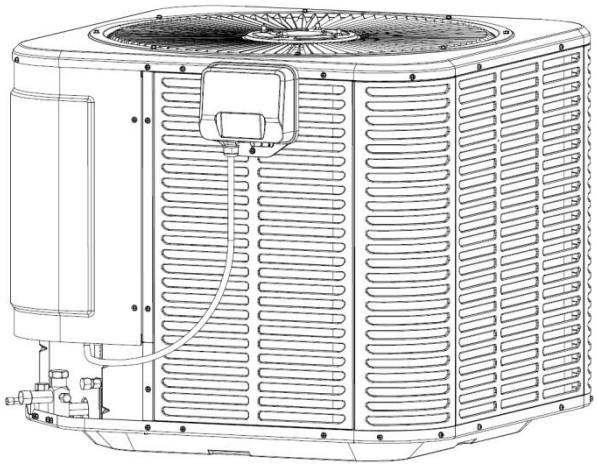
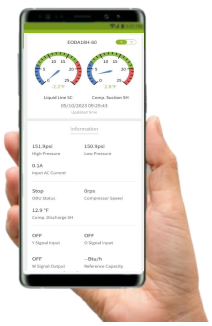
ESi Decades ODU Specifications

Up to 18 SEER2 / 8.5 HSPF2
R-410A VARIABLE SPEED
IoT TECHNOLOGY



Contents



Standard Features

1. **Comfort.** Ecoer Smart Inverter (ESI) condensing units output flexible capacity from 25%-110% to achieve your desired temperature – no more, no less.
2. **Quiet.** Compressors are equipped with noise cancelling jacket.
3. **Free match.** ESI condensing units are compatible with most traditional indoor air handlers / furnaces and 24VAC controlled thermostats.
4. **Refrigerant AUTO charge assistant.** ESI insures accurate refrigerant charge for every indoor coils match-up.
5. **Seasonable dehumidification.** Dry mode is specifically designed for high humidity areas.
6. **Load learning.** Load forecasting technology helps to save energy.
7. **Back-up running.** Continued operation up to 2 failed sensors.

Ecoer IoT Features

1. 24/7 monitoring service (Up to 2 months history data on ESS Pro App).
2. Diagnostic and alerts service.
3. ESS Pro App reminds dealers and homeowners of valuable service such as refrigerant leakage/shortage and home inefficiency etc.

AHRI CERTIFIED® www.ahridirectory.org
Unitary Small HP
AHRI Standard 210/240
Certification applies only when the complete system is listed with AHRI.

ETL LISTED c US Intertek

1. Nomenclature

Condensing Unit

E	OD	A	18	H
1	2	3	4	5

Brand

E: Ecoer

Product Series

OD: Outdoor Condensing Unit

Model Letters

A: 208/230V-1Ph-60Hz

SEER

18: 18SEER Series

Type

H: Heat Pump C: Cooling only *Display on ESS Pro App

Capacity

2436: up to 3Ton 4860: up to 5Ton.

E series Air Handler

E	AH	A	T	N
1	2	3	4	5

Brand

E: Ecoer

Product Series

AH: Indoor Air Handler

Model Letters

A: 208/230V-1Ph-60Hz

Metering device

T: TXV

Communications

N: 24VAC Normal

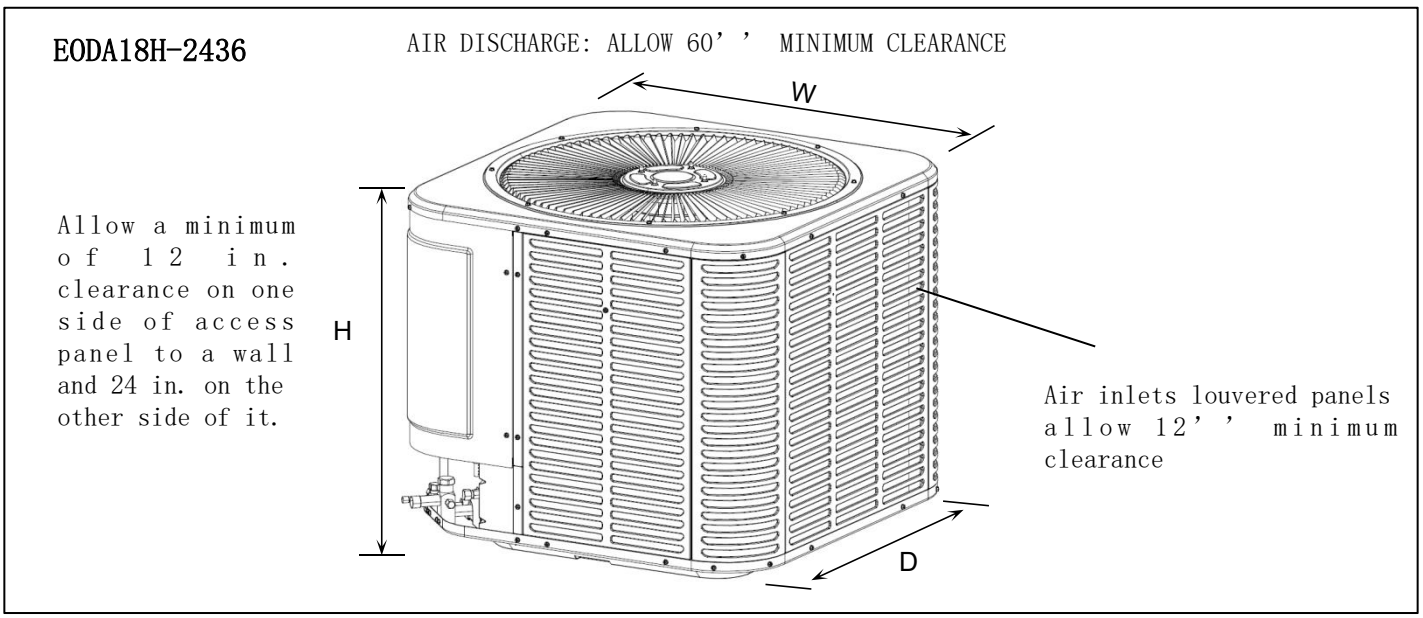
Capacity

24=2Ton 36=3Ton

48=4Ton 60=5Ton

2. Dimensions

EODA18H-2436



EODA18H-4860

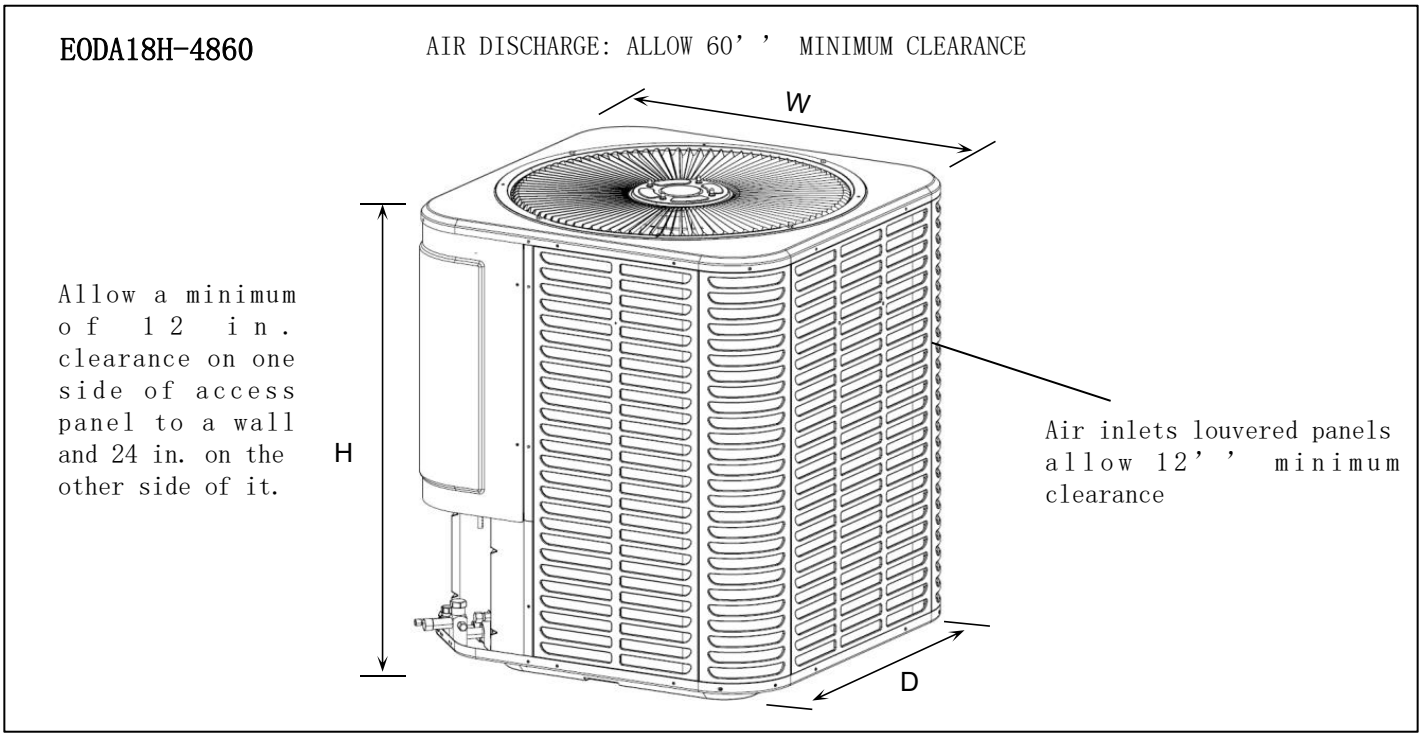


Fig 1. Condensing unit dimensions

Model	Dimensions (In. [mm])		
	H	W	D
EODA18H-2436	24-15/16 [633]	29-1/8 [740]	29-1/8 [740]
EODA18H-4860	33-3/16 [843]	29-1/8 [740]	29-1/8 [740]

Ecoer Smart Inverter condensing units (EODA18H-2436 and EODA18H-4860) share the same chassis part.

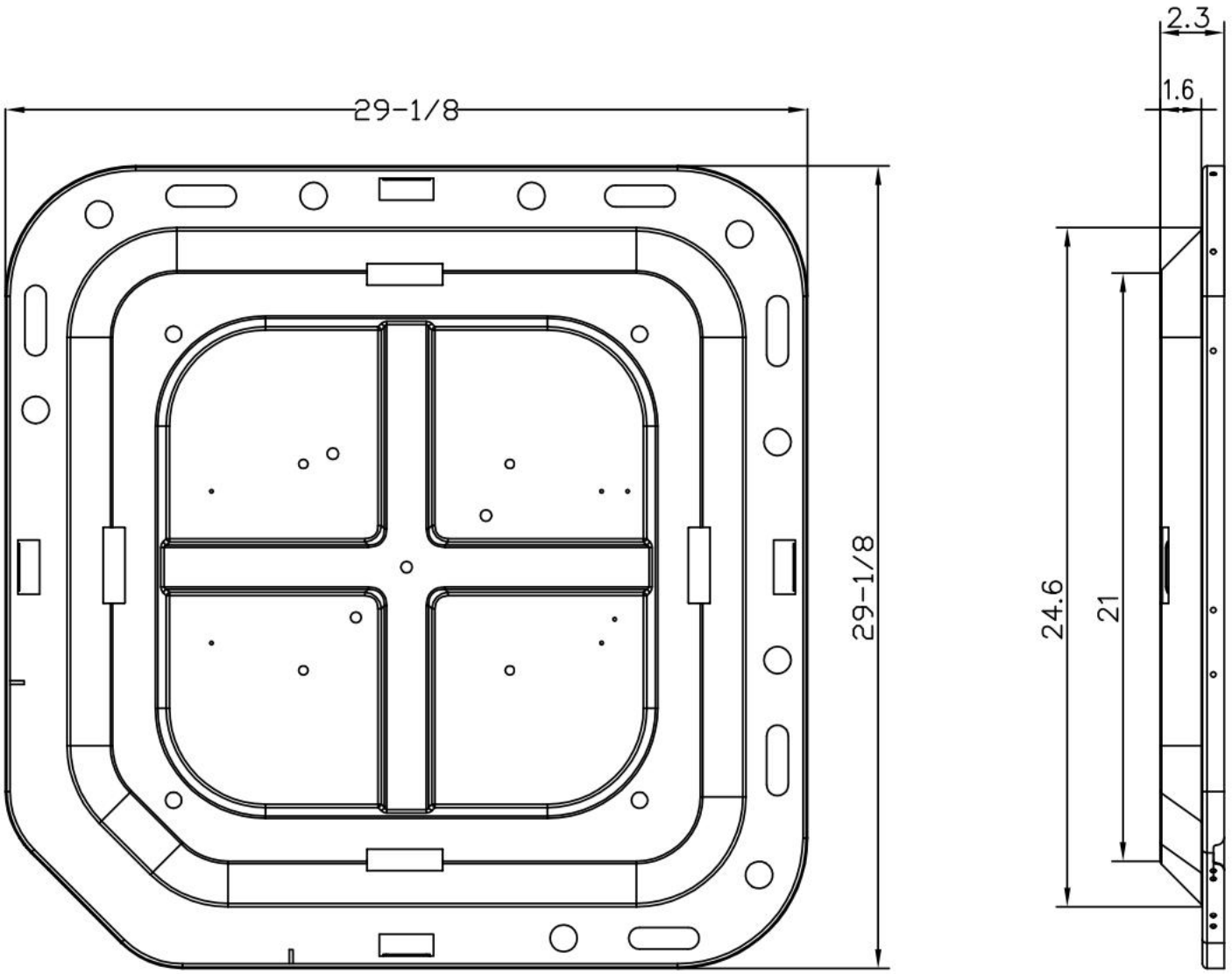


Fig 2. Chassis dimensions

3. Product Specifications

Model	EODA18H-2436	EODA18H-2436	EODA18H-4860	EODA18H-4860
ESI Combination	**2Ton**	**3Ton**	**4Ton**	**5Ton**
Indoor Unit Model	EAHATN-24	EAHATN-36	EAHATN-48	EAHATN-60
Capacity [1]				
Cooling (BTU/h)	23400	34200	45000	54000
Heating (BTU/h)	24000	36000	47000	54000
Operation limit [2]				
Cooling operation range	40~122℉	40~122℉	40~122℉	40~122℉
Heating operation range	-3~86℉	-3~86℉	-3~86℉	-3~86℉
Compressor				
RLA	17.5	17.5	24.0	24.0
LRA	45	45	58.1	58.1
Condenser Fan Motor				
Horse power (HP)	1/3	1/3	1/3	1/3
FLA	2.5	2.5	2.5	2.5
Refrigeration System				
Refrigerant Line Size				
Liquid Line Size (″O.D.)	3/8″	3/8″	3/8″	3/8″
Suction Line Size (″O.D.)	3/4″	3/4″	7/8″	7/8″
Refrigerant Connection Size				
Liquid Line Size (″O.D.)	3/8″	3/8″	3/8″	3/8″
Suction Line Size (″O.D.)	3/4″	3/4″	7/8″	7/8″
Cooling Metering Device (Indoor Side)	TXV	TXV	TXV	TXV
Heating Metering Device	EEV	EEV	EEV	EEV
Maximum Line Length	100FT	100FT	100FT	100FT
Maximum Elevation Difference	50FT	50FT	50FT	50FT
Charging Specifications				
Superheat at Service Valve	8℉ (±2℉)	8℉ (±2℉)	8℉ (±2℉)	8℉ (±2℉)
Sub-cooling at Service Valve	10℉ (±2℉)	10℉ (±2℉)	8℉ (±2℉)	8℉ (±2℉)
Electrical Data				
Voltage-Phase-Hz	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60
Minimum Circuit Ampacity [3]	24.4	24.4	32.5	32.5
Max. Over-current Protection [4]	40	40	50	50
Allowed Volts Range	187~253	187~253	187~253	187~253
Condenser Decibels (dB) [5]	63/59/56	66/63/60	70/64/61	72/66/62
Equipment Weight (lbs)	157	157	192	192
Ship Weight (lbs) [6]	187	187	225	225

REMARKS:

1. Tested and rated in accordance with AHRI Standard 210/240-2023.
2. It's not recommended to run cooling when the ambient temperature is below 50° F, the heating operating range can lower down to -22° F by field setting (n01).
3. Wire size should be determined in accordance with National Electrical Codes.
4. Must use time-delay fuses or HACR-type circuit breakers of the same size as noted.
5. It may vary based on the actual installation status.
6. Weight shown includes packaging.

Model	EODA18H-4860
ESI Ultra Combination	**Ultra 3Ton**
Indoor Unit Model	EAHATN-36
Capacity [1]	
Cooling (BTU/h)	36000
Heating (BTU/h)	36000
Operation limit [2]	
Cooling operation range	40~122℉
Heating operation range	-3~86℉
Compressor	
RLA	24.0
LRA	58.1
Condenser Fan Motor	
Horsepower (HP)	1/3
FLA	2.5
Refrigeration System	
Refrigerant Line Size	
Liquid Line Size (″O.D.)	3/8″
Suction Line Size (″O.D.)	7/8″
Refrigerant Connection Size	
Liquid Line Size (″O.D.)	3/8″
Suction Line Size (″O.D.)	7/8″
Cooling Metering Device (Indoor Side)	TXV
Heating Metering Device	EEV
Maximum Line Length	100FT
Maximum Elevation Difference	50FT
Charging Specifications	
Superheat at Service Valve	8℉ (±2℉)
Sub-cooling at Service Valve	8℉ (±2℉)
Electrical Data	
Voltage-Phase-Hz	208/230-1-60
Minimum Circuit Ampacity [3]	32.5
Max. Over-current Protection [4]	50
Allowed Volts Range	187~253
Condenser Decibels (dB) [5]	72/66/62
Equipment Weight (lbs)	192
Ship Weight (lbs) [6]	225

REMARKS:

1. Tested and rated in accordance with AHRI Standard 210/240-2023.
2. It's not recommended to run cooling when the ambient temperature is below 50° F, the heating operating range can lower down to -22° F by field setting (n01).
3. Wire size should be determined in accordance with National Electrical Codes.
4. Must use time-delay fuses or HACR-type circuit breakers of the same size as noted.
5. It may vary based on the actual installation status.
6. Weight shown includes packaging.

4. Performance Data

COOLING-2TON

2TON SYSTEM-----EODA18H-2436+EAHATN-24																			
Indoor Airflow (CFM)	Outdoor	IWB(°F)	59				63				67				71				
	DB(°F)	IDB(°F)	70	75	80	85	70	75	80	85	70	75	80	85	70	75	80	85	
700	65	TC	17.6	17.7	17.8	17.9	20.8	20.9	21.1	21.2	24.1	24.2	24.4	24.5	-	27.5	27.6	27.8	
		S/T	0.67	0.83	0.91	0.96	0.54	0.68	0.80	0.89	0.42	0.56	0.68	0.79	-	0.44	0.57	0.68	
		kW	0.84	0.84	0.85	0.86	1.04	1.04	1.05	1.06	1.25	1.26	1.27	1.28	-	1.49	1.50	1.51	
	75	TC	17.1	17.2	17.3	17.4	20.3	20.4	20.5	20.6	23.5	23.6	23.7	23.9	-	26.8	26.9	27.1	
		S/T	0.69	0.85	0.94	0.96	0.56	0.70	0.82	0.92	0.43	0.57	0.70	0.81	-	0.45	0.58	0.70	
		kW	0.94	0.95	0.95	0.96	1.16	1.17	1.18	1.18	1.40	1.41	1.42	1.43	-	1.66	1.68	1.69	
	85	TC	16.7	16.8	16.9	17.0	19.8	19.9	20.0	20.1	22.8	23.0	23.1	23.2	-	26.1	26.2	26.4	
		S/T	0.71	0.87	0.96	0.96	0.57	0.72	0.84	0.94	0.44	0.59	0.72	0.83	-	0.47	0.60	0.72	
		kW	1.06	1.06	1.07	1.08	1.30	1.31	1.32	1.33	1.57	1.58	1.59	1.60	-	1.86	1.88	1.89	
	95	TC	16.2	16.3	16.4	16.5	19.2	19.3	19.4	19.6	22.2	22.4	22.5	22.6	-	25.4	25.5	25.7	
		S/T	0.73	0.90	0.96	0.96	0.59	0.74	0.86	0.96	0.46	0.61	0.74	0.86	-	0.48	0.62	0.74	
		kW	1.19	1.19	1.20	1.21	1.46	1.47	1.48	1.49	1.75	1.77	1.78	1.79	-	2.08	2.10	2.12	
	105	TC	15.8	15.9	15.9	16.0	18.7	18.8	18.9	19.0	21.6	21.7	21.9	22.0	-	24.7	24.8	24.9	
		S/T	0.75	0.92	0.96	0.96	0.60	0.76	0.89	0.96	0.47	0.62	0.76	0.88	-	0.49	0.64	0.76	
		kW	1.32	1.33	1.34	1.35	1.63	1.64	1.65	1.66	1.96	1.97	1.96	2.00	-	2.32	2.34	2.36	
	115	TC	15.3	15.4	15.5	15.6	18.2	18.3	18.4	18.5	21.0	21.1	21.2	21.4	-	23.8	24.0	24.1	
		S/T	0.77	0.95	0.96	0.96	0.62	0.78	0.92	0.96	0.48	0.64	0.78	0.91	-	0.51	0.65	0.78	
		kW	1.47	1.48	1.49	1.50	1.81	1.82	1.84	1.85	2.17	2.19	2.17	2.22	-	2.56	2.58	2.59	
800	65	TC	18.3	18.4	18.5	18.6	21.7	21.8	21.9	22.0	25.1	25.2	25.4	25.5	-	28.6	28.8	28.9	
		S/T	0.70	0.86	0.95	1.00	0.56	0.71	0.83	0.93	0.44	0.58	0.71	0.82	-	0.46	0.59	0.71	
		kW	0.87	0.87	0.88	0.89	1.08	1.08	1.09	1.10	1.30	1.31	1.32	1.33	-	1.55	1.56	1.57	
	75	TC	17.8	17.9	18.0	18.1	21.1	21.2	21.4	21.5	24.4	24.6	24.7	24.8	-	27.9	28.0	28.2	
		S/T	0.72	0.88	0.97	1.00	0.58	0.73	0.85	0.96	0.45	0.60	0.73	0.84	-	0.47	0.61	0.73	
		kW	0.97	0.98	0.99	0.99	1.20	1.21	1.22	1.23	1.45	1.46	1.47	1.48	-	1.73	1.74	1.76	
	85	TC	17.4	17.5	17.6	17.6	20.6	20.7	20.8	20.9	23.8	23.9	24.1	24.2	-	27.1	27.3	27.5	
		S/T	0.74	0.91	1.00	1.00	0.60	0.74	0.88	0.98	0.46	0.61	0.75	0.87	-	0.49	0.63	0.75	
		kW	1.09	1.10	1.11	1.12	1.35	1.36	1.37	1.38	1.63	1.64	1.65	1.66	-	1.94	1.95	1.97	
	95	TC	16.9	17.0	17.1	17.2	20.0	20.1	20.2	20.4	23.1	23.3	**23.4**	23.5	-	26.4	26.6	26.7	
		S/T	0.76	0.93	1.00	1.00	0.61	0.77	0.90	1.00	0.47	0.63	**0.77**	0.89	-	0.50	0.64	0.77	
		kW	1.23	1.24	1.24	1.25	1.51	1.53	1.54	1.55	1.82	1.84	**1.85**	1.86	-	2.17	2.18	2.20	
	105	TC	16.4	16.5	16.6	16.7	19.5	19.6	19.7	19.8	22.5	22.6	22.8	22.9	-	25.7	25.8	26.0	
		S/T	0.78	0.96	1.00	1.00	0.63	0.79	0.93	1.00	0.49	0.65	0.79	0.92	-	0.51	0.66	0.79	
		kW	1.37	1.38	1.39	1.40	1.69	1.70	1.71	1.73	2.03	2.05	2.06	2.08	-	2.42	2.43	2.45	
	115	TC	15.9	16.0	16.1	16.2	18.9	19.0	19.1	19.2	21.9	22.0	22.1	22.2	-	24.8	25.0	25.1	
		S/T	0.80	0.99	1.00	1.00	0.65	0.81	0.95	1.00	0.50	0.67	0.82	0.94	-	0.53	0.68	0.81	
		kW	1.53	1.54	1.55	1.56	1.88	1.89	1.90	1.92	2.25	2.27	2.29	2.30	-	2.66	2.68	2.70	
900	65	TC	19.0	19.1	19.2	19.3	22.5	22.6	22.7	22.8	26.0	26.1	26.3	26.4	-	29.6	29.8	30.0	
		S/T	0.73	0.89	0.98	1.04	0.59	0.73	0.86	0.96	0.45	0.60	0.74	0.85	-	0.48	0.61	0.74	
		kW	0.90	0.90	0.91	0.92	1.11	1.12	1.13	1.14	1.34	1.35	1.36	1.37	-	1.61	1.62	1.63	
	75	TC	18.5	18.6	18.7	18.8	21.9	22.0	22.1	22.3	25.3	25.4	25.6	25.7	-	28.9	29.0	29.2	
		S/T	0.74	0.92	1.01	1.04	0.60	0.75	0.88	0.99	0.47	0.62	0.76	0.87	-	0.49	0.63	0.76	
		kW	1.01	1.01	1.02	1.03	1.24	1.25	1.26	1.27	1.50	1.51	1.53	1.54	-	1.79	1.81	1.82	
	85	TC	18.0	18.1	18.2	18.3	21.3	21.4	21.5	21.7	24.6	24.8	24.9	25.1	-	28.1	28.3	28.4	
		S/T	0.76	0.94	1.04	1.04	0.62	0.77	0.91	1.02	0.48	0.63	0.78	0.90	-	0.50	0.65	0.78	
		kW	1.13	1.14	1.14	1.15	1.40	1.41	1.42	1.43	1.69	1.70	1.71	1.72	-	2.01	2.02	2.04	
	95	TC	17.5	17.6	17.7	17.8	20.7	20.8	21.0	21.1	24.0	24.1	24.2	24.4	-	27.4	27.5	27.7	
		S/T	0.79	0.97	1.04	1.04	0.63	0.79	0.93	1.04	0.49	0.65	0.80	0.92	-	0.52	0.67	0.80	
		kW	1.27	1.28	1.28	1.29	1.56	1.58	1.59	1.60	1.89	1.90	1.91	1.93	-	2.25	2.26	2.28	
	105	TC	17.0	17.1	17.2	17.3	20.2	20.3	20.4	20.5	23.3	23.4	23.6	23.7	-	26.6	26.8	26.9	
		S/T	0.81	1.00	1.04	1.04	0.65	0.82	0.96	1.04	0.51	0.67	0.82	0.95	-	0.53	0.68	0.82	
		kW	1.42	1.42	1.43	1.44	1.75	1.76	1.77	1.78	2.10	2.12	2.13	2.15	-	2.50	2.52	2.54	
	115	TC	16.5	16.6	16.7	16.8	19.6	19.7	19.8	19.9	22.6	22.8	22.9	23.0	-	25.7	25.9	26.0	
		S/T	0.83	1.02	1.04	1.04	0.67	0.84	0.99	1.04	0.52	0.69	0.85	0.98	-	0.55	0.70	0.84	
		kW	1.57	1.58	1.59	1.61	1.94	1.95	1.97	1.98	2.33	2.35	2.37	2.38	-	2.75	2.77	2.79	

TC: Total capacity (MBH) **S/T:** Sensible heat ratio

COOLING-3TON

3TON SYSTEM-----EODA18H-2436+EAHATN-36																			
Indoor Airflow (CFM)	Outdoor DB(°F)	IWB(°F) IDB(°F)	59				63				67				71				
			70	75	80	85	70	75	80	85	70	75	80	85	70	75	80	85	
1040	65	TC	26.1	26.2	26.4	26.5	30.9	31.1	31.3	31.4	35.7	35.9	36.1	36.3	-	40.8	41.0	41.3	
		S/T	0.68	0.84	0.93	0.98	0.55	0.69	0.81	0.91	0.43	0.57	0.69	0.80	-	0.45	0.58	0.69	
		kW	1.40	1.41	1.42	1.43	1.73	1.74	1.76	1.77	2.09	2.10	2.12	2.14	-	2.49	2.51	2.53	
	75	TC	25.4	25.6	25.7	25.8	30.1	30.3	30.5	30.6	34.8	35.0	35.2	35.4	-	39.7	40.0	40.2	
		S/T	0.70	0.86	0.95	0.98	0.57	0.71	0.83	0.93	0.44	0.58	0.71	0.82	-	0.46	0.59	0.71	
		kW	1.57	1.58	1.59	1.60	1.94	1.95	1.97	1.98	2.34	2.35	2.37	2.39	-	2.78	2.80	2.83	
	85	TC	24.7	24.9	25.0	25.2	29.3	29.5	29.7	29.8	33.9	34.1	34.3	34.5	-	38.7	38.9	39.1	
		S/T	0.72	0.89	0.98	0.98	0.58	0.73	0.85	0.96	0.45	0.60	0.73	0.84	-	0.47	0.61	0.73	
		kW	1.76	1.78	1.79	1.80	2.18	2.19	2.21	2.22	2.62	2.64	2.66	2.68	-	3.12	3.14	3.16	
	95	TC	24.1	24.2	24.3	24.5	28.5	28.7	28.9	29.0	33.0	33.2	33.4	33.5	-	37.7	37.9	38.1	
		S/T	0.74	0.91	0.98	0.98	0.60	0.75	0.88	0.98	0.46	0.61	0.75	0.87	-	0.49	0.63	0.75	
		kW	1.98	1.99	2.01	2.02	2.44	2.46	2.47	2.49	2.93	2.96	2.98	3.00	-	3.49	3.51	3.54	
	105	TC	23.4	23.5	23.7	23.8	27.7	27.9	28.0	28.2	32.1	32.3	32.4	32.6	-	36.6	36.8	37.0	
		S/T	0.76	0.94	0.98	0.98	0.61	0.77	0.90	0.98	0.48	0.63	0.77	0.89	-	0.50	0.64	0.77	
		kW	2.21	2.23	2.24	2.26	2.72	2.74	2.76	2.78	3.27	3.30	3.29	3.34	-	3.89	3.92	3.94	
	115	TC	22.7	22.9	23.0	23.1	26.9	27.1	27.2	27.4	31.2	31.3	31.5	31.7	-	35.6	35.8	36.0	
		S/T	0.78	0.96	0.98	0.98	0.63	0.79	0.93	0.98	0.49	0.65	0.80	0.92	-	0.52	0.66	0.79	
		kW	2.46	2.48	2.49	2.51	3.03	3.05	3.07	3.09	3.63	3.66	3.65	3.71	-	4.31	4.34	4.37	
1130	65	TC	26.7	26.9	27.0	27.2	31.7	31.9	32.0	32.2	36.6	36.8	37.1	37.3	-	41.8	42.1	42.3	
		S/T	0.70	0.86	0.95	1.00	0.56	0.71	0.83	0.93	0.44	0.58	0.71	0.82	-	0.46	0.59	0.71	
		kW	1.43	1.44	1.45	1.46	1.77	1.79	1.80	1.81	2.14	2.16	2.17	2.19	-	2.55	2.57	2.59	
	75	TC	26.1	26.2	26.3	26.5	30.9	31.0	31.2	31.4	35.7	35.9	36.1	36.3	-	40.8	41.0	41.2	
		S/T	0.72	0.88	0.97	1.00	0.58	0.73	0.85	0.96	0.45	0.60	0.73	0.84	-	0.47	0.61	0.73	
		kW	1.61	1.62	1.63	1.64	1.99	2.00	2.01	2.03	2.39	2.41	2.43	2.45	-	2.85	2.88	2.90	
	85	TC	25.4	25.5	25.7	25.8	30.1	30.2	30.4	30.6	34.8	35.0	35.2	35.3	-	39.7	39.9	40.1	
		S/T	0.74	0.91	1.00	1.00	0.60	0.74	0.88	0.98	0.46	0.61	0.75	0.87	-	0.49	0.63	0.75	
		kW	1.80	1.82	1.83	1.84	2.23	2.24	2.26	2.28	2.68	2.70	2.72	2.74	-	3.20	3.22	3.24	
	95	TC	24.7	24.8	25.0	25.1	29.2	29.4	29.6	29.7	33.8	34.0	**34.2**	34.4	-	38.6	38.8	39.0	
		S/T	0.76	0.93	1.00	1.00	0.61	0.77	0.90	1.00	0.47	0.63	**0.77**	0.89	-	0.50	0.64	0.77	
		kW	2.02	2.04	2.05	2.07	2.50	2.51	2.53	2.55	3.01	3.03	**3.05**	3.07	-	3.58	3.60	3.63	
	105	TC	24.0	24.1	24.3	24.4	28.4	28.6	28.8	28.9	32.9	33.1	33.3	33.4	-	37.5	37.7	38.0	
		S/T	0.78	0.96	1.00	1.00	0.63	0.79	0.93	1.00	0.49	0.65	0.79	0.92	-	0.51	0.66	0.79	
		kW	2.26	2.28	2.29	2.31	2.79	2.81	2.83	2.85	3.35	3.38	3.40	3.42	-	3.98	4.01	4.04	
	115	TC	23.3	23.4	23.6	23.7	27.6	27.8	27.9	28.1	31.9	32.1	32.3	32.5	-	36.5	36.7	36.9	
		S/T	0.80	0.99	1.00	1.00	0.65	0.81	0.95	1.00	0.50	0.67	0.82	0.94	-	0.53	0.68	0.81	
		kW	2.51	2.53	2.55	2.57	3.10	3.12	3.14	3.16	3.72	3.74	3.77	3.80	-	4.41	4.45	4.48	
1240	65	TC	27.5	27.6	27.8	28.0	32.6	32.8	32.9	33.1	37.7	37.9	38.1	38.3	-	43.0	43.2	43.5	
		S/T	0.72	0.89	0.98	1.03	0.58	0.73	0.85	0.96	0.45	0.60	0.73	0.84	-	0.47	0.61	0.73	
		kW	1.47	1.48	1.49	1.50	1.82	1.83	1.85	1.86	2.20	2.22	2.23	2.25	-	2.63	2.65	2.67	
	75	TC	26.8	26.9	27.1	27.2	31.7	31.9	32.1	32.3	36.7	36.9	37.1	37.3	-	41.9	42.1	42.4	
		S/T	0.74	0.91	1.00	1.03	0.60	0.75	0.88	0.98	0.46	0.61	0.75	0.87	-	0.49	0.63	0.75	
		kW	1.65	1.66	1.67	1.68	2.04	2.05	2.07	2.08	2.46	2.48	2.50	2.52	-	2.94	2.96	2.98	
	85	TC	26.1	26.2	26.4	26.5	30.9	31.1	31.3	31.4	35.7	35.9	36.1	36.3	-	40.8	41.0	41.3	
		S/T	0.76	0.93	1.03	1.03	0.61	0.77	0.90	1.01	0.48	0.63	0.77	0.89	-	0.50	0.64	0.77	
		kW	1.85	1.86	1.87	1.89	2.29	2.30	2.32	2.34	2.76	2.78	2.80	2.82	-	3.29	3.31	3.34	
	95	TC	25.4	25.5	25.7	25.8	30.1	30.2	30.4	30.6	34.8	35.0	35.2	35.4	-	39.7	39.9	40.1	
		S/T	0.78	0.96	1.03	1.03	0.63	0.79	0.93	1.03	0.49	0.65	0.79	0.92	-	0.51	0.66	0.79	
		kW	2.07	2.09	2.10	2.12	2.56	2.58	2.60	2.62	3.09	3.11	3.13	3.16	-	3.68	3.70	3.73	
	105	TC	24.7	24.8	24.9	25.1	29.2	29.4	29.6	29.7	33.8	34.0	34.2	34.4	-	38.6	38.8	39.0	
		S/T	0.80	0.99	1.03	1.03	0.65	0.81	0.95	1.03	0.50	0.67	0.81	0.94	-	0.53	0.68	0.81	
		kW	2.32	2.33	2.35	2.37	2.86	2.88	2.90	2.92	3.44	3.47	3.49	3.52	-	4.10	4.13	4.16	
	115	TC	24.0	24.1	24.2	24.4	28.4	28.6	28.7	28.9	32.8	33.0	33.2	33.4	-	37.5	37.7	37.9	
		S/T	0.83	1.02	1.03	1.03	0.67	0.83	0.98	1.03	0.52	0.69	0.84	0.97	-	0.54	0.70	0.84	
		kW	2.58	2.59	2.61	2.63	3.17	3.20	3.22	3.24	3.82	3.84	3.87	3.90	-	4.54	4.57	4.60	

TC: Total capacity (MBH) **S/T:** Sensible heat ratio

COOLING-ULTRA 3TON

Hyper Heating 3TON SYSTEM-----EODA18H-4860+EAHATN-36																			
Indoor Airflow (CFM)	Outdoor	IWB(°F)	59				63				67				71				
	DB(°F)	IDB(°F)	70	75	80	85	70	75	80	85	70	75	80	85	70	75	80	85	
1040	65	TC	27.5	27.6	27.8	27.9	32.5	32.7	32.9	33.1	37.6	37.8	38.0	38.3	-	42.9	43.2	43.4	
		S/T	0.65	0.80	0.88	0.96	0.52	0.65	0.77	0.86	0.41	0.54	0.66	0.76	-	0.43	0.55	0.66	
		kW	1.23	1.23	1.24	1.25	1.52	1.53	1.54	1.55	1.83	1.84	1.86	1.87	-	2.18	2.20	2.21	
	75	TC	26.7	26.9	27.0	27.2	31.7	31.9	32.1	32.2	36.7	36.9	37.1	37.3	-	41.8	42.1	42.3	
		S/T	0.66	0.82	0.90	0.98	0.54	0.67	0.79	0.88	0.42	0.55	0.67	0.78	-	0.44	0.56	0.67	
		kW	1.37	1.38	1.39	1.40	1.70	1.71	1.72	1.73	2.05	2.06	2.08	2.09	-	2.44	2.45	2.47	
	85	TC	26.0	26.2	26.3	26.5	30.9	31.0	31.2	31.4	35.7	35.9	36.1	36.3	-	40.7	41.0	41.2	
		S/T	0.68	0.84	0.93	0.98	0.55	0.69	0.81	0.91	0.43	0.57	0.69	0.80	-	0.45	0.58	0.69	
		kW	1.54	1.56	1.57	1.58	1.91	1.92	1.93	1.95	2.29	2.31	2.33	2.34	-	2.73	2.75	2.77	
	95	TC	25.3	25.5	25.6	25.8	30.0	30.2	30.4	30.5	34.7	34.9	35.1	35.3	-	39.6	39.9	40.1	
		S/T	0.70	0.86	0.95	0.98	0.57	0.71	0.83	0.93	0.44	0.58	0.71	0.82	-	0.46	0.59	0.71	
		kW	1.73	1.74	1.76	1.77	2.14	2.15	2.17	2.18	2.57	2.59	2.61	2.62	-	3.05	3.08	3.10	
	105	TC	24.6	24.8	24.9	25.1	29.2	29.4	29.5	29.7	33.8	33.9	34.1	34.3	-	38.5	38.8	39.0	
		S/T	0.72	0.89	0.98	0.98	0.58	0.73	0.86	0.96	0.45	0.60	0.73	0.85	-	0.47	0.61	0.73	
		kW	1.94	1.95	1.96	1.98	2.39	2.40	2.42	2.44	2.87	2.89	2.88	2.93	-	3.40	3.43	3.45	
	115	TC	23.9	24.1	24.2	24.3	28.4	28.5	28.7	28.8	32.8	33.0	33.2	33.3	-	37.4	37.6	37.9	
		S/T	0.74	0.91	0.98	0.98	0.60	0.75	0.88	0.98	0.47	0.62	0.75	0.87	-	0.49	0.63	0.75	
		kW	2.15	2.17	2.18	2.20	2.65	2.67	2.69	2.70	3.18	3.20	3.20	3.25	-	3.77	3.80	3.83	
1130	65	TC	28.1	28.3	28.5	28.6	33.4	33.5	33.7	33.9	38.6	38.8	39.0	39.2	-	44.0	44.3	44.5	
		S/T	0.66	0.82	0.90	0.99	0.54	0.67	0.79	0.88	0.42	0.55	0.67	0.78	-	0.44	0.56	0.67	
		kW	1.25	1.26	1.27	1.28	1.55	1.56	1.57	1.59	1.87	1.89	1.90	1.92	-	2.24	2.25	2.27	
	75	TC	27.4	27.6	27.7	27.9	32.5	32.7	32.9	33.0	37.6	37.8	38.0	38.2	-	42.9	43.1	43.4	
		S/T	0.68	0.84	0.92	1.00	0.55	0.69	0.81	0.91	0.43	0.57	0.69	0.80	-	0.45	0.58	0.69	
		kW	1.41	1.42	1.42	1.43	1.74	1.75	1.76	1.78	2.10	2.11	2.13	2.14	-	2.50	2.52	2.54	
	85	TC	26.7	26.9	27.0	27.2	31.6	31.8	32.0	32.2	36.6	36.8	37.0	37.2	-	41.8	42.0	42.2	
		S/T	0.70	0.86	0.95	1.00	0.56	0.71	0.83	0.93	0.44	0.58	0.71	0.82	-	0.46	0.59	0.71	
		kW	1.58	1.59	1.60	1.61	1.95	1.96	1.98	1.99	2.35	2.37	2.38	2.40	-	2.80	2.82	2.84	
	95	TC	26.0	26.1	26.3	26.4	30.8	31.0	31.1	31.3	35.6	35.8	**36.0**	36.2	-	40.6	40.9	41.1	
		S/T	0.72	0.89	0.97	1.00	0.58	0.73	0.85	0.96	0.45	0.60	**0.73**	0.84	-	0.47	0.61	0.73	
		kW	1.77	1.78	1.80	1.81	2.19	2.20	2.22	2.23	2.63	2.65	**2.67**	2.69	-	3.13	3.15	3.18	
	105	TC	25.3	25.4	25.5	25.7	29.9	30.1	30.3	30.4	34.6	34.8	35.0	35.2	-	39.5	39.7	40.0	
		S/T	0.74	0.91	1.00	1.00	0.60	0.75	0.88	0.98	0.46	0.61	0.75	0.87	-	0.49	0.63	0.75	
		kW	1.98	1.99	2.01	2.02	2.44	2.46	2.47	2.49	2.93	2.96	2.98	3.00	-	3.49	3.51	3.54	
	115	TC	24.5	24.7	24.8	24.9	29.1	29.2	29.4	29.6	33.6	33.8	34.0	34.2	-	38.4	38.6	38.8	
		S/T	0.76	0.94	1.00	1.00	0.61	0.77	0.90	1.00	0.48	0.63	0.77	0.89	-	0.50	0.65	0.77	
		kW	2.20	2.22	2.23	2.25	2.71	2.73	2.75	2.77	3.25	3.28	3.30	3.32	-	3.86	3.89	3.92	
1240	65	TC	28.9	29.1	29.3	29.4	34.3	34.5	34.7	34.9	39.7	39.9	40.1	40.3	-	45.3	45.5	45.8	
		S/T	0.68	0.84	0.93	1.01	0.55	0.69	0.81	0.91	0.43	0.57	0.69	0.80	-	0.45	0.58	0.69	
		kW	1.29	1.29	1.30	1.31	1.59	1.61	1.62	1.63	1.93	1.94	1.96	1.97	-	2.30	2.32	2.34	
	75	TC	28.2	28.4	28.5	28.7	33.4	33.6	33.8	34.0	38.6	38.9	39.1	39.3	-	44.1	44.4	44.6	
		S/T	0.70	0.86	0.95	1.03	0.57	0.71	0.83	0.93	0.44	0.58	0.71	0.82	-	0.46	0.59	0.71	
		kW	1.44	1.45	1.46	1.47	1.78	1.80	1.81	1.82	2.15	2.17	2.19	2.20	-	2.57	2.59	2.61	
	85	TC	27.5	27.6	27.8	27.9	32.5	32.7	32.9	33.1	37.6	37.8	38.0	38.3	-	42.9	43.2	43.4	
		S/T	0.72	0.89	0.98	1.03	0.58	0.73	0.85	0.96	0.45	0.60	0.73	0.84	-	0.47	0.61	0.73	
		kW	1.62	1.63	1.64	1.65	2.00	2.02	2.03	2.04	2.41	2.43	2.45	2.47	-	2.88	2.90	2.92	
	95	TC	26.7	26.9	27.0	27.2	31.7	31.8	32.0	32.2	36.6	36.8	37.0	37.2	-	41.8	42.0	42.3	
		S/T	0.74	0.91	1.00	1.03	0.60	0.75	0.88	0.98	0.46	0.61	0.75	0.87	-	0.49	0.63	0.75	
		kW	1.82	1.83	1.84	1.85	2.24	2.26	2.27	2.29	2.70	2.72	2.74	2.76	-	3.22	3.24	3.27	
	105	TC	26.0	26.1	26.3	26.4	30.8	31.0	31.1	31.3	35.6	35.8	36.0	36.2	-	40.6	40.9	41.1	
		S/T	0.76	0.94	1.03	1.03	0.61	0.77	0.90	1.01	0.48	0.63	0.77	0.89	-	0.50	0.64	0.77	
		kW	2.03	2.04	2.06	2.07	2.50	2.52	2.54	2.56	3.01	3.04	3.06	3.08	-	3.59	3.61	3.64	
	115	TC	25.2	25.4	25.5	25.7	29.9	30.1	30.2	30.4	34.6	34.8	35.0	35.2	-	39.5	39.7	39.9	
		S/T	0.78	0.96	1.03	1.03	0.63	0.79	0.93	1.03	0.49	0.65	0.80	0.92	-	0.51	0.66	0.79	
		kW	2.26	2.27	2.29	2.30	2.78	2.80	2.82	2.84	3.34	3.37	3.39	3.41	-	3.97	4.00	4.03	

TC: Total capacity (MBH) **S/T:** Sensible heat ratio

ESI Ultra provides about 95% cooling capacity up to 115° F outdoor ambient temperature.

COOLING-4TON

4TON SYSTEM-----EODA18H-4860+EAHATN-48																			
Indoor Airflow (CFM)	Outdoor DB(°F)	IWB(°F) IDB(°F)	59				63				67				71				
			70	75	80	85	70	75	80	85	70	75	80	85	70	75	80	85	
1400	65	TC	34.5	34.7	34.8	35.0	40.8	41.1	41.3	41.5	47.2	47.5	47.8	48.0	-	53.9	54.2	54.5	
		S/T	0.68	0.83	0.92	0.98	0.55	0.68	0.80	0.90	0.42	0.56	0.69	0.79	-	0.45	0.57	0.69	
		kW	1.73	1.75	1.76	1.77	2.14	2.16	2.17	2.19	2.59	2.61	2.62	2.64	-	3.08	3.11	3.13	
	75	TC	33.6	33.8	34.0	34.1	39.8	40.0	40.2	40.5	46.0	46.3	46.5	46.8	-	52.5	52.8	53.1	
		S/T	0.69	0.86	0.94	0.98	0.56	0.70	0.82	0.92	0.43	0.58	0.71	0.82	-	0.46	0.59	0.70	
		kW	1.94	1.96	1.97	1.98	2.40	2.42	2.43	2.45	2.89	2.91	2.94	2.96	-	3.45	3.47	3.50	
	85	TC	32.7	32.9	33.1	33.2	38.7	39.0	39.2	39.4	44.8	45.1	45.3	45.6	-	51.1	51.4	51.7	
		S/T	0.71	0.88	0.97	0.98	0.58	0.72	0.85	0.95	0.45	0.59	0.72	0.84	-	0.47	0.60	0.72	
		kW	2.18	2.20	2.21	2.23	2.69	2.71	2.73	2.75	3.24	3.27	3.29	3.32	-	3.86	3.89	3.92	
	95	TC	31.8	32.0	32.2	32.3	37.7	37.9	38.1	38.3	43.6	43.8	44.1	44.3	-	49.8	50.0	50.3	
		S/T	0.73	0.90	0.98	0.98	0.59	0.74	0.87	0.98	0.46	0.61	0.74	0.86	-	0.48	0.62	0.74	
		kW	2.45	2.47	2.48	2.50	3.02	3.04	3.06	3.08	3.63	3.66	3.68	3.71	-	4.32	4.35	4.38	
	105	TC	30.9	31.1	31.3	31.4	36.7	36.9	37.1	37.3	42.4	42.6	42.9	43.1	-	48.4	48.6	48.9	
		S/T	0.75	0.93	0.98	0.98	0.61	0.76	0.89	0.98	0.47	0.63	0.77	0.89	-	0.50	0.64	0.77	
		kW	2.74	2.76	2.78	2.79	3.37	3.40	3.42	3.44	4.05	4.08	4.08	4.14	-	4.81	4.85	4.88	
	115	TC	30.0	30.2	30.4	30.5	35.6	35.8	36.0	36.2	41.2	41.4	41.6	41.9	-	47.0	47.3	47.5	
		S/T	0.78	0.96	0.98	0.98	0.63	0.78	0.92	0.98	0.49	0.64	0.79	0.91	-	0.51	0.66	0.79	
		kW	3.04	3.07	3.09	3.11	3.74	3.77	3.80	3.82	4.49	4.53	4.53	4.59	-	5.33	5.37	5.41	
1500	65	TC	35.2	35.4	35.6	35.8	41.7	41.9	42.2	42.4	48.2	48.5	48.8	49.0	-	55.0	55.3	55.6	
		S/T	0.69	0.85	0.94	1.00	0.56	0.70	0.82	0.92	0.43	0.57	0.70	0.81	-	0.45	0.59	0.70	
		kW	1.77	1.78	1.79	1.80	2.19	2.20	2.22	2.23	2.64	2.66	2.68	2.70	-	3.15	3.17	3.20	
	75	TC	34.3	34.5	34.7	34.9	40.6	40.9	41.1	41.3	47.0	47.2	47.5	47.8	-	53.6	53.9	54.2	
		S/T	0.71	0.87	0.96	1.00	0.57	0.72	0.84	0.94	0.44	0.59	0.72	0.83	-	0.47	0.60	0.72	
		kW	1.98	1.99	2.01	2.02	2.45	2.46	2.48	2.50	2.95	2.97	3.00	3.02	-	3.52	3.55	3.57	
	85	TC	33.4	33.6	33.8	33.9	39.6	39.8	40.0	40.2	45.7	46.0	46.3	46.5	-	52.2	52.5	52.8	
		S/T	0.73	0.90	0.99	1.00	0.59	0.74	0.86	0.97	0.46	0.60	0.74	0.85	-	0.48	0.62	0.74	
		kW	2.22	2.24	2.25	2.27	2.75	2.77	2.79	2.81	3.31	3.33	3.36	3.38	-	3.94	3.97	4.00	
	95	TC	32.5	32.7	32.8	33.0	38.5	38.7	38.9	39.1	44.5	44.8	**45.0**	45.3	-	50.8	51.1	51.4	
		S/T	0.75	0.92	1.00	1.00	0.60	0.76	0.89	1.00	0.47	0.62	**0.76**	0.88	-	0.49	0.63	0.76	
		kW	2.49	2.51	2.53	2.55	3.08	3.10	3.12	3.14	3.70	3.73	**3.76**	3.79	-	4.41	4.44	4.47	
	105	TC	31.6	31.7	31.9	32.1	37.4	37.6	37.8	38.0	43.3	43.5	43.8	44.0	-	49.4	49.7	49.9	
		S/T	0.77	0.95	1.00	1.00	0.62	0.78	0.91	1.00	0.48	0.64	0.78	0.90	-	0.51	0.65	0.78	
		kW	2.79	2.81	2.83	2.85	3.44	3.46	3.48	3.51	4.13	4.16	4.19	4.22	-	4.91	4.95	4.98	
	115	TC	30.7	30.8	31.0	31.2	36.3	36.6	36.8	37.0	42.0	42.3	42.5	42.7	-	48.0	48.2	48.5	
		S/T	0.79	0.98	1.00	1.00	0.64	0.80	0.94	1.00	0.50	0.66	0.81	0.93	-	0.52	0.67	0.80	
		kW	3.10	3.12	3.14	3.16	3.82	3.84	3.87	3.90	4.58	4.62	4.65	4.68	-	5.44	5.48	5.52	
1590	65	TC	35.8	36.0	36.2	36.4	42.4	42.7	42.9	43.1	49.1	49.3	49.6	49.9	-	56.0	56.3	56.6	
		S/T	0.70	0.87	0.95	1.02	0.57	0.71	0.83	0.94	0.44	0.58	0.71	0.83	-	0.46	0.60	0.71	
		kW	1.79	1.81	1.82	1.83	2.22	2.24	2.25	2.27	2.68	2.70	2.72	2.75	-	3.21	3.23	3.25	
	75	TC	34.9	35.1	35.3	35.5	41.3	41.6	41.8	42.0	47.8	48.1	48.3	48.6	-	54.6	54.9	55.2	
		S/T	0.72	0.89	0.98	1.02	0.58	0.73	0.86	0.96	0.45	0.60	0.73	0.85	-	0.47	0.61	0.73	
		kW	2.01	2.02	2.04	2.05	2.49	2.51	2.52	2.54	3.00	3.02	3.05	3.07	-	3.58	3.61	3.64	
	85	TC	34.0	34.2	34.3	34.5	40.3	40.5	40.7	40.9	46.5	46.8	47.1	47.3	-	53.1	53.4	53.7	
		S/T	0.74	0.91	1.00	1.02	0.60	0.75	0.88	0.99	0.46	0.62	0.75	0.87	-	0.49	0.63	0.75	
		kW	2.26	2.27	2.29	2.31	2.79	2.81	2.83	2.85	3.37	3.39	3.42	3.44	-	4.01	4.04	4.07	
	95	TC	33.0	33.2	33.4	33.6	39.2	39.4	39.6	39.8	45.3	45.5	45.8	46.0	-	51.7	52.0	52.3	
		S/T	0.76	0.94	1.02	1.02	0.61	0.77	0.90	1.01	0.48	0.63	0.77	0.89	-	0.50	0.65	0.77	
		kW	2.53	2.55	2.57	2.59	3.13	3.15	3.17	3.20	3.77	3.80	3.82	3.85	-	4.49	4.52	4.55	
	105	TC	32.1	32.3	32.5	32.7	38.1	38.3	38.5	38.7	44.0	44.3	44.5	44.8	-	50.3	50.5	50.8	
		S/T	0.78	0.97	1.02	1.02	0.63	0.79	0.93	1.02	0.49	0.65	0.80	0.92	-	0.52	0.66	0.79	
		kW	2.83	2.85	2.87	2.89	3.49	3.52	3.54	3.57	4.20	4.23	4.26	4.29	-	5.00	5.03	5.07	
	115	TC	31.2	31.4	31.6	31.7	37.0	37.2	37.4	37.6	42.8	43.0	43.2	43.5	-	48.8	49.1	49.4	
		S/T	0.81	0.99	1.02	1.02	0.65	0.81	0.96	1.02	0.51	0.67	0.82	0.95	-	0.53	0.68	0.82	
		kW	3.15	3.17	3.19	3.21	3.88	3.90	3.93	3.96	4.66	4.69	4.73	4.76	-	5.54	5.58	5.62	

TC: Total capacity (MBH) **S/T:** Sensible heat ratio

COOLING-5TON

5TON SYSTEM----EODA18H-4860+EAHATN-60																			
Indoor Airflow (CFM)	Outdoor	IWB(°F)	59				63				67				71				
	DB(°F)	IDB(°F)	70	75	80	85	70	75	80	85	70	75	80	85	70	75	80	85	
1500	65	TC	41.5	41.7	41.9	42.2	49.2	49.4	49.7	50.0	56.8	57.2	57.5	57.8	-	64.9	65.3	65.6	
		S/T	0.65	0.80	0.88	0.97	0.53	0.66	0.77	0.87	0.41	0.54	0.66	0.77	-	0.43	0.55	0.66	
		kW	2.39	2.41	2.43	2.44	2.96	2.98	3.00	3.03	3.57	3.60	3.63	3.65	-	4.26	4.29	4.33	
	75	TC	40.4	40.6	40.9	41.1	47.9	48.2	48.4	48.7	55.4	55.7	56.0	56.3	-	63.2	63.6	63.9	
		S/T	0.67	0.82	0.91	0.98	0.54	0.68	0.79	0.89	0.42	0.56	0.68	0.79	-	0.44	0.57	0.68	
		kW	2.68	2.70	2.72	2.74	3.32	3.34	3.36	3.39	4.00	4.03	4.06	4.09	-	4.76	4.80	4.83	
	85	TC	39.4	39.6	39.8	40.0	46.6	46.9	47.2	47.4	53.9	54.2	54.5	54.8	-	61.6	61.9	62.3	
		S/T	0.69	0.85	0.93	0.98	0.55	0.69	0.82	0.91	0.43	0.57	0.70	0.81	-	0.45	0.58	0.70	
		kW	3.02	3.04	3.06	3.08	3.72	3.75	3.78	3.80	4.48	4.52	4.55	4.58	-	5.34	5.38	5.42	
	95	TC	38.3	38.5	38.7	38.9	45.4	45.6	45.9	46.1	52.5	52.8	53.1	53.4	-	59.9	60.2	60.6	
		S/T	0.71	0.87	0.96	0.98	0.57	0.71	0.84	0.94	0.44	0.59	0.72	0.83	-	0.46	0.60	0.72	
		kW	3.38	3.41	3.43	3.45	4.17	4.20	4.23	4.26	5.02	5.06	5.09	5.13	-	5.97	6.01	6.06	
	105	TC	37.2	37.4	37.6	37.9	44.1	44.4	44.6	44.9	51.0	51.3	51.6	51.9	-	58.2	58.6	58.9	
		S/T	0.73	0.90	0.98	0.98	0.59	0.73	0.86	0.97	0.46	0.60	0.74	0.85	-	0.48	0.62	0.74	
		kW	3.78	3.81	3.83	3.86	4.66	4.69	4.72	4.76	5.60	5.64	5.65	5.72	-	6.65	6.70	6.75	
	115	TC	36.2	36.4	36.6	36.8	42.9	43.1	43.3	43.6	48.1	48.4	48.7	49.0	-	49.3	49.5	49.8	
		S/T	0.75	0.92	0.98	0.98	0.60	0.76	0.89	0.98	0.47	0.62	0.76	0.88	-	0.49	0.63	0.76	
		kW	4.21	4.23	4.26	4.29	5.17	5.21	5.25	5.28	5.99	6.03	6.04	6.11	-	6.16	6.21	6.25	
1590	65	TC	42.2	42.5	42.7	42.9	50.0	50.3	50.6	50.9	57.9	58.2	58.5	58.8	-	66.0	66.4	66.8	
		S/T	0.66	0.82	0.90	0.99	0.54	0.67	0.79	0.88	0.42	0.55	0.67	0.78	-	0.44	0.56	0.67	
		kW	2.43	2.45	2.47	2.48	3.01	3.03	3.05	3.08	3.64	3.66	3.69	3.72	-	4.34	4.37	4.40	
	75	TC	41.1	41.4	41.6	41.8	48.7	49.0	49.3	49.6	56.4	56.7	57.0	57.3	-	64.3	64.7	65.1	
		S/T	0.68	0.84	0.92	1.00	0.55	0.69	0.81	0.91	0.43	0.57	0.69	0.80	-	0.45	0.58	0.69	
		kW	2.73	2.75	2.76	2.78	3.37	3.40	3.42	3.44	4.07	4.10	4.13	4.16	-	4.85	4.88	4.92	
	85	TC	40.1	40.3	40.5	40.7	47.5	47.7	48.0	48.3	54.9	55.2	55.5	55.8	-	62.7	63.0	63.4	
		S/T	0.70	0.86	0.95	1.00	0.56	0.71	0.83	0.93	0.44	0.58	0.71	0.82	-	0.46	0.59	0.71	
		kW	3.06	3.08	3.11	3.13	3.78	3.81	3.84	3.86	4.56	4.59	4.63	4.66	-	5.43	5.47	5.51	
	95	TC	39.0	39.2	39.4	39.6	46.2	46.4	46.7	47.0	53.4	53.7	**54.0**	54.3	-	61.0	61.3	61.6	
		S/T	0.72	0.89	0.97	1.00	0.58	0.73	0.85	0.96	0.45	0.60	**0.73**	0.84	-	0.47	0.61	0.73	
		kW	3.44	3.46	3.48	3.51	4.24	4.27	4.30	4.33	5.10	5.14	**5.18**	5.22	-	6.07	6.12	6.16	
	105	TC	37.9	38.1	38.3	38.5	44.9	45.2	45.4	45.7	51.9	52.2	52.5	52.8	-	59.3	59.6	59.9	
		S/T	0.74	0.91	1.00	1.00	0.60	0.75	0.88	0.98	0.46	0.61	0.75	0.87	-	0.49	0.63	0.75	
		kW	3.84	3.87	3.89	3.92	4.73	4.77	4.80	4.83	5.69	5.73	5.77	5.82	-	6.77	6.82	6.87	
	115	TC	36.8	37.0	37.2	37.4	43.6	43.9	44.1	44.4	49.0	49.3	49.5	49.8	-	50.1	50.4	50.7	
		S/T	0.76	0.94	1.00	1.00	0.61	0.77	0.90	1.00	0.48	0.63	0.77	0.89	-	0.50	0.65	0.77	
		kW	4.27	4.30	4.33	4.36	5.26	5.29	5.33	5.37	6.08	6.13	6.17	6.22	-	6.27	6.31	6.36	
1700	65	TC	43.1	43.3	43.6	43.8	51.0	51.3	51.6	51.9	59.0	59.4	59.7	60.0	-	67.4	67.8	68.1	
		S/T	0.68	0.83	0.92	1.01	0.55	0.68	0.80	0.90	0.42	0.56	0.69	0.79	-	0.45	0.57	0.69	
		kW	2.48	2.49	2.51	2.53	3.07	3.09	3.11	3.14	3.71	3.74	3.76	3.79	-	4.43	4.46	4.50	
	75	TC	42.0	42.2	42.4	42.7	49.7	50.0	50.3	50.6	57.5	57.8	58.2	58.5	-	65.6	66.0	66.4	
		S/T	0.70	0.86	0.94	1.02	0.56	0.70	0.82	0.92	0.44	0.58	0.71	0.82	-	0.46	0.59	0.71	
		kW	2.78	2.80	2.81	2.83	3.44	3.46	3.49	3.51	4.15	4.18	4.21	4.24	-	4.95	4.98	5.02	
	85	TC	40.9	41.1	41.3	41.6	48.4	48.7	49.0	49.2	56.0	56.3	56.6	56.9	-	63.9	64.3	64.6	
		S/T	0.71	0.88	0.97	1.02	0.58	0.72	0.85	0.95	0.45	0.59	0.73	0.84	-	0.47	0.60	0.72	
		kW	3.12	3.14	3.16	3.18	3.86	3.88	3.91	3.94	4.65	4.68	4.72	4.75	-	5.54	5.58	5.62	
	95	TC	39.8	40.0	40.2	40.4	47.1	47.4	47.6	47.9	54.5	54.8	55.1	55.4	-	62.2	62.5	62.9	
		S/T	0.73	0.90	0.99	1.02	0.59	0.74	0.87	0.98	0.46	0.61	0.75	0.86	-	0.48	0.62	0.74	
		kW	3.50	3.52	3.55	3.57	4.32	4.35	4.38	4.41	5.20	5.24	5.28	5.32	-	6.20	6.24	6.29	
	105	TC	38.7	38.9	39.1	39.3	45.8	46.1	46.3	46.6	53.0	53.3	53.6	53.9	-	60.5	60.8	61.1	
		S/T	0.75	0.93	1.02	1.02	0.61	0.76	0.90	1.00	0.47	0.63	0.77	0.89	-	0.50	0.64	0.77	
		kW	3.91	3.94	3.96	3.99	4.82	4.86	4.89	4.92	5.80	5.84	5.89	5.93	-	6.90	6.95	7.00	
	115	TC	37.5	37.8	38.0	38.2	44.5	44.8	45.0	45.3	50.0	50.3	50.5	50.8	-	51.2	51.4	51.7	
		S/T	0.78	0.96	1.02	1.02	0.63	0.78	0.92	1.02	0.49	0.64	0.79	0.91	-	0.51	0.66	0.79	
		kW	4.35	4.38	4.41	4.43	5.35	5.39	5.43	5.47	6.20	6.25	6.29	6.33	-	6.39	6.43	6.48	

TC: Total capacity (MBH) **S/T:** Sensible heat ratio

HEATING-2/3TON

2TON SYSTEM-----EODA18H-2436+EAHATN-24													
INDOOR AIR		OUTDOOR AMBIENT TEMPERATURE(°F)											
		-3			7			17			27		
IDB (°F)	CFM	MBh	kW	COP	MBh	kW	COP	MBh	kW	COP	MBh	kW	COP
65	700	18.5	2.81	1.94	21.9	2.74	2.34	25.2	2.65	2.79	25.7	2.54	2.97
	800	19.3	2.95	1.92	22.8	2.88	2.32	26.2	2.78	2.76	26.8	2.67	2.94
	900	20.0	3.08	1.90	23.6	3.00	2.30	27.2	2.91	2.74	27.8	2.79	2.91
70	700	16.6	2.46	1.98	19.6	2.40	2.39	22.6	2.32	2.85	23.1	2.23	3.03
	800	17.3	2.58	1.97	20.4	2.52	2.38	23.5	2.44	2.83	24.0	2.34	3.01
	900	17.9	2.69	1.95	21.1	2.63	2.36	24.4	2.54	2.81	24.9	2.44	2.99
75	700	14.7	2.13	2.02	17.3	2.08	2.44	20.0	2.01	2.91	20.4	1.93	3.09
	800	15.3	2.23	2.01	18.0	2.18	2.43	20.8	2.11	2.89	21.2	2.02	3.07
	900	15.8	2.32	2.00	18.7	2.27	2.41	21.5	2.20	2.87	22.0	2.11	3.06

2TON SYSTEM-----EODA18H-2436+EAHATN-24													
INDOOR AIR		OUTDOOR AMBIENT TEMPERATURE(°F)											
		37			47			57			67		
IDB (°F)	CFM	MBh	kW	COP	MBh	kW	COP	MBh	kW	COP	MBh	kW	COP
65	700	25.7	2.41	3.13	25.7	2.25	3.35	25.7	2.06	3.67	25.7	1.82	4.16
	800	26.8	2.53	3.10	26.8	2.36	3.32	26.8	2.16	3.64	26.8	1.91	4.12
	900	27.8	2.65	3.07	27.8	2.47	3.29	27.8	2.26	3.61	27.8	1.99	4.09
70	700	23.1	2.11	3.20	23.1	1.97	3.42	23.1	1.80	3.75	23.1	1.59	4.25
	800	24.0	2.22	3.17	24.0	2.07	3.40	24.0	1.89	3.72	24.0	1.67	4.22
	900	24.9	2.31	3.15	24.9	2.16	3.37	24.9	1.97	3.69	24.9	1.74	4.19
75	700	20.4	1.83	3.26	20.4	1.71	3.49	20.4	1.56	3.83	20.4	1.38	4.34
	800	21.2	1.92	3.24	21.2	1.79	3.47	21.2	1.63	3.80	21.2	1.44	4.31
	900	22.0	2.00	3.22	22.0	1.86	3.45	22.0	1.70	3.78	22.0	1.50	4.28

3TON SYSTEM-----EODA18H-2436+EAHATN-36													
INDOOR AIR		OUTDOOR AMBIENT TEMPERATURE(°F)											
		-3			7			17			27		
IDB (°F)	CFM	MBh	kW	COP	MBh	kW	COP	MBh	kW	COP	MBh	kW	COP
65	1040	22.4	4.45	1.47	26.4	4.34	1.78	30.4	4.20	2.12	34.4	4.03	2.50
	1130	22.9	4.58	1.47	27.0	4.47	1.77	31.2	4.33	2.11	35.3	4.16	2.49
	1240	23.6	4.74	1.46	27.8	4.63	1.76	32.0	4.48	2.09	36.3	4.30	2.47
70	1040	20.0	3.89	1.51	23.6	3.80	1.82	27.2	3.68	2.17	30.8	3.53	2.56
	1130	20.5	4.01	1.50	24.2	3.92	1.81	27.9	3.79	2.16	31.6	3.64	2.55
	1240	21.1	4.15	1.49	24.9	4.05	1.80	28.7	3.92	2.15	32.5	3.76	2.53
75	1040	17.7	3.37	1.54	20.9	3.29	1.86	24.1	3.19	2.21	27.2	3.06	2.61
	1130	18.1	3.47	1.53	21.4	3.39	1.85	24.7	3.28	2.21	27.9	3.15	2.60
	1240	18.7	3.58	1.53	22.0	3.50	1.85	25.4	3.39	2.20	28.7	3.25	2.59

3TON SYSTEM-----EODA18H-2436+EAHATN-36													
INDOOR AIR		OUTDOOR AMBIENT TEMPERATURE(°F)											
		37			47			57			67		
IDB (°F)	CFM	MBh	kW	COP	MBh	kW	COP	MBh	kW	COP	MBh	kW	COP
65	1040	38.4	3.82	2.95	39.2	3.57	3.22	39.2	3.26	3.53	39.2	2.88	3.99
	1130	39.4	3.94	2.93	40.2	3.68	3.20	40.2	3.36	3.51	40.2	2.97	3.97
	1240	40.5	4.08	2.91	41.3	3.81	3.18	41.3	3.48	3.48	41.3	3.07	3.95
70	1040	34.4	3.35	3.01	35.1	3.13	3.29	35.1	2.85	3.61	35.1	2.52	4.08
	1130	35.3	3.45	3.00	36.0	3.22	3.28	36.0	2.94	3.59	36.0	2.60	4.07
	1240	36.3	3.57	2.98	37.0	3.33	3.26	37.0	3.04	3.57	37.0	2.68	4.04
75	1040	30.4	2.90	3.08	31.0	2.71	3.36	31.0	2.47	3.68	31.0	2.18	4.17
	1130	31.2	2.98	3.07	31.8	2.78	3.35	31.8	2.54	3.67	31.8	2.24	4.16
	1240	32.1	3.08	3.05	32.7	2.88	3.33	32.7	2.63	3.65	32.7	2.32	4.14

HEATING-ULTRA 3TON

Hyper Heating 3TON SYSTEM-----EODA18H-4860+EAHATN-36													
INDOOR AIR		OUTDOOR AMBIENT TEMPERATURE											
		-3			7			17			27		
IDB (°F)	CFM	MBh	kW	COP	MBh	kW	COP	MBh	kW	COP	MBh	kW	COP
65	1040	34.8	3.85	2.64	39.2	3.76	3.06	39.2	3.64	3.16	39.2	3.49	3.29
	1130	35.6	3.97	2.63	40.2	3.88	3.04	40.2	3.75	3.14	40.2	3.60	3.27
	1240	36.6	4.11	2.61	41.3	4.01	3.02	41.3	3.88	3.12	41.3	3.73	3.25
70	1040	31.1	3.37	2.70	35.1	3.29	3.13	35.1	3.19	3.23	35.1	3.06	3.36
	1130	31.9	3.48	2.69	36.0	3.39	3.11	36.0	3.29	3.21	36.0	3.15	3.35
	1240	32.8	3.59	2.68	37.0	3.51	3.09	37.0	3.40	3.19	37.0	3.26	3.33
75	1040	27.5	2.92	2.76	31.0	2.85	3.19	31.0	2.76	3.30	31.0	2.65	3.43
	1130	28.2	3.00	2.75	31.8	2.93	3.18	31.8	2.84	3.28	31.8	2.73	3.42
	1240	29.0	3.10	2.74	32.7	3.03	3.16	32.7	2.93	3.27	32.7	2.81	3.41

Hyper Heating 3TON SYSTEM-----EODA18H-4860+EAHATN-36													
INDOOR AIR		OUTDOOR AMBIENT TEMPERATURE											
		37			47			57			67		
IDB (°F)	CFM	MBh	kW	COP	MBh	kW	COP	MBh	kW	COP	MBh	kW	COP
65	1040	39.2	3.31	3.47	39.2	3.09	3.72	39.2	2.82	4.07	39.2	2.49	4.61
	1130	40.2	3.41	3.45	40.2	3.19	3.69	40.2	2.91	4.05	40.2	2.57	4.58
	1240	41.3	3.53	3.43	41.3	3.30	3.67	41.3	3.01	4.02	41.3	2.66	4.55
70	1040	35.1	2.90	3.55	35.1	2.71	3.80	35.1	2.47	4.16	35.1	2.18	4.71
	1130	36.0	2.99	3.53	36.0	2.79	3.78	36.0	2.55	4.14	36.0	2.25	4.69
	1240	37.0	3.09	3.51	37.0	2.88	3.76	37.0	2.63	4.12	37.0	2.33	4.67
75	1040	31.0	2.51	3.62	31.0	2.34	3.88	31.0	2.14	4.25	31.0	1.89	4.81
	1130	31.8	2.58	3.61	31.8	2.41	3.87	31.8	2.20	4.23	31.8	1.94	4.80
	1240	32.7	2.67	3.59	32.7	2.49	3.85	32.7	2.28	4.21	32.7	2.01	4.77

Note: ESI Ultra provides 100% heating capacity down to 5° F outdoor ambient temperature.

HEATING-4/5TON

4TON SYSTEM-----EODA18H-4860+EAHATN-48													
INDOOR AIR		OUTDOOR AMBIENT TEMPERATURE											
		-3			7			17			27		
IDB (°F)	CFM	MBh	kW	COP	MBh	kW	COP	MBh	kW	COP	MBh	kW	COP
65	1590	36.9	6.05	1.79	43.5	5.90	2.16	50.1	5.72	2.57	53.4	5.49	2.85
	1500	36.2	5.92	1.79	42.7	5.78	2.17	49.3	5.60	2.58	52.5	5.37	2.86
	1400	35.5	5.77	1.80	41.9	5.63	2.18	48.2	5.46	2.59	51.4	5.23	2.88
70	1590	33.0	5.29	1.83	39.0	5.17	2.21	44.9	5.00	2.63	47.8	4.80	2.92
	1500	32.4	5.18	1.84	38.3	5.06	2.22	44.1	4.90	2.64	47.0	4.70	2.93
	1400	31.8	5.06	1.84	37.5	4.93	2.23	43.2	4.78	2.65	46.0	4.59	2.94
75	1590	29.2	4.57	1.87	34.4	4.46	2.26	39.7	4.32	2.69	42.3	4.15	2.99
	1500	28.7	4.48	1.88	33.8	4.37	2.27	39.0	4.24	2.70	41.5	4.06	3.00
	1400	28.1	4.37	1.88	33.1	4.27	2.27	38.2	4.14	2.71	40.7	3.97	3.01

4TON SYSTEM-----EODA18H-4860+EAHATN-48													
INDOOR AIR		OUTDOOR AMBIENT TEMPERATURE											
		37			47			57			67		
IDB (°F)	CFM	MBh	kW	COP	MBh	kW	COP	MBh	kW	COP	MBh	kW	COP
65	1590	53.4	5.20	3.01	53.4	4.86	3.22	53.4	4.43	3.53	53.4	3.91	4.00
	1500	52.5	5.09	3.02	52.5	4.75	3.24	52.5	4.34	3.54	52.5	3.83	4.01
	1400	51.4	4.96	3.03	51.4	4.63	3.25	51.4	4.23	3.56	51.4	3.73	4.03
70	1590	47.8	4.55	3.08	47.8	4.25	3.30	47.8	3.88	3.61	47.8	3.42	4.09
	1500	47.0	4.46	3.09	47.0	4.16	3.31	47.0	3.80	3.63	47.0	3.35	4.11
	1400	46.0	4.35	3.10	46.0	4.06	3.32	46.0	3.71	3.64	46.0	3.27	4.12
75	1590	42.3	3.93	3.15	42.3	3.67	3.37	42.3	3.35	3.70	42.3	2.96	4.19
	1500	41.5	3.85	3.16	41.5	3.60	3.38	41.5	3.28	3.71	41.5	2.90	4.20
	1400	40.7	3.76	3.17	40.7	3.51	3.40	40.7	3.21	3.72	40.7	2.83	4.21

5TON SYSTEM-----EODA18H-4860+EAHATN-60													
INDOOR AIR		OUTDOOR AMBIENT TEMPERATURE											
		-3			7			17			27		
IDB (°F)	CFM	MBh	kW	COP	MBh	kW	COP	MBh	kW	COP	MBh	kW	COP
65	1700	36.7	7.13	1.51	43.3	6.96	1.82	49.9	6.74	2.17	56.4	6.47	2.56
	1590	35.9	6.96	1.51	42.4	6.79	1.83	48.9	6.58	2.18	55.3	6.31	2.57
	1500	35.3	6.81	1.52	41.7	6.65	1.84	48.0	6.44	2.19	54.4	6.18	2.58
70	1700	32.8	6.24	1.54	38.8	6.09	1.86	44.7	5.90	2.22	50.6	5.66	2.62
	1590	32.2	6.09	1.55	38.0	5.95	1.87	43.8	5.76	2.23	49.6	5.52	2.63
	1500	31.6	5.97	1.55	37.3	5.82	1.88	43.0	5.64	2.24	48.7	5.41	2.64
75	1700	29.0	5.39	1.58	34.2	5.26	1.91	39.5	5.10	2.27	44.7	4.89	2.68
	1590	28.4	5.27	1.58	33.6	5.14	1.91	38.7	4.98	2.28	43.8	4.78	2.69
	1500	28.0	5.16	1.59	33.0	5.04	1.92	38.0	4.88	2.28	43.0	4.68	2.69

5TON SYSTEM-----EODA18H-4860+EAHATN-60													
INDOOR AIR		OUTDOOR AMBIENT TEMPERATURE											
		37			47			57			67		
IDB (°F)	CFM	MBh	kW	COP	MBh	kW	COP	MBh	kW	COP	MBh	kW	COP
65	1700	61.5	6.13	2.94	61.5	5.73	3.15	61.5	5.23	3.45	61.5	4.62	3.91
	1590	60.3	5.98	2.95	60.3	5.59	3.16	60.3	5.10	3.46	60.3	4.50	3.92
	1500	59.2	5.86	2.96	59.2	5.47	3.17	59.2	4.99	3.48	59.2	4.41	3.94
70	1700	55.1	5.37	3.01	55.1	5.01	3.22	55.1	4.57	3.53	55.1	4.04	4.00
	1590	54.0	5.24	3.02	54.0	4.89	3.24	54.0	4.47	3.54	54.0	3.94	4.02
	1500	53.1	5.13	3.03	53.1	4.79	3.25	53.1	4.37	3.56	53.1	3.86	4.03
75	1700	48.7	4.64	3.08	48.7	4.33	3.30	48.7	3.95	3.61	48.7	3.49	4.09
	1590	47.7	4.53	3.09	47.7	4.23	3.31	47.7	3.86	3.62	47.7	3.41	4.10
	1500	46.9	4.44	3.10	46.9	4.14	3.32	46.9	3.78	3.63	46.9	3.34	4.12

Capacity Corrections

The system can extend the line sets flexibly within its limitation to fit the actual situation. However, it will cause cooling/heating capacity decrease because of the pressure loss by longer line length. Using the following correction factor to calculate the approximate capacity accordingly.

SUCTION LINE LENGTH/SIZE VS CAPACITY MULTIPLIER (R410A)

Model		EODA18H-2436	EODA18H-4860
Liquid Line Connection Size		3/8"	3/8"
Suction Line Connection Size		3/4"	7/8"
Suction Line Length/Size ***NOTE**		5/8" Optional	3/4" Optional
		3/4" Standard	7/8" Standard
25 feet	Optional	1.00	0.99
	Standard	1.00	1.00
50 feet	Optional	0.98	0.97
	Standard	0.99	0.98
100 feet	Optional	0.95	0.94
	Standard	0.97	0.96

NOTE: It's not suggested to use suction line bigger than standard size shown above, in which will result poor oil return back to the inverter compressor.

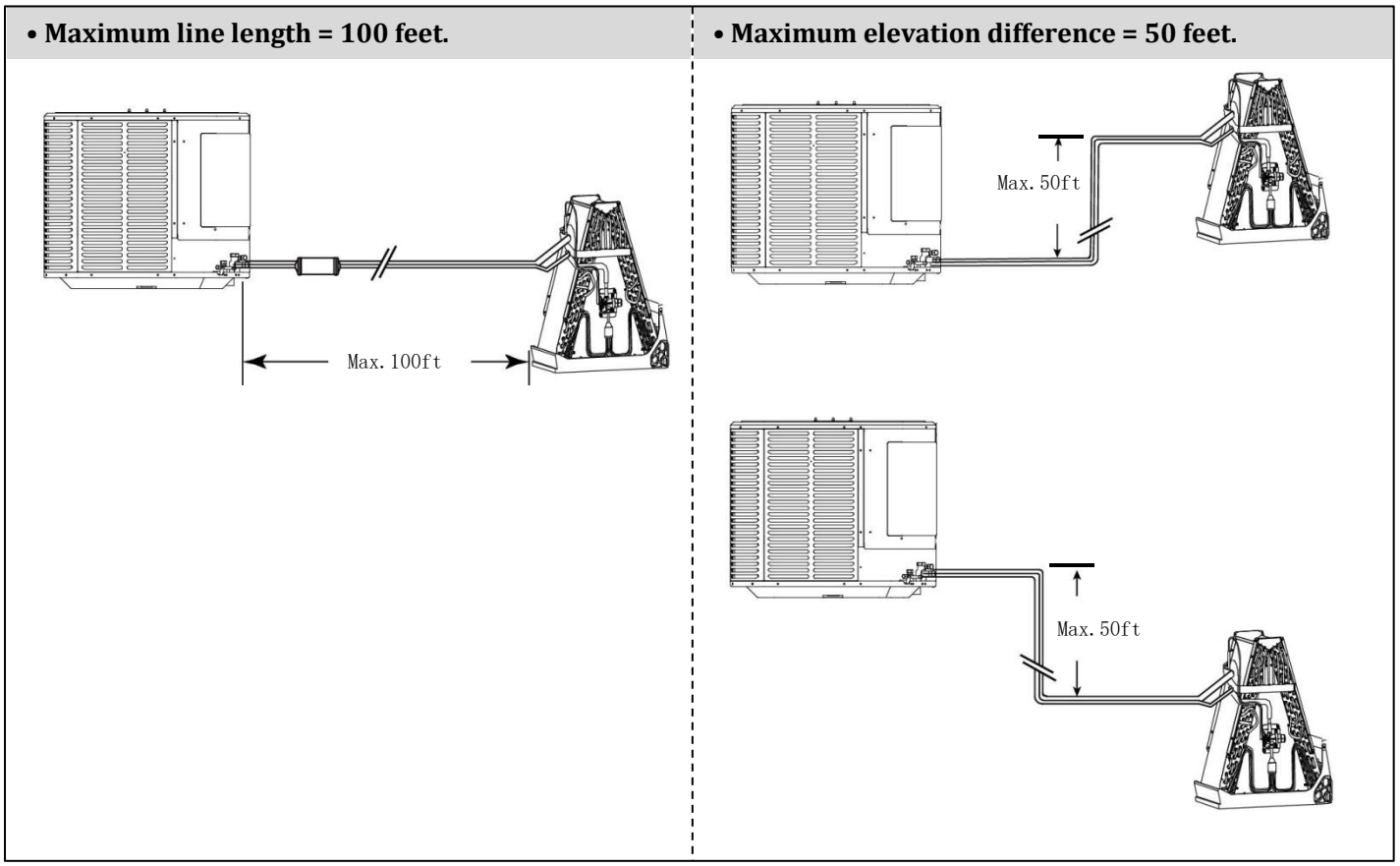


Fig 3. Line length and elevation difference limits

43671 Trade Center Place, Suite 100Dulles, VA 20166

Tel: 703-348-2538

www.ecoer.com