

Outdoor Unit Specifications

MRS-X

- Single Module:
8/10/12/14/16/18/20/22HP
- Combination Module: 24HP-66HP,
2-3 Full DC Inverter Technology mod-



Model			AP.UJNT080BI	AP.UJNT100BI	AP.UJNT120BI	AP.UJNT140BI	AP.UJNT160BI	AP.UJNT180BI	AP.UJNT200BI	AP.UJNT220BI	
Combination model			-	-	-	-	-	-	-	-	
Capacity	Capacity range	HP	8	10	12	14	16	18	20	22	
	Cooling	kW	25.0	28.0	33.5	40.0	45.0	50.0	56.0	61.5	
	Heating	kW	27.0	31.5	37.5	45.0	50.0	56.0	63.0	69.0	
Power supply			380V/3N/50Hz/60Hz								
EER		kW/kW	4.08	3.95	3.88	3.75	3.56	3.53	3.60	3.68	
COP		kW/kW	4.45	4.49	4.36	4.25	3.99	3.96	4.06	4.14	
Rated input	Cooling	kW	6.12	7.09	8.63	10.67	12.64	14.16	15.56	16.71	
	Heating	kW	6.07	7.02	8.60	10.58	12.60	14.12	15.52	16.65	
Rated current	Cooling	A	12.5	13.4	16.4	19.6	24.1	30.5	35.2	40.0	
	Heating	A	13.6	13.9	16.7	20.0	24.0	30.1	34.9	35.0	
Refrigerant	Type		R410A								
	Charge volume	kg	8		10		12		16		
Compressor	Brand	—	Hitachi								
	Type	—	Scroll type								
	Quantity	—	1				1+1				
	Refrigerant oil charge volume	L	0.50			1.10		0.50		0.50	
Fan	Type		Axial flow								
	Quantity		1				1+1				
Fan motor	Insulation class	—	IP24								
	Drive Type	—	DC								
Airflow rate		m ³ /h	12000			13980		18780	20820	22020	
Connecting pipe	Liquid pipe	mm	φ12.7		φ12.7	φ12.7		φ15.88			
	Gas pipe	mm	φ22.23		φ25.4	φ28.58		φ28.58			
	Connection method		Welding								
ESP		Pa	0-80								
Sound pressure level		dB(A)	45-57			45-59		45-62		45-63	
Outline dimension		mm	930*860*1710			1240*860*1710		1500*860*1710		1500*860*1710	
Package dimension		mm	930*860*2000			1240*860*2000		1500*860*2000		1500*860*2000	
Net weight		kg	225	225	225	290	290	430	430	430	
Gross weight		kg	245	245	245	310	310	450	450	450	
Maximum drive IDU NO.		unit	14	16	19	22	23	31	33	34	
Max. equivalent connection pipe length		m	240	240	240	240	240	240	240	240	
Working temp.	Cooling	°C	-5-50°C								
	Heating	°C	-20-24°C								

Notes:

1. Cooling operating temperature range is from -5°C to 50°C, Heating operating temperature range is from -20°C to 24°C.
2. The cooling condition: indoor side 27°C (80.6°F) DB, 19°C (60°F) WB outdoor side 35°C (95°F) DB
3. The heating condition: indoor side 20°C (68°F) DB, 15°C (44.6°F) WB outdoor side 7°C (42.8°F) DB
4. Sound level: measured at point 1m in front of the unit at a height of 1.3m. During actual operation, these values are normally somewhat higher as a result of ambient conditions and lower as a result of ambient conditions when under ultra-silent operation
5. Choosing fuse or breaker according to MFA and electrical wiring according to MCA.
6. The above data may be changed without notice for future improvement on quality and performance.

MRS-X

- Single Module: 8/10/12/14/16/18/20/22HP
- Full DC Inverter Technology
- Max. 1000m pipe length, Max. 110m height drop



Model			AP.UJNT240BI	AP.UJNT280BI	AP.UJNT320BI	AP.UJNT360BI	AP.UJNT400BI	AP.UJNT440BI							
Combination model			10+14	10+16	14+14	14+16	16+16	14+20	14+22	16+22	20+20	20+22	22+22		
Capacity	Capacity range	HP	24	26	28	30	32	34	36	38	40	42	44		
	Cooling	kW	68.0	73.0	80.0	85.0	90.0	96.0	101.5	106.5	112.0	117.5	123.0		
	Heating	kW	76.5	81.5	90.0	95.0	100.0	108.0	114.0	119.0	126.0	132.0	138.0		
Power supply		V/N/Hz	380V/3N/50Hz/60Hz												
EER		kW/kW	3.83	3.70	3.75	3.65	3.56	3.66	3.71	3.63	3.60	3.64	3.68		
COP		kW/kW	4.35	4.15	4.25	4.10	3.97	4.14	4.19	4.07	4.06	4.10	4.14		
Rated input	Cooling	kW	17.76	19.73	21.34	23.31	25.28	26.23	27.38	29.35	31.12	32.27	33.42		
	Heating	kW	17.60	19.62	21.16	23.18	25.20	26.10	27.23	29.25	31.04	32.17	33.30		
Rated current	Cooling	A	33.00	37.50	39.20	43.70	48.20	54.80	59.60	61.04	70.40	75.20	80.00		
	Heating	A	3350	37.90	40.00	44.00	48.00	54.90	55.00	59.00	69.80	69.90	70.00		
Refrigerant	Type		R410A												
	Charge volume	kg	8+12			12+12			12+16			16+16			
Compressor	Brand	—	Hitachi												
	Type	—	Scroll type												
	Quantity	—	1+1				1+2				2+2				
	Refrigerant oil charge volume	L	0.5+1.10			1.10+1.10			1.10+0.50			0.50+0.50			
Fan	Type		Axial flow												
	Quantity		1+1				1+2				2+2				
Fan motor	Insulation class	—	IP24												
	Drive type	—	DC												
Airflow rate		m ³ /h	12030+13980			13990+13980			13930+20320			20820+20820		22020+22020	
Connecting pipe	Liquid pipe	mm	φ19.05				φ19.05				φ19.05				
	Gas pipe	mm	φ31.75				φ34.92				φ38.10				
	Connection method		Welding												
ESP		Pa	0-80												
Sound pressure level		dB(A)	48-59		48-60				48-66				50-67		
Outline dimension		mm	(930+1240)*860*1710			(1240+1240)*850*1710				(1240+1500)*860*1710			(1500+1500)*860*1710		
Package dimension		mm	(930+1240)*860*2000			(1240+1240)*860*2000				(1240+1500)*860*2000			(1500+1500)*860*2000		
Net weight		kg	225+290		290+290		290+290		290+430			430+430			
Gross weight		kg	245+310		310+310		310+310		310+450			450+450			
Maximum drive IDU NO.		unit	35	35	36	33	40	42	44	44	48	50	52		
Max. equivalent connection pipe length		m	240												
Working temp.	Cooling	°C	-5~50°C												
	Heating	°C	-20~24°C												

Notes

1. Cooling operating temperature range is from -5°C to 50°C, Heating operating temperature range is from -20°C to 24°C.
2. The cooling condition:indoor side 27°C (80.6°F) DB,19°C (60°F) WB outdoor side 35°C (95°F) DB
3. The heating condition:indoor side 20°C (68°F) DB,15°C (44.6°F) WB outdoor side 7°C (42.8°F) DB
- 4.Sound level:measured at point 1m in front of the unit at a height of 1.3m. During actual operation, these values are normally somewhat higher as a result of ambient conditions,and lower as a result of ambient conditions when under ultra-silent operation
5. Choosing fuse or breaker according to MFA and electrical wiring according to MCA.
6. The above data may be changed without notice for future improvement on quality and performance.

MRS-X

- Single Module: 8/10/12/14/16/18/20/22HP
- Full DC Inverter Technology
- Max. 1000m pipe length, Max. 110m height drop



Model			AP.UJNT460BI	AP.UJNT480BI	AP.UJNT500BI	AP.UJNT520BI	AP.UJNT540BI	AP.UJNT560BI	AP.UJNT580BI	AP.UJNT600BI	AP.UJNT620BI	AP.UJNT640BI	AP.UJNT680BI		
Combination model			14+16+16	16+16+16	14+16+20	14+16+22	16+16+22	14+20+22	14+22+22	16+22+22	20+20+22	20+22+22	22+22+22		
Capacity	Capacity range	HP	46	48	50	52	54	56	58	60	62	64	66		
	Cooling	kW	130.0	135.0	141.0	146.5	151.5	157.5	163.0	168.0	173.5	179.0	184.5		
	Heating	kW	145.0	150.0	158.0	164.0	169.0	177.0	183.0	183.0	195.0	201.0	207.0		
Power supply		V/Hz	380V/3N/50Hz/60Hz												
EER		kW/kW	3.62	3.56	3.63	3.66	3.61	3.67	3.70	3.65	3.63	3.65	3.68		
COP		kW/kW	4.05	3.96	4.08	4.12	4.04	4.14	4.17	3.99	4.09	4.12	4.14		
Rated input	Cooling	kW	35.95	37.92	38.87	40.02	41.99	42.94	44.09	46.06	47.83	48.98	50.13		
	Heating	kW	35.78	37.80	38.70	39.83	41.85	42.75	43.88	45.90	47.69	48.82	49.95		
Rated current	Cooling	A	67.80	72.30	78.90	83.70	88.20	94.83	99.60	104.10	110.40	115.20	120.03		
	Heating	A	68.00	72.00	78.90	79.00	83.00	89.90	90.00	94.03	104.80	104.90	105.03		
Refrigerant	Type		R410A												
	Charge volume	kg	12+12+12		12+12+16			12+16+16			16+16+16				
Compressor	Brand	—	Hitachi												
	Type	—	Scroll type												
	Quantity	—	1+1+1		1+1+2			1+2+2			2+2+2				
	Refrigerant oil charge volume	L	1.10+1.10+1.10		1.10+1.10+0.50			1.10+0.50+0.50			0.50+0.50+0.50				
Fan	Type		Axial flow												
	Quantity		1+1+1		1+1+2			1+2+2			2+2+2				
Fan motor	Insulation class	—	IP24												
	Drive type	—	DC												
Airflow rate		m ³ /h	13980+13980+13980		13980+13980+20820			13993+22020+22020		13993+22020+22020		20820+20820+22020		20820+22020+22020	22020+22020+22020
Connecting pipe	Liquid pipe	mm	φ19.05		φ19.05										
	Gas pipe	mm	φ38.10		φ41.30										
	Connection method		Welding												
ESP		Pa	0-80												
Sound pressure level		dB(A)	50-63		50-66	50-67		50-68			50-69				
Outline dimension		mm	(1240+1240+1240)*860*1710		(1240+1240+1500)*860*1710			(1240+1500+1500)*860*1710			(1500+1500+1500)*860*1710				
Package dimension		mm	(1240+1240+1240)*860*2000		(1240+1240+1500)*860*2000			(1240+1500+1500)*860*2000			(1500+1500+1500)*860*2000				
Net weight		kg	290+290+290		290+290+430			290+430+430			430+430+430				
Gross weight		kg	290+290+290		310+310+450			310+450+450			450+450+450				
Maximum drive IDU NO.		unit	54	56	58	60	62	64	64	64	64	64	64		
Max. equivalent connection pipe length		m	240	240	240	240	240	240	240	240	240	240	240		
Working temp.	Cooling	°C	-5~50°C												
	Heating	°C	-20~24°C												

Notes

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