

ADDISON



TRSH

TRS-SERIES ROOFTOP UNITS

FOR COMMERCIAL/INDUSTRIAL HEATING, COOLING AND/OR DEHUMIDIFICATION

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Nomenclature

TRS	H	240	C	A	3	A
Model	Type	Unit Size	Cabinet Size	Air Flow	Voltage	Design Series
TRS	A = A/C	036	A	A = Vertical Supply / Vertical Return	3 = 208-230/3	A
	F = AHU	048	B	C = Horizontal Supply / Vertical Return	4 = 460/3	
	G = GSHP	066	C	E = Vertical Supply / 100% Outside Air		
	H = ASHP	072		F = Horizontal Supply / 100% Outside Air		
	W = WSHP	084				
		096				
		120				
		150				
		180				
		210				
		200				
		240				
		300				
		360				
		420				

SERIES TRSH - A CABINET

SPECIFICATIONS

MODEL TRS	036	048	06	072	084
RECIRCULATING AIR UNITS					
Performance per ARI Standard 210/240 and 340/360					
Airflow (CFM)	TBD	TBD	2,100	2,400	2,800
Cooling Capacity (BTUH)	TBD	TBD	66,436	79,396	92,750
EER / SEER* (036, 048, & 060 units)	TBD	TBD	13.1	11.3	10.5
Heating Capacity (BTUH)	TBD	TBD	68,329	78,815	91,430
COP	TBD	TBD	3.54	3.77	3.72
Physical Data					
No. Refrig. Circuits	TBD	TBD	1	1	1
Refrig. Charge R410A (oz./ckt.)	TBD	TBD	196	232	234
Cond. Area (sq. ft.)	TBD	TBD	12.38	12.38	12.38
Cond. Row / fpi	TBD	TBD	2 / 16	2 / 16	2 / 16
Cond. Motor HP / (qty.)	TBD	TBD	1/2 / (1)	3/4 / (1)	3/4 / (1)
Evap. Area (sq. ft.)	TBD	TBD	4.00	7.50	7.50
Evap. Row / fpi	TBD	TBD	4 / 12	4 / 12	4 / 12
Supply Fan HP Range	TBD	TBD	1/2 - 3	1/2 - 3	1/2 - 3
Supply Fan size/type	TBD	TBD	12 x 9 / FC	12 x 9 / FC	12 x 9 / FC
Filter Area (sq. ft.)	TBD	TBD	13.30	13.30	13.30
Drain Conn. (mpt.)	TBD	TBD	1-1/4"	1-1/4"	1-1/4"

1. Cooling rating based on 80°F DB / 67°F WB return air temperature at 95°F ambient.
2. Heating rating based on 70°F DB / 60°F WB return air temperature at 47°F ambient..

SERIES TRSH - A CABINET

HEATING CAPACITY DATA - RECIRCULATING

TRSH066 RECIRCULATING @ 2000 CFM								
RETURN AIR		AMBIENT AIR TEMPERATURE						
dbt°F	wbt°F	10°F	20°F	30°F	40°F	50°F	60°F	
40.0	33.6	Btuhs	46,166	51,570	58,584	66,769	84,704	
		Watts	4,105	4,180	4,287	4,418	4,560	4,702
		COP	3.30	3.61	4.00	4.43	4.85	5.28
50.0	41.9	Btuhs	43,935	49,530	56,490	64,742	73,250	82,024
		Watts	4,440	4,516	4,618	4,756	4,898	5,011
		COP	2.90	3.21	3.58	3.99	4.38	4.80
60.0	50.2	Btuhs	42,005	47,853	54,669	62,767	71,227	81,945
		Watts	4,790	4,870	4,971	5,118	5,258	5,408
		COP	2.57	2.88	3.22	3.59	3.97	4.44
70.0	58.4	Btuhs	40,501	46,233	53,056	60,988	71,266	78,081
		Watts	5,167	5,249	5,356	5,515	5,692	5,759
		COP	2.30	2.58	2.90	3.24	3.67	3.97

Consult factory for conditions below 10°F.

SERIES TRSH - A CABINET

HEATING CAPACITY DATA - RECIRCULATING

TRSH072 RECIRCULATING @ 2400 CFM								
RETURN AIR		AMBIENT AIR TEMPERATURE						
dbt°F	wbt°F		10°F	20°F	30°F	40°F	50°F	60°F
40.0	33.6	Btuhs	55,594	61,917	69,860	79,312	89,654	100,965
		Watts	4,731	4,756	4,800	4,876	4,975	5,103
		COP	3.44	3.81	4.26	4.77	5.28	5.80
50.0	41.9	Btuhs	53,224	59,794	67,769	76,923	87,066	98,208
		Watts	4,979	5,030	5,102	5,204	5,330	5,485
		COP	3.13	3.48	3.89	4.33	4.79	5.25
60.0	50.2	Btuhs	51,983	56,209	65,624	74,737	84,579	95,263
		Watts	5,305	5,338	5,456	5,583	5,730	5,888
		COP	2.87	3.09	3.52	3.92	4.32	4.74
70.0	58.4	Btuhs	49,674	56,330	63,740	72,501	82,226	94,178
		Watts	5,683	5,765	5,873	6,014	6,175	6,371
		COP	2.56	2.86	3.18	3.53	3.90	4.33

TRSH084 RECIRCULATING @ 2800 CFM								
RETURN AIR		AMBIENT AIR TEMPERATURE						
dbt°F	wbt°F		10°F	20°F	30°F	40°F	50°F	60°F
40.0	33.6	Btuhs	120,642	138,154	159,160	182,224	206,708	233,874
		Watts	9,968	10,294	10,700	11,188	11,726	12,358
		COP	3.55	3.93	4.35	4.77	5.16	5.54
50.0	41.9	Btuhs	117,698	137,710	155,818	177,836	205,290	227,926
		Watts	10,800	11,196	11,588	12,074	12,702	13,230
		COP	3.19	3.60	3.94	4.32	4.74	5.05
60.0	50.2	Btuhs	116,270	132,364	154,364	176,836	196,886	220,090
		Watts	11,722	12,078	12,576	13,108	13,596	14,142
		COP	2.91	3.21	3.60	3.95	4.24	4.56
70.0	58.4	Btuhs	115,798	134,174	150,494	169,146	194,258	221,270
		Watts	12,756	13,212	13,616	14,098	14,698	15,376
		COP	2.66	2.98	3.24	3.52	3.87	4.22

Consult factory for conditions below 10°F.

SERIES TRSH - B CABINET

SPECIFICATIONS

MODEL TRS	096	120	150	180	210
RECIRCULATING AIR UNITS					
Performance per ARI Standard 340/3601					
Airflow (CFM)	3,200	4,000	5,000	6,000	6,000
Cooling Capacity (BTUH)	107,700	136,100	158,400	186,100	208,100
EER	11.6	11.5	11.0	10.4	10.5
IPLV	12.0	11.9	11.7	10.8	10.9
Heating Capacity (BTUH)	109,402	134,962	157,636	183,876	195,474
COP	3.93	3.70	3.70	3.65	3.65
Physical Data					
No. Refrig. Circuits	2	2	2	2	2
Refrig. Charge R410A (oz./ckt.)	230	235	241	249	271
Cond. Area (sq. ft.)	24.75	24.75	24.75	24.75	24.75
Cond. Row / fpi	2 / 16	2 / 16	2 / 16	2 / 16	2 / 16
Cond. Motor HP / (qty.)	1/2 / (2)	1/2 / (2)	3/4 / (2)	3/4 / (2)	3/4 / (2)
Evap. Area (sq. ft.)	12.00	12.00	12.00	12.00	12.00
Evap. Row / fpi	4 / 12	4 / 12	4 / 12	4 / 12	6 / 12
Supply Fan HP Range	2 - 7 1/2	2 - 7 1/2	3 - 10	3 - 10	3 - 10
Supply Fan size/type	12 x 12 / FC	12 x 12 / FC	15 x 15 / FC	15 x 15 / FC	15 x 15 / FC
Filter Area (sq. ft.)	13.30	13.30	13.30	13.30	13.30
Drain Conn. (mpt.)	1-1/4"	1-1/4"	1-1/4"	1-1/4"	1-1/4"

1. Cooling rating based on 80°F DB / 67°F WB return air temperature at 95°F ambient.
2. Heating rating based on 70°F DB / 60°F WB return air temperature at 47°F ambient..

SERIES TRSH - B CABINET

HEATING CAPACITY DATA - RECIRCULATING

TRSH096 RECIRCULATING @ 3200 CFM

RETURN AIR		AMBIENT AIR TEMPERATURE						
dbt°F	wbt°F	10°F	20°F	30°F	40°F	50°F	60°F	
40.0	33.6	Btuhs	55,594	61,917	69,860	79,312	89,654	100,965
		Watts	4,731	4,756	4,800	4,876	4,975	5,103
		COP	3.44	3.81	4.26	4.77	5.28	5.80
50.0	41.9	Btuhs	53,224	59,794	67,769	76,923	87,066	98,208
		Watts	4,979	5,030	5,102	5,204	5,330	5,485
		COP	3.13	3.48	3.89	4.33	4.79	5.25
60.0	50.2	Btuhs	51,983	56,209	65,624	74,737	84,579	95,263
		Watts	5,305	5,338	5,456	5,583	5,730	5,888
		COP	2.87	3.09	3.52	3.92	4.32	4.74
70.0	58.4	Btuhs	49,674	56,330	63,740	72,501	82,226	94,178
		Watts	5,683	5,765	5,873	6,014	6,175	6,371
		COP	2.56	2.86	3.18	3.53	3.90	4.33

TRSH0120 RECIRCULATING @ 4000 CFM

RETURN AIR		AMBIENT AIR TEMPERATURE						
dbt°F	wbt°F	10°F	20°F	30°F	40°F	50°F	60°F	
40.0	33.6	Btuhs	120,642	138,154	159,160	182,224	206,708	233,874
		Watts	9,968	10,294	10,700	11,188	11,726	12,358
		COP	3.55	3.93	4.35	4.77	5.16	5.54
50.0	41.9	Btuhs	117,698	137,710	155,818	177,836	205,290	227,926
		Watts	10,800	11,196	11,588	12,074	12,702	13,230
		COP	3.19	3.60	3.94	4.32	4.74	5.05
60.0	50.2	Btuhs	116,270	132,364	154,364	176,836	196,886	220,090
		Watts	11,722	12,078	12,576	13,108	13,596	14,142
		COP	2.91	3.21	3.60	3.95	4.24	4.56
70.0	58.4	Btuhs	115,798	134,174	150,494	169,146	194,258	221,270
		Watts	12,756	13,212	13,616	14,098	14,698	15,376
		COP	2.66	2.98	3.24	3.52	3.87	4.22

TRSH0150 RECIRCULATING @ 5000 CFM

RETURN AIR		AMBIENT AIR TEMPERATURE						
dbt°F	wbt°F	10°F	20°F	30°F	40°F	50°F	60°F	
40.0	33.6	Btuhs	120,642	138,154	159,160	182,224	206,708	233,874
		Watts	9,968	10,294	10,700	11,188	11,726	12,358
		COP	3.55	3.93	4.35	4.77	5.16	5.54
50.0	41.9	Btuhs	117,698	137,710	155,818	177,836	205,290	227,926
		Watts	10,800	11,196	11,588	12,074	12,702	13,230
		COP	3.19	3.60	3.94	4.32	4.74	5.05
60.0	50.2	Btuhs	116,270	132,364	154,364	176,836	196,886	220,090
		Watts	11,722	12,078	12,576	13,108	13,596	14,142
		COP	2.91	3.21	3.60	3.95	4.24	4.56
70.0	58.4	Btuhs	115,798	134,174	150,494	169,146	194,258	221,270
		Watts	12,756	13,212	13,616	14,098	14,698	15,376
		COP	2.66	2.98	3.24	3.52	3.87	4.22

Consult factory for conditions below 10°F.

SERIES TRSH - B CABINET

HEATING CAPACITY DATA - RECIRCULATING

TRSH180 RECIRCULATING @ 6000 CFM

RETURN AIR		AMBIENT AIR TEMPERATURE						
dbt°F	wbt°F	10°F	20°F	30°F	40°F	50°F	60°F	
40.0	33.6	Btuhs	122,054	139,100	159,258	181,398	206,482	233,620
		Watts	10,236	10,560	10,970	11,442	12,004	12,634
		COP	3.49	3.86	4.25	4.64	5.04	5.42
50.0	41.9	Btuhs	118,576	137,940	155,638	177,696	201,022	228,782
		Watts	11,066	11,460	11,856	12,356	12,910	13,528
		COP	3.14	3.53	3.85	4.21	4.56	4.95
60.0	50.2	Btuhs	114,508	133,628	154,624	172,814	194,572	222,016
		Watts	11,940	12,376	12,874	13,324	13,840	14,472
		COP	2.81	3.16	3.52	3.80	4.12	4.49
70.0	58.4	Btuhs	116,342	127,588	150,624	168,810	191,670	219,496
		Watts	13,040	13,334	13,934	14,406	14,944	15,628
		COP	2.61	2.80	3.17	3.43	3.76	4.11

TRSH210 RECIRCULATING @ 6000 CFM

RETURN AIR		AMBIENT AIR TEMPERATURE						
dbt°F	wbt°F	10°F	20°F	30°F	40°F	50°F	60°F	
40.0	33.6	Btuhs	133,684	147,996	168,252	192,894	219,992	251,794
		Watts	11,334	11,438	11,696	12,074	12,546	13,124
		COP	3.46	3.79	4.21	4.68	5.14	5.62
50.0	41.9	Btuhs	127,420	144,228	164,590	188,776	215,316	245,718
		Watts	12,264	12,414	12,690	13,080	13,572	14,154
		COP	3.04	3.40	3.80	4.23	4.65	5.09
60.0	50.2	Btuhs	—	141,372	159,670	184,574	210,608	236,496
		Watts	—	13,438	13,700	14,134	14,650	15,178
		COP	—	3.08	3.41	3.83	4.21	4.57
70.0	58.4	Btuhs	121,772	135,440	157,626	182,308	206,118	235,710
		Watts	14,336	14,472	14,828	15,314	15,820	16,440
		COP	2.49	2.74	3.11	3.49	3.82	4.20

Consult factory for conditions below 10°F.

SERIES TRSH - C CABINET

SPECIFICATIONS

MODEL TRS	200	240	300	360	420
RECIRCULATING AIR UNITS					
Performance per ARI Standard 340/3601					
Airflow (CFM)	6,000	8,000	10,000	12,000	14,000
Cooling Capacity (BTUH)	208,600	238,800	310,200	379,800	427,700
EER	11.0	10.6	10.4	9.7	9.6
IPLV	11.4	11.1	10.7	10.0	10.0
Heating Capacity (BTUH)	212,634	244,520	356,468	399,398	441,294
COP	3.90	4.05	3.68	2.69	2.76
Physical Data					
No. Refrig. Circuits	2	2	2	2	2
Refrig. Charge R410A (oz./ckt.)	392	396	405	411	511
Cond. Area (sq. ft.)	42.60	42.60	42.60	42.60	42.60
Cond. Row / fpi	2 / 16	2 / 16	2 / 16	2 / 16	3 / 12
Cond. Motor HP / (qty.)	3/4 / (2)	3/4 / (2)	1 1/2 / (2)	1 1/2 / (2)	1 1/2 / (2)
Evap. Area (sq. ft.)	23.00	23.00	23.00	23.00	23.00
Evap. Row / fpi	4 / 12	4 / 12	4 / 12	4 / 12	6 / 12
Supply Fan HP Range	3 - 10	3 - 15	3 - 15	3 - 20	3 - 20
Supply Fan size/type	15 x 15 / FC	15 x 15 / FC	18 x 18 / FC	18 x 18 / FC	18 x 18 / FC
Filter Area (sq. ft.)	24.00	24.00	24.00	24.00	24.00
Drain Conn. (mpt.)	1-1/4"	1-1/4"	1-1/4"	1-1/4"	1-1/4"

1. Cooling rating based on 80°F DB / 67°F WB return air temperature at 95°F ambient.
2. Heating rating based on 70°F DB / 60°F WB return air temperature at 47°F ambient..

SERIES TRSH - C CABINET

HEATING CAPACITY DATA - RECIRCULATING

TRSH200 RECIRCULATING @ 6000 CFM

RETURN AIR		AMBIENT AIR TEMPERATURE						
dbt°F	wbt°F	10°F	20°F	30°F	40°F	50°F	60°F	
40.0	33.6	Btuhs	141,876	158,818	183,438	208,664	238,458	271,388
		Watts	11,214	11,474	11,878	12,326	12,886	13,550
		COP	3.71	4.06	4.52	4.96	5.42	5.87
50.0	41.9	Btuhs	137,270	155,330	179,704	206,054	232,882	264,668
		Watts	12,178	12,464	12,880	13,372	13,912	14,592
		COP	3.30	3.65	4.09	4.51	4.90	5.31
60.0	50.2	Btuhs	134,238	151,652	173,944	203,336	227,408	258,064
		Watts	13,206	13,486	13,090	14,478	15,010	15,712
		COP	2.98	3.29	3.67	4.11	4.44	4.81
70.0	58.4	Btuhs	132,768	148,374	170,338	199,020	222,190	251,084
		Watts	14,332	14,590	15,020	15,642	16,208	16,900
		COP	2.71	2.98	3.32	3.73	4.02	4.35

TRSH0240 RECIRCULATING @ 8000 CFM

RETURN AIR		AMBIENT AIR TEMPERATURE						
dbt°F	wbt°F	10°F	20°F	30°F	40°F	50°F	60°F	
40.0	33.6	Btuhs	164,378	183,602	211,066	238,662	271,700	310,506
		Watts	12,334	12,606	12,986	13,394	13,966	14,740
		COP	3.90	4.27	4.76	5.22	5.70	6.17
50.0	41.9	Btuhs	158,960	181,038	206,182	235,560	265,324	303,132
		Watts	13,402	13,748	14,132	14,606	15,166	15,954
		COP	3.48	3.86	4.27	4.73	5.13	5.57
60.0	50.2	Btuhs	157,520	173,936	199,022	229,970	259,106	295,948
		Watts	14,602	14,900	15,320	15,870	16,462	17,276
		COP	3.16	3.42	3.81	4.25	4.61	5.02
70.0	58.4	Btuhs	149,044	169,528	194,440	224,832	253,182	289,904
		Watts	15,812	16,212	16,670	17,278	17,896	18,708
		COP	2.76	3.06	3.42	3.81	4.14	4.54

TRSH0300 RECIRCULATING @ 10000 CFM

RETURN AIR		AMBIENT AIR TEMPERATURE						
dbt°F	wbt°F	10°F	20°F	30°F	40°F	50°F	60°F	
40.0	33.6	Btuhs	245,524	276,216	300,566	349,582	395,010	449,420
		Watts	19,716	20,374	21,112	22,046	23,120	24,370
		COP	3.65	3.97	4.28	4.65	5.01	5.40
50.0	41.9	Btuhs	236,646	265,180	300,380	343,786	385,116	438,402
		Watts	21,210	21,862	22,700	23,756	24,786	26,036
		COP	3.27	3.55	3.88	4.24	4.55	4.93
60.0	50.2	Btuhs	229,690	257,422	292,654	335,386	380,178	422,760
		Watts	22,930	23,604	24,500	25,624	26,708	27,788
		COP	2.93	3.20	3.50	3.83	4.17	4.46
70.0	58.4	Btuhs	220,388	250,856	284,386	328,790	371,618	412,278
		Watts	24,790	25,590	26,508	27,678	28,780	29,886
		COP	2.60	2.87	3.14	3.48	3.78	4.04

Consult factory for conditions below 10°F.

SERIES TRSH - C CABINET

HEATING CAPACITY DATA - RECIRCULATING

TRSH360 RECIRCULATING @ 12000 CFM

RETURN AIR		AMBIENT AIR TEMPERATURE						
dbt°F	wbt°F	10°F	20°F	30°F	40°F	50°F	60°F	
40.0	33.6	Btuhs	254,782	291,550	335,710	384,982	439,238	505,068
		Watts	22,520	23,190	24,098	25,200	26,528	28,122
		COP	3.31	3.68	4.08	4.48	4.85	5.26
50.0	41.9	Btuhs	251,466	285,912	328,808	380,418	429,350	493,000
		Watts	24,252	24,916	25,818	26,988	28,150	29,680
		COP	3.04	3.36	3.73	4.13	4.47	4.87
60.0	50.2	Btuhs	247,326	281,344	321,492	373,780	425,184	476,144
		Watts	26,162	26,914	27,820	29,060	30,208	31,492
		COP	2.77	3.06	3.39	3.77	4.12	4.43
70.0	58.4	Btuhs	249,794	276,878	316,020	367,448	416,912	465,418
		Watts	28,424	29,150	30,146	31,352	32,528	33,796
		COP	2.57	2.78	3.07	3.43	3.76	4.03

TRSH420 RECIRCULATING @ 12000 CFM

RETURN AIR		AMBIENT AIR TEMPERATURE						
dbt°F	wbt°F	10°F	20°F	30°F	40°F	50°F	60°F	
40.0	33.6	Btuhs	301,286	334,736	378,974	431,548	488,358	553,802
		Watts	24,124	24,870	25,800	26,928	28,226	29,780
		COP	3.66	3.94	4.30	4.70	5.07	5.45
50.0	41.9	Btuhs	292,256	325,518	369,386	422,254	479,366	543,662
		Watts	26,194	27,040	28,066	29,304	30,688	32,232
		COP	3.27	3.53	3.86	4.22	4.58	4.94
60.0	50.2	Btuhs	283,630	318,722	361,802	412,540	468,084	531,910
		Watts	28,444	29,442	30,560	31,866	33,232	34,870
		COP	2.92	3.17	3.47	3.79	4.13	4.47
70.0	58.4	Btuhs	279,130	312,040	354,780	405,908	462,540	521,236
		Watts	31,042	32,090	33,322	34,714	36,198	37,816
		COP	2.63	2.85	3.12	3.43	3.74	4.04

Consult factory for conditions below 10°F.



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Installation Code and Annual Inspections: All installations and service of ADDISON equipment must be performed by a contractor qualified in the installation and service of equipment sold and supplied by Addison and conform to all requirements set forth in the ADDISON manuals and all applicable governmental authorities pertaining to the installation, service and operation of the equipment. To help facilitate optimum performance and safety, Addison recommends that a qualified contractor annually inspect your ADDISON equipment and perform service where necessary, using only replacement parts sold and supplied by ADDISON.

Further Information: Applications, engineering and detailed guidance on systems design, installation and equipment performance is available through ADDISON representatives. Please contact us for any further information you may require, including the Installation, Operation and Service Manual.

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