

2-Stage Indoor Condensing Unit for Refrigeration Applications (15-30 HP)



Product catalogue

COPELAND™


EMERSON™

2-Stage indoor condensing unit for extremely low temperature applications



2-Stage indoor condensing unit for extremely low temperature applications

Emerson's 2-stage semi-hermetic indoor condensing units were developed to meet low temperature requirements in many of the application areas existing today. They were mainly designed for operation in plants with low evaporating temperatures using R22 or R404A/R507. The distinctive advantage of operating 2-stage condensing units allows evaporating temperatures to go as low as -60°C . With single-stage condensing units, evaporating temperatures can only go down to -50°C . Another advantage of using 2-stage condensing units is that higher cooling capacities and improved overall system efficiency can be achieved through liquid sub-cooling via heat exchanger. 2-stage condensing unit models are available in 15 to 30 HP ranges.

For many years, users of semi-hermetic condensing units have relied on Emerson to provide high performance and value to the refrigeration market. Long term engineering and manufacturing experience combined with innovative technologies now unleash new opportunities in extremely low temperature applications.

This catalogue presents information for low temperature applications using R404A. For applications using other refrigerants, please contact your Emerson representative.



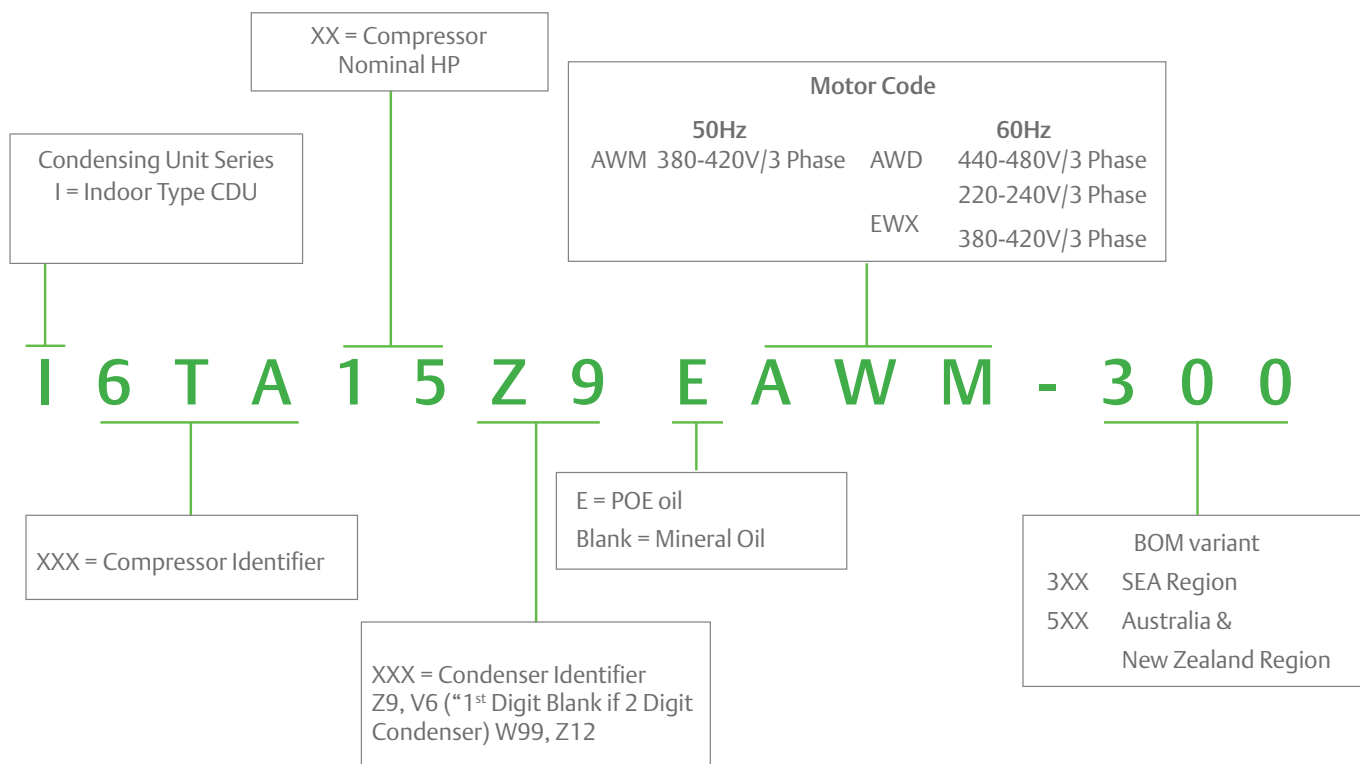
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Features	Benefits
Fully assembled & ready for installation <ul style="list-style-type: none"> • Required components come as standard BOM • Emerson brand line components 	<ul style="list-style-type: none"> • Save on assembly time • Save on applied cost
Designed for extremely low evaporating temperatures: -20°C to -60°C	<ul style="list-style-type: none"> • Perfect for applications such as blast freezing and blast chilling
2 Stage units are approved for operation with R404A/R507.	<ul style="list-style-type: none"> • Easier logistics • Lower stock levels
Sub-cooler models equipped with heat exchanger <ul style="list-style-type: none"> • Increased cooling capacity • Improved energy efficiency 	<ul style="list-style-type: none"> • Lower operating costs • Energy savings



Nomenclature



Bill of Material

Item	Description	Item
3/500	Fully Featured Unit	With Solder Filter Drier, Sight Glass, Oil Separator, Suction Accumulator
3/501	Semi Featured Unit	With Solder Filter Drier, Sight Glass, Oil Separator
3/502	Basic Unit	With Solder Filter Drier, Sight Glass
3/5X0	Variation of 3/500	
3/5X1	Variation of 3/501	
3/5X2	Variation of 3/502	

	300/500	301/501	302/502
Compressor	✓	✓	✓
Crankcase Heater	✓	✓	✓
Oil Sight Glass	✓	✓	✓
Discharge Line Vibration Absorber	✓	✓	✓
Dual Pressure Switch	✓	✓	✓
Electronic Oil Pressure Switch	✓	✓	✓
Oil Separator	✓	✓	
Suction Accumulator	✓		
Liquid Filter Drier	✓	✓	✓
Liquid Sight Glass	✓	✓	✓

Layout

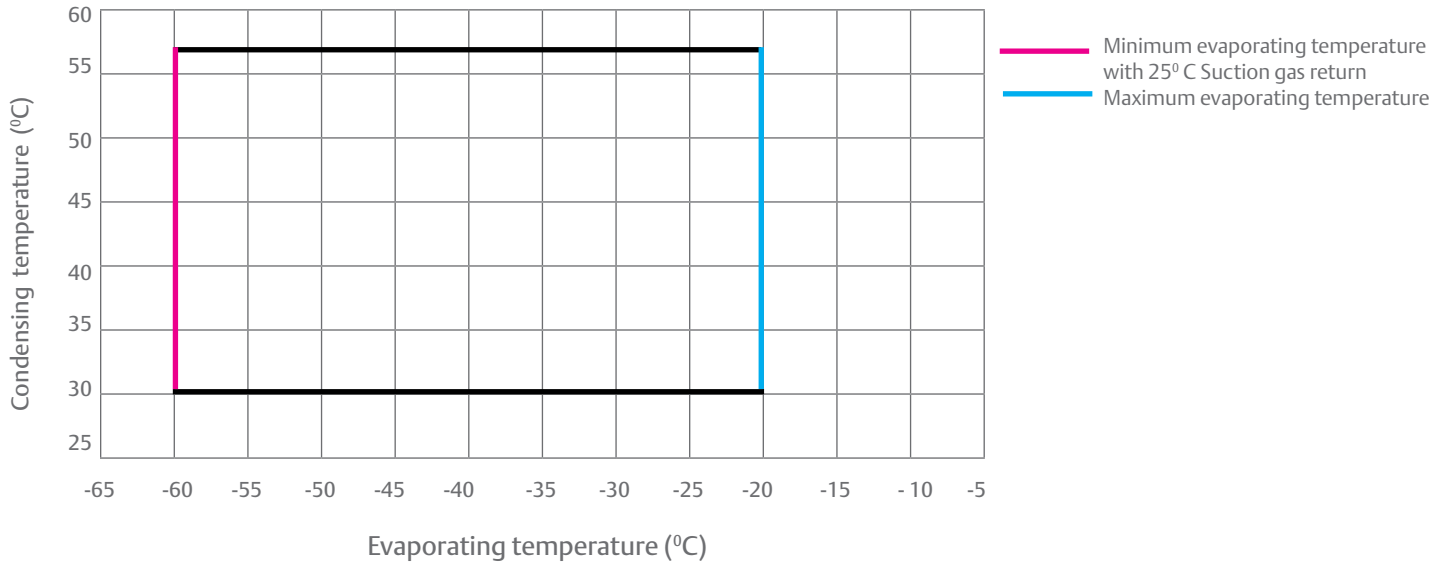


Operating envelopes

R404A

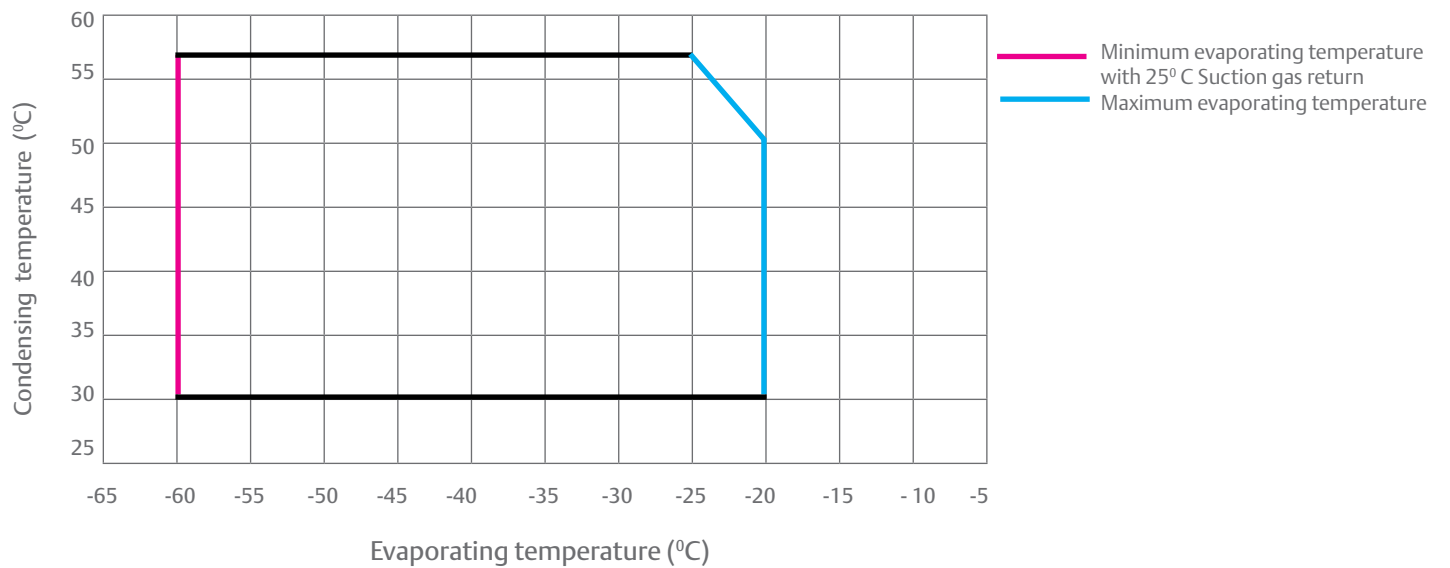
Without Sub-cooler

6TA-150X, 6TH-200X, 6TJ-250X, 6TK-300X



With Sub-cooler

6TA-150X-SUB, 6TH-200X-SUB, 6TJ-250X-SUB, 6TK-300X-SUB



Performance data

50Hz

I6TA15Z9E-SUB-AWM

R404A	Evaporating Temperature °C																	
	-60		-55		-50		-45		-40		-35		-30		-25		-20	
Ambient Temperature °C	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P
27					8.81	10.02	11.32	10.95	14.18	11.90	17.41	12.88	21.03	13.90	25.04	14.95	29.44	16.06
32	4.73	8.50	6.55	9.43	8.66	10.39	11.09	11.39	13.87	12.43	17.00	13.50	20.49	14.61	24.36	15.77	28.60	17.00
38	4.66	8.89	6.41	9.87	8.44	10.91	10.77	11.99	13.42	13.12	16.41	14.29	19.74	15.52	23.42	16.81	27.45	18.18
43	4.59	9.26	6.28	10.28	8.23	11.38	10.46	12.53	13.00	13.73	15.85	14.99	19.03	16.31	22.54	17.71		
46	4.55	9.49	6.19	10.54	8.08	11.67	10.25	12.86	12.71	14.10	15.48	15.41	18.57	16.79	21.97	18.25		
49	4.50	9.72	6.09	10.81	7.93	11.97	10.03	13.19	12.41	14.49	15.09	15.85						

I6TA15Z9E-AWM

R404A	Evaporating Temperature °C																	
	-60		-55		-50		-45		-40		-35		-30		-25		-20	
Ambient Temperature °C	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P
27							8.34	10.18	10.78	11.15	13.66	12.16	16.99	13.22	20.76	14.34	24.99	15.51
32	3.11	7.67	4.34	8.54	5.89	9.46	7.80	10.44	10.09	11.48	12.79	12.57	15.91	13.72	19.44	14.93	23.38	16.21
38	2.83	7.87	3.98	8.77	5.41	9.74	7.17	10.79	9.28	11.90	11.74	13.07	14.59	14.32	17.81	15.64	21.39	17.04
43	2.62	8.06	3.69	8.99	5.02	10.00	6.64	11.09	8.57	12.26	10.83	13.51	13.43	14.84	16.38	16.25	19.65	17.75
46	2.50	8.18	3.52	9.13	4.77	10.16	6.30	11.28	8.12	12.49	10.25	13.78	12.70	15.15	15.47	16.61	18.56	18.17
49	2.36	8.31	3.32	9.27	4.50	10.33	5.93	11.47	7.64	12.71	9.63	14.04	11.93	15.46	14.53	16.97		

I6TH20Z9E -SUB-AWM

R404A	Evaporating Temperature °C																	
	-60		-55		-50		-45		-40		-35		-30		-25		-20	
Ambient Temperature °C	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P
27			8.34	10.8	10.78	12.05	13.62	13.33	16.87	14.64	20.52	16.01	24.54	17.46	28.91	19.02	33.58	20.72
32	6.17	9.88	8.17	11.21	10.55	12.54	13.32	13.9	16.46	15.32	19.98	16.81	23.84	18.38	28.03	20.08	32.49	21.92
38	6	10.35	7.96	11.74	10.27	13.17	12.93	14.64	15.94	16.17	19.29	17.79	22.96	19.51	26.92	21.36	31.11	23.36
43	5.85	10.79	7.76	12.24	10	13.73	12.57	15.28	15.47	16.91	18.68	18.63	22.18	20.46	25.94	22.44		
46	5.74	11.07	7.63	12.55	9.83	14.08	12.34	15.68	15.17	17.36	18.29	19.14	21.69	21.04				
49	5.63	11.38	7.49	12.88	9.64	14.45	12.1	16.09										

I6TH20Z9E-AWM

R404A	Evaporating Temperature °C																	
	-60		-55		-50		-45		-40		-35		-30		-25		-20	
Ambient Temperature °C	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P
27					7.83	11.07	10.25	12.39	13.11	13.77	16.43	15.20	20.21	16.67	24.42	18.21	29.03	19.80
32	4.02	9.03	5.47	10.24	7.31	11.52	9.56	12.88	12.23	14.30	15.32	15.80	18.83	17.36	22.73	19.00	27.01	20.72
38	3.71	9.24	5.05	10.47	6.74	11.81	8.79	13.23	11.22	14.76	14.02	16.37	17.20	18.07	20.74	19.87	24.60	21.78
43	3.44	9.32	4.69	10.59	6.25	11.99	8.14	13.50	10.37	15.12	12.94	16.86	15.84	18.71	19.06	20.68	22.58	22.78
46	3.27	9.38	4.46	10.69	5.94	12.13	7.73	13.70	9.84	15.39	12.26	17.21	15.00	19.16	18.04	21.24	21.33	23.47
49	3.07	9.50	4.21	10.84	5.62	12.33	7.30	13.96	9.29	15.74	11.57	17.65						

Q: Cooling Capacity (kW), P: Total Power Input (kW), Return Gas Temperature: 18.30 °C

I6TH20Z12E-SUB-AWM

R404A	Evaporating Temperature °C																	
	-60		-55		-50		-45		-40		-35		-30		-25		-20	
Ambient Temperature °C	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P
27							13.71	13.37	17.02	14.61	20.74	15.89	24.88	17.22	29.40	18.64	34.28	20.15
32	6.19	10.04	8.21	11.34	10.61	12.63	13.42	13.94	16.62	15.28	20.22	16.68	24.20	18.14	28.54	19.69	33.21	21.35
38	6.03	10.5	8.00	11.86	10.33	13.25	13.04	14.66	16.11	16.12	19.55	17.65	23.34	19.25	27.46	20.96	31.88	22.79
43	5.87	10.92	7.81	12.34	10.07	13.80	12.69	15.29	15.65	16.85	18.96	18.48	22.58	20.20	26.51	22.03		
46	5.78	11.20	7.68	12.65	9.91	14.14	12.47	15.68	15.36	17.29	18.58	18.98	22.11	20.77	25.92	22.68		
49	5.67	11.50	7.54	12.97	9.73	14.50	12.23	16.09	15.06	17.75	18.19	19.50	21.61	21.35				

I6TH20Z12E-AWM

R404A	Evaporating Temperature °C																	
	-60		-55		-50		-45		-40		-35		-30		-25		-20	
Ambient Temperature °C	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P
27									13.40	13.77	16.86	15.13	20.83	16.53	25.31	17.95	30.27	19.41
32	4.05	9.21	5.54	10.40	7.42	11.67	9.73	12.99	12.50	14.38	15.72	15.82	19.42	17.30	23.58	18.84	28.18	20.41
38	3.74	9.44	5.11	10.67	6.83	11.99	8.95	13.39	11.47	14.87	14.41	16.42	17.77	18.05	21.55	19.74	25.74	21.49
43	3.48	9.53	4.75	10.79	6.35	12.17	8.30	13.65	10.62	15.23	13.32	16.90	16.40	18.65	19.87	20.50	23.69	22.43
46	3.31	9.59	4.53	10.88	6.05	12.30	7.90	13.83	10.10	15.48	12.65	17.22	15.57	19.07	18.84	21.01	22.46	23.06
49	3.12	9.69	4.28	11.02	5.73	12.48	7.48	14.07	9.55	15.78	11.97	17.61	14.72	19.55	17.80	21.61	21.20	23.77

I6TJ25Z12E-SUB-AWM

R404A	Evaporating Temperature °C																	
	-60		-55		-50		-45		-40		-35		-30		-25		-20	
Ambient Temperature °C	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P
27					12.91	13.52	16.37	15.00	20.34	16.60	24.69	18.27	29.29	19.93	34.02	21.52	38.70	22.98
32	7.65	11.52	9.75	12.68	12.51	14.06	15.85	15.63	19.66	17.33	23.84	19.12	28.26	20.92	32.77	22.66	37.21	24.29
38	7.42	12.02	9.42	13.26	12.04	14.73	15.21	16.41	18.84	18.24	22.80	20.17	26.98	22.14	31.22	24.08	35.38	25.91
43	7.24	12.47	9.13	13.78	11.64	15.33	14.67	17.1	18.13	19.03	21.92	21.09	25.89	23.21	29.91	25.31		
46	7.14	12.75	8.96	14.11	11.39	15.71	14.34	17.53	17.70	19.54	21.37	21.67	25.22	23.87	29.10	26.07		
49	7.03	13.05	8.79	14.46	11.14	16.11	14.00	17.99	17.27	20.06	20.82	22.27						

I6TJ25Z12E-AWM

R404A	Evaporating Temperature °C																	
	-60		-55		-50		-45		-40		-35		-30		-25		-20	
Ambient Temperature °C	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P
27							12.15	13.58	15.59	15.17	19.59	16.93	24.12	18.84	29.15	20.90	34.61	23.10
32	4.91	10.19	6.53	11.21	8.68	12.48	11.38	13.97	14.61	15.66	18.36	17.54	22.60	19.60	27.30	21.83	32.40	24.22
38	4.49	10.47	5.98	11.53	7.97	12.86	10.46	14.44	13.44	16.24	16.90	18.27	20.80	20.51	25.11	22.94	29.78	25.56
43	4.14	10.71	5.53	11.79	7.38	13.17	9.70	14.82	12.48	16.73	15.70	18.88	19.32	21.26	23.31	23.86	27.62	26.67
46	3.93	10.84	5.25	11.94	7.02	13.35	9.25	15.04	11.91	17.01	14.98	19.24	18.44	21.71	22.24	24.41	26.33	27.34
49	3.71	10.98	4.97	12.09	6.67	13.53	8.80	15.27	11.34	17.3	14.28	19.59	17.57	22.15				

Q: Cooling Capacity (kW), P: Total Power Input (kW), Return Gas Temperature: 18.30 °C

I6TK30Z12E-SUB-AWM

R404A	Evaporating Temperature °C																		
	-60		-55		-50		-45		-40		-35		-30		-25		-20		
Ambient Temperature °C	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	
27			14.15	14.45	17.88	16.20	22.20	18.02	27.14	19.97	32.73	22.11	39.01	24.51	45.98	27.24	53.68	30.37	
32	10.54	13.32	13.70	15.15	17.39	16.99	21.64	18.92	26.50	20.99	31.99	23.26	38.13	25.8	44.96	28.69	52.48	31.99	
38	10.08	14.04	13.20	15.98	16.83	17.95	20.99	20.01	25.74	22.23	31.09	24.67	37.08	27.39	43.72	30.47	51.03	33.98	
43	9.78	14.63	12.86	16.67	16.42	18.75	20.51	20.93	25.15	23.28	30.38	25.86	36.22	28.74	42.70	31.99			
46	9.65	14.98	12.69	17.08	16.21	19.23	20.25	21.49	24.83	23.92	29.98	26.59	35.73	29.56					
49	9.56	15.32	12.57	17.48	16.04	19.7	20.02	22.04											

I6TK30Z12E-AWM

R404A	Evaporating Temperature °C																		
	-60		-55		-50		-45		-40		-35		-30		-25		-20		
Ambient Temperature °C	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	
27			11.47	12.65	14.85	14.14	18.77	15.98	23.25	18.14	28.31	20.57	33.96	23.25	40.20	26.14	47.03	29.19	
32	8.25	11.78	11.01	13.07	14.23	14.70	17.95	16.66	22.19	18.90	26.97	21.40	32.30	24.12	38.18	27.03	44.60	30.08	
38	7.89	12.12	10.49	13.6	13.49	15.40	16.95	17.48	20.89	19.83	25.32	22.41	30.25	25.18	35.68	28.11	41.60	31.16	
43	7.67	12.43	10.11	14.07	12.92	16.00	16.15	18.19	19.81	20.63	23.94	23.27	28.52	26.09	33.57	29.04	39.06	32.08	
46	7.58	12.63	9.92	14.36	12.61	16.37	15.68	18.63	19.18	21.12	23.11	23.80	27.49	26.64	32.30	29.60			
49	7.55	12.84	9.77	14.66	12.33	16.75	15.25	19.08	18.57	21.62									

Q: Cooling Capacity (kW), P: Total Power Input (kW), Return Gas Temperature: 18.30 °C

I6TA15Z9E-SUB-EWK

R404A	Evaporating Temperature °C																	
	-60		-55		-50		-45		-40		-35		-30		-25		-20	
Ambient Temperature °C	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P
27					10.39	12.23	13.34	13.35	16.71	14.51	20.51	15.70	24.76	16.94	29.47	18.23	34.62	19.59
32	5.58	10.40	7.72	11.51	10.21	12.68	13.07	13.89	16.34	15.14	20.01	16.44	24.12	17.80	28.65	19.22	33.61	20.73
38	5.49	10.87	7.56	12.05	9.95	13.30	12.69	14.61	15.81	15.98	19.31	17.40	23.22	18.90	27.53	20.47	32.24	22.15
43	5.42	11.31	7.40	12.55	9.69	13.87	12.32	15.25	15.30	16.71	18.65	18.24	22.37	19.85	26.48	21.55		
46	5.37	11.58	7.29	12.86	9.52	14.22	12.07	15.65	14.96	17.16	18.21	18.75	21.82	20.43	25.79	22.20		
49	5.31	11.87	7.18	13.18	9.34	14.58	11.81	16.06	14.60	17.62								

I6TA15Z9E-EWK

R404A	Evaporating Temperature °C																	
	-60		-55		-50		-45		-40		-35		-30		-25		-20	
Ambient Temperature °C	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P
27							9.81	12.41	12.68	13.58	16.05	14.81	19.94	16.10	24.36	17.46	29.28	18.89
32	3.66	9.40	5.11	10.44	6.93	11.55	9.17	12.73	11.87	13.98	15.03	15.30	18.67	16.69	22.8	18.16	27.39	19.72
38	3.33	9.63	4.68	10.72	6.37	11.89	8.43	13.14	10.90	14.48	13.79	15.91	17.11	17.42	20.87	19.02	25.04	20.72
43	3.09	9.86	4.35	10.98	5.91	12.20	7.80	13.51	10.06	14.92	12.71	16.43	15.74	18.04	19.17	19.75	22.98	21.56
46	2.94	10.01	4.14	11.14	5.61	12.39	7.40	13.74	9.53	15.19	12.02	16.75	14.88	18.41	18.10	20.18	21.68	22.07
49	2.78	10.16	3.91	11.32	5.29	12.59	6.97	13.97	8.96	15.46	11.29	17.07	13.97	18.78				

I6TH20Z9E-SUB-EWK

R404A	Evaporating Temperature °C																	
	-60		-55		-50		-45		-40		-35		-30		-25		-20	
Ambient Temperature °C	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P
27			9.83	13.17	12.70	14.68	16.05	16.22	19.87	17.81	24.15	19.48	28.87	21.26	33.98	23.17	39.44	25.26
32	7.27	12.06	9.63	13.66	12.44	15.27	15.69	16.92	19.39	18.64	23.51	20.45	28.04	22.37	32.93	24.45	38.14	26.70
38	7.07	12.62	9.38	14.3	12.10	16.03	15.23	17.81	18.77	19.67	22.70	21.63	26.99	23.73	31.61	25.99	36.50	28.44
43	6.89	13.15	9.14	14.9	11.78	16.70	14.80	18.58	18.21	20.55	21.97	22.64	26.06	24.88	30.45	27.28		
46	6.77	13.5	8.99	15.28	11.58	17.13	14.53	19.06	17.85	21.1	21.51	23.26	25.48	25.57				
49	6.64	13.87	8.82	15.68	11.35	17.57	14.24	19.55										

I6TH20Z9E-EWK

R404A	Evaporating Temperature °C																	
	-60		-55		-50		-45		-40		-35		-30		-25		-20	
Ambient Temperature °C	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P
27					9.21	13.51	12.04	15.10	15.40	16.76	19.28	18.49	23.68	20.28	28.58	22.15	33.94	24.10
32	4.73	11.03	6.44	12.48	8.60	14.02	11.24	15.66	14.36	17.38	17.97	19.19	22.06	21.09	26.60	23.08	31.56	25.18
38	4.36	11.27	5.94	12.76	7.92	14.36	10.33	16.08	13.17	17.92	16.45	19.87	20.15	21.94	24.26	24.13	28.73	26.46
43	4.05	11.37	5.52	12.90	7.35	14.58	9.56	16.40	12.16	18.36	15.16	20.47	18.54	22.71	22.28	25.11	26.34	27.68
46	3.85	11.45	5.25	13.02	6.98	14.76	9.08	16.65	11.54	18.70	14.36	20.90	17.55	23.27	21.06	25.81		
49	3.61	11.59	4.95	13.21	6.59	15.01	8.57	16.98	10.88	19.12	13.54	21.44						

Q: Cooling Capacity (kW), P: Total Power Input (kW), Return Gas Temperature: 18.30 °C

I6TH20Z12E-SUB-EWK

R404A	Evaporating Temperature °C																	
	-60		-55		-50		-45		-40		-35		-30		-25		-20	
Ambient Temperature °C	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P
27					12.77	15.21	16.16	16.69	20.05	18.19	24.42	19.75	29.27	21.38	34.58	23.11	40.29	24.97
32	7.30	12.67	9.68	14.22	12.51	15.79	15.81	17.37	19.57	19.00	23.80	20.70	28.47	22.48	33.56	24.37	39.02	26.41
38	7.10	13.21	9.43	14.86	12.18	16.53	15.36	18.24	18.97	20.01	23.01	21.87	27.45	23.82	32.28	25.9	37.43	28.14
43	6.93	13.73	9.20	15.44	11.87	17.19	14.95	19.00	18.43	20.89	22.30	22.86	26.55	24.96	31.15	27.19		
46	6.81	14.07	9.05	15.81	11.67	17.61	14.68	19.47	18.08	21.42	21.86	23.47	25.99	25.65	30.44	27.97		
49	6.68	14.43	8.89	16.2	11.46	18.04	14.40	19.96	17.72	21.97	21.39	24.09						

I6TH20Z12E-EWK

R404A	Evaporating Temperature °C																	
	-60		-55		-50		-45		-40		-35		-30		-25		-20	
Ambient Temperature °C	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P
27							12.26	15.58	15.74	17.18	19.80	18.83	24.43	20.53	29.65	22.27	35.42	24.05
32	4.77	11.66	6.52	13.10	8.73	14.62	11.44	16.22	14.68	17.89	18.46	19.63	22.77	21.44	27.61	23.30	32.97	25.23
38	4.40	11.93	6.01	13.41	8.04	14.99	10.52	16.68	13.47	18.47	16.91	20.35	20.83	22.32	25.23	24.37	30.09	26.52
43	4.10	12.03	5.59	13.56	7.47	15.21	9.75	17.00	12.47	18.90	15.62	20.92	19.22	23.05	23.25	25.29	27.69	27.65
46	3.90	12.11	5.33	13.67	7.11	15.37	9.28	17.22	11.85	19.20	14.83	21.32	18.23	23.56	22.04	25.92	26.23	28.42
49	3.67	12.23	5.03	13.83	6.73	15.59	8.78	17.51	11.21	19.58	14.02	21.79	17.22	24.15	20.80	26.65		

I6TJ25Z12E-SUB-EWK

R404A	Evaporating Temperature °C																	
	-60		-55		-50		-45		-40		-35		-30		-25		-20	
Ambient Temperature °C	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P
27			11.82	15.28	15.2	16.86	19.27	18.66	23.93	20.60	29.03	22.63	34.42	24.66	39.94	26.61	45.41	28.41
32	9.01	14.44	11.49	15.84	14.74	17.51	18.66	19.41	23.13	21.48	28.03	23.65	33.20	25.84	38.46	27.98	43.64	29.99
38	8.75	15.05	11.09	16.54	14.18	18.32	17.90	20.35	22.15	22.57	26.80	24.92	31.68	27.32	36.64	29.69	41.47	31.95
43	8.54	15.59	10.76	17.17	13.70	19.04	17.26	21.18	21.32	23.53	25.75	26.03	30.39	28.6	35.08	31.17		
46	8.41	15.93	10.56	17.57	13.41	19.5	16.87	21.70	20.81	24.13	25.11	26.73	29.60	29.41	34.12	32.10		
49	8.28	16.29	10.36	17.99	13.12	19.98	16.47	22.25	20.29	24.76								

I6TJ25Z12E-EWK

R404A	Evaporating Temperature °C																	
	-60		-55		-50		-45		-40		-35		-30		-25		-20	
Ambient Temperature °C	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P
27							14.28	16.92	18.32	18.85	22.99	20.98	28.28	23.30	34.13	25.81	40.48	28.51
32	5.78	12.83	7.68	14.07	10.21	15.60	13.37	17.39	17.16	19.43	21.54	21.71	26.49	24.21	31.96	26.93	37.88	29.85
38	5.29	13.18	7.04	14.45	9.37	16.05	12.29	17.95	15.78	20.13	19.82	22.59	24.37	25.30	29.38	28.26	34.79	31.45
43	4.87	13.46	6.50	14.76	8.67	16.42	11.39	18.41	14.65	20.71	18.41	23.31	22.63	26.20	27.26	29.36	32.25	32.78
46	4.62	13.62	6.17	14.94	8.26	16.64	10.86	18.68	13.97	21.05	17.56	23.74	21.59	26.73	26.01	30.01	30.74	33.58
49	4.36	13.78	5.85	15.12	7.84	16.85	10.33	18.95	13.30	21.39	16.73	24.17	20.57	27.27				

Q: Cooling Capacity (kW), P: Total Power Input (kW), Return Gas Temperature: 18.30 °C

I6TK30Z12E-SUB-EWK

R404A	Evaporating Temperature °C																	
	-60		-55		-50		-45		-40		-35		-30		-25		-20	
Ambient Temperature °C	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P
27	12.64	15.45	16.30	17.48	20.59	19.51	25.55	21.63	31.23	23.9	37.66	26.40	44.86	29.22	52.86	32.42	61.68	36.10
32	12.15	16.16	15.78	18.28	20.02	20.43	24.91	22.67	30.49	25.08	36.80	27.74	43.85	30.71	51.68	34.10	60.30	37.98
38	11.62	17.00	15.21	19.24	19.38	21.53	24.17	23.94	29.63	26.52	35.77	29.37	42.64	32.56	50.25	36.17		
43	11.28	17.68	14.82	20.04	18.92	22.46	23.62	25.00	28.95	27.74	34.96	30.76	41.66	34.13	49.09	37.94		
46	11.14	18.08	14.64	20.52	18.69	23.01	23.33	25.64	28.59	28.48	34.50	31.60						
49	11.04	18.48	14.50	20.99	18.50	23.56	23.07	26.28										

I6TK30Z12E-EWK

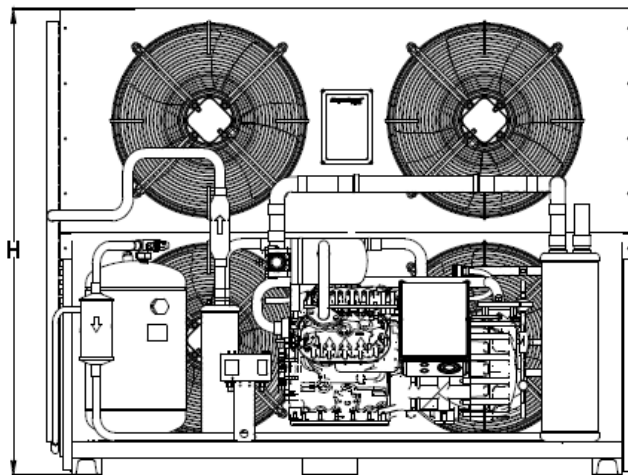
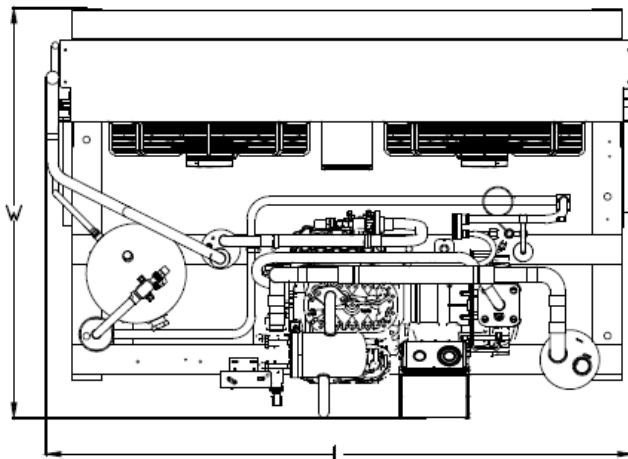
R404A	Evaporating Temperature °C																	
	-60		-55		-50		-45		-40		-35		-30		-25		-20	
Ambient Temperature °C	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P
27			13.06	15.42	16.92	17.18	21.37	19.33	26.47	21.85	32.23	24.70	38.65	27.84	45.75	31.22	53.49	34.80
32	9.39	14.39	12.54	15.91	16.21	17.82	20.43	20.11	25.25	22.74	30.68	25.67	36.74	28.85	43.41	32.26	50.69	35.83
38	8.98	14.79	11.94	16.53	15.37	18.63	19.30	21.08	23.77	23.83	28.79	26.84	34.38	30.09	40.53	33.52	47.23	37.09
43	8.72	15.16	11.50	17.07	14.71	19.33	18.37	21.90	22.53	24.76	27.20	27.85	32.39	31.14	38.10	34.59	44.31	38.15
46	8.62	15.39	11.29	17.41	14.35	19.77	17.84	22.42	21.81	25.33	26.26	28.47	31.20	31.79	36.64	35.25		
49	8.58	15.63	11.12	17.77	14.03	20.21	17.35	22.94	21.12	25.91								

Q: Cooling Capacity (kW), P: Total Power Input (kW), Return Gas Temperature: 18.30 °C

Technical data

	I6TA15Z9E-SUB-AWM I6TA15Z9E-AWM	I6TA15Z9E-SUB-EWK I6TA15Z9E-EWK	I6TH20Z9E-AWM I6TH20Z9E-SUB-AWM	I6TH20Z9E-SUB-EWK I6TH20Z9E-EWK	I6TH20Z12E-SUB-AWM I6TH20Z12E-AWM	I6TH20Z12E-SUB-EWK I6TH20Z12E-EWK	I6TJ25Z12E-SUB-AWM I6TJ25Z12E-AWM	I6TJ25Z12E-SUB-EWK I6TJ25Z12E-EWK	I6TK30Z12E-SUB-AWM I6TK30Z12E-AWM	I6TK30Z12E-SUB-EWK I6TK30Z12E-EWK
Motor code	AWM	EWK	AWM	EWK	AWM	EWK	AWM	EWK	AWM	EWK
Compressor Model	6TA-150X-SUB-AWM 6TA-150X-AWM	6TA-150X-SUB-EWK 6TA-150X-EWK	6TH-200X-SUB-AWM 6TH-200X-AWM	6TH-200X-SUB-EWK 6TH-200X-EWK	6TH-200X-SUB-AWM 6TH-200X-AWM	6TH-200X-SUB-AWM 6TH-200X-AWM	6TJ-250X-SUB-AWM 6TJ-250X-AWM	6TJ-250X-SUB-EWK 6TJ-250X-EWK	6TKWE-SUB-AWM 6TKWE-AWM	6TKWE-SUB-EWK 6TKWE-EWK
Receiver (Li)	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	47.9	47.9
Chassis size LxWxH (mm)	1560x1120x1271	1560x1120x1271	1560x1120x1271	1560x1120x1271	2001x1123x1405	2001x1123x1405	2001x1123x1405	2001x1123x1405	2001x1123x1405	2001x1123x1405
No. Of Fans/ Fan Motor	4/690	4/950	4/690	4/950	4/690	4/950	4/690	4/950	4/690	4/950
Air Flow (m3/hr)	11,463	11,463	11,463	11,463	12,883	12,883	12,883	12,883	12,883	12,883
Return Gas Line (in)	1 5/8	1 5/8	1 5/8	1 5/8	1 5/8	1 5/8	1 5/8	1 5/8	1 5/8	1 5/8
Liquid Line Size (in)	7/8	7/8	7/8	7/8	7/8	7/8	7/8	7/8	7/8	7/8
Locked Rotor Amperes	173		173		173		197		304A	367A
Rated Load Amperes										
Maximum Operating Current (Amperes)	29.4		37.7		37.7		44.6		54.5	
Net Weight (kg)	615	615	620	620	620	620	620	620	635	635
Oil Type	POE	POE	POE	POE	POE	POE	POE	POE	POE	POE

Dimensional drawings



Models	I6TA15Z9E, I6TH20Z9E I6TA15Z9E-SUB, I6TH20Z9E-SUB	I6TH20Z12E, I6TJ25Z12E, I6TK30Z12E I6TH20Z12E-SUB, I6TJ25Z12E-SUB, I6TK30Z12E-SUB
Chassis size (LxWxH) mm	1560x1120x1271	2001x1123x1405

Receiver Capacity Table

Model No.	Capacity	Compressor	Receiver Type	Receiver Size (Liter)
I6TA15Z9E I6TA15Z9E-SUB	15 HP	6TA-150X 6TA-150X-SUB	Vertical	23.6
I6TH20Z9E, I6TH20Z12E I6TH20Z9E-SUB, I6TH20Z12E-SUB	20 HP	6TH-200X 6TH-200X-SUB		
I6TJ25Z12E I6TJ25Z12E-SUB	25 HP	6TJ-250X 6TJ-250X-SUB		
I6TK30Z12E I6TK30Z12E-SUB	30 HP	6TKW-300X 6TKW-300X-SUB	Horizontal	47.9

General information

Technical data are correct at the time of printing. Updates may occur, and should you need confirmation of a specific value, please contact Emerson clearly stating the information required.

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The suitability for this has to be assured from the plant manufacturer, which may include making appropriate tests.

Note:

The components listed in this catalogue are not released for use with caustic, poisonous or flammable substances. Emerson cannot be held responsible for any damage caused by using these substances.

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