



code		22022010006096	22022010006097	22022010006098	22022010006099				
Indoor code		22022011006522	22022011006523	22022011006524	22022011006525				
outdoor code		22022016005302	22022016005339	22022016005260	22022016007308				
Model		MSAFU-09HRDN1-QRD0GW	MSAFBU-12HRDN1-QRD0GW	MSAFU-18HRFN1-QRD0GW	MSAFDU-24HRFN1-QRD0GW				
Indoor		MSAFU-09HRDN1-QRD0GW	MSAFBU-12HRDN1-QRD0GW	MSAFU-18HRFN1-QRD0GW	MSAFDU-24HRFN1-QRD0GW				
Outdoor		MOBA30-09HFN1-QRD0GW	MOBA30-12HFN1-QRD0GW	MOB31-18HFN1-QRD0GW	MOCA30-24HFN1-QRD0GW				
Power supply		Ph-V-Hz	220-240V~ 50Hz, 1Ph	220-240V~ 50Hz, 1Ph	220-240V~ 50Hz, 1Ph				
Rated Cooling Capacity		Btu/h	9000(3500-11000)	12000(3700-14000)	18000(6200-20900)				
Cooling Power input		W	100-1240	100-1580	140-2360				
Cooling Current		A	0.4-5.4	0.4-6.9	0.6~10.3				
Rated Heating Capacity		Btu/h	10000(2800-11500)	13000(3000-14400)	19000(4700-23000)				
Heating Power input		W	120-1200	130-1510	200-2410				
Heating Current		A	0.5-5.2	0.6-6.6	0.9~10.5				
Seasonal Cooling		Pdesignc	kW	2.6	3.5	5.3	7.0		
		SEER	W/W	6.1	6.1	6.5	6.3		
		Energy Efficiency Class		A++	A++	A++	A++		
Heating(Average)		Pdesignh	kW	2.4	2.6	4.3	5.5		
		SCOP	W/W	4.0	4.0	4.2	4.0		
		Energy Efficiency Class		A+	A+	A+	A+		
Heating(Warmer)		Tbiv	°C	-7	-7	-7	-10		
		Pdesignh	kW	2.8	2.9	4.6	6.7		
		SCOP	W/W	4.9	4.6	5.1	5.1		
Tol		Energy Efficiency Class		A++	A++	A+++	A+++		
		Tbiv	°C	2	2	2	2		
Moisture Removal		L/h	/	/	/	/			
Max. input consumption		W	2075	2200	2550	3700			
Max. current		A	9.5	10	11.5	17			
Starting current		A	---	---	---	---			
Compressor		Model	ASK89D53UEZ	ASK89D53UEZ	ASM135D23UFZ	ATF235D22UMT			
		Type	ROTARY	ROTARY	ROTARY	ROTARY			
		Brand	GMCC	GMCC	GMCC	GMCC			
		Capacity	Btu/h	9010	9010	13836	24345		
		Input	W	671	671	1035	1970		
		Rated current(RLA)	A	2.2	2.2	7.32	6.95		
		Locked rotor Amp(LRA)	A	3.5	3.5	---	---		
		Thermal protector		---	---	---	---		
		Thermal protector position		---	---	---	---		
Indoor fan motor		Capacitor	uF	---	---	---			
		Refrigerant oil/oil charge	ml	SUNISO 4GSD/NM56EP 280 ml	SUNISO 4GSD/NM56EP 280 ml	VG74/450	POE(VG74)/670		
		Model		YKFG-20-4-5	YKFG-20-4-5	ZKFP-30-8-3	ZKFP-58-8-1		
		Output	W	45(Input)	45(Input)	30	58		
		Capacitor	uF	1.5	1.5	--	--		
		Speed(Hi/Mi/Lo)	r/min	1130 / 900 / 800	1130 / 900 / 800	1130 / 900 / 800	1130 / 900 / 800		
		Indoor coil		a.Number of rows	2	2	2	2	
				b.Tube pitch(a)x row pitch(b)	mm	21x13.37	21x13.37	21x13.37	21x13.37
				c.Fin spacing	mm	1.3	1.2	1.2	1.3
d.Fin type (code)				Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium		
e.Tube outside dia.and type	mm			Φ7,innergroove tube	Φ5,innergroove tube	Φ7,innergroove tube	Φ7, innergroove tube		
f.Coil length x height x width	mm			510x84x13.37+510x189x26.74	595x84x19.5+595x210x19.5	750x294x26.74	780x336x26.74		
g.Number of circuits				2	3	3	4		
Indoor air flow (Hi/Mi/Lo)		m3/h	430/320/230	520/420/340	610/460/360	960 / 820 / 650			
Indoor sound pressure level (Hi/Mi/Lo)		dB(A)	38/31/25	38/32/26	36/29/23	43/37/31			
Indoor sound power level (Hi)		dB(A)	52	53	55	61			
Indoor unit		Dimension(W*D*H)	mm	715x195x285	805x195x285	958x213x302	1038x220x325		
		Packing (W*D*H)	mm	780x270x360	870x270x360	1035x295x380	1120x405x310		
		Net/Gross weight	Kg	6.5/8.5	7.5/9.5	8.5/12	12/15		
Outdoor fan motor		Model	ZKFN-40-8-1L	ZKFN-40-8-1L	ZKFN-40-8-1L	ZKFN-50-8-2			
		Output	W	40	40	40	50		
		Capacitor	uF	--	--	--	--		
		Speed	r/min	810/710/520	810/710/520	810/700/550	810/750/600		
Outdoor coil		a.Number of rows	1	1	2	2			
		b.Tube pitch(a)x row pitch(b)	mm	21x13.37	21x13.37	25.4x22	25.4x22		
		c.Fin spacing	mm	1.4	1.4	1.4	1.4		
		d.Fin type (code)		Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium		
		e.Tube outside dia.and type	mm	Φ7,innergroove tube	Φ7,innergroove tube	Φ9.52,innergroove tube	Φ9,innergroove tube		
		f.Coil length x height x width	mm	755x504x13.37	755x504x13.37	860x508x44	730x660.4x44		
		g.Number of circuits		2	2	4	4		
Outdoor air flow		m3/h	1800	1800	2100	2700			
Outdoor sound pressure level		dB(A)	53	55	57	59			
Outdoor sound power level		dB(A)	58	60	63	68			
Outdoor unit		Dimension(W*D*H)	mm	770x300x555	770x300x555	800x333x554	845x363x702		
		Packing (W*D*H)	mm	900x345x585	900x345x585	920x390x615	965x395x755		
		Net/Gross weight	Kg	25.2/27.4	25.5/27.7	37.8/40.5	48.4/51.6		
Refrigerant		Type	R410A	R410A	R410A	R410A			
		GWP	2088	2088	2088	2088			
		Charged quantity	Kg	0.8	0.8	1.48	2		
Design pressure		MPa	4.2/1.5	4.2/1.5	4.2/1.5	4.2/1.5			
Refrigerant piping		Liquid side/ Gas side	mm(inch)	Φ6.35/Φ9.52(1/4"/3/8")	Φ6.35/Φ9.52(1/4"/3/8")	Φ6.35/Φ12.7(1/4"/1/2")	Φ9.52/Φ15.9(3/8"/5/8")		
		Max. refrigerant pipe length	m	25	25	30	50		
		Max. difference in level	m	10	10	20	25		
Connection wiring			1.5(Optional)	1.5(Optional)	1.5(Optional)	2.5(Optional)			
Plug type			--	--	--	--			
Thermostat type			Remote Control	Remote Control	Remote Control	Remote Control			
Operation temperature		Indoor(cooling/ heating)	°C	17~32/0~30	17~32/0~30	17~32/0~30	17~32/0~30		
		Outdoor(cooling/heating)	°C	-15~50/-15~30	-15~50/-15~30	-15~50/-15~30	-15~50/-15~30		
Application area		minimum	m2	12	16	24	32		
		maximum	m2	18	23	35	47		
Qty per 20' /40' /40'HQ			120/250/280	110/230/260	90/186/208	66/140/156			