



## Wongso Multipurpose Condensing Unit

Wongso Multipurpose Condensing Unit (WMCU Series) is closed design condensing unit with vertical flow air cooled condenser.

WMCU Series have been designed for low, medium, and also air blast freezer application start with the capacity from 0,5 HP until 15 HP. This unit is rapidly growing in popularity as it is suited to outdoor installations and is quick to install, commission and looks good every time.



# WMCU SERIES

## MEDIUM TEMPERATURE PERFORMANCE DATA

Performance data 50 Hz based on 20 °C suction gas temperature with liquid subcooling.



Model	Compressor			TE	Capacity R404a (kW)							Fan Condensing Unit			Receiv-er Tank	Connection		Net Weight	Dimen-sion Figure		
	Type	HP	Max. Operating Current (A)		0	-5	-10	-15	-20	-25	-30	Current (A)	Power (kW)	Air Flow (cmh)	Ltr	Suc-tion	Liq-uid	Kgs			
WMCU-0005-M	2KES-05Y	0.5	4,9/2,8	27	Q	2.72	2.34	1.98	1.64	1.34	1.06	0.81	0.3	0.068	1520	1.5	1/2	3/8	160	A	
					P	0.99	0.92	0.85	0.78	0.71	0.64	0.57									
				32	Q	2.48	2.13	1.79	1.48	1.2	0.94	0.71									
					P	1.04	0.96	0.88	0.8	0.73	0.65	0.57									
				43	Q	1.97	1.68	1.41	1.15	0.92	0.705	0.51									
					P	1.15	1.05	0.95	0.86	0.76	0.66	0.56									
WMCU-0007-M	2JES-07Y	0.7	6,4/3,7	27	Q	3.32	2.89	2.48	2.09	1.73	1.4	1.1	0.3	0.068	1520	1.5	1/2	3/8	160	A	
					P	1.46	1.32	1.2	1.09	0.89	0.87	0.76									
				32	Q	3.03	2.64	2.26	1.9	1.57	1.26	0.98									
					P	1.52	1.38	1.25	1.12	1	0.88	0.76									
				43	Q			1.79	1.49	1.22	0.96	0.725									
					P			1.34	1.19	1.04	0.89	0.75									
WMCU-0020-M	2HES-2Y	2	7,8/4,5	27	Q	4.51	3.92	3.35	2.82	2.33	1.89	1.49	0.3	0.068	2570	4.8	5/8	3/8	160	A	
					P	1.81	1.65	1.51	1.37	1.23	1.09	0.96									
				32	Q	4.14	3.58	3.06	2.57	2.12	1.71	1.34									
					P	1.88	1.72	1.56	1.4	1.25	1.1	0.96									
				43	Q			2.88	2.45	2.04	1.66	1.31									0.995
					P			1.84	1.65	1.47	1.29	1.11									0.94
WMCU-0032-M	2DES-3Y	3	15,0/8,6	27	Q	10.82	9.32	7.93	6.65	5.49	4.44	3.51	1.1	0.25	4200	7.8	7/8	1/2	195	A	
					P	3.46	3.18	2.90	2.62	2.35	2.08	1.82									
				32	Q	9.95	8.58	7.29	6.11	5.04	4.07	3.2									
					P	3.63	3.32	3.02	2.72	2.43	2.14	1.86									
				43	Q	8	6.9	5.86	4.89	4.01	3.21	2.49									
					P	3.93	3.58	3.23	2.88	2.54	2.2	1.88									
WMCU-0040-M	2CES-4Y	4	17,4/10,0	27	Q	13.7	11.77	10	8.38	6.92	5.61	4.45	1.1	0.25	4350	7.8	7/8	1/2	195	A	
					P	4.15	3.83	3.51	3.19	2.88	2.57	2.27									
				32	Q	12.64	10.87	9.23	7.73	6.38	5.16	4.08									
					P	4.38	4.03	3.68	3.34	2.99	2.66	2.33									
				43	Q	10.23	8.81	7.48	6.25	5.13	4.12	3.22									
					P	4.81	4.4	3.99	3.58	3.18	2.78	2.40									
WMCU-0050-M	4FES-5Y	5	18,8/10,8	27	Q	14.68	12.58	10.64	8.88	7.3	5.9	4.68	1.1	0.25	4350	7.8	7/8	1/2	210	A	
					P	4.49	4.17	3.84	3.51	3.17	2.83	2.50									
				32	Q	13.5	11.58	9.81	8.19	6.74	5.44	4.31									
					P	4.72	4.38	4.02	3.66	3.30	2.94	2.58									
				43	Q	10.85	9.34	7.93	6.64	5.46	4.4	3.48									
					P	5.13	4.74	4.33	3.92	3.50	3.08	2.67									
WMCU-0060-M	4EES-6Y	6	23,7/13,6	27	Q	17.31	14.94	12.73	10.68	8.82	7.16	5.7	1.4/0.94	0.8/0.55	7600/5600	7.8	1 1/8	1/2	260	B	
					P	5.96	5.47	4.97	4.49	4.01	3.54	3.08									
				32	Q	15.9	13.74	11.7	9.82	8.11	6.57	5.22									
					P	6.23	5.70	5.18	4.66	4.14	3.64	3.16									
				43	Q	12.75	11.05	9.43	7.91	6.52	5.27	4.15									
					P	6.70	6.11	5.52	4.93	4.35	3.78	3.23									
WMCU-0070-M	4DES-7Y	7	28,7/16,5	27	Q	21.2	18.27	15.54	13.04	10.78	8.77	7	1.4/0.77	0.72/0.47	8600/5450	13	1 1/8	5/8	265	B	
					P	7.04	6.48	5.91	5.35	4.79	4.25	3.73									
				32	Q	19.57	16.86	14.34	12.03	9.94	8.07	6.42									
					P	7.39	6.78	6.17	5.57	4.97	4.39	3.83									
				43	Q	15.89	13.72	11.68	9.79	8.07	6.52	5.15									
					P	8.03	7.34	6.65	5.99	5.27	4.61	3.97									
WMCU-0090-M	4CES-9Y	9	35,1/20,2	27	Q	25.35	21.85	18.56	15.57	12.87	10.46	8.34	1.4/0.77	0.72/0.47	7700/4900	15	1 1/8	5/8	265	B	
					P	8.80	8.02	7.26	6.51	5.79	5.09	4.42									
				32	Q	23.45	20.2	17.14	14.35	11.84	9.6	7.62									
					P	9.23	8.39	7.75	6.77	5.99	5.23	4.52									
				43	Q	19.12	16.5	14.01	11.71	9.62	7.75	6.09									
					P	10.10	9.09	8.15	7.22	6.33	5.47	4.66									
WMCU-0120-M	4TES-12Y	12	25.1	27	Q	29.75	25.8	22.1	18.6	15.41	12.52	9.96	2.7/1.88	1.56/1.1	14200/11200	15	1 3/8	5/8	350	C	
					P	11.2	10.1	8.98	7.94	6.96	6.03	5.16									
				32	Q	27.3	23.7	20.3	17.05	14.09	11.42	9.04									
					P	11.7	10.5	9.31	8.2	7.15	6.16	5.24									
				43	Q			16.32	13.7	11.27	9.05	7.08									
					P			9.94	8.7	7.52	6.42	5.39									
WMCU-0150-M	4PES-15Y	15	28.7	27	Q	39.45	33.55	28.15	23.3	18.93	15.09	11.75	2.7/1.9	1.56/1.1	13550/10200	15	1 5/8	7/8	355	C	
					P	11.7	10.7	9.62	8.59	7.58	6.6	5.65									
				32	Q	36.35	30.85	25.8	21.3	17.25	13.68	10.57									
					P	12.3	11.1	10	8.88	7.78	6.72	5.7									
				43	Q	29.5	25	20.8	17.05	13.67	10.69	8.11									
					P	13.4	12	10.7	9.38	8.1	6.88	5.72									



## LOW TEMPERATURE PERFORMANCE DATA

Performance data 50 Hz based on 20 °C suction gas temperature with liquid subcooling



Model	Compressor			TE	Capacity R404a (kW)						Fan Condensing Unit			Receiver Tank	Connection		Net Weight	Dimension Figure	
	Type	HP	Max. Operating Current (A)		TA	-5	-10	-15	-20	-25	-30	Current (A)	Power (kW)	Air Flow (cmh)	Ltr	Suction	Liquid		Kgs
WMCU-0010-L	2HES-1Y	1	6.7/3.8	27	Q	3.83	3.28	2.76	2.29	1.85	1.46	0.3	0.068	1520	1.5	5/8	3/8	160	A
					P	1.68	1.51	1.35	1.21	1.07	0.94								
				32	Q	3.5	2.99	2.52	2.07	1.67	1.31								
					P	1.75	1.56	1.39	1.23	1.08	0.94								
				43	Q	2.79	2.45	1.98	1.62	1.28	0.975								
					P	1.89	1.65	1.46	1.27	1.09	0.91								
WMCU-0020-L	2DES-2Y	2	13.4/7.5	27	Q	7.9	6.87	5.88	4.94	4.06	3.26	0.58	0.13	2200	4.8	7/8	3/8	160	A
					P	3.55	3.17	2.82	2.48	2.16	1.86								
				32	Q	7.21	6.27	5.37	4.5	3.7	2.96								
					P	3.66	3.27	2.89	2.54	2.2	1.88								
				43	Q		4.94	4.22	3.53	2.88	2.27								
					P		3.41	3.00	2.6	2.23	1.88								
WMCU-0030-L	4FES-3Y	3	16.5/9.5	27	Q	11.55	9.9	8.35	6.93	5.65	4.52	1.1	0.25	4200	7.8	7/8	1/2	195	A
					P	4.50	4.09	3.68	3.29	2.91	2.54								
				32	Q	10.59	9.09	7.68	6.38	5.2	4.16								
					P	4.68	4.25	3.83	3.41	3.00	2.61								
				43	Q	8.44	7.27	6.16	5.13	4.18	3.34								
					P	5.00	4.53	4.05	3.58	3.12	2.68								
WMCU-0040-L	4EES-4Y	4	21.2/12.2	27	Q	13.54	11.73	10	8.38	6.89	5.55	1.1	0.25	4200	7.8	1 1/8	1/2	210	A
					P	6.03	5.41	4.82	4.25	3.71	3.20								
				32	Q	12.4	10.75	9.17	7.69	6.32	5.09								
					P	6.25	5.61	4.98	4.38	3.81	3.27								
				43	Q		8.58	7.34	6.16	5.06	4.06								
					P		5.94	5.25	4.59	3.96	3.36								
WMCU-0050-L	4DES-5Y	5	25.2/14.5	27	Q	17.09	14.67	12.41	10.33	8.46	6.79	1.1	0.25	4350	13	1 1/8	1/2	210	A
					P	6.92	6.24	5.58	4.95	4.34	3.77								
				32	Q	15.72	13.5	11.42	9.51	7.77	6.23								
					P	7.22	6.49	5.79	5.12	4.48	3.86								
				43	Q	12.67	10.91	9.23	7.68	6.26	3.99								
					P	7.76	6.95	6.17	5.41	4.68	3.99								
WMCU-0060-L	4CES-6Y	6	30.8/17.7	27	Q	19.47	16.79	14.27	11.93	9.8	7.89	1.4/0.94	0.8/0.55	7600/5600	13	1 1/8	1/2	255	A
					P	8.54	7.64	6.78	5.97	5.20	4.48								
				32	Q	17.91	15.45	13.12	10.96	8.98	7.2								
					P	8.84	7.90	7.00	6.14	5.33	4.56								
				43	Q			10.61	8.84	7.21	5.74								
					P			7.38	6.42	5.52	4.68								
WMCU-0080-L	4TES-9Y	8	19.9	27	Q	24.5	21.15	17.93	14.94	12.21	9.75	1.4/0.77	0.72/0.47	8600/5450	13	1 3/8	5/8	310	B
					P	10.7	9.43	8.25	7.17	6.16	5.24								
				32	Q	22.45	19.36	16.42	13.66	11.13	8.85								
					P	11.1	9.75	8.51	7.36	6.3	5.32								
				43	Q		15.49	13.12	10.87	8.79	6.91								
					P		10.4	9.01	7.73	6.54	5.45								
WMCU-0100-L	4PES-12Y	10	22.7	27	Q	28.1	24.1	20.35	16.89	13.72	10.87	1.4/0.77	0.72/0.47	7700/4900	13	1 3/8	5/8	315	B
					P	11.7	10.4	9.1	7.9	6.78	5.74								
				32	Q	25.65	22.05	18.59	15.37	12.42	9.78								
					P	12.1	10.6	9.3	8.04	6.86	5.76								
				43	Q		17.48	14.7	12.07	9.65	7.47								
					P		11.1	9.57	8.18	6.87	5.66								
WMCU-0120-L	4NES-14Y	12	26.6	27	Q	34.15	29.35	24.8	20.65	16.82	13.41	2.7/1.88	1.56/1.1	14200/11200	24	1 3/8	7/8	315	B
					P	14.1	12.6	11.1	9.7	8.39	7.17								
				32	Q	31.3	26.9	22.7	18.85	15.32	12.17								
					P	14.5	12.9	11.4	9.91	8.53	7.23								
				43	Q		21.45	18.08	14.95	12.05	9.45								
					P		13.5	11.8	10.1	8.6	7.16								
WMCU-0130-L	4JE-15Y	13	30.8	27	Q	42.5	36.35	30.65	25.45	20.75	16.54	2.7/1.9	1.56/1.1	13550/10200	25	1 5/8	7/8	390	C
					P	15.3	13.8	12.3	10.9	9.64	8.4								
				32	Q	39.25	33.55	28.2	23.4	19	15.09								
					P	15.9	14.3	12.8	11.3	9.87	8.54								
				43	Q	32	27.35	22.95	18.91	15.23	11.93								
					P	17.1	15.3	13.5	11.8	10.2	8.67								

TE : Evaporating Temperature ( °C )  
 TA : Ambient Temperature ( °C )  
 Q : Cooling Capacity ( kW )  
 P : Power Input ( kW )

## DIMENSION DATA

Model	Connection		Net Weight Kgs	Dimension Figure
	Suction	Liquid		
WMCU-0005-M	1/2	3/8	160	A
WMCU-0007-M	1/2	3/8	160	A
WMCU-0020-M	5/8	3/8	160	A
WMCU-0032-M	7/8	1/2	195	A
WMCU-0040-M	7/8	1/2	195	A
WMCU-0050-M	7/8	1/2	210	A
WMCU-0060-M	1 1/8	1/2	260	B
WMCU-0070-M	1 1/8	5/8	265	B
WMCU-0090-M	1 1/8	5/8	265	B
WMCU-0120-M	1 3/8	5/8	350	C
WMCU-0150-M	1 5/8	7/8	355	C

Model	Connection		Net Weight Kgs	Dimension Figure
	Suction	Liquid		
WMCU-0010-L	5/8	3/8	160	A
WMCU-0020-L	7/8	3/8	160	A
WMCU-0030-L	7/8	1/2	195	A
WMCU-0040-L	1 1/8	1/2	210	A
WMCU-0050-L	1 1/8	1/2	210	A
WMCU-0060-L	1 1/8	1/2	255	A
WMCU-0080-L	1 3/8	5/8	310	B
WMCU-0100-L	1 3/8	5/8	315	B
WMCU-0120-L	1 3/8	7/8	315	B
WMCU-0130-L	1 5/8	7/8	390	C

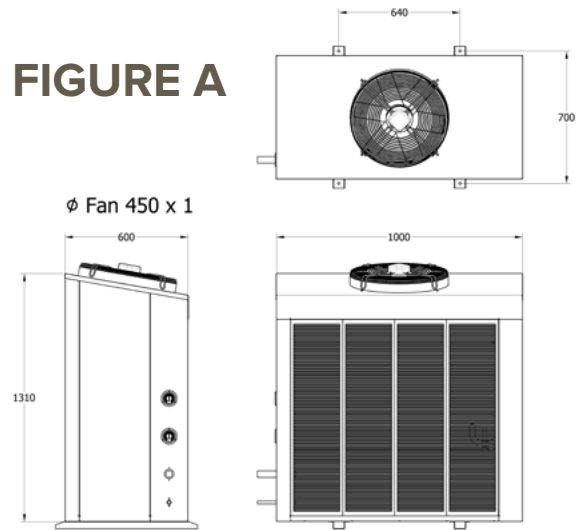
## PRODUCT SELECTION - MEDIUM TEMPERATURE

WMCU MODEL	COMP. MODEL	WONGSO AIRCOOLED CONDENSER	WONGSO AIRCOOLED EVAPORATOR
WMCU-0005-M	2KES-05Y	WAC 010	WMT 005
WMCU-0007-M	2JES-07Y		WMT 007
WMCU-0020-M	2HES-2Y	WAC 012	WMT 020
WMCU-0030-M	2DES-3Y	WAC 030	WMT 030
WMCU-0040-M	2CES-4Y	WAC 040	WMT 040
WMCU-0050-M	4FES-5Y		WMT 050
WMCU-0060-M	4EES-6Y	WAC 050	WMT 060
WMCU-0070-M	4DES-7Y	WAC 060	WMT 070
WMCU-0090-M	4CES-9Y	WAC 075	WMT 090
WMCU-0120-M	4TES-12Y	WAC 100	WMT 120
WMCU-0150-M	4PES-15Y	WAC 120	WMT 150

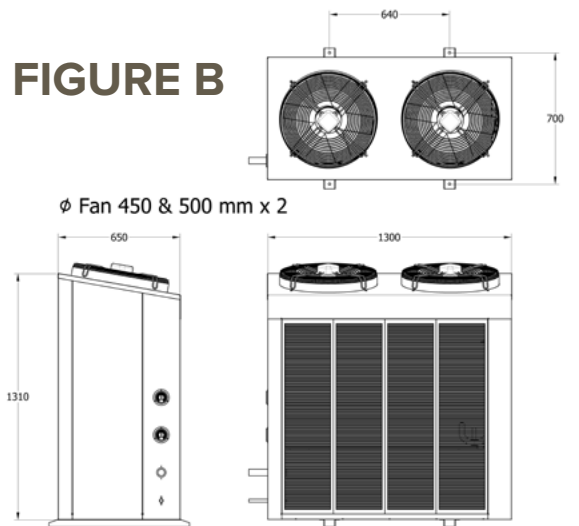
## PRODUCT SELECTION - LOW TEMPERATURE

WMCU MODEL	COMP. MODEL	WONGSO AIRCOOLED CONDENSER	WONGSO AIRCOOLED EVAPORATOR	
WMCU-0010-L	2HES-1Y	WAC 010	WLT 010	
WMCU-0020-L	2DES-2Y	WAC 015	WLT 020	
WMCU-0030-L	4FES-3Y	WAC 030	WLT 030	
WMCU-0040-L	4EES-4Y		WLT 040	WHDE 050
WMCU-0050-L	4DES-5Y	WAC 040	WLT 050	WHDE 070
WMCU-0060-L	4CES-6Y	WAC 050	WLT 060	WHDE 080
WMCU-0080-L	4TES-9Y	WAC 060	WLT 080	WHDE 100
WMCU-0100-L	4PES-12Y	WAC 075	WLT 100	
WMCU-0120-L	4NES-14Y	WAC 100	WLT 130	WHDE 130
WMCU-0130-L	4JE-15Y	WAC 120		

### FIGURE A



### FIGURE B



### FIGURE C

