.38	1.38	1.38	1.38	1.38
	47°F(8.3°C)	TC	14183	14202	14217	14218	14237	15038	15055	15070	15073	15091	15936	15957	15974	15977	15995	16896	16915	16933	16936	16957
		S/T	0.50	0.58	0.66	0.66	0.75	0.53	0.62	0.70	0.70	0.80	0.56	0.65	0.74	0.74	0.85	0.59	0.69	0.79	0.79	0.90
		PI	1.27	1.27	1.28	1.28	1.28	1.35	1.35	1.35	1.35	1.35	1.43	1.43	1.43	1.43	1.43	1.52	1.52	1.52	1.52	1.52
	50°F(10.0°C)	TC	14109	14128	14143	14143	14163	14959	14977	14991	14994	15012	15853	15873	15891	15894	15912	16808	16826	16844	16847	16868
		S/T	0.50	0.58	0.66	0.66	0.76	0.53	0.62	0.70	0.70	0.80	0.56	0.66	0.75	0.75	0.85	0.59	0.70	0.79	0.79	0.90
		PI	1.20	1.21	1.21	1.21	1.21	1.28	1.28	1.28	1.28	1.28	1.35	1.35	1.36	1.36	1.36	1.43	1.44	1.44	1.44	1.44
	59°F(15.0°C)	TC	13886	13905	13920	13920	13939	14723	14740	14755	14758	14775	15603	15623	15640	15643	15661	16543	16561	16579	16581	16602
		S/T	0.50	0.59	0.67	0.67	0.76	0.53	0.62	0.71	0.71	0.81	0.56	0.66	0.75	0.75	0.86	0.60	0.70	0.80	0.80	0.91
		PI	1.00	1.00	1.00	1.00	1.00	1.06	1.06	1.06	1.06	1.06	1.12	1.13	1.13	1.13	1.13	1.19	1.19	1.19	1.19	1.20
	68°F(20.0°C)	TC	13664	13682	13697	13697	13716	14487	14504	14518	14521	14539	15352	15372	15390	15392	15410	16277	16295	16313	16315	16336
		S/T	0.51	0.60	0.69	0.69	0.78	0.54	0.64	0.73	0.73	0.83	0.58	0.68	0.77	0.77	0.88	0.61	0.72	0.82	0.82	0.93
		PI	0.80	0.80	0.80	0.80	0.80	0.84	0.85	0.85	0.85	0.85	0.90	0.90	0.90	0.90	0.90	0.95	0.95	0.95	0.95	0.95
	77°F(25.0°C)	TC	13441	13459	13474	13474	13492	14251	14268	14282	14285	14302	15102	15122	15139	15142	15159	16012	16030	16047	16050	16070
		S/T	0.52	0.61	0.69	0.69	0.79	0.55	0.65	0.74	0.74	0.84	0.59	0.69	0.78	0.78	0.89	0.62	0.73	0.83	0.83	0.94
		PI	0.59	0.59	0.59	0.59	0.59	0.63	0.63	0.63	0.63	0.63	0.67	0.67	0.67	0.67	0.67	0.71	0.71	0.71	0.71	0.71
	82°F(27.8°C)	TC	13527	13545	13559	13560	13578	14342	14359	14373	14376	14393	15199	15218	15235	15238	15255	16114	16132	16149	16152	16172
		S/T	0.53	0.62	0.70	0.70	0.80	0.56	0.66	0.75	0.75	0.85	0.59	0.70	0.79	0.79	0.90	0.63	0.74	0.84	0.84	0.95
		PI	0.61	0.62	0.62	0.62	0.62	0.65	0.65	0.65	0.65	0.65	0.69	0.69	0.69	0.69	0.69	0.73	0.73	0.73	0.73	0.73
	86°F(30.0°C)	TC	13859	13878	13893	13893	13912	14694	14712	14726	14729	14747	15572	15592	15610	15613	15630	16510	16528	16546	16549	16569
S/T		0.53	0.63	0.71	0.71	0.81	0.57	0.66	0.75	0.75	0.86	0.60	0.70	0.80	0.80	0.91	0.64	0.75	0.85	0.85	0.97	
PI		0.80	0.80	0.81	0.81	0.81	0.85	0.85	0.85	0.85	0.85	0.90	0.90	0.90	0.90	0.91	0.96	0.96	0.96	0.96	0.96	
95°F(35.0°C)	TC	14607	14627	14642	14643	14663	15487	15506	15521	15524	15542	16413	16434	16452	16455	16474	17401	17420	17439	17442	17464	
	S/T	0.53	0.63	0.71	0.71	0.81	0.57	0.66	0.75	0.75	0.86	0.60	0.70	0.80	0.80	0.91	0.64	0.75	0.85	0.85	0.97	
	PI	1.23	1.23	1.23	1.23	1.23	1.30	1.30	1.30	1.30	1.31	1.38	1.38	1.38	1.38	1.38	1.46	1.46	1.46	1.47	1.47	
104°F(40.0°C)	TC	13849	13867	13882	13883	13902	14683	14701	14715	14718	14735	15560	15581	15598	15601	15618	16498	16516	16534	16536	16557	
	S/T	0.55	0.64	0.73	0.73	0.83	0.58	0.68	0.77	0.77	0.88	0.62	0.72	0.82	0.82	0.93	0.65	0.76	0.87	0.87	0.99	
	PI	1.34	1.35	1.35	1.35	1.35	1.42	1.43	1.43	1.43	1.43	1.51	1.51	1.51	1.51	1.51	1.60	1.60	1.60	1.60	1.61	
110°F(43.0°C)	TC	13394	13412	13426	13427	13445	14201	14218	14232	14234	14251	15049	15069	15085	15088	15105	15956	15973	15991	15993	16013	
	S/T	0.57	0.67	0.76	0.76	0.86	0.60	0.71	0.80	0.80	0.91	0.64	0.75	0.85	0.85	0.97	0.68	0.79	0.90	0.90	1.00	
	PI	1.41	1.41	1.42	1.42	1.42	1.50	1.50	1.50	1.50	1.50	1.59	1.59	1.59	1.59	1.59	1.68	1.69	1.69	1.69	1.69	
115°F(46.0°C)	TC	10656	10671	10682	10683	10697	11299	11312	11323	11325	11339	11974	11989	12003	12005	12018	12695	12709	12723	12725	12741	
	S/T	0.57	0.67	0.77	0.77	0.87	0.61	0.71	0.81	0.81	0.92	0.65	0.76	0.86	0.86	0.98	0.68	0.80	0.91	0.91	1.00	
	PI	1.11	1.11	1.11	1.11	1.12	1.18	1.18	1.18	1.18	1.18	1.25	1.25	1.25	1.25	1.25	1.32	1.33	1.33	1.33	1.33	
122°F(50.0°C)	TC	7007	7016	7024	7024	7034	7429	7438	7445	7447	7456	7873	7883	7892	7893	7902	8347	8356	8365	8367	8377	
	S/T	0.59	0.69	0.78	0.78	0.89	0.62	0.73	0.83	0.83	0.95	0.66	0.77	0.88	0.88	1.00	0.70	0.82	0.93	0.93	1.00	
	PI	0.71	0.71	0.71	0.71	0.71	0.75	0.75	0.75	0.75	0.75	0.80	0.80	0.80	0.80	0.80	0.84	0.84	0.85	0.85	0.85	

Table 10 – 12K Cooling Performance

AIRFLOW (CFM)	OUTDOOR DB (°F)	ID WB °F (°C)	60.8°F(16.0°C)					64.4°F(18.0°C)					67°F(19.4°C)					71.6°F(22.0°C)				
		ID DB °F °C	73.4°F 23.0°C	77.0°F 25.0°C	80.0°F 26.7°C	80.6°F 27.0°C	84.2°F 29.0°C	73.4°F 23.0°C	77.0°F 25.0°C	80.0°F 26.7°C	80.6°F 27.0°C	84.2°F 29.0°C	73.4°F 23.0°C	77.0°F 25.0°C	80.0°F 26.7°C	80.6°F 27.0°C	84.2°F 29.0°C	73.4°F 23.0°C	77.0°F 25.0°C	80.0°F 26.7°C	80.6°F 27.0°C	84.2°F 29.0°C
		TC	S/T	PI	TC	S/T	PI	TC	S/T	PI	TC	S/T	PI	TC	S/T	PI	TC	S/T	PI	TC	S/T	PI
152	-22°F(-30.0°C)	TC	4500	4506	4511	4511	4517	4772	4777	4782	4783	4789	5057	5063	5069	5070	5075	5361	5367	5373	5374	5380
		S/T	0.23	0.27	0.30	0.30	0.34	0.24	0.28	0.32	0.32	0.37	0.25	0.30	0.34	0.34	0.39	0.27	0.32	0.36	0.36	0.41
		PI	0.25	0.25	0.26	0.26	0.26	0.27	0.27	0.27	0.27	0.27	0.29	0.29	0.29	0.29	0.29	0.30	0.30	0.30	0.30	0.30
	-13°F(-25.0°C)	TC	4875	4882	4887	4887	4894	5169	5175	5180	5181	5188	5478	5485	5491	5492	5498	5808	5814	5821	5822	5829
		S/T	0.23	0.27	0.30	0.30	0.35	0.24	0.28	0.32	0.32	0.37	0.26	0.30	0.34	0.34	0.39	0.27	0.32	0.36	0.36	0.41
		PI	0.28	0.28	0.28	0.28	0.28	0.29	0.29	0.29	0.29	0.29	0.31	0.31	0.31	0.31	0.31	0.33	0.33	0.33	0.33	0.33
	-4°F(-20.0°C)	TC	5250	5257	5263	5263	5270	5567	5573	5579	5580	5587	5899	5907	5914	5915	5921	6255	6262	6268	6269	6277
		S/T	0.23	0.27	0.31	0.31	0.35	0.24	0.29	0.32	0.32	0.37	0.26	0.30	0.34	0.34	0.39	0.27	0.32	0.36	0.36	0.42
		PI	0.30	0.30	0.30	0.30	0.30	0.31	0.32	0.32	0.32	0.32	0.33	0.33	0.33	0.33	0.33	0.35	0.35	0.35	0.35	0.36
	0°F(-17.8°C)	TC	5417	5424	5430	5430	5438	5743	5750	5756	5757	5764	6087	6095	6101	6102	6109	6453	6460	6467	6468	6476
		S/T	0.23	0.27	0.31	0.31	0.35	0.24	0.29	0.33	0.33	0.37	0.26	0.30	0.34	0.34	0.39	0.27	0.32	0.37	0.37	0.42
		PI	0.31	0.31	0.31	0.31	0.31	0.32	0.33	0.33	0.33	0.33	0.34	0.34	0.35	0.35	0.35	0.37	0.37	0.37	0.37	0.37
	5°F(-15.0°C)	TC	5625	5633	5639	5639	5647	5964	5971	5977	5979	5986	6321	6329	6336	6337	6344	6702	6709	6716	6717	6726
		S/T	0.23	0.27	0.31	0.31	0.35	0.25	0.29	0.33	0.33	0.37	0.26	0.30	0.35	0.35	0.39	0.28	0.32	0.37	0.37	0.42
		PI	0.32	0.32	0.32	0.32	0.32	0.34	0.34	0.34	0.34	0.34	0.36	0.36	0.36	0.36	0.36	0.38	0.38	0.38	0.38	0.38
	14°F(-1.0°C)	TC	6006	6015	6021	6021	6029	6368	6376	6382	6384	6391	6749	6758	6765	6766	6774	7156	7163	7171	7172	7181
		S/T	0.23	0.27	0.31	0.31	0.35	0.25	0.29	0.33	0.33	0.37	0.26	0.31	0.35	0.35	0.40	0.28	0.32	0.37	0.37	0.42
		PI	0.68	0.68	0.68	0.68	0.68	0.72	0.72	0.72	0.72	0.72	0.76	0.76	0.76	0.76	0.77	0.81	0.81	0.81	0.81	0.81
	17°F(-8.3°C)	TC	6133	6142	6148	6149	6157	6503	6511	6517	6519	6526	6892	6901	6908	6910	6917	7307	7315	7323	7324	7333
		S/T	0.23	0.27	0.31	0.31	0.35	0.25	0.29	0.33	0.33	0.37	0.26	0.31	0.35	0.35	0.40	0.28	0.32	0.37	0.37	0.42
		PI	0.80	0.80	0.80	0.80	0.80	0.85	0.85	0.85	0.85	0.85	0.90	0.90	0.90	0.90	0.90	0.95	0.95	0.95	0.95	0.96
	23°F(-5.0°C)	TC	5843	5851	5857	5857	5865	6195	6202	6209	6210	6217	6565	6574	6581	6582	6590	6961	6968	6976	6977	6986
		S/T	0.23	0.27	0.31	0.31	0.36	0.25	0.29	0.33	0.33	0.38	0.26	0.31	0.35	0.35	0.40	0.28	0.33	0.37	0.37	0.42
		PI	0.70	0.70	0.70	0.70	0.70	0.74	0.74	0.74	0.74	0.74	0.78	0.79	0.79	0.79	0.79	0.83	0.83	0.83	0.83	0.83
35°F(1.7°C)	TC	5262	5269	5275	5275	5282	5579	5586	5591	5592	5599	5912	5920	5927	5928	5934	6269	6275	6282	6283	6291	
	S/T	0.23	0.28	0.31	0.31	0.36	0.25	0.29	0.33	0.33	0.38	0.26	0.31	0.35	0.35	0.40	0.28	0.33	0.37	0.37	0.42	
	PI	0.50	0.50	0.50	0.50	0.50	0.53	0.53	0.53	0.53	0.53	0.56	0.56	0.56	0.56	0.56	0.59	0.59	0.59	0.59	0.59	
41°F(5.0°C)	TC	6007	6015	6021	6022	6030	6369	6376	6383	6384	6391	6749	6758	6765	6767	6774	7156	7164	7171	7173	7181	
	S/T	0.24	0.28	0.31	0.31	0.36	0.25	0.29	0.33	0.33	0.38	0.26	0.31	0.35	0.35	0.40	0.28	0.33	0.37	0.37	0.43	
	PI	0.55	0.55	0.55	0.55	0.55	0.58	0.58	0.59	0.59	0.59	0.62	0.62	0.62	0.62	0.62	0.66	0.66	0.66	0.66	0.66	
47°F(8.3°C)	TC	6751	6760	6768	6768	6777	7158	7167	7174	7175	7184	7586	7596	7604	7606	7614	8043	8052	8061	8062	8072	
	S/T	0.24	0.28	0.31	0.31	0.36	0.25	0.29	0.33	0.33	0.38	0.27	0.31	0.35	0.35	0.40	0.28	0.33	0.37	0.37	0.43	
	PI	0.61	0.61	0.61	0.61	0.61	0.64	0.64	0.64	0.64	0.64	0.68	0.68	0.68	0.68	0.68	0.72	0.72	0.72	0.72	0.72	
50°F(10.0°C)	TC	6716	6725	6732	6733	6742	7121	7129	7136	7138	7146	7546	7556	7564	7566	7574	8001	8010	8018	8020	8030	
	S/T	0.24	0.28	0.32	0.32	0.36	0.25	0.29	0.34	0.34	0.38	0.27	0.31	0.36	0.36	0.40	0.28	0.33	0.38	0.38	0.43	
	PI	0.57	0.57	0.57	0.57	0.58	0.61	0.61	0.61	0.61	0.61	0.64	0.64	0.65	0.65	0.65	0.68	0.68	0.68	0.68	0.69	
59°F(15.0°C)	TC	6610	6619	6626	6626	6635	7008	7017	7024	7025	7033	7427	7437	7445	7447	7455	7875	7883	7892	7893	7903	
	S/T	0.24	0.28	0.32	0.32	0.36	0.25	0.30	0.34	0.34	0.38	0.27	0.31	0.36	0.36	0.41	0.28	0.33	0.38	0.38	0.43	
	PI	0.48	0.48	0.48	0.48	0.48	0.50	0.51	0.51	0.51	0.51	0.54	0.54	0.54	0.54	0.54	0.57	0.57	0.57	0.57	0.57	
68°F(20.0°C)	TC	6504	6513	6520	6520	6529	6896	6904	6911	6913	6921	7308	7318	7326	7327	7335	7748	7757	7765	7767	7776	
	S/T	0.24	0.29	0.33	0.33	0.37	0.26	0.30	0.35	0.35	0.39	0.27	0.32	0.37	0.37	0.42	0.29	0.34	0.39	0.39	0.44	
	PI	0.38	0.38	0.38	0.38	0.38	0.40	0.40	0.40	0.40	0.40	0.43	0.43	0.43	0.43	0.43	0.45	0.45	0.45	0.45	0.45	
77°F(25.0°C)	TC	6398	6407	6414	6414	6423	6784	6792	6799	6800	6808	7189	7198	7206	7208	7216	7622	7631	7639	7640	7650	
	S/T	0.25	0.29	0.33	0.33	0.38	0.26	0.31	0.35	0.35	0.40	0.28	0.33	0.37	0.37	0.42	0.30	0.35	0.39	0.39	0.45	
	PI	0.28	0.28	0.28	0.28	0.28	0.30	0.30	0.30	0.30	0.30	0.32	0.32	0.32	0.32	0.32	0.34	0.34	0.34	0.34	0.34	

Manufacturer reserves the right to change, at any time, specifications and designs without notice and without obligations.

Table 10 – 12K Cooling Performance (Continued)

152	82°F(27.8°C)	TC	6439	6448	6455	6455	6464	6827	6835	6842	6843	6851	7235	7244	7252	7254	7262	7671	7679	7688	7689	7698	
		S/T	0.25	0.29	0.33	0.33	0.38	0.27	0.31	0.35	0.35	0.40	0.28	0.33	0.38	0.38	0.43	0.30	0.35	0.40	0.40	0.40	0.45
		PI	0.29	0.29	0.29	0.29	0.29	0.31	0.31	0.31	0.31	0.31	0.31	0.33	0.33	0.33	0.33	0.33	0.35	0.35	0.35	0.35	0.35
	86°F(30.0°C)	TC	6597	6606	6613	6614	6622	6995	7003	7010	7011	7020	7413	7422	7431	7432	7440	7859	7868	7876	7878	7887	
		S/T	0.25	0.30	0.34	0.34	0.39	0.27	0.32	0.36	0.36	0.41	0.29	0.34	0.38	0.38	0.43	0.30	0.36	0.40	0.40	0.40	0.46
		PI	0.38	0.38	0.38	0.38	0.38	0.41	0.41	0.41	0.41	0.41	0.41	0.43	0.43	0.43	0.43	0.43	0.46	0.46	0.46	0.46	0.46
	95°F(35.0°C)	TC	6953	6963	6970	6970	6980	7372	7381	7388	7390	7399	7813	7823	7832	7833	7842	8284	8293	8302	8303	8313	
		S/T	0.25	0.30	0.34	0.34	0.39	0.27	0.32	0.36	0.36	0.41	0.29	0.34	0.38	0.38	0.43	0.30	0.36	0.40	0.40	0.40	0.46
		PI	0.58	0.58	0.59	0.59	0.59	0.62	0.62	0.62	0.62	0.62	0.66	0.66	0.66	0.66	0.66	0.70	0.70	0.70	0.70	0.70	0.70
	104°F(40.0°C)	TC	6592	6601	6608	6609	6617	6990	6998	7005	7006	7014	7407	7417	7425	7426	7435	7853	7862	7871	7872	7882	
		S/T	0.26	0.31	0.35	0.35	0.40	0.28	0.32	0.37	0.37	0.42	0.29	0.34	0.39	0.39	0.44	0.31	0.36	0.41	0.41	0.47	
		PI	0.64	0.64	0.64	0.64	0.64	0.68	0.68	0.68	0.68	0.68	0.72	0.72	0.72	0.72	0.72	0.76	0.76	0.76	0.76	0.76	0.76
	110°F(43.0°C)	TC	6376	6384	6391	6391	6400	6760	6768	6775	6776	6784	7164	7173	7181	7182	7190	7595	7604	7612	7613	7623	
		S/T	0.27	0.32	0.36	0.36	0.41	0.29	0.34	0.38	0.38	0.44	0.30	0.36	0.40	0.40	0.46	0.32	0.38	0.43	0.43	0.49	
		PI	0.67	0.67	0.67	0.67	0.68	0.71	0.71	0.71	0.71	0.71	0.72	0.76	0.76	0.76	0.76	0.76	0.80	0.80	0.80	0.80	0.80
	115°F(46.0°C)	TC	5073	5080	5085	5085	5092	5378	5385	5390	5391	5398	5700	5707	5714	5715	5721	6043	6050	6056	6057	6065	
		S/T	0.27	0.32	0.36	0.36	0.42	0.29	0.34	0.39	0.39	0.44	0.31	0.36	0.41	0.41	0.47	0.33	0.38	0.43	0.43	0.49	
		PI	0.53	0.53	0.53	0.53	0.53	0.56	0.56	0.56	0.56	0.56	0.59	0.60	0.60	0.60	0.60	0.63	0.63	0.63	0.63	0.63	0.63
	122°F(50.0°C)	TC	3335	3340	3344	3344	3348	3536	3541	3544	3545	3549	3748	3753	3757	3757	3762	3974	3978	3982	3983	3988	
		S/T	0.28	0.33	0.37	0.37	0.43	0.30	0.35	0.40	0.40	0.45	0.31	0.37	0.42	0.42	0.48	0.33	0.39	0.44	0.44	0.51	
		PI	0.34	0.34	0.34	0.34	0.34	0.36	0.36	0.36	0.36	0.36	0.38	0.38	0.38	0.38	0.38	0.40	0.40	0.40	0.40	0.40	0.40

Table 10 – 12K Cooling Performance (Continued)

211	-22°F(-30.0°C)	TC	5764	5771	5778	5778	5786	6111	6118	6124	6126	6133	6476	6485	6492	6493	6500	6866	6874	6881	6882	6891	
		S/T	0.29	0.34	0.39	0.39	0.44	0.31	0.36	0.41	0.41	0.47	0.33	0.38	0.43	0.43	0.50	0.35	0.41	0.46	0.46	0.46	0.53
		PI	0.33	0.33	0.33	0.33	0.33	0.35	0.35	0.35	0.35	0.35	0.35	0.37	0.37	0.37	0.37	0.37	0.39	0.39	0.39	0.39	0.39
	-13°F(-25.0°C)	TC	6244	6252	6259	6259	6268	6620	6628	6635	6636	6644	7016	7025	7033	7034	7042	7439	7447	7455	7456	7465	
		S/T	0.29	0.34	0.39	0.39	0.44	0.31	0.36	0.41	0.41	0.47	0.33	0.39	0.44	0.44	0.50	0.35	0.41	0.46	0.46	0.46	0.53
		PI	0.35	0.35	0.35	0.35	0.35	0.37	0.37	0.38	0.38	0.38	0.40	0.40	0.40	0.40	0.40	0.42	0.42	0.42	0.42	0.42	0.42
	-4°F(-20.0°C)	TC	6724	6733	6741	6741	6750	7130	7138	7145	7146	7155	7555	7565	7574	7575	7584	8011	8019	8028	8029	8039	
		S/T	0.29	0.34	0.39	0.39	0.45	0.31	0.37	0.42	0.42	0.47	0.33	0.39	0.44	0.44	0.50	0.35	0.41	0.47	0.47	0.47	0.53
		PI	0.38	0.38	0.38	0.38	0.38	0.40	0.40	0.40	0.40	0.40	0.43	0.43	0.43	0.43	0.43	0.45	0.45	0.45	0.45	0.45	0.45
	0°F(-17.8°C)	TC	6938	6947	6955	6955	6964	7356	7365	7372	7373	7382	7795	7805	7814	7816	7824	8265	8274	8283	8284	8295	
		S/T	0.29	0.35	0.39	0.39	0.45	0.31	0.37	0.42	0.42	0.47	0.33	0.39	0.44	0.44	0.50	0.35	0.41	0.47	0.47	0.47	0.53
		PI	0.39	0.39	0.39	0.39	0.39	0.42	0.42	0.42	0.42	0.42	0.44	0.44	0.44	0.44	0.44	0.47	0.47	0.47	0.47	0.47	0.47
	5°F(-15.0°C)	TC	7205	7214	7222	7222	7232	7639	7648	7655	7657	7666	8095	8106	8115	8116	8125	8583	8592	8602	8603	8614	
		S/T	0.30	0.35	0.39	0.39	0.45	0.31	0.37	0.42	0.42	0.48	0.33	0.39	0.44	0.44	0.51	0.35	0.41	0.47	0.47	0.47	0.54
		PI	0.41	0.41	0.41	0.41	0.41	0.43	0.43	0.43	0.43	0.43	0.46	0.46	0.46	0.46	0.46	0.49	0.49	0.49	0.49	0.49	0.49
	14°F(-10.0°C)	TC	7693	7703	7711	7712	7722	8156	8166	8174	8176	8185	8644	8655	8664	8666	8676	9164	9174	9184	9186	9197	
		S/T	0.30	0.35	0.40	0.40	0.45	0.31	0.37	0.42	0.42	0.48	0.33	0.39	0.44	0.44	0.51	0.35	0.41	0.47	0.47	0.47	0.54
		PI	0.87	0.87	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.98	0.98	0.98	0.98	0.98	1.04	1.04	1.04	1.04	1.04	1.04
	17°F(-8.3°C)	TC	7855	7866	7874	7875	7885	8329	8339	8347	8348	8358	8826	8838	8848	8849	8859	9358	9368	9378	9380	9392	
		S/T	0.30	0.35	0.40	0.40	0.45	0.32	0.37	0.42	0.42	0.48	0.33	0.39	0.45	0.45	0.51	0.35	0.42	0.47	0.47	0.47	0.54
		PI	1.02	1.02	1.03	1.03	1.03	1.08	1.09	1.09	1.09	1.09	1.15	1.15	1.15	1.15	1.15	1.22	1.22	1.22	1.22	1.22	1.22
23°F(-5.0°C)	TC	7483	7493	7501	7502	7512	7934	7944	7951	7953	7962	8408	8419	8429	8430	8440	8915	8925	8934	8936	8947		
	S/T	0.30	0.35	0.40	0.40	0.45	0.32	0.37	0.42	0.42	0.48	0.34	0.39	0.45	0.45	0.51	0.36	0.42	0.48	0.48	0.48	0.54	
	PI	0.89	0.90	0.90	0.90	0.90	0.95	0.95	0.95	0.95	0.95	1.00	1.01	1.01	1.01	1.01	1.06	1.07	1.07	1.07	1.07	1.07	
35°F(1.7°C)	TC	6739	6748	6756	6756	6765	7145	7154	7161	7162	7171	7572	7582	7590	7592	7600	8028	8037	8046	8047	8057		
	S/T	0.30	0.35	0.40	0.40	0.46	0.32	0.37	0.42	0.42	0.48	0.34	0.40	0.45	0.45	0.51	0.36	0.42	0.48	0.48	0.48	0.54	
	PI	0.64	0.64	0.64	0.64	0.64	0.67	0.67	0.68	0.68	0.68	0.71	0.71	0.72	0.72	0.72	0.76	0.76	0.76	0.76	0.76	0.76	
41°F(5.0°C)	TC	7693	7703	7712	7712	7722	8157	8166	8174	8176	8186	8644	8655	8665	8666	8676	9165	9175	9185	9186	9197		
	S/T	0.30	0.35	0.40	0.40	0.46	0.32	0.37	0.43	0.43	0.49	0.34	0.40	0.45	0.45	0.51	0.36	0.42	0.48	0.48	0.48	0.55	
	PI	0.71	0.71	0.71	0.71	0.71	0.75	0.75	0.75	0.75	0.75	0.79	0.79	0.79	0.79	0.80	0.84	0.84	0.84	0.84	0.84	0.84	
47°F(8.3°C)	TC	8647	8658	8668	8668	8680	9168	9179	9188	9190	9200	9716	9728	9739	9741	9752	10301	10312	10323	10325	10338		
	S/T	0.30	0.35	0.40	0.40	0.46	0.32	0.38	0.43	0.43	0.49	0.34	0.40	0.45	0.45	0.52	0.36	0.42	0.48	0.48	0.48	0.55	
	PI	0.78	0.78	0.78	0.78	0.78	0.82	0.82	0.82	0.82	0.83	0.87	0.87	0.87	0.87	0.87	0.92	0.93	0.93	0.93	0.93	0.93	
50°F(10.0°C)	TC	8601	8613	8622	8623	8634	9120	9131	9140	9141	9152	9665	9677	9688	9690	9701	10247	10258	10269	10271	10284		
	S/T	0.30	0.36	0.40	0.40	0.46	0.32	0.38	0.43	0.43	0.49	0.34	0.40	0.45	0.46	0.52	0.36	0.42	0.48	0.48	0.48	0.55	
	PI	0.73	0.74	0.74	0.74	0.74	0.78	0.78	0.78	0.78	0.78	0.82	0.83	0.83	0.83	0.83	0.87	0.88	0.88	0.88	0.88	0.88	
59°F(15.0°C)	TC	8466	8477	8486	8487	8498	8976	8987	8995	8997	9008	9512	9525	9535	9537	9548	10085	10096	10107	10109	10121		
	S/T	0.31	0.36	0.41	0.41	0.46	0.32	0.38	0.43	0.43	0.49	0.34	0.40	0.46	0.46	0.52	0.36	0.43	0.48	0.48	0.48	0.55	
	PI	0.61	0.61	0.61	0.61	0.61	0.65	0.65	0.65	0.65	0.65	0.69	0.69	0.69	0.69	0.69	0.73	0.73	0.73	0.73	0.73	0.73	
68°F(20.0°C)	TC	8330	8341	8350	8351	8362	8832	8843	8851	8853	8864	9360	9372	9382	9384	9395	9924	9934	9945	9947	9959		
	S/T	0.31	0.37	0.42	0.42	0.48	0.33	0.39	0.44	0.44	0.50	0.35	0.41	0.47	0.47	0.54	0.37	0.44	0.50	0.50	0.57		
	PI	0.49	0.49	0.49	0.49	0.49	0.51	0.52	0.52	0.52	0.52	0.55	0.55	0.55	0.55	0.55	0.58	0.58	0.58	0.58	0.58	0.58	
77°F(25.0°C)	TC	8194	8205	8214	8215	8226	8688	8699	8707	8709	8719	9207	9219	9230	9231	9242	9762	9773	9783	9785	9797		
	S/T	0.32	0.37	0.42	0.42	0.48	0.34	0.39	0.45	0.45	0.51	0.36	0.42	0.48	0.48	0.54	0.38	0.44	0.50	0.50	0.57		
	PI	0.36	0.36	0.36	0.36	0.36	0.38	0.38	0.38	0.38	0.38	0.41	0.41	0.41	0.41	0.41	0.43	0.43	0.43	0.43	0.43	0.43	
82°F(27.8°C)	TC	8247	8258	8267	8267	8278	8744	8754	8763	8764	8775	9266	9278	9288	9290	9300	9824	9835	9846	9847	9859		
	S/T	0.32	0.38	0.43	0.43	0.49	0.34	0.40	0.45	0.45	0.52	0.36	0.42	0.48	0.48	0.55	0.38	0.45	0.51	0.51	0.58		
	PI	0.37	0.38	0.38	0.38	0.38	0.40	0.40	0.40	0.40	0.40	0.42	0.42	0.42	0.42	0.42	0.45	0.45	0.45	0.45	0.45	0.45	
86°F(30.0°C)	TC	8449	8461	8470	8470	8482	8958	8969	8978	8980	8990	9494	9506	9517	9518	9529	10066	10077	10088	10089	10102		
	S/T	0.33	0.38	0.43	0.43	0.49	0.35	0.40	0.46	0.46	0.52	0.37	0.43	0.49	0.49	0.56	0.39	0.45	0.52	0.52	0.59		
	PI	0.49	0.49	0.49	0.49	0.49	0.52	0.52	0.52	0.52	0.52	0.55	0.55	0.55	0.55	0.55	0.58	0.58	0.58	0.58	0.58	0.59	

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Table 10 – 12K Cooling Performance (Continued)

211	95°F(35.0°C)	TC	8905	8917	8927	8927	8939	9442	9453	9462	9464	9476	10006	10019	10030	10032	10043	10609	10620	10632	10634	10647	
		S/T	0.33	0.38	0.43	0.43	0.49	0.35	0.40	0.46	0.46	0.52	0.37	0.43	0.49	0.49	0.56	0.39	0.45	0.52	0.52	0.59	
		PI	0.75	0.75	0.75	0.75	0.75	0.79	0.79	0.79	0.79	0.80	0.84	0.84	0.84	0.84	0.84	0.89	0.89	0.89	0.89	0.89	
	104°F(40.0°C)	TC	8443	8454	8463	8464	8475	8952	8962	8971	8973	8984	9487	9499	9509	9511	9522	10058	10069	10080	10082	10094	
		S/T	0.33	0.39	0.44	0.44	0.51	0.35	0.42	0.47	0.47	0.54	0.37	0.44	0.50	0.50	0.57	0.40	0.47	0.53	0.53	0.60	
		PI	0.82	0.82	0.82	0.82	0.82	0.87	0.87	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.98	0.98	0.98	0.98	0.98	
	110°F(43.0°C)	TC	8166	8176	8185	8186	8197	8658	8668	8676	8678	8688	9175	9187	9197	9199	9209	9728	9738	9749	9750	9762	
		S/T	0.35	0.41	0.46	0.46	0.53	0.37	0.43	0.49	0.49	0.56	0.39	0.46	0.52	0.52	0.59	0.41	0.48	0.55	0.55	0.63	
		PI	0.86	0.86	0.86	0.86	0.86	0.91	0.91	0.92	0.92	0.92	0.97	0.97	0.97	0.97	0.97	1.03	1.03	1.03	1.03	1.03	
	115°F(46.0°C)	TC	6497	6505	6513	6513	6522	6888	6896	6903	6905	6913	7300	7309	7317	7319	7327	7740	7748	7756	7758	7767	
		S/T	0.35	0.41	0.47	0.47	0.53	0.37	0.44	0.49	0.49	0.56	0.39	0.46	0.52	0.52	0.60	0.42	0.49	0.56	0.56	0.63	
		PI	0.68	0.68	0.68	0.68	0.68	0.72	0.72	0.72	0.72	0.72	0.76	0.76	0.76	0.76	0.76	0.81	0.81	0.81	0.81	0.81	
	122°F(50.0°C)	TC	4272	4278	4282	4282	4288	4529	4535	4539	4540	4545	4800	4806	4811	4812	4818	5089	5095	5100	5101	5107	
		S/T	0.36	0.42	0.48	0.48	0.54	0.38	0.45	0.51	0.51	0.58	0.40	0.47	0.54	0.54	0.61	0.43	0.50	0.57	0.57	0.65	
		PI	0.43	0.43	0.43	0.43	0.43	0.46	0.46	0.46	0.46	0.46	0.49	0.49	0.49	0.49	0.49	0.51	0.52	0.52	0.52	0.52	
	423	-22°F(-30.0°C)	TC	7382	7392	7400	7400	7410	7827	7836	7844	7845	7854	8294	8305	8314	8316	8325	8794	8803	8813	8814	8825
			S/T	0.37	0.44	0.50	0.50	0.56	0.39	0.46	0.53	0.53	0.60	0.42	0.49	0.56	0.56	0.63	0.44	0.52	0.59	0.59	0.67
			PI	0.42	0.42	0.42	0.42	0.42	0.44	0.44	0.44	0.44	0.44	0.47	0.47	0.47	0.47	0.47	0.50	0.50	0.50	0.50	0.50
-13°F(-25.0°C)		TC	7997	8008	8016	8017	8027	8479	8489	8497	8499	8509	8985	8997	9007	9009	9019	9527	9537	9547	9549	9561	
		S/T	0.37	0.44	0.50	0.50	0.57	0.40	0.47	0.53	0.53	0.60	0.42	0.49	0.56	0.56	0.64	0.45	0.52	0.59	0.59	0.68	
		PI	0.45	0.45	0.45	0.45	0.45	0.48	0.48	0.48	0.48	0.48	0.51	0.51	0.51	0.51	0.51	0.54	0.54	0.54	0.54	0.54	
-4°F(-20.0°C)		TC	8612	8624	8633	8633	8645	9131	9142	9151	9153	9163	9676	9689	9700	9702	9712	10260	10271	10282	10283	10296	
		S/T	0.38	0.44	0.50	0.50	0.57	0.40	0.47	0.53	0.53	0.61	0.42	0.50	0.56	0.56	0.64	0.45	0.53	0.60	0.60	0.68	
		PI	0.49	0.49	0.49	0.49	0.49	0.52	0.52	0.52	0.52	0.52	0.55	0.55	0.55	0.55	0.55	0.58	0.58	0.58	0.58	0.58	
0°F(-17.8°C)		TC	8885	8897	8907	8907	8919	9421	9432	9441	9443	9454	9984	9997	10008	10010	10021	10585	10597	10608	10610	10623	
		S/T	0.38	0.44	0.50	0.50	0.57	0.40	0.47	0.53	0.53	0.61	0.42	0.50	0.57	0.57	0.64	0.45	0.53	0.60	0.60	0.68	
		PI	0.50	0.50	0.50	0.50	0.50	0.53	0.53	0.53	0.53	0.53	0.56	0.57	0.57	0.57	0.57	0.60	0.60	0.60	0.60	0.60	
5°F(-15.0°C)		TC	9227	9240	9249	9250	9262	9783	9795	9804	9806	9818	10368	10381	10393	10395	10406	10992	11004	11016	11018	11032	
		S/T	0.38	0.45	0.51	0.51	0.58	0.40	0.47	0.54	0.54	0.61	0.43	0.50	0.57	0.57	0.65	0.45	0.53	0.60	0.60	0.69	
		PI	0.52	0.52	0.52	0.52	0.52	0.55	0.55	0.55	0.55	0.56	0.59	0.59	0.59	0.59	0.59	0.62	0.62	0.62	0.62	0.62	
14°F(-10.0°C)		TC	9852	9865	9876	9876	9890	10446	10458	10469	10471	10483	11070	11084	11097	11099	11111	11737	11750	11763	11764	11779	
		S/T	0.38	0.45	0.51	0.51	0.58	0.40	0.47	0.54	0.54	0.61	0.43	0.50	0.57	0.57	0.65	0.45	0.53	0.60	0.60	0.69	
		PI	1.11	1.11	1.12	1.12	1.12	1.18	1.18	1.18	1.18	1.18	1.25	1.25	1.25	1.25	1.26	1.33	1.33	1.33	1.33	1.33	
17°F(-8.3°C)	TC	10060	10074	10085	10085	10099	10667	10679	10690	10692	10705	11304	11319	11331	11333	11346	11985	11998	12011	12013	12028		
	S/T	0.38	0.45	0.51	0.51	0.58	0.40	0.47	0.54	0.54	0.61	0.43	0.50	0.57	0.57	0.65	0.45	0.53	0.61	0.61	0.69		
	PI	1.31	1.31	1.31	1.31	1.32	1.39	1.39	1.39	1.39	1.39	1.47	1.47	1.48	1.48	1.48	1.56	1.56	1.56	1.56	1.57		
23°F(-5.0°C)	TC	9584	9597	9607	9608	9621	10162	10174	10184	10186	10198	10769	10783	10795	10797	10809	11418	11430	11442	11444	11458		
	S/T	0.38	0.45	0.51	0.51	0.58	0.41	0.48	0.54	0.54	0.62	0.43	0.51	0.57	0.57	0.65	0.46	0.54	0.61	0.61	0.69		
	PI	1.14	1.15	1.15	1.15	1.15	1.21	1.22	1.22	1.22	1.22	1.29	1.29	1.29	1.29	1.29	1.36	1.37	1.37	1.37	1.37		
35°F(1.7°C)	TC	8631	8643	8652	8652	8664	9151	9162	9171	9173	9184	9698	9711	9721	9723	9734	10282	10293	10305	10306	10319		
	S/T	0.39	0.45	0.51	0.51	0.59	0.41	0.48	0.54	0.54	0.62	0.43	0.51	0.58	0.58	0.66	0.46	0.54	0.61	0.61	0.70		
	PI	0.81	0.81	0.82	0.82	0.82	0.86	0.86	0.86	0.86	0.87	0.91	0.92	0.92	0.92	0.92	0.97	0.97	0.97	0.97	0.97		
41°F(5.0°C)	TC	9853	9866	9876	9877	9890	10446	10459	10469	10471	10484	11070	11085	11097	11099	11112	11737	11750	11763	11765	11779		
	S/T	0.39	0.45	0.51	0.51	0.59	0.41	0.48	0.55	0.55	0.62	0.43	0.51	0.58	0.58	0.66	0.46	0.54	0.61	0.61	0.70		
	PI	0.90	0.90	0.91	0.91	0.91	0.96	0.96	0.96	0.96	0.96	1.02	1.02	1.02	1.02	1.02	1.08	1.08	1.08	1.08	1.08		
47°F(8.3°C)	TC	11074	11089	11101	11101	11116	11741	11755	11767	11769	11783	12443	12459	12473	12475	12489	13193	13207	13221	13223	13240		
	S/T	0.39	0.45	0.52	0.52	0.59	0.41	0.48	0.55	0.55	0.62	0.43	0.51	0.58	0.58	0.66	0.46	0.54	0.61	0.61	0.70		
	PI	0.99	0.99	1.00	1.00	1.00	1.05	1.05	1.06	1.06	1.06	1.12	1.12	1.12	1.12	1.12	1.18	1.18	1.19	1.19	1.19		
50°F(10.0°C)	TC	11016	11031	11043	11043	11058	11680	11694	11705	11708	11722	12378	12394	12408	12410	12424	13124	13138	13152	13154	13171		
	S/T	0.39	0.46	0.52	0.52	0.59	0.41	0.48	0.55	0.55	0.63	0.44	0.51	0.58	0.58	0.66	0.46	0.54	0.62	0.62	0.70		
	PI	0.94	0.94	0.94	0.94	0.94	1.00	1.00	1.00	1.00	1.00	1.06	1.06	1.06	1.06	1.06	1.12	1.12	1.12	1.12	1.12		

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Table 10 – 12K Cooling Performance (Continued)

423	59°F(15.0°C)	TC	10842	10857	10869	10869	10884	11496	11509	11521	11523	11537	12183	12198	12212	12214	12228	12917	12931	12945	12947	12963	
		S/T	0.39	0.46	0.52	0.52	0.59	0.41	0.49	0.55	0.55	0.63	0.44	0.52	0.59	0.59	0.67	0.67	0.47	0.55	0.62	0.62	0.71
		PI	0.78	0.78	0.78	0.78	0.78	0.83	0.83	0.83	0.83	0.83	0.83	0.88	0.88	0.88	0.88	0.88	0.93	0.93	0.93	0.93	0.93
	68°F(20.0°C)	TC	10669	10683	10694	10695	10709	11312	11325	11336	11338	11352	11987	12003	12016	12018	12032	12710	12723	12737	12739	12755	
		S/T	0.40	0.47	0.54	0.54	0.61	0.43	0.50	0.57	0.57	0.65	0.45	0.53	0.60	0.60	0.69	0.48	0.56	0.64	0.64	0.73	
		PI	0.62	0.62	0.62	0.62	0.62	0.66	0.66	0.66	0.66	0.66	0.70	0.70	0.70	0.70	0.70	0.74	0.74	0.74	0.74	0.74	
	77°F(25.0°C)	TC	10495	10509	10520	10521	10535	11127	11140	11151	11154	11167	11792	11807	11821	11823	11836	12503	12516	12530	12532	12547	
		S/T	0.41	0.48	0.54	0.54	0.62	0.43	0.51	0.57	0.57	0.65	0.46	0.54	0.61	0.61	0.69	0.48	0.57	0.65	0.65	0.74	
		PI	0.46	0.46	0.46	0.46	0.46	0.49	0.49	0.49	0.49	0.49	0.52	0.52	0.52	0.52	0.52	0.55	0.55	0.55	0.55	0.55	
	82°F(27.8°C)	TC	10562	10576	10587	10588	10602	11198	11211	11222	11225	11238	11867	11883	11896	11898	11911	12582	12596	12610	12611	12627	
		S/T	0.41	0.48	0.55	0.55	0.63	0.44	0.51	0.58	0.58	0.66	0.46	0.54	0.62	0.62	0.70	0.49	0.58	0.65	0.65	0.75	
		PI	0.48	0.48	0.48	0.48	0.48	0.51	0.51	0.51	0.51	0.51	0.54	0.54	0.54	0.54	0.54	0.57	0.57	0.57	0.57	0.57	
	86°F(30.0°C)	TC	10821	10836	10847	10848	10863	11473	11487	11498	11501	11514	12159	12175	12188	12190	12204	12891	12905	12919	12921	12938	
		S/T	0.42	0.49	0.56	0.56	0.63	0.44	0.52	0.59	0.59	0.67	0.47	0.55	0.62	0.62	0.71	0.50	0.58	0.66	0.66	0.75	
		PI	0.63	0.63	0.63	0.63	0.63	0.66	0.67	0.67	0.67	0.67	0.70	0.71	0.71	0.71	0.71	0.75	0.75	0.75	0.75	0.75	
	95°F(35.0°C)	TC	11405	11421	11433	11433	11449	12093	12107	12119	12121	12136	12815	12832	12846	12848	12863	13587	13602	13617	13619	13636	
		S/T	0.42	0.49	0.56	0.56	0.63	0.44	0.52	0.59	0.59	0.67	0.47	0.55	0.62	0.62	0.71	0.50	0.58	0.66	0.66	0.75	
		PI	0.96	0.96	0.96	0.96	0.96	1.02	1.02	1.02	1.02	1.02	1.08	1.08	1.08	1.08	1.08	1.14	1.14	1.14	1.14	1.15	
	104°F(40.0°C)	TC	10813	10828	10839	10840	10854	11465	11478	11490	11492	11506	12150	12165	12179	12181	12195	12882	12896	12910	12912	12928	
		S/T	0.43	0.50	0.57	0.57	0.65	0.45	0.53	0.60	0.60	0.69	0.48	0.56	0.64	0.64	0.73	0.51	0.60	0.68	0.68	0.77	
		PI	1.05	1.05	1.05	1.05	1.05	1.11	1.11	1.11	1.11	1.12	1.18	1.18	1.18	1.18	1.18	1.25	1.25	1.25	1.25	1.25	
	110°F(43.0°C)	TC	10458	10472	10483	10484	10498	11088	11101	11112	11114	11127	11750	11766	11779	11781	11794	12458	12472	12486	12488	12503	
		S/T	0.44	0.52	0.59	0.59	0.67	0.47	0.55	0.63	0.63	0.71	0.50	0.58	0.66	0.66	0.76	0.53	0.62	0.70	0.70	0.80	
		PI	1.10	1.10	1.11	1.11	1.11	1.17	1.17	1.17	1.17	1.17	1.24	1.24	1.24	1.24	1.24	1.31	1.32	1.32	1.32	1.32	
115°F(46.0°C)	TC	8321	8332	8341	8341	8352	8822	8832	8841	8843	8853	9349	9361	9372	9373	9384	9912	9923	9934	9936	9948		
	S/T	0.45	0.53	0.60	0.60	0.68	0.48	0.56	0.63	0.63	0.72	0.50	0.59	0.67	0.67	0.77	0.53	0.63	0.71	0.71	0.81		
	PI	0.87	0.87	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.97	0.98	0.98	0.98	0.98	1.03	1.03	1.04	1.04	1.04		
122°F(50.0°C)	TC	5471	5478	5484	5484	5492	5801	5808	5813	5814	5821	6147	6155	6162	6163	6170	6518	6525	6532	6533	6541		
	S/T	0.46	0.54	0.61	0.61	0.70	0.49	0.57	0.65	0.65	0.74	0.52	0.60	0.69	0.69	0.78	0.55	0.64	0.73	0.73	0.83		
	PI	0.55	0.55	0.55	0.55	0.56	0.59	0.59	0.59	0.59	0.59	0.62	0.62	0.62	0.62	0.62	0.66	0.66	0.66	0.66	0.66		
-22°F(-30.0°C)	TC	9454	9467	9477	9477	9490	10024	10036	10045	10047	10059	10623	10636	10648	10650	10662	11263	11275	11287	11289	11303		
	S/T	0.48	0.56	0.63	0.63	0.72	0.50	0.59	0.67	0.67	0.77	0.53	0.63	0.71	0.71	0.81	0.57	0.67	0.76	0.76	0.86		
	PI	0.53	0.54	0.54	0.54	0.54	0.57	0.57	0.57	0.57	0.57	0.60	0.60	0.60	0.60	0.60	0.64	0.64	0.64	0.64	0.64		
-13°F(-25.0°C)	TC	10242	10256	10267	10267	10281	10859	10872	10883	10885	10898	11508	11523	11536	11538	11551	12201	12214	12228	12230	12245		
	S/T	0.48	0.56	0.64	0.64	0.73	0.51	0.60	0.68	0.68	0.77	0.54	0.63	0.72	0.72	0.82	0.57	0.67	0.76	0.76	0.87		
	PI	0.58	0.58	0.58	0.58	0.58	0.61	0.62	0.62	0.62	0.62	0.65	0.65	0.65	0.65	0.65	0.69	0.69	0.69	0.69	0.69		
-4°F(-20.0°C)	TC	11030	11044	11056	11057	11072	11694	11708	11720	11722	11736	12393	12409	12423	12425	12439	13140	13154	13168	13170	13187		
	S/T	0.48	0.57	0.64	0.64	0.73	0.51	0.60	0.68	0.68	0.78	0.54	0.64	0.72	0.72	0.82	0.57	0.67	0.77	0.77	0.87		
	PI	0.62	0.62	0.63	0.63	0.63	0.66	0.66	0.66	0.66	0.66	0.70	0.70	0.70	0.70	0.70	0.74	0.74	0.74	0.75	0.75		
0°F(-17.8°C)	TC	11380	11395	11407	11408	11423	12066	12080	12092	12094	12108	12786	12803	12817	12820	12834	13557	13572	13586	13588	13605		
	S/T	0.48	0.57	0.64	0.64	0.73	0.51	0.60	0.68	0.68	0.78	0.54	0.64	0.72	0.72	0.83	0.58	0.68	0.77	0.77	0.88		
	PI	0.64	0.64	0.65	0.65	0.65	0.68	0.68	0.68	0.68	0.69	0.72	0.72	0.73	0.73	0.73	0.77	0.77	0.77	0.77	0.77		
5°F(-15.0°C)	TC	11817	11833	11846	11847	11863	12530	12544	12557	12559	12574	13278	13295	13310	13313	13328	14078	14093	14109	14111	14129		
	S/T	0.49	0.57	0.65	0.65	0.74	0.51	0.60	0.69	0.69	0.78	0.55	0.64	0.73	0.73	0.83	0.58	0.68	0.77	0.77	0.88		
	PI	0.67	0.67	0.67	0.67	0.67	0.71	0.71	0.71	0.71	0.71	0.75	0.75	0.75	0.75	0.75	0.80	0.80	0.80	0.80	0.80		
14°F(-10.0°C)	TC	12618	12635	12648	12649	12666	13378	13394	13407	13410	13426	14178	14196	14212	14214	14230	15032	15048	15065	15067	15086		
	S/T	0.49	0.57	0.65	0.65	0.74	0.52	0.61	0.69	0.69	0.78	0.55	0.64	0.73	0.73	0.83	0.58	0.68	0.77	0.77	0.88		
	PI	1.43	1.43	1.43	1.43	1.43	1.51	1.51	1.52	1.52	1.52	1.60	1.60	1.61	1.61	1.61	1.70	1.70	1.70	1.70	1.70		
17°F(-8.3°C)	TC	12885	12902	12916	12917	12934	13661	13677	13691	13694	13710	14477	14496	14512	14515	14531	15350	15366	15383	15386	15405		
	S/T	0.49	0.57	0.65	0.65	0.74	0.52	0.61	0.69	0.69	0.79	0.55	0.64	0.73	0.73	0.83	0.58	0.68	0.78	0.78	0.88		
	PI	1.68	1.68	1.68	1.68	1.68	1.78	1.78	1.78	1.78	1.79	1.89	1.89	1.89	1.89	1.89	2.00	2.00	2.00	2.00	2.01		

Manufacturer reserves the right to change, at any time, specifications and designs without notice and without obligations.

Table 10 – 12K Cooling Performance (Continued)

558	23°F(-5.0°C)	TC	12275	12291	12304	12305	12321	13014	13030	13043	13045	13061	13792	13810	13825	13828	13843	14623	14639	14655	14657	14675
		S/T	0.49	0.58	0.65	0.65	0.75	0.52	0.61	0.69	0.69	0.79	0.55	0.65	0.74	0.74	0.84	0.58	0.69	0.78	0.78	0.89
		PI	1.47	1.47	1.47	1.47	1.47	1.55	1.56	1.56	1.56	1.56	1.56	1.65	1.65	1.65	1.65	1.65	1.75	1.75	1.75	1.75
	35°F(1.7°C)	TC	11054	11069	11081	11081	11096	11720	11734	11746	11748	11762	12420	12437	12450	12453	12467	13169	13183	13197	13199	13216
		S/T	0.49	0.58	0.66	0.66	0.75	0.52	0.61	0.70	0.70	0.79	0.55	0.65	0.74	0.74	0.84	0.59	0.69	0.78	0.78	0.89
		PI	1.04	1.04	1.04	1.04	1.05	1.11	1.11	1.11	1.11	1.11	1.17	1.17	1.17	1.17	1.18	1.24	1.24	1.24	1.24	1.25
	41°F(5.0°C)	TC	12618	12635	12649	12650	12667	13379	13395	13408	13411	13427	14178	14197	14212	14215	14231	15032	15049	15065	15068	15086
		S/T	0.49	0.58	0.66	0.66	0.75	0.52	0.61	0.70	0.70	0.80	0.56	0.65	0.74	0.74	0.84	0.59	0.69	0.78	0.78	0.89
		PI	1.16	1.16	1.16	1.16	1.16	1.23	1.23	1.23	1.23	1.23	1.30	1.30	1.30	1.30	1.31	1.38	1.38	1.38	1.38	1.38
	47°F(8.3°C)	TC	14183	14202	14217	14218	14237	15038	15055	15070	15073	15091	15936	15957	15974	15977	15995	16896	16915	16933	16936	16957
		S/T	0.50	0.58	0.66	0.66	0.75	0.53	0.62	0.70	0.70	0.80	0.56	0.65	0.74	0.74	0.85	0.59	0.69	0.79	0.79	0.90
		PI	1.27	1.27	1.28	1.28	1.28	1.35	1.35	1.35	1.35	1.35	1.43	1.43	1.43	1.43	1.43	1.52	1.52	1.52	1.52	1.52
	50°F(10.0°C)	TC	14109	14128	14143	14143	14163	14959	14977	14991	14994	15012	15853	15873	15891	15894	15912	16808	16826	16844	16847	16868
		S/T	0.50	0.58	0.66	0.66	0.76	0.53	0.62	0.70	0.70	0.80	0.56	0.66	0.75	0.75	0.85	0.59	0.70	0.79	0.79	0.90
		PI	1.20	1.21	1.21	1.21	1.21	1.28	1.28	1.28	1.28	1.28	1.35	1.35	1.36	1.36	1.36	1.43	1.44	1.44	1.44	1.44
	59°F(15.0°C)	TC	13886	13905	13920	13920	13939	14723	14740	14755	14758	14775	15603	15623	15640	15643	15661	16543	16561	16579	16581	16602
		S/T	0.50	0.59	0.67	0.67	0.76	0.53	0.62	0.71	0.71	0.81	0.56	0.66	0.75	0.75	0.86	0.60	0.70	0.80	0.80	0.91
		PI	1.00	1.00	1.00	1.00	1.00	1.06	1.06	1.06	1.06	1.06	1.12	1.13	1.13	1.13	1.13	1.19	1.19	1.19	1.19	1.20
	68°F(20.0°C)	TC	13664	13682	13697	13697	13716	14487	14504	14518	14521	14539	15352	15372	15390	15392	15410	16277	16295	16313	16315	16336
		S/T	0.51	0.60	0.69	0.69	0.78	0.54	0.64	0.73	0.73	0.83	0.58	0.68	0.77	0.77	0.88	0.61	0.72	0.82	0.82	0.93
		PI	0.80	0.80	0.80	0.80	0.80	0.84	0.85	0.85	0.85	0.85	0.90	0.90	0.90	0.90	0.90	0.95	0.95	0.95	0.95	0.95
	77°F(25.0°C)	TC	13441	13459	13474	13474	13492	14251	14268	14282	14285	14302	15102	15122	15139	15142	15159	16012	16030	16047	16050	16070
		S/T	0.52	0.61	0.69	0.69	0.79	0.55	0.65	0.74	0.74	0.84	0.59	0.69	0.78	0.78	0.89	0.62	0.73	0.83	0.83	0.94
		PI	0.59	0.59	0.59	0.59	0.59	0.63	0.63	0.63	0.63	0.63	0.67	0.67	0.67	0.67	0.67	0.71	0.71	0.71	0.71	0.71
82°F(27.8°C)	TC	13527	13545	13559	13560	13578	14342	14359	14373	14376	14393	15199	15218	15235	15238	15255	16114	16132	16149	16152	16172	
	S/T	0.53	0.62	0.70	0.70	0.80	0.56	0.66	0.75	0.75	0.85	0.59	0.70	0.79	0.79	0.90	0.63	0.74	0.84	0.84	0.95	
	PI	0.61	0.62	0.62	0.62	0.62	0.65	0.65	0.65	0.65	0.65	0.69	0.69	0.69	0.69	0.69	0.73	0.73	0.73	0.73	0.73	
86°F(30.0°C)	TC	13859	13878	13893	13893	13912	14694	14712	14726	14729	14747	15572	15592	15610	15613	15630	16510	16528	16546	16549	16569	
	S/T	0.53	0.63	0.71	0.71	0.81	0.57	0.66	0.75	0.75	0.86	0.60	0.70	0.80	0.80	0.91	0.64	0.75	0.85	0.85	0.97	
	PI	0.80	0.80	0.81	0.81	0.81	0.85	0.85	0.85	0.85	0.85	0.90	0.90	0.90	0.90	0.91	0.96	0.96	0.96	0.96	0.96	
95°F(35.0°C)	TC	14607	14627	14642	14643	14663	15487	15506	15521	15524	15542	16413	16434	16452	16455	16474	17401	17420	17439	17442	17464	
	S/T	0.53	0.63	0.71	0.71	0.81	0.57	0.66	0.75	0.75	0.86	0.60	0.70	0.80	0.80	0.91	0.64	0.75	0.85	0.85	0.97	
	PI	1.23	1.23	1.23	1.23	1.23	1.30	1.30	1.30	1.30	1.31	1.38	1.38	1.38	1.38	1.38	1.46	1.46	1.46	1.47	1.47	
104°F(40.0°C)	TC	13849	13867	13882	13883	13902	14683	14701	14715	14718	14735	15560	15581	15598	15601	15618	16498	16516	16534	16536	16557	
	S/T	0.55	0.64	0.73	0.73	0.83	0.58	0.68	0.77	0.77	0.88	0.62	0.72	0.82	0.82	0.93	0.65	0.76	0.87	0.87	0.99	
	PI	1.34	1.35	1.35	1.35	1.35	1.42	1.43	1.43	1.43	1.43	1.51	1.51	1.51	1.51	1.51	1.60	1.60	1.60	1.60	1.61	
110°F(43.0°C)	TC	13394	13412	13426	13427	13445	14201	14218	14232	14234	14251	15049	15069	15085	15088	15105	15956	15973	15991	15993	16013	
	S/T	0.57	0.67	0.76	0.76	0.86	0.60	0.71	0.80	0.80	0.91	0.64	0.75	0.85	0.85	0.97	0.68	0.79	0.90	0.90	1.00	
	PI	1.41	1.41	1.42	1.42	1.42	1.50	1.50	1.50	1.50	1.50	1.59	1.59	1.59	1.59	1.59	1.68	1.69	1.69	1.69	1.69	
115°F(46.0°C)	TC	10656	10671	10682	10683	10697	11299	11312	11323	11325	11339	11974	11989	12003	12005	12018	12695	12709	12723	12725	12741	
	S/T	0.57	0.67	0.77	0.77	0.87	0.61	0.71	0.81	0.81	0.92	0.65	0.76	0.86	0.86	0.98	0.68	0.80	0.91	0.91	1.00	
	PI	1.11	1.11	1.11	1.11	1.12	1.18	1.18	1.18	1.18	1.18	1.25	1.25	1.25	1.25	1.25	1.32	1.33	1.33	1.33	1.33	
122°F(50.0°C)	TC	7007	7016	7024	7024	7034	7429	7438	7445	7447	7456	7873	7883	7892	7893	7902	8347	8356	8365	8367	8377	
	S/T	0.59	0.69	0.78	0.78	0.89	0.62	0.73	0.83	0.83	0.95	0.66	0.77	0.88	0.88	1.00	0.70	0.82	0.93	0.93	1.00	
	PI	0.71	0.71	0.71	0.71	0.71	0.75	0.75	0.75	0.75	0.75	0.80	0.80	0.80	0.80	0.80	0.84	0.84	0.85	0.85	0.85	

Table 11 – 18K Cooling Performance

AIRFLOW (CFM)	OUTDOOR DB (°F)	ID WB °F(°C)	60.8°F(16.0°C)					64.4°F(18.0°C)					67°F(19.4°C)					71.6°F(22.0°C)				
		ID DB °F °C	73.4°F 23.0°C	77.0°F 25.0°C	80.0°F 26.7°C	80.6°F 27.0°C	84.2°F 29.0°C	73.4°F 23.0°C	77.0°F 25.0°C	80.0°F 26.7°C	80.6°F 27.0°C	84.2°F 29.0°C	73.4°F 23.0°C	77.0°F 25.0°C	80.0°F 26.7°C	80.6°F 27.0°C	84.2°F 29.0°C	73.4°F 23.0°C	77.0°F 25.0°C	80.0°F 26.7°C	80.6°F 27.0°C	84.2°F 29.0°C
		TC	S/T	PI	TC	S/T	PI	TC	S/T	PI	TC	S/T	PI	TC	S/T	PI	TC	S/T	PI	TC	S/T	PI
318	-22°F(-30.0°C)	TC	14102	14118	14132	14135	14152	14944	14963	14980	14983	15000	15844	15862	15879	15881	15901	14118	14132	14135	14152	14944
		S/T	0.35	0.41	0.47	0.47	0.53	0.37	0.44	0.50	0.50	0.57	0.39	0.46	0.53	0.53	0.60	0.41	0.47	0.47	0.53	0.37
		PI	0.77	0.77	0.77	0.77	0.77	0.81	0.81	0.81	0.81	0.81	0.86	0.86	0.86	0.86	0.86	0.77	0.77	0.77	0.77	0.81
	-13°F(-25.0°C)	TC	15277	15295	15310	15313	15331	16189	16210	16228	16231	16250	17165	17183	17202	17205	17226	15295	15310	15313	15331	16189
		S/T	0.35	0.42	0.47	0.47	0.54	0.38	0.44	0.50	0.50	0.57	0.40	0.47	0.53	0.53	0.60	0.42	0.47	0.47	0.54	0.38
		PI	0.83	0.83	0.83	0.83	0.83	0.88	0.88	0.88	0.88	0.88	0.93	0.93	0.93	0.93	0.94	0.83	0.83	0.83	0.83	0.88
	-4°F(-20.0°C)	TC	16452	16471	16488	16491	16510	17435	17457	17477	17480	17500	18485	18505	18525	18528	18551	16471	16488	16491	16510	17435
		S/T	0.36	0.42	0.47	0.47	0.54	0.38	0.44	0.50	0.50	0.57	0.40	0.47	0.53	0.53	0.61	0.42	0.47	0.47	0.54	0.38
		PI	0.89	0.89	0.89	0.90	0.90	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.01	1.01	1.01	0.89	0.89	0.90	0.90	0.95
	0°F(-17.8°C)	TC	16974	16994	17011	17014	17035	17988	18012	18032	18035	18055	19072	19093	19114	19116	19140	16994	17011	17014	17035	17988
		S/T	0.36	0.42	0.48	0.48	0.54	0.38	0.44	0.50	0.50	0.58	0.40	0.47	0.53	0.53	0.61	0.42	0.48	0.48	0.54	0.38
		PI	0.92	0.92	0.92	0.92	0.92	0.98	0.98	0.98	0.98	0.98	1.04	1.04	1.04	1.04	1.04	0.92	0.92	0.92	0.92	0.98
	5°F(-15.0°C)	TC	17627	17648	17665	17669	17690	18680	18704	18725	18729	18750	19806	19827	19849	19852	19876	17648	17665	17669	17690	18680
		S/T	0.36	0.42	0.48	0.48	0.55	0.38	0.45	0.51	0.51	0.58	0.40	0.47	0.54	0.54	0.61	0.42	0.48	0.48	0.55	0.38
		PI	0.96	0.96	0.96	0.96	0.96	1.01	1.02	1.02	1.02	1.02	1.08	1.08	1.08	1.08	1.08	0.96	0.96	0.96	0.96	1.01
	14°F(-10.0°C)	TC	19444	19467	19487	19490	19514	20606	20633	20656	20660	20683	21848	21871	21895	21899	21926	19467	19487	19490	19514	20606
		S/T	0.36	0.42	0.48	0.48	0.55	0.38	0.45	0.51	0.51	0.58	0.40	0.47	0.54	0.54	0.61	0.42	0.48	0.48	0.55	0.38
		PI	0.69	0.69	0.69	0.69	0.69	0.73	0.73	0.73	0.73	0.74	0.78	0.78	0.78	0.78	0.78	0.69	0.69	0.69	0.69	0.73
	17°F(-8.3°C)	TC	20050	20074	20094	20098	20122	21248	21276	21299	21303	21327	22528	22553	22577	22581	22609	20074	20094	20098	20122	21248
		S/T	0.36	0.42	0.48	0.48	0.55	0.38	0.45	0.51	0.51	0.58	0.41	0.48	0.54	0.54	0.62	0.42	0.48	0.48	0.55	0.38
		PI	0.60	0.60	0.60	0.60	0.61	0.64	0.64	0.64	0.64	0.64	0.68	0.68	0.68	0.68	0.68	0.60	0.60	0.60	0.61	0.64
	23°F(-5.0°C)	TC	18459	18481	18499	18503	18525	19562	19588	19609	19613	19635	20741	20763	20786	20789	20815	18481	18499	18503	18525	19562
		S/T	0.36	0.43	0.48	0.48	0.55	0.38	0.45	0.51	0.51	0.58	0.41	0.48	0.54	0.54	0.62	0.43	0.48	0.48	0.55	0.38
		PI	0.61	0.61	0.61	0.61	0.61	0.65	0.65	0.65	0.65	0.65	0.69	0.69	0.69	0.69	0.69	0.61	0.61	0.61	0.61	0.65
35°F(1.7°C)	TC	15278	15296	15311	15314	15332	16190	16211	16229	16232	16251	17166	17184	17203	17206	17227	15296	15311	15314	15332	16190	
	S/T	0.36	0.43	0.49	0.49	0.55	0.39	0.45	0.51	0.51	0.59	0.41	0.48	0.55	0.55	0.62	0.43	0.49	0.49	0.55	0.39	
	PI	0.63	0.63	0.63	0.63	0.63	0.67	0.67	0.67	0.67	0.67	0.71	0.71	0.71	0.71	0.71	0.63	0.63	0.63	0.63	0.67	
41°F(5.0°C)	TC	18288	18310	18328	18331	18353	19381	19406	19428	19431	19453	20548	20571	20593	20596	20622	18310	18328	18331	18353	19381	
	S/T	0.36	0.43	0.49	0.49	0.55	0.39	0.45	0.52	0.52	0.59	0.41	0.48	0.55	0.55	0.62	0.43	0.49	0.49	0.55	0.39	
	PI	0.83	0.83	0.83	0.83	0.83	0.88	0.88	0.88	0.88	0.88	0.93	0.93	0.93	0.93	0.93	0.83	0.83	0.83	0.83	0.88	
47°F(8.3°C)	TC	21299	21324	21345	21349	21374	22571	22600	22626	22630	22655	23931	23957	23983	23987	24017	21324	21345	21349	21374	22571	
	S/T	0.37	0.43	0.49	0.49	0.56	0.39	0.46	0.52	0.52	0.59	0.41	0.48	0.55	0.55	0.63	0.43	0.49	0.49	0.56	0.39	
	PI	1.03	1.03	1.03	1.03	1.03	1.09	1.09	1.09	1.09	1.09	1.15	1.15	1.15	1.15	1.16	1.03	1.03	1.03	1.03	1.09	
50°F(10.0°C)	TC	21266	21291	21312	21317	21342	22537	22566	22591	22595	22621	23895	23921	23947	23950	23980	21291	21312	21317	21342	22537	
	S/T	0.37	0.43	0.49	0.49	0.56	0.39	0.46	0.52	0.52	0.59	0.41	0.48	0.55	0.55	0.63	0.43	0.49	0.49	0.56	0.39	
	PI	1.05	1.05	1.05	1.05	1.05	1.11	1.11	1.11	1.11	1.11	1.17	1.18	1.18	1.18	1.18	1.05	1.05	1.05	1.05	1.11	
59°F(15.0°C)	TC	21169	21194	21215	21219	21244	22433	22463	22488	22492	22517	23785	23811	23837	23841	23870	21194	21215	21219	21244	22433	
	S/T	0.37	0.43	0.49	0.49	0.56	0.39	0.46	0.52	0.52	0.60	0.42	0.49	0.55	0.55	0.63	0.43	0.49	0.49	0.56	0.39	
	PI	1.11	1.11	1.11	1.11	1.11	1.17	1.17	1.18	1.18	1.18	1.24	1.25	1.25	1.25	1.25	1.11	1.11	1.11	1.11	1.17	
68°F(20.0°C)	TC	21071	21096	21117	21121	21146	22330	22359	22384	22388	22413	23676	23701	23727	23731	23760	21096	21117	21121	21146	22330	
	S/T	0.38	0.45	0.51	0.51	0.58	0.40	0.47	0.54	0.54	0.61	0.43	0.50	0.57	0.57	0.65	0.45	0.51	0.51	0.58	0.40	
	PI	1.17	1.17	1.17	1.17	1.17	1.24	1.24	1.24	1.24	1.24	1.31	1.31	1.32	1.32	1.32	1.17	1.17	1.17	1.17	1.24	
77°F(25.0°C)	TC	20974	20999	21019	21024	21048	22227	22256	22281	22285	22310	23566	23592	23617	23621	23650	20999	21019	21024	21048	22227	
	S/T	0.38	0.45	0.51	0.51	0.58	0.41	0.48	0.54	0.54	0.62	0.43	0.51	0.58	0.58	0.66	0.45	0.51	0.51	0.58	0.41	
	PI	1.23	1.23	1.23	1.23	1.23	1.30	1.31	1.31	1.31	1.31	1.38	1.38	1.39	1.39	1.39	1.23	1.23	1.23	1.23	1.30	

Table 11 – 18K Cooling Performance (Continued)

318	82°F(27.8°C)	TC	20596	20621	20641	20645	20670	21827	21855	21880	21884	21908	23142	23167	23192	23196	23225	20621	20641	20645	20670	21827
		S/T	0.39	0.46	0.52	0.52	0.59	0.41	0.48	0.55	0.55	0.63	0.44	0.51	0.58	0.58	0.67	0.46	0.52	0.52	0.59	0.41
		PI	1.28	1.28	1.29	1.29	1.29	1.36	1.36	1.36	1.36	1.37	1.44	1.44	1.45	1.45	1.45	1.28	1.29	1.29	1.29	1.36
	86°F(30.0°C)	TC	19886	19910	19930	19934	19957	21075	21102	21125	21129	21153	22344	22369	22393	22396	22424	19910	19930	19934	19957	21075
		S/T	0.39	0.46	0.53	0.53	0.60	0.42	0.49	0.56	0.56	0.64	0.44	0.52	0.59	0.59	0.67	0.46	0.53	0.53	0.60	0.42
		PI	1.35	1.35	1.35	1.35	1.35	1.43	1.43	1.43	1.43	1.43	1.52	1.52	1.52	1.52	1.52	1.35	1.35	1.35	1.35	1.43
	95°F(35.0°C)	TC	18289	18311	18329	18333	18354	19382	19407	19429	19432	19454	20550	20572	20594	20598	20623	18311	18329	18333	18354	19382
		S/T	0.39	0.46	0.53	0.53	0.60	0.42	0.49	0.56	0.56	0.64	0.44	0.52	0.59	0.59	0.67	0.46	0.53	0.53	0.60	0.42
		PI	1.50	1.50	1.50	1.50	1.50	1.59	1.59	1.59	1.59	1.59	1.68	1.68	1.69	1.69	1.69	1.50	1.50	1.50	1.50	1.59
	104°F(40.0°C)	TC	16393	16412	16429	16432	16451	17372	17395	17414	17418	17437	18419	18439	18459	18462	18485	16412	16429	16432	16451	17372
		S/T	0.40	0.47	0.54	0.54	0.61	0.43	0.50	0.57	0.57	0.65	0.45	0.53	0.61	0.61	0.69	0.47	0.54	0.54	0.61	0.43
		PI	1.49	1.49	1.50	1.50	1.50	1.58	1.58	1.58	1.59	1.59	1.68	1.68	1.68	1.68	1.68	1.49	1.50	1.50	1.50	1.58
	110°F(43.0°C)	TC	15255	15273	15288	15291	15310	16167	16188	16206	16209	16227	17141	17159	17178	17181	17202	15273	15288	15291	15310	16167
		S/T	0.42	0.49	0.56	0.56	0.64	0.44	0.52	0.59	0.59	0.68	0.47	0.55	0.63	0.63	0.72	0.49	0.56	0.56	0.64	0.44
		PI	1.49	1.49	1.49	1.49	1.49	1.58	1.58	1.58	1.58	1.58	1.67	1.68	1.68	1.68	1.68	1.49	1.49	1.49	1.49	1.58
	115°F(46.0°C)	TC	12451	12466	12478	12481	12496	13195	13212	13227	13230	13244	13990	14005	14021	14023	14040	12466	12478	12481	12496	13195
		S/T	0.42	0.50	0.57	0.57	0.64	0.45	0.53	0.60	0.60	0.68	0.48	0.56	0.64	0.64	0.72	0.50	0.57	0.57	0.64	0.45
		PI	1.32	1.32	1.32	1.32	1.32	1.40	1.40	1.40	1.40	1.40	1.48	1.48	1.48	1.48	1.49	1.32	1.32	1.32	1.32	1.40
	122°F(50.0°C)	TC	8713	8723	8732	8733	8744	9233	9245	9256	9257	9268	9790	9800	9811	9812	9825	8723	8732	8733	8744	9233
		S/T	0.43	0.51	0.58	0.58	0.66	0.46	0.54	0.61	0.61	0.70	0.49	0.57	0.65	0.65	0.74	0.51	0.58	0.58	0.66	0.46
		PI	1.09	1.09	1.09	1.09	1.09	1.16	1.16	1.16	1.16	1.16	1.22	1.23	1.23	1.23	1.23	1.09	1.09	1.09	1.09	1.16

Table 11 – 18K Cooling Performance (Continued)

412	-22°F(-30.0°C)	TC	15907	15926	15942	15945	15964	16858	16880	16899	16902	16921	17874	17893	17912	17915	17938	15926	15942	15945	15964	16858
		S/T	0.40	0.47	0.53	0.53	0.60	0.42	0.49	0.56	0.56	0.64	0.45	0.52	0.59	0.59	0.68	0.47	0.53	0.53	0.60	0.42
		PI	0.86	0.86	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.97	0.97	0.97	0.97	0.97	0.97	0.86	0.87	0.87	0.87
	-13°F(-25.0°C)	TC	17233	17253	17270	17274	17294	18263	18286	18307	18310	18331	19363	19384	19405	19408	19432	17253	17270	17274	17294	18263
		S/T	0.40	0.47	0.53	0.53	0.61	0.42	0.50	0.56	0.56	0.64	0.45	0.53	0.60	0.60	0.68	0.47	0.53	0.53	0.61	0.42
		PI	0.94	0.94	0.94	0.94	0.94	0.99	0.99	0.99	0.99	0.99	1.05	1.05	1.05	1.05	1.05	0.94	0.94	0.94	0.94	0.99
	-4°F(-20.0°C)	TC	18559	18581	18599	18603	18625	19667	19693	19715	19719	19741	20852	20875	20898	20901	20927	18581	18599	18603	18625	19667
		S/T	0.40	0.47	0.54	0.54	0.61	0.43	0.50	0.57	0.57	0.65	0.45	0.53	0.60	0.60	0.69	0.47	0.54	0.54	0.61	0.43
		PI	1.01	1.01	1.01	1.01	1.01	1.07	1.07	1.07	1.07	1.07	1.13	1.13	1.13	1.13	1.14	1.01	1.01	1.01	1.01	1.07
	0°F(-17.8°C)	TC	19148	19170	19189	19193	19216	20292	20318	20341	20345	20367	21514	21538	21561	21565	21591	19170	19189	19193	19216	20292
		S/T	0.40	0.47	0.54	0.54	0.61	0.43	0.50	0.57	0.57	0.65	0.45	0.53	0.60	0.60	0.69	0.47	0.54	0.54	0.61	0.43
		PI	1.04	1.04	1.04	1.04	1.04	1.10	1.10	1.10	1.10	1.11	1.17	1.17	1.17	1.17	1.17	1.04	1.04	1.04	1.04	1.10
	5°F(-15.0°C)	TC	19884	19908	19927	19931	19955	21072	21100	21123	21127	21151	22342	22366	22391	22394	22422	19908	19927	19931	19955	21072
		S/T	0.40	0.47	0.54	0.54	0.62	0.43	0.50	0.57	0.57	0.65	0.45	0.53	0.61	0.61	0.69	0.47	0.54	0.54	0.62	0.43
		PI	1.08	1.08	1.08	1.08	1.08	1.14	1.15	1.15	1.15	1.15	1.21	1.21	1.22	1.22	1.22	1.08	1.08	1.08	1.08	1.14
	14°F(-10.0°C)	TC	21934	21960	21982	21986	22013	23245	23275	23301	23305	23331	24645	24672	24699	24703	24734	21960	21982	21986	22013	23245
		S/T	0.41	0.48	0.54	0.54	0.62	0.43	0.50	0.57	0.57	0.65	0.46	0.53	0.61	0.61	0.69	0.48	0.54	0.54	0.62	0.43
		PI	0.78	0.78	0.78	0.78	0.78	0.83	0.83	0.83	0.83	0.83	0.88	0.88	0.88	0.88	0.88	0.78	0.78	0.78	0.78	0.83
	17°F(-8.3°C)	TC	22618	22645	22667	22671	22698	23969	24000	24027	24031	24058	25413	25441	25469	25473	25504	22645	22667	22671	22698	23969
		S/T	0.41	0.48	0.54	0.54	0.62	0.43	0.51	0.57	0.57	0.66	0.46	0.54	0.61	0.61	0.69	0.48	0.54	0.54	0.62	0.43
		PI	0.68	0.68	0.68	0.68	0.68	0.72	0.72	0.72	0.72	0.72	0.76	0.77	0.77	0.77	0.77	0.68	0.68	0.68	0.68	0.72
	23°F(-5.0°C)	TC	20823	20848	20868	20873	20897	22067	22096	22121	22125	22149	23397	23422	23448	23451	23481	20848	20868	20873	20897	22067
		S/T	0.41	0.48	0.54	0.55	0.62	0.43	0.51	0.58	0.58	0.66	0.46	0.54	0.61	0.61	0.70	0.48	0.54	0.55	0.62	0.43
		PI	0.69	0.69	0.69	0.69	0.69	0.73	0.73	0.73	0.73	0.73	0.78	0.78	0.78	0.78	0.78	0.69	0.69	0.69	0.69	0.73
35°F(1.7°C)	TC	17234	17254	17271	17275	17295	18264	18287	18308	18311	18332	19364	19385	19406	19409	19433	17254	17271	17275	17295	18264	
	S/T	0.41	0.48	0.55	0.55	0.62	0.44	0.51	0.58	0.58	0.66	0.46	0.54	0.62	0.62	0.70	0.48	0.55	0.55	0.62	0.44	
	PI	0.71	0.71	0.71	0.71	0.71	0.75	0.75	0.76	0.76	0.76	0.80	0.80	0.80	0.80	0.80	0.71	0.71	0.71	0.71	0.75	
41°F(5.0°C)	TC	20630	20655	20675	20679	20704	21863	21891	21915	21920	21944	23180	23205	23230	23234	23263	20655	20675	20679	20704	21863	
	S/T	0.41	0.48	0.55	0.55	0.63	0.44	0.51	0.58	0.58	0.66	0.46	0.54	0.62	0.62	0.70	0.48	0.55	0.55	0.63	0.44	
	PI	0.93	0.93	0.94	0.94	0.94	0.99	0.99	0.99	0.99	0.99	1.05	1.05	1.05	1.05	1.05	0.93	0.94	0.94	0.94	0.99	
47°F(8.3°C)	TC	24026	24055	24078	24083	24112	25462	25495	25523	25528	25556	26996	27025	27055	27059	27092	24055	24078	24083	24112	25462	
	S/T	0.41	0.48	0.55	0.55	0.63	0.44	0.51	0.58	0.58	0.67	0.46	0.54	0.62	0.62	0.71	0.48	0.55	0.55	0.63	0.44	
	PI	1.16	1.16	1.16	1.16	1.16	1.23	1.23	1.23	1.23	1.23	1.30	1.30	1.30	1.30	1.30	1.16	1.16	1.16	1.16	1.23	
50°F(10.0°C)	TC	23990	24018	24042	24046	24075	25423	25456	25484	25489	25517	26955	26984	27013	27017	27051	24018	24042	24046	24075	25423	
	S/T	0.41	0.49	0.55	0.55	0.63	0.44	0.52	0.59	0.59	0.67	0.47	0.55	0.62	0.62	0.71	0.49	0.55	0.55	0.63	0.44	
	PI	1.18	1.18	1.18	1.18	1.18	1.25	1.25	1.25	1.25	1.25	1.33	1.33	1.33	1.33	1.33	1.18	1.18	1.18	1.18	1.25	
59°F(15.0°C)	TC	23880	23908	23932	23936	23965	25306	25339	25367	25372	25400	26831	26860	26889	26894	26927	23908	23932	23936	23965	25306	
	S/T	0.42	0.49	0.56	0.56	0.63	0.44	0.52	0.59	0.59	0.67	0.47	0.55	0.62	0.62	0.71	0.49	0.56	0.56	0.63	0.44	
	PI	1.25	1.25	1.25	1.25	1.25	1.32	1.33	1.33	1.33	1.33	1.40	1.41	1.41	1.41	1.41	1.25	1.25	1.25	1.25	1.32	
68°F(20.0°C)	TC	23770	23798	23821	23826	23854	25190	25222	25251	25255	25283	26708	26737	26766	26770	26803	23798	23821	23826	23854	25190	
	S/T	0.43	0.50	0.57	0.57	0.65	0.45	0.53	0.61	0.61	0.69	0.48	0.56	0.64	0.64	0.73	0.50	0.57	0.57	0.65	0.45	
	PI	1.32	1.32	1.32	1.32	1.32	1.40	1.40	1.40	1.40	1.40	1.48	1.48	1.48	1.49	1.49	1.32	1.32	1.32	1.32	1.40	
77°F(25.0°C)	TC	23660	23688	23711	23716	23744	25073	25106	25134	25138	25167	26584	26613	26642	26646	26679	23688	23711	23716	23744	25073	
	S/T	0.43	0.51	0.58	0.58	0.66	0.46	0.54	0.61	0.61	0.70	0.49	0.57	0.65	0.65	0.74	0.51	0.58	0.58	0.66	0.46	
	PI	1.39	1.39	1.39	1.39	1.39	1.47	1.47	1.47	1.47	1.48	1.56	1.56	1.56	1.56	1.57	1.39	1.39	1.39	1.39	1.47	
82°F(27.8°C)	TC	23234	23261	23284	23289	23317	24622	24654	24682	24686	24714	26106	26134	26162	26166	26199	23261	23284	23289	23317	24622	
	S/T	0.44	0.52	0.59	0.59	0.67	0.47	0.55	0.62	0.62	0.71	0.49	0.58	0.66	0.66	0.75	0.52	0.59	0.59	0.67	0.47	
	PI	1.45	1.45	1.45	1.45	1.45	1.53	1.54	1.54	1.54	1.54	1.63	1.63	1.63	1.63	1.63	1.45	1.45	1.45	1.45	1.53	
86°F(30.0°C)	TC	22433	22460	22482	22486	22513	23773	23804	23831	23835	23862	25206	25233	25261	25265	25296	22460	22482	22486	22513	23773	
	S/T	0.44	0.52	0.59	0.59	0.68	0.47	0.55	0.63	0.63	0.72	0.50	0.59	0.67	0.67	0.76	0.52	0.59	0.59	0.68	0.47	
	PI	1.52	1.52	1.52	1.53	1.53	1.61	1.61	1.62	1.62	1.62	1.71	1.71	1.71	1.71	1.72	1.52	1.52	1.53	1.53	1.61	

Manufacturer reserves the right to change, at any time, specifications and designs without notice and without obligations.

Table 11 – 18K Cooling Performance (Continued)

		TC	20631	20656	20676	20680	20705	21864	21892	21917	21921	21945	23181	23207	23232	23235	23264	20656	20676	20680	20705	21864		
412	95°F(35.0°C)	S/T	0.44	0.52	0.59	0.59	0.68	0.47	0.55	0.63	0.63	0.72	0.50	0.59	0.67	0.67	0.76	0.52	0.59	0.59	0.68	0.47		
		PI	1.69	1.69	1.69	1.69	1.69	1.79	1.79	1.79	1.79	1.79	1.80	1.90	1.90	1.90	1.90	1.90	1.69	1.69	1.69	1.69	1.79	
		TC	18492	18514	18532	18536	18558	19597	19623	19644	19648	19670	20778	20800	20823	20826	20852	18514	18532	18536	18558	19597		
	104°F(40.0°C)	S/T	0.46	0.53	0.61	0.61	0.69	0.48	0.57	0.64	0.64	0.73	0.51	0.60	0.68	0.68	0.78	0.53	0.61	0.61	0.69	0.48		
		PI	1.68	1.69	1.69	1.69	1.69	1.78	1.79	1.79	1.79	1.79	1.89	1.89	1.90	1.90	1.90	1.90	1.69	1.69	1.69	1.69	1.78	
	110°F(43.0°C)	TC	17209	17229	17246	17250	17270	18237	18261	18281	18284	18305	19336	19357	19378	19381	19405	17229	17246	17250	17270	18237		
		S/T	0.47	0.55	0.63	0.63	0.72	0.50	0.59	0.67	0.67	0.76	0.53	0.62	0.71	0.71	0.81	0.55	0.63	0.63	0.72	0.50		
	115°F(46.0°C)	PI	1.68	1.68	1.68	1.68	1.69	1.78	1.78	1.78	1.78	1.79	1.89	1.89	1.89	1.89	1.89	1.89	1.68	1.68	1.68	1.69	1.78	
		TC	14046	14062	14076	14079	14096	14885	14904	14921	14924	14940	15782	15799	15816	15819	15838	14062	14076	14079	14096	14885		
	122°F(50.0°C)	S/T	0.48	0.56	0.64	0.64	0.73	0.51	0.59	0.68	0.68	0.77	0.54	0.63	0.72	0.72	0.82	0.56	0.64	0.64	0.73	0.51		
		PI	1.49	1.49	1.49	1.49	1.49	1.58	1.58	1.58	1.58	1.58	1.67	1.67	1.67	1.67	1.68	1.49	1.49	1.49	1.49	1.58		
	122°F(50.0°C)	TC	9829	9840	9850	9852	9864	10416	10429	10441	10443	10455	11043	11055	11067	11069	11083	9840	9850	9852	9864	10416		
		S/T	0.49	0.57	0.65	0.65	0.74	0.52	0.61	0.69	0.69	0.79	0.55	0.65	0.73	0.73	0.84	0.57	0.65	0.65	0.74	0.52		
	-22°F(-30.0°C)	PI	1.23	1.23	1.23	1.23	1.23	1.30	1.30	1.31	1.31	1.31	1.38	1.38	1.38	1.38	1.39	1.23	1.23	1.23	1.23	1.30		
		TC	17945	17966	17984	17987	18008	19017	19041	19063	19066	19087	20162	20184	20206	20209	20235	17966	17984	17987	18008	19017		
	-13°F(-25.0°C)	S/T	0.45	0.52	0.60	0.60	0.68	0.47	0.56	0.63	0.63	0.72	0.50	0.59	0.67	0.67	0.76	0.52	0.60	0.60	0.68	0.47		
		PI	0.97	0.98	0.98	0.98	0.98	1.03	1.03	1.03	1.03	1.04	1.09	1.10	1.10	1.10	1.10	0.98	0.98	0.98	0.98	1.03		
	-4°F(-20.0°C)	TC	19440	19463	19482	19486	19509	20601	20628	20651	20655	20678	21843	21866	21890	21894	21921	19463	19482	19486	19509	20601		
		S/T	0.45	0.53	0.60	0.60	0.68	0.48	0.56	0.64	0.64	0.73	0.51	0.59	0.67	0.67	0.77	0.53	0.60	0.60	0.68	0.48		
	0°F(-17.8°C)	PI	1.06	1.06	1.06	1.06	1.06	1.12	1.12	1.12	1.12	1.12	1.19	1.19	1.19	1.19	1.19	1.06	1.06	1.06	1.06	1.12		
		TC	20935	20960	20981	20985	21010	22186	22215	22240	22244	22269	23523	23548	23574	23578	23607	20960	20981	20985	21010	22186		
	5°F(-15.0°C)	S/T	0.45	0.53	0.60	0.60	0.69	0.48	0.56	0.64	0.64	0.73	0.51	0.60	0.68	0.68	0.77	0.53	0.60	0.60	0.69	0.48		
		PI	1.14	1.14	1.14	1.14	1.14	1.20	1.21	1.21	1.21	1.21	1.28	1.28	1.28	1.28	1.28	1.14	1.14	1.14	1.14	1.20		
	14°F(-10.0°C)	TC	21600	21626	21647	21651	21677	22890	22920	22946	22950	22976	24270	24296	24322	24326	24357	21626	21647	21651	21677	22890		
S/T		0.45	0.53	0.61	0.61	0.69	0.48	0.56	0.64	0.64	0.73	0.51	0.60	0.68	0.68	0.78	0.53	0.61	0.61	0.69	0.48			
17°F(-8.3°C)	PI	1.17	1.17	1.17	1.18	1.18	1.24	1.24	1.25	1.25	1.25	1.32	1.32	1.32	1.32	1.32	1.17	1.17	1.18	1.18	1.24			
	TC	22431	22457	22479	22484	22511	23771	23802	23828	23833	23859	25203	25230	25258	25262	25293	22457	22479	22484	22511	23771			
23°F(-5.0°C)	S/T	0.46	0.54	0.61	0.61	0.69	0.48	0.57	0.65	0.65	0.74	0.51	0.60	0.68	0.68	0.78	0.54	0.61	0.61	0.69	0.48			
	PI	1.22	1.22	1.22	1.22	1.22	1.29	1.29	1.29	1.29	1.30	1.37	1.37	1.37	1.37	1.37	1.22	1.22	1.22	1.22	1.29			
35°F(1.7°C)	TC	24743	24773	24797	24802	24832	26222	26256	26285	26290	26319	27802	27832	27862	27866	27901	24773	24797	24802	24832	26222			
	S/T	0.46	0.54	0.61	0.61	0.70	0.48	0.57	0.65	0.65	0.74	0.51	0.60	0.69	0.69	0.78	0.54	0.61	0.61	0.70	0.48			
41°F(5.0°C)	PI	0.88	0.88	0.88	0.88	0.88	0.93	0.93	0.94	0.94	0.94	0.99	0.99	0.99	0.99	0.99	0.88	0.88	0.88	0.88	0.93			
	TC	25514	25545	25570	25575	25605	27039	27074	27104	27109	27139	28668	28699	28730	28735	28770	25545	25570	25575	25605	27039			
47°F(8.3°C)	S/T	0.46	0.54	0.61	0.61	0.70	0.49	0.57	0.65	0.65	0.74	0.52	0.60	0.69	0.69	0.78	0.54	0.61	0.61	0.70	0.49			
	PI	0.77	0.77	0.77	0.77	0.77	0.81	0.81	0.82	0.82	0.82	0.86	0.86	0.86	0.86	0.87	0.77	0.77	0.77	0.77	0.81			
50°F(10.0°C)	TC	23490	23518	23541	23546	23574	24893	24926	24953	24958	24986	26393	26422	26451	26455	26488	23518	23541	23546	23574	24893			
	S/T	0.46	0.54	0.61	0.61	0.70	0.49	0.57	0.65	0.65	0.74	0.52	0.61	0.69	0.69	0.79	0.54	0.61	0.61	0.70	0.49			
50°F(10.0°C)	PI	0.78	0.78	0.78	0.78	0.78	0.83	0.83	0.83	0.83	0.83	0.88	0.88	0.88	0.88	0.88	0.78	0.78	0.78	0.78	0.83			
	TC	19441	19464	19483	19487	19510	20603	20629	20652	20656	20679	21844	21868	21891	21895	21922	19464	19483	19487	19510	20603			
41°F(5.0°C)	S/T	0.46	0.54	0.62	0.62	0.70	0.49	0.58	0.65	0.65	0.75	0.52	0.61	0.69	0.69	0.79	0.54	0.62	0.62	0.70	0.49			
	PI	0.80	0.80	0.80	0.80	0.81	0.85	0.85	0.85	0.85	0.85	0.90	0.90	0.90	0.90	0.90	0.80	0.80	0.80	0.81	0.85			
47°F(8.3°C)	TC	23272	23300	23323	23327	23355	24662	24694	24722	24727	24754	26148	26177	26205	26209	26242	23300	23323	23327	23355	24662			
	S/T	0.46	0.54	0.62	0.62	0.71	0.49	0.58	0.66	0.66	0.75	0.52	0.61	0.70	0.70	0.79	0.54	0.62	0.62	0.71	0.49			
50°F(10.0°C)	PI	1.05	1.05	1.06	1.06	1.06	1.12	1.12	1.12	1.12	1.12	1.18	1.18	1.19	1.19	1.19	1.05	1.06	1.06	1.06	1.12			
	TC	27103	27135	27162	27167	27200	28722	28760	28792	28797	28829	30453	30486	30519	30524	30562	27135	27162	27167	27200	28722			
50°F(10.0°C)	S/T	0.47	0.55	0.62	0.62	0.71	0.49	0.58	0.66	0.66	0.75	0.52	0.61	0.70	0.70	0.80	0.55	0.62	0.62	0.71	0.49			
	PI	1.30	1.31	1.31	1.31	1.31	1.38	1.38	1.39	1.39	1.39	1.47	1.47	1.47	1.47	1.47	1.31	1.31	1.31	1.31	1.38			
50°F(10.0°C)	TC	27062	27094	27121	27126	27158	28679	28716	28748	28753	28785	30406	30440	30473	30477	30515	27094	27121	27126	27158	28679			
	S/T	0.47	0.55	0.62	0.62	0.71	0.50	0.58	0.66	0.66	0.75	0.53	0.62	0.70	0.70	0.80	0.55	0.62	0.62	0.71	0.50			
50°F(10.0°C)	PI	1.33	1.33	1.33	1.33	1.34	1.41	1.41	1.41	1.41	1.42	1.50	1.50	1.50	1.50	1.50	1.33	1.33	1.33	1.34	1.41			

Table 11 – 18K Cooling Performance (Continued)

618	59°F(15.0°C)	TC	26938	26970	26996	27002	27034	28547	28584	28616	28621	28653	30267	30300	30333	30338	30375	26970	26996	27002	27034	28547
		S/T	0.47	0.55	0.63	0.63	0.72	0.50	0.59	0.66	0.66	0.76	0.53	0.62	0.70	0.70	0.80	0.55	0.63	0.63	0.72	0.50
		PI	1.41	1.41	1.41	1.41	1.41	1.49	1.50	1.50	1.50	1.50	1.58	1.58	1.59	1.59	1.59	1.41	1.41	1.41	1.41	1.49
	68°F(20.0°C)	TC	26814	26845	26872	26877	26909	28416	28453	28484	28490	28521	30128	30161	30193	30198	30236	26845	26872	26877	26909	28416
		S/T	0.48	0.57	0.64	0.64	0.73	0.51	0.60	0.68	0.68	0.78	0.54	0.64	0.72	0.72	0.82	0.57	0.64	0.64	0.73	0.51
		PI	1.49	1.49	1.49	1.49	1.49	1.58	1.58	1.58	1.58	1.58	1.67	1.67	1.67	1.68	1.68	1.49	1.49	1.49	1.49	1.58
	77°F(25.0°C)	TC	26690	26721	26748	26753	26785	28284	28321	28353	28358	28389	29988	30021	30054	30058	30096	26721	26748	26753	26785	28284
		S/T	0.49	0.57	0.65	0.65	0.74	0.52	0.61	0.69	0.69	0.79	0.55	0.64	0.73	0.73	0.84	0.57	0.65	0.65	0.74	0.52
		PI	1.57	1.57	1.57	1.57	1.57	1.66	1.66	1.66	1.66	1.67	1.76	1.76	1.76	1.76	1.77	1.57	1.57	1.57	1.57	1.66
	82°F(27.8°C)	TC	26209	26240	26266	26272	26303	27775	27811	27842	27847	27879	29449	29481	29513	29517	29554	26240	26266	26272	26303	27775
		S/T	0.50	0.58	0.66	0.66	0.75	0.53	0.62	0.70	0.70	0.80	0.56	0.65	0.74	0.74	0.85	0.58	0.66	0.66	0.75	0.53
		PI	1.63	1.63	1.64	1.64	1.64	1.73	1.73	1.73	1.74	1.74	1.83	1.84	1.84	1.84	1.84	1.63	1.64	1.64	1.64	1.73
	86°F(30.0°C)	TC	25306	25336	25361	25366	25396	26818	26853	26883	26888	26918	28434	28465	28496	28500	28536	25336	25361	25366	25396	26818
		S/T	0.50	0.59	0.67	0.67	0.76	0.53	0.62	0.71	0.71	0.81	0.56	0.66	0.75	0.75	0.86	0.59	0.67	0.67	0.76	0.53
		PI	1.72	1.72	1.72	1.72	1.72	1.82	1.82	1.82	1.82	1.83	1.93	1.93	1.93	1.93	1.94	1.72	1.72	1.72	1.72	1.82
	95°F(35.0°C)	TC	23274	23301	23324	23329	23356	24664	24696	24724	24728	24756	26150	26178	26207	26211	26244	23301	23324	23329	23356	24664
		S/T	0.50	0.59	0.67	0.67	0.76	0.53	0.62	0.71	0.71	0.81	0.56	0.66	0.75	0.75	0.86	0.59	0.67	0.67	0.76	0.53
		PI	1.90	1.91	1.91	1.91	1.91	2.02	2.02	2.02	2.02	2.03	2.14	2.14	2.14	2.14	2.15	1.91	1.91	1.91	1.91	2.02
	104°F(40.0°C)	TC	20860	20885	20906	20910	20935	22107	22135	22160	22164	22189	23439	23464	23490	23493	23523	20885	20906	20910	20935	22107
		S/T	0.51	0.60	0.69	0.69	0.78	0.55	0.64	0.73	0.73	0.83	0.58	0.68	0.77	0.77	0.88	0.60	0.69	0.69	0.78	0.55
		PI	1.90	1.90	1.90	1.90	1.91	2.01	2.01	2.02	2.02	2.02	2.13	2.14	2.14	2.14	2.14	1.90	1.90	1.90	1.91	2.01
	110°F(43.0°C)	TC	19413	19436	19455	19459	19482	20572	20599	20622	20626	20649	21812	21836	21859	21863	21890	19436	19455	19459	19482	20572
		S/T	0.53	0.63	0.71	0.71	0.81	0.57	0.66	0.75	0.75	0.86	0.60	0.70	0.80	0.80	0.91	0.63	0.71	0.71	0.81	0.57
		PI	1.90	1.90	1.90	1.90	1.90	2.01	2.01	2.01	2.01	2.02	2.13	2.13	2.13	2.13	2.14	1.90	1.90	1.90	1.90	2.01
115°F(46.0°C)	TC	15845	15863	15879	15882	15901	16791	16813	16832	16835	16854	17803	17822	17842	17844	17867	15863	15879	15882	15901	16791	
	S/T	0.54	0.63	0.72	0.72	0.82	0.57	0.67	0.76	0.76	0.87	0.61	0.71	0.81	0.81	0.92	0.63	0.72	0.72	0.82	0.57	
	PI	1.68	1.68	1.68	1.68	1.68	1.78	1.78	1.78	1.78	1.78	1.88	1.89	1.89	1.89	1.89	1.68	1.68	1.68	1.68	1.78	
122°F(50.0°C)	TC	11087	11100	11111	11114	11127	11750	11765	11778	11780	11793	12458	12471	12485	12487	12502	11100	11111	11114	11127	11750	
	S/T	0.55	0.65	0.74	0.74	0.84	0.59	0.69	0.78	0.78	0.89	0.62	0.73	0.83	0.83	0.94	0.65	0.74	0.74	0.84	0.59	
	PI	1.39	1.39	1.39	1.39	1.39	1.47	1.47	1.47	1.47	1.48	1.56	1.56	1.56	1.56	1.56	1.39	1.39	1.39	1.39	1.47	
718	-22°F(-30.0°C)	TC	20243	20267	20287	20291	20315	21452	21480	21504	21508	21532	22745	22769	22794	22798	22826	20267	20287	20291	20315	21452
		S/T	0.50	0.59	0.67	0.67	0.77	0.53	0.63	0.71	0.71	0.81	0.57	0.67	0.76	0.76	0.86	0.59	0.67	0.67	0.77	0.53
		PI	1.10	1.10	1.10	1.10	1.10	1.16	1.17	1.17	1.17	1.17	1.23	1.24	1.24	1.24	1.24	1.10	1.10	1.10	1.10	1.16
	-13°F(-25.0°C)	TC	21929	21955	21977	21981	22008	23240	23270	23296	23300	23326	24640	24667	24694	24697	24728	21955	21977	21981	22008	23240
		S/T	0.51	0.60	0.68	0.68	0.77	0.54	0.63	0.72	0.72	0.82	0.57	0.67	0.76	0.76	0.87	0.60	0.68	0.68	0.77	0.54
		PI	1.19	1.19	1.19	1.19	1.19	1.26	1.26	1.26	1.26	1.27	1.34	1.34	1.34	1.34	1.34	1.19	1.19	1.19	1.19	1.26
	-4°F(-20.0°C)	TC	23616	23644	23668	23672	23700	25027	25060	25088	25092	25120	26535	26564	26593	26597	26630	23644	23668	23672	23700	25027
		S/T	0.51	0.60	0.68	0.68	0.78	0.54	0.64	0.72	0.72	0.82	0.57	0.67	0.77	0.77	0.87	0.60	0.68	0.68	0.78	0.54
		PI	1.28	1.28	1.28	1.28	1.29	1.36	1.36	1.36	1.36	1.36	1.44	1.44	1.44	1.44	1.45	1.28	1.28	1.28	1.29	1.36
	0°F(-17.8°C)	TC	24366	24395	24419	24424	24453	25822	25855	25884	25889	25918	27378	27407	27437	27442	27476	24395	24419	24424	24453	25822
		S/T	0.51	0.60	0.68	0.68	0.78	0.54	0.64	0.72	0.72	0.83	0.58	0.68	0.77	0.77	0.88	0.60	0.68	0.68	0.78	0.54
		PI	1.32	1.32	1.33	1.33	1.33	1.40	1.40	1.40	1.41	1.41	1.49	1.49	1.49	1.49	1.49	1.32	1.33	1.33	1.33	1.40
	5°F(-15.0°C)	TC	25303	25333	25358	25363	25393	26815	26850	26880	26885	26915	28431	28462	28493	28497	28532	25333	25358	25363	25393	26815
		S/T	0.51	0.60	0.69	0.69	0.78	0.55	0.64	0.73	0.73	0.83	0.58	0.68	0.77	0.77	0.88	0.60	0.69	0.69	0.78	0.55
		PI	1.37	1.38	1.38	1.38	1.38	1.46	1.46	1.46	1.46	1.46	1.54	1.54	1.55	1.55	1.55	1.38	1.38	1.38	1.38	1.46
	14°F(-10.0°C)	TC	27912	27945	27973	27978	28012	29580	29618	29651	29657	29690	31362	31396	31430	31435	31474	27945	27973	27978	28012	29580
		S/T	0.52	0.61	0.69	0.69	0.78	0.55	0.64	0.73	0.73	0.83	0.58	0.68	0.77	0.77	0.88	0.61	0.69	0.69	0.78	0.55
		PI	0.99	0.99	1.00	1.00	1.00	1.05	1.05	1.05	1.05	1.06	1.12	1.12	1.12	1.12	1.12	0.99	1.00	1.00	1.00	1.05
	17°F(-8.3°C)	TC	28782	28816	28844	28850	28884	30501	30541	30575	30581	30615	32339	32374	32409	32414	32455	28816	28844	28850	28884	30501
		S/T	0.52	0.61	0.69	0.69	0.79	0.55	0.64	0.73	0.73	0.83	0.58	0.68	0.78	0.78	0.88	0.61	0.69	0.69	0.79	0.55
		PI	0.87	0.87	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.97	0.97	0.97	0.97	0.97	0.87	0.87	0.87	0.87	0.92

Manufacturer reserves the right to change, at any time, specifications and designs without notice and without obligations.

Table 11 – 18K Cooling Performance (Continued)

718	23°F(-5.0°C)	TC	26498	26529	26556	26561	26592	28081	28118	28149	28154	28186	29773	29806	29838	29843	29880	26529	26556	26561	26592	28081
		S/T	0.52	0.61	0.69	0.69	0.79	0.55	0.65	0.74	0.74	0.84	0.58	0.69	0.78	0.78	0.89	0.61	0.69	0.69	0.79	0.55
		PI	0.88	0.88	0.88	0.88	0.88	0.93	0.93	0.93	0.93	0.94	0.99	0.99	0.99	0.99	0.99	0.99	0.88	0.88	0.88	0.88
	35°F(1.7°C)	TC	21931	21957	21978	21983	22009	23241	23271	23297	23301	23327	24641	24668	24695	24699	24730	21957	21978	21983	22009	23241
		S/T	0.52	0.61	0.70	0.70	0.79	0.55	0.65	0.74	0.74	0.84	0.59	0.69	0.78	0.78	0.89	0.61	0.70	0.70	0.79	0.55
		PI	0.91	0.91	0.91	0.91	0.91	0.96	0.96	0.96	0.96	0.96	1.02	1.02	1.02	1.02	1.02	0.91	0.91	0.91	0.91	0.96
	41°F(5.0°C)	TC	26252	26283	26309	26315	26346	27821	27857	27888	27893	27924	29497	29529	29561	29566	29603	26283	26309	26315	26346	27821
		S/T	0.52	0.61	0.70	0.70	0.80	0.56	0.65	0.74	0.74	0.84	0.59	0.69	0.78	0.78	0.89	0.61	0.70	0.70	0.80	0.56
		PI	1.19	1.19	1.19	1.19	1.19	1.26	1.26	1.26	1.26	1.26	1.34	1.34	1.34	1.34	1.34	1.19	1.19	1.19	1.19	1.26
	47°F(8.3°C)	TC	30574	30610	30640	30646	30683	32401	32443	32479	32485	32521	34353	34390	34428	34433	34476	30610	30640	30646	30683	32401
		S/T	0.53	0.62	0.70	0.70	0.80	0.56	0.65	0.74	0.74	0.85	0.59	0.69	0.79	0.79	0.90	0.62	0.70	0.70	0.80	0.56
		PI	1.47	1.47	1.47	1.48	1.48	1.56	1.56	1.56	1.56	1.57	1.65	1.66	1.66	1.66	1.66	1.47	1.47	1.48	1.48	1.56
	50°F(10.0°C)	TC	30527	30563	30594	30600	30636	32351	32393	32429	32435	32472	34300	34338	34375	34380	34423	30563	30594	30600	30636	32351
		S/T	0.53	0.62	0.70	0.70	0.80	0.56	0.66	0.75	0.75	0.85	0.59	0.70	0.79	0.79	0.90	0.62	0.70	0.70	0.80	0.56
		PI	1.50	1.50	1.50	1.50	1.51	1.59	1.59	1.59	1.59	1.60	1.69	1.69	1.69	1.69	1.69	1.50	1.50	1.50	1.51	1.59
	59°F(15.0°C)	TC	30387	30423	30453	30459	30496	32203	32245	32281	32287	32323	34143	34180	34218	34223	34265	30423	30453	30459	30496	32203
		S/T	0.53	0.62	0.71	0.71	0.81	0.56	0.66	0.75	0.75	0.86	0.60	0.70	0.80	0.80	0.91	0.62	0.71	0.71	0.81	0.56
		PI	1.59	1.59	1.59	1.59	1.60	1.68	1.69	1.69	1.69	1.69	1.79	1.79	1.79	1.79	1.79	1.59	1.59	1.59	1.60	1.68
	68°F(20.0°C)	TC	30248	30283	30313	30319	30355	32055	32096	32132	32138	32174	33986	34023	34060	34065	34108	30283	30313	30319	30355	32055
		S/T	0.54	0.64	0.73	0.73	0.83	0.58	0.68	0.77	0.77	0.88	0.61	0.72	0.82	0.82	0.93	0.64	0.73	0.73	0.83	0.58
		PI	1.68	1.68	1.68	1.68	1.68	1.78	1.78	1.78	1.78	1.78	1.89	1.89	1.89	1.89	1.89	1.68	1.68	1.68	1.68	1.78
	77°F(25.0°C)	TC	30108	30143	30173	30179	30215	31906	31948	31983	31989	32025	33829	33866	33902	33908	33950	30143	30173	30179	30215	31906
		S/T	0.55	0.65	0.74	0.74	0.84	0.59	0.69	0.78	0.78	0.89	0.62	0.73	0.83	0.83	0.94	0.65	0.74	0.74	0.84	0.59
		PI	1.77	1.77	1.77	1.77	1.77	1.87	1.87	1.88	1.88	1.88	1.98	1.99	1.99	1.99	1.99	1.77	1.77	1.77	1.77	1.87
82°F(27.8°C)	TC	29566	29601	29630	29636	29671	31332	31373	31408	31414	31449	33220	33256	33292	33298	33339	29601	29630	29636	29671	31332	
	S/T	0.56	0.66	0.75	0.75	0.85	0.59	0.70	0.79	0.79	0.90	0.63	0.74	0.84	0.84	0.95	0.66	0.75	0.75	0.85	0.59	
	PI	1.84	1.84	1.85	1.85	1.85	1.95	1.95	1.96	1.96	1.96	2.07	2.07	2.07	2.07	2.08	1.84	1.85	1.85	1.85	1.95	
86°F(30.0°C)	TC	28547	28581	28609	28614	28648	30252	30292	30325	30331	30365	32075	32110	32145	32150	32190	28581	28609	28614	28648	30252	
	S/T	0.57	0.66	0.75	0.75	0.86	0.60	0.70	0.80	0.80	0.91	0.64	0.75	0.85	0.85	0.97	0.66	0.75	0.75	0.86	0.60	
	PI	1.94	1.94	1.94	1.94	1.94	2.05	2.05	2.06	2.06	2.06	2.18	2.18	2.18	2.18	2.18	1.94	1.94	1.94	1.94	2.05	
95°F(35.0°C)	TC	26254	26285	26311	26316	26347	27822	27859	27890	27895	27926	29499	29531	29563	29568	29604	26285	26311	26316	26347	27822	
	S/T	0.57	0.66	0.75	0.75	0.86	0.60	0.70	0.80	0.80	0.91	0.64	0.75	0.85	0.85	0.97	0.66	0.75	0.75	0.86	0.60	
	PI	2.15	2.15	2.15	2.15	2.16	2.28	2.28	2.28	2.28	2.28	2.41	2.42	2.42	2.42	2.42	2.15	2.15	2.15	2.16	2.28	
104°F(40.0°C)	TC	23532	23560	23583	23588	23616	24938	24970	24998	25003	25031	26440	26469	26498	26502	26535	23560	23583	23588	23616	24938	
	S/T	0.58	0.68	0.77	0.77	0.88	0.62	0.72	0.82	0.82	0.93	0.65	0.76	0.87	0.87	0.99	0.68	0.77	0.77	0.88	0.62	
	PI	2.14	2.14	2.15	2.15	2.15	2.27	2.27	2.28	2.28	2.28	2.41	2.41	2.41	2.41	2.42	2.14	2.15	2.15	2.15	2.27	
110°F(43.0°C)	TC	21899	21925	21946	21951	21977	23207	23237	23263	23267	23293	24605	24632	24659	24663	24693	21925	21946	21951	21977	23207	
	S/T	0.60	0.71	0.80	0.80	0.91	0.64	0.75	0.85	0.85	0.97	0.68	0.79	0.90	0.90	1.00	0.71	0.80	0.80	0.91	0.64	
	PI	2.14	2.14	2.14	2.14	2.15	2.27	2.27	2.27	2.27	2.27	2.40	2.40	2.41	2.41	2.41	2.14	2.14	2.14	2.15	2.27	
115°F(46.0°C)	TC	17874	17895	17913	17916	17937	18942	18966	18987	18991	19012	20083	20105	20127	20130	20155	17895	17913	17916	17937	18942	
	S/T	0.61	0.71	0.81	0.81	0.92	0.65	0.76	0.86	0.86	0.98	0.68	0.80	0.91	0.91	1.00	0.71	0.81	0.81	0.92	0.65	
	PI	1.89	1.89	1.90	1.90	1.90	2.01	2.01	2.01	2.01	2.01	2.13	2.13	2.13	2.13	2.13	1.89	1.90	1.90	1.90	2.01	
122°F(50.0°C)	TC	12507	12522	12534	12537	12552	13254	13272	13286	13289	13304	14053	14068	14084	14086	14103	12522	12534	12537	12552	13254	
	S/T	0.62	0.73	0.83	0.83	0.95	0.66	0.77	0.88	0.88	1.00	0.70	0.82	0.93	0.93	1.00	0.73	0.83	0.83	0.95	0.66	
	PI	1.56	1.57	1.57	1.57	1.57	1.66	1.66	1.66	1.66	1.66	1.76	1.76	1.76	1.76	1.76	1.57	1.57	1.57	1.57	1.66	

HEATING PERFORMANCE

6K HEATING PERFORMANCE

Table 12 – 6K Heating Performance

AIRFLOW (CFM)	HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE										
	OUTDOOR DB(°F)	TC: Total Heating Capacity (BTU/hr)					PI: Power Input (kW)				
		Indoor Conditions(DB °F)					Indoor Conditions(DB °F)				
		60.8°F (16.0°C)	68°F (20.0°C)	70°F (21.1°C)	71.6°F (22.0°C)	75.2°F (24.0°C)	60.8°F (16.0°C)	68°F (20.0°C)	70°F (21.1°C)	71.6°F (22.0°C)	75.2°F (24.0°C)
152	-22°F(-30.0°C)	3520	3450	3433	1540	1526	1.64	1.65	1.65	1.66	1.66
	-13°F(-25.0°C)	4509	4419	4397	1896	1879	1.70	1.71	1.72	1.72	1.73
	-4°F(-20.0°C)	4945	4846	4822	2080	2061	1.70	1.71	1.72	1.72	1.73
	0°F(-17.8°C)	5777	5662	5634	2430	2408	1.80	1.81	1.82	1.82	1.83
	5°F(-15.0°C)	6818	6681	6648	2867	2841	1.92	1.94	1.94	1.94	1.95
	14°F(-10.0°C)	7018	6878	6843	2951	2925	1.84	1.85	1.86	1.86	1.87
	17°F(-8.3°C)	7085	6943	6908	2979	2952	1.81	1.83	1.83	1.83	1.84
	22°F(-5.6°C)	6996	6856	6821	2942	2915	1.73	1.74	1.74	1.75	1.75
	27°F(-2.8°C)	6906	6768	6734	2904	2878	1.64	1.65	1.66	1.66	1.67
	32°F(-0.0°C)	6817	6681	6647	2867	2841	1.55	1.56	1.57	1.57	1.58
	35°F(1.7°C)	6764	6628	6595	2844	2819	1.50	1.51	1.52	1.52	1.52
	37°F(2.8°C)	7034	6893	6858	2958	2931	1.50	1.52	1.52	1.52	1.53
	42°F(5.6°C)	7708	7554	7516	3241	3212	1.51	1.52	1.53	1.53	1.54
	44.6°F(7.0°C)	7978	7818	7779	3355	3325	1.52	1.53	1.53	1.53	1.54
	47°F(8.3°C)	8383	8215	8174	3525	3493	1.52	1.53	1.54	1.54	1.55
	52°F(11.1°C)	8145	7982	7942	3425	3394	1.33	1.34	1.34	1.34	1.35
	57°F(13.9°C)	7907	7749	7710	3325	3295	1.13	1.14	1.14	1.14	1.15
59°F(15.0°C)	7812	7656	7617	3285	3255	1.05	1.06	1.06	1.06	1.07	
62°F(16.7°C)	7669	7516	7478	3225	3196	0.93	0.94	0.94	0.94	0.95	
64.4°F(18.0°C)	7574	7422	7385	3185	3156	0.86	0.86	0.86	0.87	0.87	
211	-22°F(-30.0°C)	4598	4506	4483	2997	2970	1.65	1.67	1.67	1.67	1.68
	-13°F(-25.0°C)	5775	5659	5631	3690	3657	1.72	1.73	1.73	1.74	1.75
	-4°F(-20.0°C)	6334	6207	6176	4048	4011	1.72	1.73	1.73	1.74	1.74
	0°F(-17.8°C)	7399	7251	7215	4729	4686	1.82	1.83	1.83	1.84	1.84
	5°F(-15.0°C)	8731	8557	8514	5580	5530	1.94	1.96	1.96	1.96	1.97
	14°F(-10.0°C)	8988	8808	8764	5744	5692	1.86	1.87	1.88	1.88	1.89
	17°F(-8.3°C)	9074	8892	8848	5799	5746	1.83	1.84	1.85	1.85	1.86
	22°F(-5.6°C)	8959	8780	8736	5726	5674	1.74	1.76	1.76	1.76	1.77
	27°F(-2.8°C)	8845	8668	8625	5653	5602	1.66	1.67	1.67	1.68	1.68
	32°F(-0.0°C)	8731	8556	8514	5580	5529	1.57	1.58	1.58	1.59	1.59
	35°F(1.7°C)	8662	8489	8447	5536	5486	1.52	1.53	1.53	1.53	1.54
	37°F(2.8°C)	9008	8828	8784	5757	5705	1.52	1.53	1.53	1.54	1.54
	42°F(5.6°C)	9872	9675	9626	6309	6252	1.53	1.54	1.54	1.55	1.55
	44.6°F(7.0°C)	10218	10013	9963	6530	6471	1.53	1.54	1.55	1.55	1.56
	47°F(8.3°C)	10736	10521	10469	6861	6799	1.54	1.55	1.55	1.56	1.56
	52°F(11.1°C)	10431	10223	10172	6666	6606	1.34	1.35	1.35	1.36	1.36
	57°F(13.9°C)	10127	9924	9874	6472	6413	1.14	1.15	1.15	1.15	1.16
59°F(15.0°C)	10005	9805	9756	6394	6336	1.06	1.07	1.07	1.07	1.08	
62°F(16.7°C)	9822	9626	9577	6277	6220	0.94	0.95	0.95	0.95	0.96	
64.4°F(18.0°C)	9700	9506	9459	6199	6143	0.86	0.87	0.87	0.87	0.88	

Table 12 – 6K Heating Performance (Continued)

423	-22°F(-30.0°C)	6005	5885	5856	5832	5780	1.67	1.68	1.69	1.69	1.70
	-13°F(-25.0°C)	7396	7248	7212	7183	7118	1.73	1.75	1.75	1.76	1.76
	-4°F(-20.0°C)	8112	7949	7910	7878	7807	1.73	1.75	1.75	1.75	1.76
	0°F(-17.8°C)	9477	9287	9241	9204	9121	1.83	1.85	1.85	1.86	1.86
	5°F(-15.0°C)	11183	10959	10904	10861	10763	1.96	1.98	1.98	1.98	1.99
	14°F(-10.0°C)	11511	11281	11225	11180	11079	1.88	1.89	1.90	1.90	1.91
	17°F(-8.3°C)	11621	11388	11331	11286	11184	1.85	1.86	1.87	1.87	1.88
	22°F(-5.6°C)	11474	11245	11189	11144	11044	1.76	1.77	1.78	1.78	1.79
	27°F(-2.8°C)	11328	11102	11046	11002	10903	1.67	1.69	1.69	1.69	1.70
	32°F(-0.0°C)	11182	10958	10904	10860	10762	1.58	1.60	1.60	1.60	1.61
	35°F(1.7°C)	11094	10872	10818	10775	10678	1.53	1.54	1.55	1.55	1.56
	37°F(2.8°C)	11537	11306	11250	11205	11104	1.53	1.55	1.55	1.55	1.56
	42°F(5.6°C)	12643	12390	12328	12279	12169	1.54	1.56	1.56	1.56	1.57
	44.6°F(7.0°C)	13086	12824	12760	12709	12595	1.55	1.56	1.56	1.57	1.57
	47°F(8.3°C)	13750	13475	13407	13354	13234	1.55	1.56	1.57	1.57	1.58
	52°F(11.1°C)	13360	13092	13027	12975	12858	1.35	1.36	1.37	1.37	1.37
	57°F(13.9°C)	12969	12710	12647	12596	12483	1.15	1.16	1.16	1.17	1.17
	59°F(15.0°C)	12813	12557	12494	12444	12332	1.07	1.08	1.08	1.09	1.09
62°F(16.7°C)	12579	12328	12266	12217	12107	0.95	0.96	0.96	0.96	0.97	
64.4°F(18.0°C)	12423	12175	12114	12065	11957	0.87	0.88	0.88	0.88	0.89	
558	-22°F(-30.0°C)	7691	7537	7500	7470	7402	1.69	1.70	1.70	1.71	1.71
	-13°F(-25.0°C)	9472	9283	9236	9199	9117	1.75	1.77	1.77	1.77	1.78
	-4°F(-20.0°C)	10389	10181	10130	10090	9999	1.75	1.76	1.77	1.77	1.78
	0°F(-17.8°C)	12137	11894	11835	11787	11681	1.85	1.87	1.87	1.87	1.88
	5°F(-15.0°C)	14322	14035	13965	13909	13784	1.98	2.00	2.00	2.00	2.01
	14°F(-10.0°C)	14743	14448	14376	14318	14189	1.90	1.91	1.91	1.92	1.93
	17°F(-8.3°C)	14883	14585	14512	14454	14324	1.87	1.88	1.89	1.89	1.90
	22°F(-5.6°C)	14696	14402	14330	14272	14144	1.78	1.79	1.80	1.80	1.81
	27°F(-2.8°C)	14508	14218	14147	14091	13964	1.69	1.70	1.71	1.71	1.72
	32°F(-0.0°C)	14321	14035	13964	13909	13783	1.60	1.61	1.62	1.62	1.63
	35°F(1.7°C)	14209	13925	13855	13799	13675	1.55	1.56	1.56	1.57	1.57
	37°F(2.8°C)	14776	14480	14408	14350	14221	1.55	1.56	1.57	1.57	1.58
	42°F(5.6°C)	16193	15869	15789	15726	15585	1.56	1.57	1.57	1.58	1.58
	44.6°F(7.0°C)	16759	16424	16342	16277	16130	1.56	1.58	1.58	1.58	1.59
	47°F(8.3°C)	17610	17258	17171	17103	16949	1.57	1.58	1.58	1.59	1.59
	52°F(11.1°C)	17110	16768	16684	16617	16468	1.37	1.38	1.38	1.38	1.39
	57°F(13.9°C)	16610	16278	16197	16132	15987	1.16	1.17	1.18	1.18	1.18
	59°F(15.0°C)	16410	16082	16002	15938	15794	1.08	1.09	1.09	1.10	1.10
62°F(16.7°C)	16111	15788	15710	15647	15506	0.96	0.97	0.97	0.97	0.98	
64.4°F(18.0°C)	15911	15593	15515	15453	15313	0.88	0.89	0.89	0.89	0.90	

LEGEND

DB - Dry Bulb

TC - Total Net Capacity (1000 Btu/hour)

Input - Total Power (kW)

COP - W/W

9K HEATING PERFORMANCE

Table 13 – 9K Heating Performance

AIRFLOW (CFM)	HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE										
	OUTDOOR DB(°F)	TC: Total Heating Capacity (BTU/hr)					PI: Power Input (kW)				
		Indoor Conditions(DB °F)					Indoor Conditions(DB °F)				
		60.8°F (16.0°C)	68°F (20.0°C)	70°F (21.1°C)	71.6°F (22.0°C)	75.2°F (24.0°C)	60.8°F (16.0°C)	68°F (20.0°C)	70°F (21.1°C)	71.6°F (22.0°C)	75.2°F (24.0°C)
152	-22°F(-30.0°C)	3520	3450	3433	1540	1526	1.64	1.65	1.65	1.66	1.66
	-13°F(-25.0°C)	4509	4419	4397	1896	1879	1.70	1.71	1.72	1.72	1.73
	-4°F(-20.0°C)	4945	4846	4822	2080	2061	1.70	1.71	1.72	1.72	1.73
	0°F(-17.8°C)	5777	5662	5634	2430	2408	1.80	1.81	1.82	1.82	1.83
	5°F(-15.0°C)	6818	6681	6648	2867	2841	1.92	1.94	1.94	1.94	1.95
	14°F(-10.0°C)	7018	6878	6843	2951	2925	1.84	1.85	1.86	1.86	1.87
	17°F(-8.3°C)	7085	6943	6908	2979	2952	1.81	1.83	1.83	1.83	1.84
	22°F(-5.6°C)	6996	6856	6821	2942	2915	1.73	1.74	1.74	1.75	1.75
	27°F(-2.8°C)	6906	6768	6734	2904	2878	1.64	1.65	1.66	1.66	1.67
	32°F(-0.0°C)	6817	6681	6647	2867	2841	1.55	1.56	1.57	1.57	1.58
	35°F(1.7°C)	6764	6628	6595	2844	2819	1.50	1.51	1.52	1.52	1.52
	37°F(2.8°C)	7034	6893	6858	2958	2931	1.50	1.52	1.52	1.52	1.53
	42°F(5.6°C)	7708	7554	7516	3241	3212	1.51	1.52	1.53	1.53	1.54
	44.6°F(7.0°C)	7978	7818	7779	3355	3325	1.52	1.53	1.53	1.53	1.54
	47°F(8.3°C)	8383	8215	8174	3525	3493	1.52	1.53	1.54	1.54	1.55
	52°F(11.1°C)	8145	7982	7942	3425	3394	1.33	1.34	1.34	1.34	1.35
	57°F(13.9°C)	7907	7749	7710	3325	3295	1.13	1.14	1.14	1.14	1.15
59°F(15.0°C)	7812	7656	7617	3285	3255	1.05	1.06	1.06	1.06	1.07	
62°F(16.7°C)	7669	7516	7478	3225	3196	0.93	0.94	0.94	0.94	0.95	
64.4°F(18.0°C)	7574	7422	7385	3185	3156	0.86	0.86	0.86	0.87	0.87	
211	-22°F(-30.0°C)	4598	4506	4483	2997	2970	1.65	1.67	1.67	1.67	1.68
	-13°F(-25.0°C)	5775	5659	5631	3690	3657	1.72	1.73	1.73	1.74	1.75
	-4°F(-20.0°C)	6334	6207	6176	4048	4011	1.72	1.73	1.73	1.74	1.74
	0°F(-17.8°C)	7399	7251	7215	4729	4686	1.82	1.83	1.83	1.84	1.84
	5°F(-15.0°C)	8731	8557	8514	5580	5530	1.94	1.96	1.96	1.96	1.97
	14°F(-10.0°C)	8988	8808	8764	5744	5692	1.86	1.87	1.88	1.88	1.89
	17°F(-8.3°C)	9074	8892	8848	5799	5746	1.83	1.84	1.85	1.85	1.86
	22°F(-5.6°C)	8959	8780	8736	5726	5674	1.74	1.76	1.76	1.76	1.77
	27°F(-2.8°C)	8845	8668	8625	5653	5602	1.66	1.67	1.67	1.68	1.68
	32°F(-0.0°C)	8731	8556	8514	5580	5529	1.57	1.58	1.58	1.59	1.59
	35°F(1.7°C)	8662	8489	8447	5536	5486	1.52	1.53	1.53	1.53	1.54
	37°F(2.8°C)	9008	8828	8784	5757	5705	1.52	1.53	1.53	1.54	1.54
	42°F(5.6°C)	9872	9675	9626	6309	6252	1.53	1.54	1.54	1.55	1.55
	44.6°F(7.0°C)	10218	10013	9963	6530	6471	1.53	1.54	1.55	1.55	1.56
	47°F(8.3°C)	10736	10521	10469	6861	6799	1.54	1.55	1.55	1.56	1.56
	52°F(11.1°C)	10431	10223	10172	6666	6606	1.34	1.35	1.35	1.36	1.36
	57°F(13.9°C)	10127	9924	9874	6472	6413	1.14	1.15	1.15	1.15	1.16
59°F(15.0°C)	10005	9805	9756	6394	6336	1.06	1.07	1.07	1.07	1.08	
62°F(16.7°C)	9822	9626	9577	6277	6220	0.94	0.95	0.95	0.95	0.96	
64.4°F(18.0°C)	9700	9506	9459	6199	6143	0.86	0.87	0.87	0.87	0.88	

Table 13 – 9K Heating Performance (Continued)

423	-22°F(-30.0°C)	6005	5885	5856	5832	5780	1.67	1.68	1.69	1.69	1.70
	-13°F(-25.0°C)	7396	7248	7212	7183	7118	1.73	1.75	1.75	1.76	1.76
	-4°F(-20.0°C)	8112	7949	7910	7878	7807	1.73	1.75	1.75	1.75	1.76
	0°F(-17.8°C)	9477	9287	9241	9204	9121	1.83	1.85	1.85	1.86	1.86
	5°F(-15.0°C)	11183	10959	10904	10861	10763	1.96	1.98	1.98	1.98	1.99
	14°F(-10.0°C)	11511	11281	11225	11180	11079	1.88	1.89	1.90	1.90	1.91
	17°F(-8.3°C)	11621	11388	11331	11286	11184	1.85	1.86	1.87	1.87	1.88
	22°F(-5.6°C)	11474	11245	11189	11144	11044	1.76	1.77	1.78	1.78	1.79
	27°F(-2.8°C)	11328	11102	11046	11002	10903	1.67	1.69	1.69	1.69	1.70
	32°F(-0.0°C)	11182	10958	10904	10860	10762	1.58	1.60	1.60	1.60	1.61
	35°F(1.7°C)	11094	10872	10818	10775	10678	1.53	1.54	1.55	1.55	1.56
	37°F(2.8°C)	11537	11306	11250	11205	11104	1.53	1.55	1.55	1.55	1.56
	42°F(5.6°C)	12643	12390	12328	12279	12169	1.54	1.56	1.56	1.56	1.57
	44.6°F(7.0°C)	13086	12824	12760	12709	12595	1.55	1.56	1.56	1.57	1.57
	47°F(8.3°C)	13750	13475	13407	13354	13234	1.55	1.56	1.57	1.57	1.58
	52°F(11.1°C)	13360	13092	13027	12975	12858	1.35	1.36	1.37	1.37	1.37
	57°F(13.9°C)	12969	12710	12647	12596	12483	1.15	1.16	1.16	1.17	1.17
	59°F(15.0°C)	12813	12557	12494	12444	12332	1.07	1.08	1.08	1.09	1.09
62°F(16.7°C)	12579	12328	12266	12217	12107	0.95	0.96	0.96	0.96	0.97	
64.4°F(18.0°C)	12423	12175	12114	12065	11957	0.87	0.88	0.88	0.88	0.89	
558	-22°F(-30.0°C)	7691	7537	7500	7470	7402	1.69	1.70	1.70	1.71	1.71
	-13°F(-25.0°C)	9472	9283	9236	9199	9117	1.75	1.77	1.77	1.77	1.78
	-4°F(-20.0°C)	10389	10181	10130	10090	9999	1.75	1.76	1.77	1.77	1.78
	0°F(-17.8°C)	12137	11894	11835	11787	11681	1.85	1.87	1.87	1.87	1.88
	5°F(-15.0°C)	14322	14035	13965	13909	13784	1.98	2.00	2.00	2.00	2.01
	14°F(-10.0°C)	14743	14448	14376	14318	14189	1.90	1.91	1.91	1.92	1.93
	17°F(-8.3°C)	14883	14585	14512	14454	14324	1.87	1.88	1.89	1.89	1.90
	22°F(-5.6°C)	14696	14402	14330	14272	14144	1.78	1.79	1.80	1.80	1.81
	27°F(-2.8°C)	14508	14218	14147	14091	13964	1.69	1.70	1.71	1.71	1.72
	32°F(-0.0°C)	14321	14035	13964	13909	13783	1.60	1.61	1.62	1.62	1.63
	35°F(1.7°C)	14209	13925	13855	13799	13675	1.55	1.56	1.56	1.57	1.57
	37°F(2.8°C)	14776	14480	14408	14350	14221	1.55	1.56	1.57	1.57	1.58
	42°F(5.6°C)	16193	15869	15789	15726	15585	1.56	1.57	1.57	1.58	1.58
	44.6°F(7.0°C)	16759	16424	16342	16277	16130	1.56	1.58	1.58	1.58	1.59
	47°F(8.3°C)	17610	17258	17171	17103	16949	1.57	1.58	1.58	1.59	1.59
	52°F(11.1°C)	17110	16768	16684	16617	16468	1.37	1.38	1.38	1.38	1.39
	57°F(13.9°C)	16610	16278	16197	16132	15987	1.16	1.17	1.18	1.18	1.18
	59°F(15.0°C)	16410	16082	16002	15938	15794	1.08	1.09	1.09	1.10	1.10
62°F(16.7°C)	16111	15788	15710	15647	15506	0.96	0.97	0.97	0.97	0.98	
64.4°F(18.0°C)	15911	15593	15515	15453	15313	0.88	0.89	0.89	0.89	0.90	

LEGEND

DB - Dry Bulb

TC - Total Net Capacity (1000 Btu/hour)

Input - Total Power (kW)

COP - W/W

12K HEATING PERFORMANCE

Table 14 – 12K Heating Performance

AIRFLOW (CFM)	HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE										
	OUTDOOR DB(°F)	TC: Total Heating Capacity (BTU/hr)					PI: Power Input (kW)				
		Indoor Conditions(DB °F)					Indoor Conditions(DB °F)				
		60.8°F (16.0°C)	68°F (20.0°C)	70°F (21.1°C)	71.6°F (22.0°C)	75.2°F (24.0°C)	60.8°F (16.0°C)	68°F (20.0°C)	70°F (21.1°C)	71.6°F (22.0°C)	75.2°F (24.0°C)
152	-22°F(-30.0°C)	3520	3450	3433	1540	1526	1.64	1.65	1.65	1.66	1.66
	-13°F(-25.0°C)	4509	4419	4397	1896	1879	1.70	1.71	1.72	1.72	1.73
	-4°F(-20.0°C)	4945	4846	4822	2080	2061	1.70	1.71	1.72	1.72	1.73
	0°F(-17.8°C)	5777	5662	5634	2430	2408	1.80	1.81	1.82	1.82	1.83
	5°F(-15.0°C)	6818	6681	6648	2867	2841	1.92	1.94	1.94	1.94	1.95
	14°F(-10.0°C)	7018	6878	6843	2951	2925	1.84	1.85	1.86	1.86	1.87
	17°F(-8.3°C)	7085	6943	6908	2979	2952	1.81	1.83	1.83	1.83	1.84
	22°F(-5.6°C)	6996	6856	6821	2942	2915	1.73	1.74	1.74	1.75	1.75
	27°F(-2.8°C)	6906	6768	6734	2904	2878	1.64	1.65	1.66	1.66	1.67
	32°F(-0.0°C)	6817	6681	6647	2867	2841	1.55	1.56	1.57	1.57	1.58
	35°F(1.7°C)	6764	6628	6595	2844	2819	1.50	1.51	1.52	1.52	1.52
	37°F(2.8°C)	7034	6893	6858	2958	2931	1.50	1.52	1.52	1.52	1.53
	42°F(5.6°C)	7708	7554	7516	3241	3212	1.51	1.52	1.53	1.53	1.54
	44.6°F(7.0°C)	7978	7818	7779	3355	3325	1.52	1.53	1.53	1.53	1.54
	47°F(8.3°C)	8383	8215	8174	3525	3493	1.52	1.53	1.54	1.54	1.55
	52°F(11.1°C)	8145	7982	7942	3425	3394	1.33	1.34	1.34	1.34	1.35
	57°F(13.9°C)	7907	7749	7710	3325	3295	1.13	1.14	1.14	1.14	1.15
59°F(15.0°C)	7812	7656	7617	3285	3255	1.05	1.06	1.06	1.06	1.07	
62°F(16.7°C)	7669	7516	7478	3225	3196	0.93	0.94	0.94	0.94	0.95	
64.4°F(18.0°C)	7574	7422	7385	3185	3156	0.86	0.86	0.86	0.87	0.87	
211	-22°F(-30.0°C)	4598	4506	4483	2997	2970	1.65	1.67	1.67	1.67	1.68
	-13°F(-25.0°C)	5775	5659	5631	3690	3657	1.72	1.73	1.73	1.74	1.75
	-4°F(-20.0°C)	6334	6207	6176	4048	4011	1.72	1.73	1.73	1.74	1.74
	0°F(-17.8°C)	7399	7251	7215	4729	4686	1.82	1.83	1.83	1.84	1.84
	5°F(-15.0°C)	8731	8557	8514	5580	5530	1.94	1.96	1.96	1.96	1.97
	14°F(-10.0°C)	8988	8808	8764	5744	5692	1.86	1.87	1.88	1.88	1.89
	17°F(-8.3°C)	9074	8892	8848	5799	5746	1.83	1.84	1.85	1.85	1.86
	22°F(-5.6°C)	8959	8780	8736	5726	5674	1.74	1.76	1.76	1.76	1.77
	27°F(-2.8°C)	8845	8668	8625	5653	5602	1.66	1.67	1.67	1.68	1.68
	32°F(-0.0°C)	8731	8556	8514	5580	5529	1.57	1.58	1.58	1.59	1.59
	35°F(1.7°C)	8662	8489	8447	5536	5486	1.52	1.53	1.53	1.53	1.54
	37°F(2.8°C)	9008	8828	8784	5757	5705	1.52	1.53	1.53	1.54	1.54
	42°F(5.6°C)	9872	9675	9626	6309	6252	1.53	1.54	1.54	1.55	1.55
	44.6°F(7.0°C)	10218	10013	9963	6530	6471	1.53	1.54	1.55	1.55	1.56
	47°F(8.3°C)	10736	10521	10469	6861	6799	1.54	1.55	1.55	1.56	1.56
	52°F(11.1°C)	10431	10223	10172	6666	6606	1.34	1.35	1.35	1.36	1.36
	57°F(13.9°C)	10127	9924	9874	6472	6413	1.14	1.15	1.15	1.15	1.16
59°F(15.0°C)	10005	9805	9756	6394	6336	1.06	1.07	1.07	1.07	1.08	
62°F(16.7°C)	9822	9626	9577	6277	6220	0.94	0.95	0.95	0.95	0.96	
64.4°F(18.0°C)	9700	9506	9459	6199	6143	0.86	0.87	0.87	0.87	0.88	

Table 14 – 12K Heating Performance (Continued)

423	-22°F(-30.0°C)	6005	5885	5856	5832	5780	1.67	1.68	1.69	1.69	1.70
	-13°F(-25.0°C)	7396	7248	7212	7183	7118	1.73	1.75	1.75	1.76	1.76
	-4°F(-20.0°C)	8112	7949	7910	7878	7807	1.73	1.75	1.75	1.75	1.76
	0°F(-17.8°C)	9477	9287	9241	9204	9121	1.83	1.85	1.85	1.86	1.86
	5°F(-15.0°C)	11183	10959	10904	10861	10763	1.96	1.98	1.98	1.98	1.99
	14°F(-10.0°C)	11511	11281	11225	11180	11079	1.88	1.89	1.90	1.90	1.91
	17°F(-8.3°C)	11621	11388	11331	11286	11184	1.85	1.86	1.87	1.87	1.88
	22°F(-5.6°C)	11474	11245	11189	11144	11044	1.76	1.77	1.78	1.78	1.79
	27°F(-2.8°C)	11328	11102	11046	11002	10903	1.67	1.69	1.69	1.69	1.70
	32°F(-0.0°C)	11182	10958	10904	10860	10762	1.58	1.60	1.60	1.60	1.61
	35°F(1.7°C)	11094	10872	10818	10775	10678	1.53	1.54	1.55	1.55	1.56
	37°F(2.8°C)	11537	11306	11250	11205	11104	1.53	1.55	1.55	1.55	1.56
	42°F(5.6°C)	12643	12390	12328	12279	12169	1.54	1.56	1.56	1.56	1.57
	44.6°F(7.0°C)	13086	12824	12760	12709	12595	1.55	1.56	1.56	1.57	1.57
	47°F(8.3°C)	13750	13475	13407	13354	13234	1.55	1.56	1.57	1.57	1.58
	52°F(11.1°C)	13360	13092	13027	12975	12858	1.35	1.36	1.37	1.37	1.37
	57°F(13.9°C)	12969	12710	12647	12596	12483	1.15	1.16	1.16	1.17	1.17
	59°F(15.0°C)	12813	12557	12494	12444	12332	1.07	1.08	1.08	1.09	1.09
62°F(16.7°C)	12579	12328	12266	12217	12107	0.95	0.96	0.96	0.96	0.97	
64.4°F(18.0°C)	12423	12175	12114	12065	11957	0.87	0.88	0.88	0.88	0.89	
558	-22°F(-30.0°C)	7691	7537	7500	7470	7402	1.69	1.70	1.70	1.71	1.71
	-13°F(-25.0°C)	9472	9283	9236	9199	9117	1.75	1.77	1.77	1.77	1.78
	-4°F(-20.0°C)	10389	10181	10130	10090	9999	1.75	1.76	1.77	1.77	1.78
	0°F(-17.8°C)	12137	11894	11835	11787	11681	1.85	1.87	1.87	1.87	1.88
	5°F(-15.0°C)	14322	14035	13965	13909	13784	1.98	2.00	2.00	2.00	2.01
	14°F(-10.0°C)	14743	14448	14376	14318	14189	1.90	1.91	1.91	1.92	1.93
	17°F(-8.3°C)	14883	14585	14512	14454	14324	1.87	1.88	1.89	1.89	1.90
	22°F(-5.6°C)	14696	14402	14330	14272	14144	1.78	1.79	1.80	1.80	1.81
	27°F(-2.8°C)	14508	14218	14147	14091	13964	1.69	1.70	1.71	1.71	1.72
	32°F(-0.0°C)	14321	14035	13964	13909	13783	1.60	1.61	1.62	1.62	1.63
	35°F(1.7°C)	14209	13925	13855	13799	13675	1.55	1.56	1.56	1.57	1.57
	37°F(2.8°C)	14776	14480	14408	14350	14221	1.55	1.56	1.57	1.57	1.58
	42°F(5.6°C)	16193	15869	15789	15726	15585	1.56	1.57	1.57	1.58	1.58
	44.6°F(7.0°C)	16759	16424	16342	16277	16130	1.56	1.58	1.58	1.58	1.59
	47°F(8.3°C)	17610	17258	17171	17103	16949	1.57	1.58	1.58	1.59	1.59
	52°F(11.1°C)	17110	16768	16684	16617	16468	1.37	1.38	1.38	1.38	1.39
	57°F(13.9°C)	16610	16278	16197	16132	15987	1.16	1.17	1.18	1.18	1.18
	59°F(15.0°C)	16410	16082	16002	15938	15794	1.08	1.09	1.09	1.10	1.10
62°F(16.7°C)	16111	15788	15710	15647	15506	0.96	0.97	0.97	0.97	0.98	
64.4°F(18.0°C)	15911	15593	15515	15453	15313	0.88	0.89	0.89	0.89	0.90	

LEGEND

DB - Dry Bulb

TC - Total Net Capacity (1000 Btu/hour)

Input - Total Power (kW)

COP - W/W

18K HEATING PERFORMANCE

Table 15 – 18K Heating Performance

AIRFLOW (CFM)	HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE										
	OUTDOOR DB(°F)	TC: Total Heating Capacity (BTU/hr)					PI: Power Input (kW)				
		Indoor Conditions(DB °F)					Indoor Conditions(DB °F)				
		60.8°F (16.0°C)	68°F (20.0°C)	70°F (21.1°C)	71.6°F (22.0°C)	75.2°F (24.0°C)	60.8°F (16.0°C)	68°F (20.0°C)	70°F (21.1°C)	71.6°F (22.0°C)	75.2°F (24.0°C)
152	-22°F(-30.0°C)	9296	9110	9064	5634	5583	2.43	2.45	2.46	2.46	2.47
	-13°F(-25.0°C)	11742	11507	11449	6842	6781	2.61	2.63	2.64	2.64	2.65
	-4°F(-20.0°C)	14633	14340	14268	8527	8450	2.67	2.69	2.69	2.70	2.71
	0°F(-17.8°C)	16007	15686	15608	9327	9244	2.77	2.79	2.80	2.81	2.82
	5°F(-15.0°C)	17724	17369	17282	10328	10235	2.90	2.93	2.93	2.94	2.95
	14°F(-10.0°C)	18119	17756	17667	10558	10463	2.95	2.98	2.98	2.99	3.00
	17°F(-8.3°C)	18250	17885	17796	10635	10539	2.97	2.99	3.00	3.01	3.02
	22°F(-5.6°C)	19171	18788	18694	11172	11071	2.97	2.99	3.00	3.01	3.02
	27°F(-2.8°C)	20092	19690	19592	11708	11603	2.97	2.99	3.00	3.01	3.02
	32°F(-0.0°C)	21013	20593	20490	12245	12135	2.97	2.99	3.00	3.01	3.02
	35°F(1.7°C)	21565	21134	21028	12567	12454	2.97	2.99	3.00	3.01	3.02
	37°F(2.8°C)	21509	21079	20973	12534	12421	2.87	2.89	2.89	2.90	2.91
	42°F(5.6°C)	21368	20940	20836	12452	12340	2.60	2.63	2.63	2.64	2.65
	44.6°F(7.0°C)	21311	20885	20781	12419	12307	2.50	2.52	2.53	2.53	2.54
	47°F(8.3°C)	21226	20802	20698	12369	12258	2.34	2.36	2.37	2.37	2.38
	52°F(11.1°C)	20801	20385	20283	12121	12012	2.16	2.18	2.19	2.19	2.20
	57°F(13.9°C)	20375	19967	19867	11873	11766	1.98	2.00	2.00	2.01	2.02
59°F(15.0°C)	20204	19800	19701	11774	11668	1.91	1.93	1.93	1.93	1.94	
62°F(16.7°C)	19949	19550	19452	11625	11520	1.80	1.82	1.82	1.83	1.83	
64.4°F(18.0°C)	19779	19383	19286	11526	11422	1.73	1.74	1.75	1.75	1.76	
211	-22°F(-30.0°C)	10694	10480	10427	8204	8130	2.46	2.48	2.48	2.49	2.50
	-13°F(-25.0°C)	13246	12981	12916	9965	9875	2.64	2.66	2.66	2.67	2.68
	-4°F(-20.0°C)	16507	16177	16096	12418	12306	2.69	2.72	2.72	2.73	2.74
	0°F(-17.8°C)	18056	17695	17607	13584	13461	2.80	2.82	2.83	2.83	2.85
	5°F(-15.0°C)	19993	19594	19496	15041	14906	2.93	2.96	2.96	2.97	2.98
	14°F(-10.0°C)	20439	20030	19930	15376	15238	2.98	3.01	3.01	3.02	3.03
	17°F(-8.3°C)	20587	20176	20075	15488	15348	3.00	3.02	3.03	3.04	3.05
	22°F(-5.6°C)	21626	21194	21088	16269	16123	3.00	3.02	3.03	3.04	3.05
	27°F(-2.8°C)	22665	22212	22101	17051	16897	3.00	3.02	3.03	3.04	3.05
	32°F(-0.0°C)	23704	23230	23114	17832	17672	3.00	3.02	3.03	3.04	3.05
	35°F(1.7°C)	24327	23840	23721	18301	18136	3.00	3.02	3.03	3.04	3.05
	37°F(2.8°C)	24263	23778	23659	18253	18089	2.89	2.92	2.92	2.93	2.94
	42°F(5.6°C)	24104	23622	23504	18133	17970	2.63	2.65	2.66	2.66	2.67
	44.6°F(7.0°C)	24040	23560	23442	18085	17923	2.53	2.55	2.55	2.56	2.57
	47°F(8.3°C)	23945	23466	23349	18014	17851	2.37	2.39	2.39	2.40	2.41
	52°F(11.1°C)	23464	22995	22880	17652	17493	2.19	2.20	2.21	2.21	2.22
	57°F(13.9°C)	22984	22524	22412	17291	17135	2.00	2.02	2.02	2.03	2.04
59°F(15.0°C)	22792	22336	22224	17146	16992	1.93	1.95	1.95	1.95	1.96	
62°F(16.7°C)	22504	22054	21943	16929	16777	1.82	1.84	1.84	1.84	1.85	
64.4°F(18.0°C)	22311	21865	21756	16785	16634	1.75	1.76	1.77	1.77	1.78	

Table 15 – 18K Heating Performance (Continued)

423	-22°F(-30.0°C)	12302	12056	11996	11948	11840	2.48	2.50	2.51	2.51	2.52
	-13°F(-25.0°C)	14942	14643	14570	14511	14381	2.66	2.69	2.69	2.70	2.71
	-4°F(-20.0°C)	18621	18248	18157	18084	17922	2.72	2.74	2.75	2.75	2.76
	0°F(-17.8°C)	20369	19961	19862	19782	19604	2.83	2.85	2.86	2.86	2.87
	5°F(-15.0°C)	22554	22103	21992	21904	21707	2.96	2.99	2.99	3.00	3.01
	14°F(-10.0°C)	23056	22595	22482	22392	22191	3.01	3.04	3.04	3.05	3.06
	17°F(-8.3°C)	23224	22759	22646	22555	22352	3.03	3.05	3.06	3.07	3.08
	22°F(-5.6°C)	24396	23908	23788	23693	23480	3.03	3.05	3.06	3.07	3.08
	27°F(-2.8°C)	25568	25056	24931	24831	24608	3.03	3.05	3.06	3.07	3.08
	32°F(-0.0°C)	26739	26205	26074	25969	25736	3.03	3.05	3.06	3.07	3.08
	35°F(1.7°C)	27442	26894	26759	26652	26412	3.03	3.05	3.06	3.07	3.08
	37°F(2.8°C)	27371	26823	26689	26582	26343	2.92	2.95	2.95	2.96	2.97
	42°F(5.6°C)	27191	26647	26514	26408	26170	2.66	2.68	2.68	2.69	2.70
	44.6°F(7.0°C)	27119	26577	26444	26338	26101	2.55	2.57	2.58	2.58	2.59
	47°F(8.3°C)	27011	26471	26339	26233	25997	2.39	2.41	2.42	2.42	2.43
	52°F(11.1°C)	26469	25940	25810	25707	25476	2.21	2.23	2.23	2.23	2.24
	57°F(13.9°C)	25927	25409	25282	25181	24954	2.02	2.04	2.04	2.05	2.06
	59°F(15.0°C)	25711	25196	25070	24970	24745	1.95	1.97	1.97	1.97	1.98
62°F(16.7°C)	25386	24878	24753	24654	24433	1.84	1.85	1.86	1.86	1.87	
64.4°F(18.0°C)	25169	24665	24542	24444	24224	1.77	1.78	1.78	1.79	1.79	
558	-22°F(-30.0°C)	13878	13600	13532	13478	13357	2.51	2.53	2.53	2.54	2.55
	-13°F(-25.0°C)	16855	16518	16436	16370	16223	2.69	2.71	2.72	2.72	2.73
	-4°F(-20.0°C)	21005	20585	20482	20400	20217	2.75	2.77	2.78	2.78	2.79
	0°F(-17.8°C)	22977	22518	22405	22315	22115	2.86	2.88	2.89	2.89	2.90
	5°F(-15.0°C)	25442	24933	24809	24709	24487	2.99	3.02	3.02	3.03	3.04
	14°F(-10.0°C)	26009	25489	25361	25260	25033	3.04	3.07	3.07	3.08	3.09
	17°F(-8.3°C)	26198	25674	25546	25443	25214	3.06	3.08	3.09	3.10	3.11
	22°F(-5.6°C)	27520	26969	26835	26727	26487	3.06	3.08	3.09	3.10	3.11
	27°F(-2.8°C)	28842	28265	28124	28011	27759	3.06	3.08	3.09	3.10	3.11
	32°F(-0.0°C)	30164	29560	29413	29295	29031	3.06	3.08	3.09	3.10	3.11
	35°F(1.7°C)	30957	30338	30186	30065	29795	3.06	3.08	3.09	3.10	3.11
	37°F(2.8°C)	30876	30258	30107	29986	29717	2.95	2.98	2.98	2.99	3.00
	42°F(5.6°C)	30673	30060	29909	29790	29522	2.68	2.71	2.71	2.72	2.73
	44.6°F(7.0°C)	30592	29980	29830	29711	29444	2.58	2.60	2.60	2.61	2.62
	47°F(8.3°C)	30470	29861	29712	29593	29327	2.42	2.44	2.44	2.45	2.46
	52°F(11.1°C)	29859	29262	29116	28999	28738	2.23	2.25	2.25	2.26	2.27
	57°F(13.9°C)	29248	28663	28520	28405	28150	2.04	2.06	2.07	2.07	2.08
	59°F(15.0°C)	29003	28423	28281	28168	27914	1.97	1.99	1.99	1.99	2.00
62°F(16.7°C)	28636	28064	27923	27812	27561	1.86	1.87	1.88	1.88	1.89	
64.4°F(18.0°C)	28392	27824	27685	27574	27326	1.78	1.80	1.80	1.81	1.81	

LEGEND

DB - Dry Bulb

TC - Total Net Capacity (1000 Btu/hour)

Input - Total Power (kW)

COP - W/W

APPLICATION DATA

Unit Selection

Select equipment that either matches or supports slightly more than the anticipated peak load. This provides better humidity control, fewer unit cycles, and less part-load operation. For units used in spaces with high sensible loads, base equipment selection on unit sensible load, not on total anticipated load. Adjust for anticipated room wet bulb temperature to avoid undersizing the equipment.

UNIT MOUNTING (OUTDOOR)

Refer to the unit's installation instructions for further details.

Unit leveling - For reliable operation, units should be level in all planes.

Clearance - Minimum clearance (see Fig. 4) must be provided for airflow. The condensing units are designed for free-flow application. Air inlets and outlets should not be restricted.

Unit location - A location which is convenient to installation and not exposed to strong winds. A location that can bear the weight of the outdoor unit and where the outdoor unit can be mounted in a level position. **Do not** install the indoor or outdoor units in a location with special environmental conditions. For those applications, contact your sales representative.

SYSTEM OPERATING CONDITIONS

OPERATING RANGE MIN / MAX °F (°C)		
	COOLING	HEATING
Outdoor DB	-22 / 122 (-30 / 50)	-22 / 75 (-30 / 24)

NOTE: Reference the product installation instructions for more information.

METERING DEVICES

The outdoor unit has an electronic expansion valve to manage the refrigerant flow of the connected fan coil.

DRAIN CONNECTIONS

Install drains to meet the local sanitation codes.

REFRIGERANT LINES

General refrigerant line sizing:

1. The outdoor units are shipped with a full charge of R-454B refrigerant. All charges, line sizing, and capacities are based on runs of 25 ft. (7.6 m). For runs over 25 ft. (7.6 m), review the *Long Line Applications* section for the proper charge adjustments.
2. Refrigerant lines should not be buried in the ground. If it is necessary to bury the lines, do not bury more than 36-in (914mm). Provide a minimum 6-in (152 mm) vertical rise to the service valves to prevent refrigerant migration.
3. Both lines must be insulated. Use a minimum of 1/2-in. (12.7 mm) thick insulation. Closed-cell insulation is recommended in all long-line applications.
4. Special consideration should be given to isolating the interconnecting tubing from the building structure. Isolate the tubing so vibration or noise is not transmitted into the structure.

Long Line Applications:

1. No change in line sizing is required.
2. Add refrigerant per the "Additional Charge" table below.

Table 16 – Additional Charge

UNIT SIZE	Total Piping Length, ft (m)		Additional Charge, oz/ft. (m)	
	Min	Max	>10 - 25 (3 - 8)	>25 - 98 (8 - 30)
6	9.8 (3)	82 (25)	None	0.16
9				
12				
18		164(50)		0.32

WIRING

All wires must be sized per NEC (National Electrical Code) or CEC (Canadian Electrical Code) and local codes. Use Electrical Data table MCA (minimum circuit amps) and MOCP (maximum over current protection) to correctly size the wires and the disconnect fuse or breakers respectively.

Recommended Connection Method for Power and Communication Wiring:

The main power is supplied to the outdoor unit. The field supplied 14/3 stranded wire with ground with a 600 volt insulation rating, power/communication wiring from the outdoor unit to indoor unit consists of four (4) wires and provides the power for the indoor unit. Two wires are line voltage AC power, one is communication wiring (S) and the other is a ground wire. Wiring between indoor and outdoor unit is polarity sensitive. The use of BX wire is NOT recommended.

If installed in a high Electromagnetic field (EMF) area and communication issues exists, a 14/2 stranded shielded wire can be used to replace L2 and (S) between outdoor unit and indoor unit landing the shield onto ground in the outdoor unit only.

! CAUTION

EQUIPMENT DAMAGE HAZARD

Failure to follow this caution may result in equipment damage or improper operation.

Wires should be sized based on NEC and local codes.

! CAUTION

EQUIPMENT DAMAGE HAZARD

Failure to follow this caution may result in equipment damage or improper operation.

Be sure to comply with local codes while running wire from the indoor unit to the outdoor unit.

Every wire must be connected firmly. Loose wiring may cause the terminal to overheat or result in unit malfunction. A fire hazard may also exist. Ensure all wiring is tightly connected.

No wire should touch the refrigerant tubing, compressor or any moving parts.

Disconnecting means must be provided and shall be located within sight and readily accessible from the air conditioner.

Connecting cable with conduit shall be routed through the hole in the conduit panel.

AIR FLOW DATA

Unit Size	6K	9K	12K	18K
Outdoor (CFM)	1472.3	1472.3	1472.3	2235.29

SOUND PRESSURE

SYSTEM SIZE		9K	12K	18K
		(208/230 V)	(208/230 V)	(208/230 V)
Outdoor Sound Pressure Level	dB(A)	56.5	56.5	54.0
Outdoor Sound Power Level	dB(A)	64.5	64.5	62.0

ELECTRICAL DATA

Outdoor Unit Size		6K	9K	12K	18K
Power (Voltage-Phase-Frequency)	V-P-H	208/230-1-60			
MCA (Minimum Circuit Ampacity)	A	16	16	16	24.9
MOP (Maximum Overcurrent Protection Ampacity)	A	20	20	20	25
Min – Max Voltage Range	V	187-253			

*Permissible limits of the voltage range at which the unit will operate satisfactorily.

WIRING DIAGRAMS

NOTE: Refer to the actual wiring diagram and connection label on the unit.

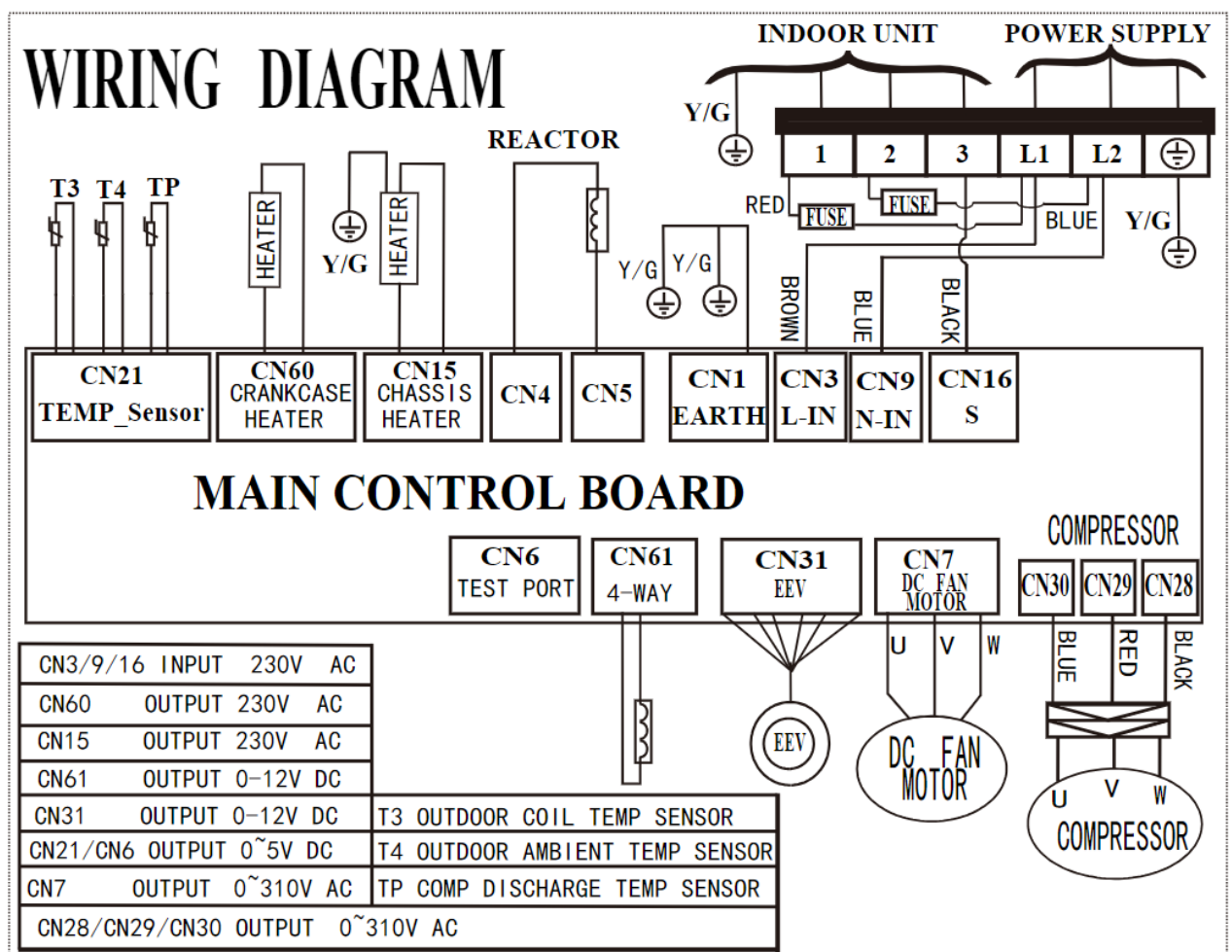


Fig. 6 – Wiring Diagram - Size 6K - 12K

WIRING DIAGRAMS (CONT.)

NOTE: Refer to the actual wiring diagram and connection label on the unit.

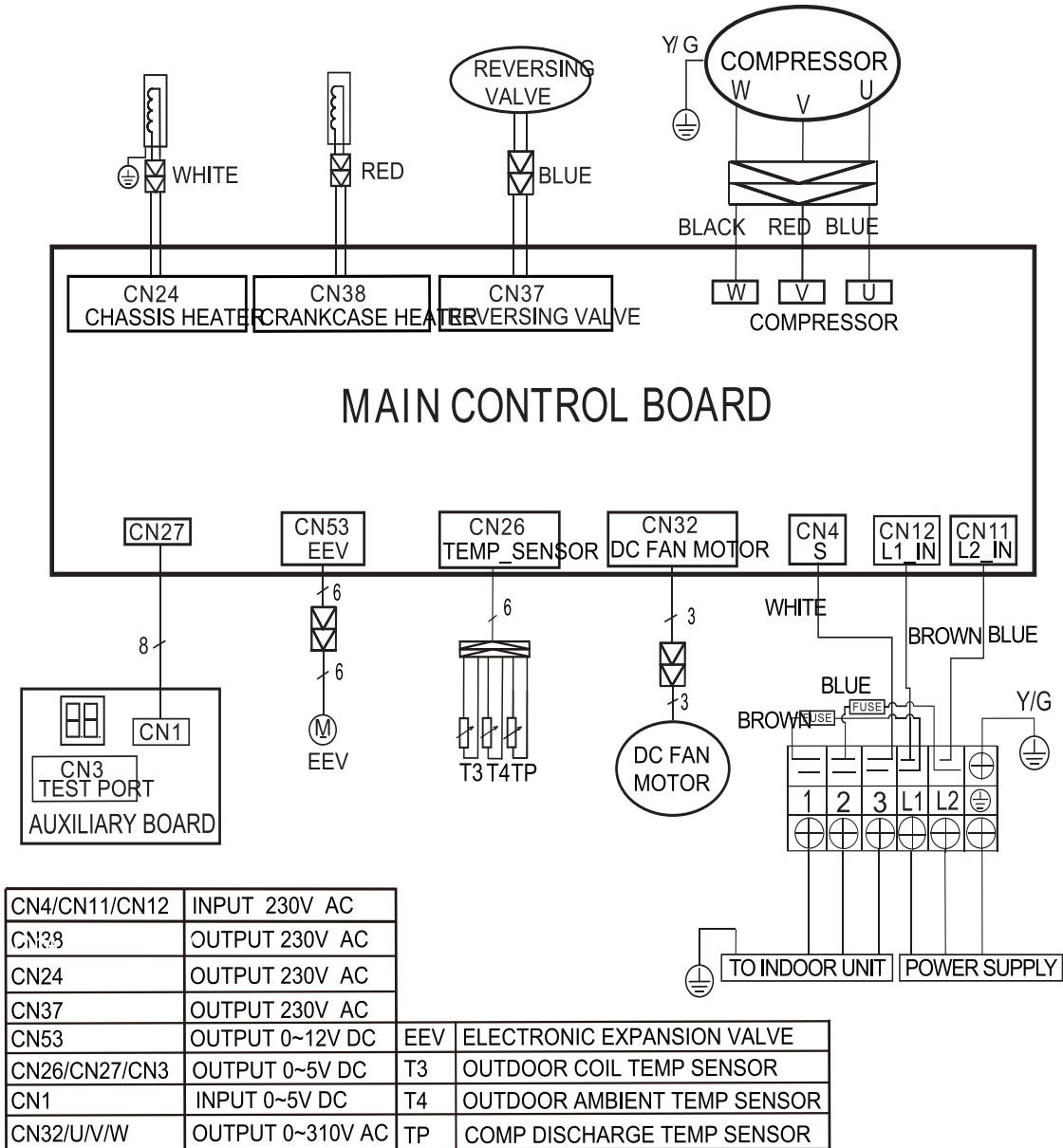


Fig. 7 —Wiring Diagram - Size 18K

GUIDE SPECIFICATIONS**OUTDOOR SINGLE-ZONE DUCTLESS SYSTEM**

Size Range: 1/2 to 1-1/2 Ton Nominal Cooling and Heating Capacity

Model Number: **37MPRA****Part 1 - GENERAL****1.01 System Description**

- a. Outdoor air-cooled split system compressor sections suitable for on-the-ground, rooftop, wall hung or balcony mounting. Units consist of a rotary compressor, an air-cooled coil, propeller-type draw-through outdoor fan, reversing valve (HP), accumulator (HP units), metering device(s), and a control box. Units discharge air horizontally as shown on the contract drawings. Units function as the outdoor component of an air-to-air heat pump system.
- b. Units are to be used in a refrigeration circuit matched to ductless heat pump fan coil units.

1.02 Agency Listings

- a. Unit construction complies with ANSI/ASHRAE 15, latest revision, and with the NEC.
- b. Units are evaluated in accordance with UL standard 1995.
- c. Units are listed in the CEC directory.
- d. Unit cabinet is capable of withstanding 500-hour salt spray test per Federal Test Standard No. 141 (method 6061).
- e. Air-cooled condenser coils are leak tested at 550 psig.

1.03 Delivery, Storage, And Handling

Units are shipped in one piece and are stored and handled per unit manufacturer's recommendations.

1.04 Warranty (For Inclusion By Specifying Engineer)**Part 2 - PRODUCTS****2.01 Equipment****A. General:**

Factory assembled, single piece, air-cooled outdoor unit. Contained within the unit enclosure is all the factory wiring, piping, controls, and the compressor.

B. Unit Cabinet:

1. Unit cabinet is constructed of galvanized steel, bonderized and coated with a baked-enamel finish on the inside and outside.
2. Unit access panels is removable with minimal screws and provides full access to the compressor, fan, and control components.
3. The outdoor compartment is isolated and has an acoustic lining to assure quiet operation.

C. Fans:

1. Outdoor fans are the direct drive propeller type, and discharges air horizontally. Fans draw air through the outdoor coil.
2. Outdoor fan motors are totally enclosed, single phase motors with class E insulation and permanently lubricated ball bearings. Motor shall be protected by internal thermal overload protection.
3. The shaft has inherent corrosion resistance.

4. Fan blades are non-metallic and statically and dynamically balanced.
5. Outdoor fan openings are equipped with a PVC metal/mesh coated protection grille over the fan.

D. Compressor:

1. Compressor is the fully hermetic rotary type.
2. Compressor is equipped with an oil system, operating oil charge, and a motor.
3. Motor is NEMA rated class E, suitable for operation in a refrigerant atmosphere.
4. Compressor assembly is installed on rubber vibration isolators.

E. Outdoor Coil:

The coil is constructed of aluminum golden hydrophilic pre-coated fins mechanically bonded to seamless copper tubes, which are cleaned, dehydrated, and sealed.

F. Refrigeration Components:

Refrigerant circuit components include a brass external liquid line service valve with service gage port connections, a suction line service valve with a service gage connection port, service gage port connections on compressor suction and discharge lines with Schrader type fittings with brass caps, accumulator, reversing valve.

G. Controls and Safeties:

Operating controls and safeties are factory selected, assembled, and tested. The minimum control functions include the following:

1. Controls:

- a. A time delay control sequence is provided standard through the fan coil board.
- b. Automatic outdoor fan motor protection.

2. Safeties:

- a. System Diagnostics
- b. Compressor motor current and temperature overload protection
- c. Outdoor fan failure protection

H. Electrical Requirements:

- a. Unit operates on single-phase, 60 Hz power at 208/230V as specified.
- b. Unit electrical power has a single point connection.
- c. Unit Control voltage to the indoor fan coil is 0-15V DC.
- d. All power and control wiring must be installed per NEC and all local electrical codes.
- e. The unit has high and low voltage terminal block connections.