

Wongso Aircooled Chiller Semi-Hermetic

WACS is a semi-A65:A69 packaged water chillers that designed to suit the complete scope of commercial, institutional, and residential applications as well as industrial process fluid cooling. WACS is designed and built to provide reliable and efficient performance and are completely factory assembled for peak performance and high operating efficiency. The units are consists of semi hermetic compressor as standar, air cooled condenser, shell and tube evaporator, flow switch, and other accesories. Air cooled condenser can be integrated with the package or can be separated.



SPECIFICATION DATA

MODEL SERIES		07.1	10.1	12.1	15.1	20.1	25.1	30.1	35.1	40.1	50.1	60.1	70.2	80.2	100.2	120.2
PERFORMANCE UNIT																
COOLING CAPACITY (*)	TR	5.9	7.5	9.1	10.4	12.3	16.3	19.2	22.5	27.8	32.7	40.5	45.1	55.7	65.4	81.0
	kW	20.9	26.9	32.5	37.3	43.9	58.2	68.4	80.5	99.4	116.8	144.7	161.0	198.9	233.6	289.4
	(Btu/hr)	77,000	99,000	119,000	137,000	161,000	213,000	250,000	295,000	363,000	428,000	492,000	590,000	726,000	856,000	985,000
EER	(Btu/hr) / KW	10.5	10.9	11.0	11.0	11.2	11.1	11.0	11.1	10.7	10.7	10.5	20.8	20.0	20.2	19.6
Total Power	KW	6.8	8.4	10.1	11.6	13.4	17.9	21.1	24.8	31.6	37.1	47.2	26.4	34.0	39.5	50.4
PIC	KW/TR	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.2	0.6	1.1	1.1	1.2
COP	kW / KW	3.1	3.2	3.2	3.2	3.3	3.3	3.2	3.2	3.1	3.1	3.1	6.1	5.8	5.9	5.7
COMPRESSOR																
Power Consumption	kW	6.22	7.53	9.2	10.5	12.3	16.8	19.5	23.2	29.2	34.7	44.0	23.2	29.2	34.7	44.0
Oil Quantity	L	2.0	2.6	2.6	2.6	2.6	4.5	4.5	4.5	4.8	4.8	5	5,5 x 2	4,8 x 2	4,8 x 2	5 x 2
Maximum Current	A	16.5	19.90	25.1	28.2	33.2	44.0	51.2	62.1	73.90	96.2	113.0	62.1	73.9	96.2	113.0
Locked Rotor Current	A	82.4	59A Y / 99A YY	69A Y / 113A YY	81A Y / 132A YY	97A Y / 158A YY	125A Y / 211A YY	141A Y / 275A YY	141A Y / 233A YY	219A Y / 362A YY	226A Y / 404A YY	349A D / 531A DD	401A D / 590A DD	219A Y / 362A YY	226A Y / 404A YY	349A D / 531A DD
V / Ph / Hz		380-420/3/50	380-420/3/50	380-420/3/50	380-420/3/50	380-420/3/50	380-420/3/50	380-420/3/50	380-420/3/50	380-420/3/50	380-420/3/50	380-420/3/50	380-420/3/50	380-420/3/50	380-420/3/50	380-420/3/50
Quantity		1	1	1	1	1	1	1	1	1	1	1	2	2	2	2
Weight	kg	91	139	141	142	150	203	206	207	238	241	350	414	476	482	700
Length	mm	450	640	640	660	660	740	740	740	800	790	890	740	800	790	890
Width	mm	310	310	310	310	310	460	460	460	510	510	490	460	510	510	490
Height	mm	360	390	390	390	390	450	450	450	440	440	540	450	440	440	540

Note ; (*) Evaporating Temperature at 3°C Condensing Temperature at 45°C Refrigerant R-407C



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MODEL SERIES		07.1	10.1	12.1	15.1	20.1	25.1	30.1	35.1	40.1	50.1	60.1	70.2	80.2	100.2	120.2
CONDENSER																
Tubes Diameter	inch	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8
Fin Spacing	fpi	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
Quantity		1	1	1	1	1	1	1	1	1	1	1	2	2	2	
Weight	kg	94	106	131	145	185	200	258	287	325	395	505	574	650	790	1010
Length	mm	1360	1360	1780	1880	2180	2180	3000	3000	3700	2200	3000	3000	3700	2200	3000
Width	mm	310	320	355	355	355	365	365	365	380	385	385	365	380	385	385
Height	mm	850	850	850	950	1150	1150	1150	1150	1150	2300	2300	2300	2300	4600	4600
FAN CONDENSER																
Blade Diameter	mm	630	500	500	630	630	630	630	630	630	630	630	630	630	630	630
No of Fans	qty	1	2	2	2	2	2	2	2	3	3	4	4	6	6	8
Total Power / fan	kW	0.55	0.90	0.90	1.10	1.10	1.10	1.60	1.60	2.40	2.40	3.2	3.2	4.8	4.8	6.4
Total Airflow	CMH	7700	14200	13550	15000	16800	20800	29900	33600	44700	47500	59000	33600	44700	47500	59000
EVAPORATOR																
SHELL AND TUBE																
Water Flow Rate	m ³ /h	6.00	6.00	6.00	8.00	8.00	11.4	13.80	13.80	20.60	20.60	28.30	28.30	34.20	41.10	51.40
Water Pressure Drop	kPa	0.3	0.3	0.3	0.4	0.4	0.4	0.42	0.42	0.3	0.3	0.5	0.5	0.4	0.5	0.5
Water Connection	Inch	1 1/2	1 1/2	2	2	2	2 1/2	2 1/2	2 1/2	3	3	3	3	4	4	5
Quantity		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Weight	kgs	37	37	42	45	45	72	77	77	107	107	125	125	157	175	270
Length	mm	1040	1040	1300	1410	1410	1440	1630	1630	1820	1820	2320	2320	2320	1620	2654
Width	mm	200	200	200	200	200	250	250	250	270	270	270	270	310	310	370
Height	mm	330	330	330	330	330	358	358	358	385	385	385	385	450	450	525
DIMENSION UNIT																
Length	mm	1580	1820	2020	2020	2120	2420	2420	3220	3220	3940	3220	3270	3720	4020	4840
Width	mm	860	860	860	860	960	1160	1160	1160	1160	1160	2300	2300	2300	2300	2300
Height	mm	1298	1312	1312	1373	1377	1387	1438	1438	1498	1498	1586	1588	1538	1538	1583