

Inverter Driven Screw Chillers ITF/ITC

High energy efficient class A water chillers with internal free cooling (ITF) or economiser (ITC)

Features

- Compressor: Twin screw
- Coolant: R134a
- Evaporator: Shell and tube
- Inbuilt tanks & pumps
- Ultra high & low ambient operating conditions
- Bespoke design available



ITF		250	300	360	440	500	560	600	730	820	950	1100	1250	1370
Nominal cooling capacity 70Hz - 35°C ambient temperature	kW	249.0	302.0	365.0	439.0	498.0	561.0	604.0	730.0	822.0	948.0	1103.0	1248.0	1368.0
Compressor nominal absorbed power	kW	84.6	102.3	115.8	76.0	84.6	95.0	102.3	115.8	128.0	146.1	172.9	193.6	203.0
Compressor nominal absorbed current	A	135.1	163.3	184.9	121.3	135.1	151.7	163.3	184.9	204.4	233.3	276.1	309.1	324.1
COP	W/W	2.95	2.95	3.15	2.89	2.94	2.95	2.95	3.15	3.21	3.24	3.19	3.22	3.37
E.E.R.	W/W	2.63	2.69	2.86	2.68	2.69	2.72	2.74	2.90	2.93	2.96	2.92	2.95	3.04
80% load cooling capacity 60Hz - 30°C ambient temperature	kW	227.0	275.0	326.0	401.0	454.0	511.0	550.0	653.0	735.0	847.0	986.0	1116.0	1222.0
Compressor absorbed power	kW	65.0	78.0	88.0	58.0	65.0	73.0	78.0	88.0	97.0	110.0	131.0	146.0	155.0
COP		3.51	3.52	3.73	3.45	3.51	3.51	3.52	3.73	3.80	3.84	3.77	3.81	3.95
E.E.R.		3.12	3.19	3.36	3.18	3.19	3.23	3.25	3.42	3.46	3.48	3.44	3.47	3.55
70% load cooling capacity 50Hz - 25°C ambient temperature	kW	208.0	251.0	300.0	369.0	416.0	466.0	502.0	601.0	676.0	780.0	907.0	1027.0	1125.0
Compressor absorbed power	kW	47.0	56.0	63.0	42.0	47.0	52.0	56.0	63.0	69.0	79.0	94.0	105.0	111.0
COP		4.46	4.47	4.79	4.39	4.46	4.46	4.47	4.79	4.88	4.93	4.85	4.90	5.07
E.E.R.		3.95	4.04	4.30	4.05	4.04	4.08	4.12	4.37	4.42	4.46	4.39	4.44	4.53
60% load cooling capacity 40Hz - 20°C ambient temperature	kW	183.0	221.0	260.0	324.0	366.0	410.0	442.0	520.0	585.0	674.0	785.0	888.0	973.0
Compressor absorbed power	kW	33.0	40.0	44.0	30.0	33.0	37.0	40.0	44.0	49.0	56.0	66.0	74.0	78.0
COP		5.55	5.56	5.89	5.46	5.55	5.56	5.56	5.89	6.00	6.06	5.96	6.03	6.24
E.E.R.		4.82	4.94	5.19	4.96	4.95	5.01	5.05	5.29	5.35	5.39	5.32	5.37	5.47
50% load cooling capacity 30Hz - 15°C ambient temperature	kW	161.0	194.0	210.0	285.0	321.0	360.0	388.0	420.0	489.0	564.0	647.0	766.0	839.0
Compressor absorbed power	kW	21.0	25.0	25.0	19.0	21.0	23.0	25.0	25.0	30.0	35.0	41.0	46.0	49.0
COP		7.72	7.75	8.42	7.61	7.72	7.73	7.75	8.42	8.10	8.08	7.97	8.40	8.58
E.E.R.		6.48	6.68	7.06	6.75	6.69	6.80	6.87	7.26	6.99	6.96	6.89	7.25	7.27
Maximum working current per compressor	A	165.0	196.0	226.0	142.0	165.0	182.0	196.0	226.0	250.0	285.0	338.0	350.0	350.0
Refrigerant circuits	no	1	1	1	2	2	2	2	2	2	2	2	2	2
Screw compressors	no	1	1	1	2	2	2	2	2	2	2	2	2	2
Hydraulic connections	DN	125	125	125	125	125	125	150	150	150	150	200	200	200
Sound pressure	dB(A)	62.0	62.0	63.0	64.0	65.0	64.0	64.0	66.0	68.0	70.0	70.0	71.0	71.0
Dimensions and weight														
Length	mm	5010	5010	6450	4000	4950	4950	4950	5950	6850	7800	8750	9700	11600
Width	mm	1310	1310	1310	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210
Height	mm	2105	2105	2105	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
Empty weight	kg	2000	2200	2950	3680	4500	4700	4900	5800	6800	7700	8600	9450	11000
Operating weight	kg	2750	3100	4100	4320	5400	5600	5800	6800	7600	8600	9550	10500	12000

Inlet/outlet water temperature +12/7°C - Condenser air temperature +35°C; fouling factor 0.000043 m²K/W
Sound pressure level according to ISO3744, pressure level at a distance of 10m, free field on reflecting surface