

		MAS12C1AMV-X	MAS12C2AMV-X	MAS18C2AMV-X	MAS24C2AMV-X	
Aurora Cooling Only Entry		22022010005153	22022010011034	22022010011035	22022010012154	
Common Model						
Power supply		Ph-V-Hz 115V-60Hz, 1Ph	208-230V, 60Hz, 1Ph	208-230V, 1Ph, 60Hz	208-230V, 1Ph, 60Hz	
Cooling	Capacity	Btu/h 12000	12000	17000(5000~17700)	22000	
	Input	W 2200	1200	1583(150~220)	1960	
	Rated current	A 10.1	5.02	6.7(1.5~11)	9.0	
	EER	Btu/w 3.03	3.20	10.75	3.29	
	SEER	Btu/w 16.0	19.0	20	19	
Heating	Capacity	Btu/h -	-	-	-	
	Input	W -	-	-	-	
	Rated current	A -	-	-	-	
	COP	W/W -	-	-	-	
	HSPF4	Btu/w -	-	-	-	
HSPF5	Btu/w -	-	-	-		
Low temperature heating capacity (2°C)		Btu/h -	-	-	-	
Low temperature heating capacity (-7°C)		Btu/h -	-	-	-	
MINIMUM CIRCUIT AMPACITY		A 15	11	15	14.5	
MAX FUSE		A 20	11	20	14.5	
Moisture Removal		L/h -	15	-	-	
Compressor	Model	ASN98D202UFZ	ASK89D29UEZD	ASN140D21UFZ	ATN150D30UFZA	
	Type	ROTARY	ROTARY	ROTARY	ROTARY	
	Brand	GMCC	GMCC	GMCC	GMCC	
	Capacity	Btu/h Jun/27	9110	4225	15354	
	Input	W 748	700	1085	1160	
	Rated current(RLA)	A 5.35	5	7.58	8	
	Locked rotor Amp(LRA)	A -	-	-	-	
	Thermal protector	-	/	-	-	
	Thermal protector position	INTERNAL	/	-	-	
	Refrigerant oil/ oil charge	ml ESTER OIL VG74/370	170	VG74440	VG74450	
Indoor fan motor	Model	YKFG-15-4-28-1	YKFG-20-4-10L/RPG20B	ZKFP-30-8-3	YKFG-45-4-13	
	Brand	Dayang/Welling			Welling	
	Input	W 46	47.4	36.0	89.0	
	RLA	A 0.3	0.25	0.275	-	
	LRA	A -	1.5	-	-	
	Winding Resistance	Ω -	-	-	-	
	Capacitor	uF -	-	-	3	
	Speed(Hi/Mi/Lo)	r/min -	1100/1000/750	1100/800/700	1100/900/800	
	Indoor air flow (Hi/Mi/Lo)	m³/h 478/422/291	476/422/288	900/750/600	988/776/652	
	Indoor air flow (Hi/Mi/Lo)	CFM 280/252/171	280/244/170	530/441/353	530/441/353	
Indoor noise level	Dimension(W*D*H)	mm 38.5/24.5	39.8/25.5	46.0/30.5	46.0/30.5	
	Dimension(W*D*H)	mm 802x189x297	802x189x297	965x215x319	1080x226x335	
	Dimension(W*D*H)	inch 31.57x7.44x11.89	31.57x7.44x11.69	37.99x8.46x12.56	42.52x8.90x13.19	
	Packing (W*D*H)	mm 875x285x375	875x285x375	1045x305x405	1155x315x375	
	Packing (W*D*H)	inch 34.45x11.22x14.76	34.45x11.22x14.76	41.14x12.01x15.94	45.47x12.34x14.20	
	Net/Gross weight	Kg 7.4/9.2	8.2/10.8	11.4/14.1	14.3/17.9	
	Net/Gross weight	lbs. 16.1/23.8	18.1/23.8	25.2/31.1	31.5/39.4	
	Outdoor fan motor	Model	ZKFN-40-8-1L	ZKFN-40-8-1L	ZKFN-40-8-1-5	ZKFN-50-8-2
		Brand	Dayang/Welling	63/54/46		Welling
		Input	W 91	/	40.0	115.0
RLA		A 0.6	-	0.56	-	
LRA		A -	-	0.7	-	
Winding Resistance		Ω -	-	100	-	
Capacitor		uF -	-	-	-	
Speed		r/min 850/800/750	850/700	850/700	800/550	
Outdoor air flow		m³/h 860	2030	2030	3100	
Outdoor air flow		CFM 506	1195	1195	1823	
Outdoor noise level	Dimension(W*D*H)	mm 58.5	53	53.5	57.0	
	Dimension(W*D*H)	mm 770x300x555	770x300x555	770x300x555	845x363x702	
	Dimension(W*D*H)	inch 30.31x11.81x21.85	30.31x11.81x21.85	30.31x11.81x21.85	33.27x14.29x27.64	
	Packing (W*D*H)	mm 900x345x585	900x345x585	900x345x585	965x395x765	
	Packing (W*D*H)	inch 35.43x13.58x23.03	35.43x13.58x23.03	35.43x13.72x21.21	37.99x13.55x24.21	
	Net/Gross weight	Kg 29.6/32.5	24.8/27.0	29.9/32.8	39.2/43.9	
	Net/Gross weight	lbs. 65/71.7	54.7/59.5	65.9/72.3	86.9/96.7	
	Refrigerant type	g R410A/590g	R410A/530	R410A/0.9	R410A/1160g	
	Refrigerant type	oz oz	R410A/20.8	?	25	
	Refrigerant precharge	ft 25	25	25	25	
Additional charge for each ft	oz 0.161	0.161	0.161	0.322		
Design pressure	PSIG 4.2/1.5 (550/340)	550/340	550/340	550/340		
Refrigerant piping	Liquid side/ Gas side	mm(inch) Φ6.35(Φ1/2")/1(1/4"/1/2")	Φ6.35(Φ1/2")/1(1/4"/1/2")	Φ6.35(Φ1/2")/1(1/4"/1/2")	52mm(3/8in)/1.5(9/16in)(5/8in)	
	Max. refrigerant pipe length	m 25	25	30	30	
	Max. refrigerant pipe length	ft 82	82	98	98	
	Max. difference in level	m 10	10	20	20	
	Max. difference in level	ft 33	33	66	66	
Connection wiring	16AWG*4 Stranded, unshielded		16AWG*4 Stranded, unshielded	16AWG*4 Stranded, unshielded	16#14X/0-plug	
Thermostat type	Remote Control		Remote Control	Remote Control	Remote Control	
Operation temperature	Indoor(cooling)/ heating	°C 17~32	17~32/---	17~32/	17~32/	
	Indoor(cooling)/ heating	°F 62~90	62~90/---	62~90/	62~90/	
	Outdoor(cooling)/heating-c	°C -15~50	-15/50/---	0~50/	-15~50/	
	Outdoor(cooling)/heating-c	°F 5~122	5~122/---	-	-	
Application area (cooling standard)	m2 16-23.4	16-23	23-33	29-43		
Application area (cooling standard)	sq.ft 172-252	172-247	248-355	330-484		

		MAS12H1AMV-X	MAS12H2AMV-X	MAS18H2AMV-X	MAS24H2AMV-X
Aurora Heat Pump		22022010012696	22022010012697	22022010012959	22022010012958
Common Model					
Power supply		Ph-V-Hz 115V, 1Ph, 60Hz	208-230V, 1Ph, 60Hz	208-230V, 1Ph, 60Hz	208-230V, 1Ph, 60Hz
Cooling	Capacity(range)	Btu/h 12000	12000	18000	24000
	Input	W 2200	1065	1645	2500
	Rated current	A 8.87	4.5	7.35	11.0
	EER	Btu/w 10.5	11.0	11.0	9.5
	SEER	Btu/w 19	19	19	17.00
Heating	Capacity(range)	Btu/h 12000	12000	18000	24000
	Input	W 1026	1025	1700	2200
	Rated current	A 8.93	4.3	7.47	9.6
	COP	W/W 3.43	3.43	3.1	3.2
	HSPF4	Btu/w 9.5	9.5	10.0	9.5
HSPF5	Btu/w 7.8	8	8.0	8.0	
MINIMUM CIRCUIT AMPACITY		A 15	15	15	18
MAX FUSE		A 20	15	20	25
Compressor	Model	KSX103D33UEZ3	KSX103D33UEZ3	KSX140D21UFZ	KTM240D57UMT
	Type	Rotary	Rotary	Rotary	Rotary
	Brand	GMCC	GMCC	GMCC	GMCC
	Capacity	W 3100	3100	4370	7715
	Input	W 790	790	1135	2085
	Rated current(RLA)	A 6	6	7.5	9.45
	Locked rotor Amp(LRA)	A -	-	-	-
	Thermal protector	-	-	-	-
	Thermal protector position	-	-	-	-
	Capacitor	uF -	-	-	-
Refrigerant oil/ oil charge	ml ER OIL VG74 310 ±15	ER OIL VG74 310 ±15	VG74440	VG74670	
Indoor fan motor	Model	ZKFP-20-8-113	ZKFP-20-8-6-7	ZKFP-30-8-3	ZKFP-58-8-1
	Brand	Welling	Welling	Welling	Brand Ocean
	Input	W 35.2	50	36	116
	Output	W 20	20	30	60
	RLA	A 0.712	0.06	-	0.37
	LRA	A -	-	-	-
	Winding Resistance	Ω -	-	-	-
	Capacitor	uF -	-	-	-
	Speed(Hi/Mi/Lo)	r/min 1100/850/750	1100/900/750	1100/800/750	1100/900/750
	Indoor air flow (Hi/Mi/Lo)	m³/h 500/360/240	550/480/360	765/668/446	1200/1000/765
Indoor air flow (Hi/Mi/Lo)	CFM 294/212/171	324/282/212	449/379/282	706/588/450	
Indoor noise level	Dimension(W*D*H)	mm 38/30/26	38/32/24	43/35/30.5	48/42/35.4
	Dimension(W*D*H)	mm 802x189x297	802x189x297	965x215x319	1080x226x335
	Dimension(W*D*H)	inch 31.57x7.44x11.69	31.57x7.44x11.69	37.99x8.46x12.56	42.52x8.90x13.19
	Packing (W*D*H)	mm 875x285x375	875x285x375	1045x305x410	1155x315x375
	Packing (W*D*H)	inch 34.45x11.22x14.76	34.45x11.22x14.76	41.14x12.01x15.94	45.47x12.34x14.20
	Net/Gross weight	Kg 6.8/11.3	6.8/11.3	9.0/14.6	13.7/18
	Net/Gross weight	lbs. 15.0/24.9	15.0/24.9	20.0/32.9	30.2/39.6
	Model	ZKFN-34-8-1-3	ZKFN-34-8-1-3	ZKFN-34-8-1-3	ZKFN-50-8-2-3
	Input	W 58	58	58	50
	Output	W 34	34	34	115
RLA	A 0.39	0.39	0.39	0.5	
Outdoor fan motor	Model	ZKFN-40-8-1L	ZKFN-40-8-1L	ZKFN-40-8-1-5	ZKFN-50-8-2
	Brand	Dayang/Welling	63/54/46		Welling
	Input	W 91	/	40.0	115.0
	RLA	A 0.6	-	0.56	-
	LRA	A -	-	0.7	-
	Winding Resistance	Ω -	-	100	-
	Capacitor	uF -	-	-	-
	Speed	r/min 800/650	800/750/650	800/750/650	800/750/650
	Outdoor air flow	m³/h 860	2000	2000	3100
	Outdoor air flow	CFM 506	1176.47	1176	1823
Outdoor noise level	Dimension(W*D*H)	mm 800x33x554	800x33x554	800x33x554	845x363x702
	Dimension(W*D*H)	mm 31.50x13.11x21.81	31.50x13.11x21.81	31.50x13.11x21.81	33.27x14.29x27.64
	Dimension(W*D*H)	mm 920x390x615	920x390x615	920x390x615	965x395x775
	Packing (W*D*H)	mm 36.22x15.35x24.21	36.22x15.35x24.21	36.22x15.35x24.21	37.99x13.55x24.21
	Packing (W*D*H)	mm 31.93x8.5	31.93x8.5	31.93x8.5	31.93x8.5
	Net/Gross weight	Kg 70.8/72.75	70.8/72.75	70.8/72.75	105.16/112.22
	Net/Gross weight	lbs. 156.1/159.6	156.1/159.6	156.1/159.6	231.8/248.7
	Refrigerant type	g R410A/840	R410A/840	R410A/840	R410A/1250
	Refrigerant type	oz oz	R410A/29.63	R410A/29.63	R410A/44.09
	Refrigerant precharge	ft 25	25	25	25
Additional charge for each ft	oz 0.161	0.161	0.161	0.322	
Design pressure	PSIG 550/340	550/340	550/340	550/340	
Refrigerant piping	Liquid side/ Gas side	mm(inch) Φ6.35(Φ1/2")/1(1/4"/1/2")	Φ6.35(Φ1/2")/1(1/4"/1/2")	Φ6.35(Φ1/2")/1(1/4"/1/2")	Φ9.52(Φ3/8")/1.5(9/16")/5/8"
	Max. refrigerant pipe	m 25	25	30	30
	Max. refrigerant pipe	ft 82	82	98	98
	Max. difference in lev	m 10	10	20	20
	Max. difference in lev	ft 33	33	66	66
Connection wiring	16AWG*4 Stranded, unshielded		16AWG*4 Stranded, unshielded	16AWG*4 Stranded, unshielded	16#14X/0-plug
Thermostat type	Remote Control		Remote Control	Remote Control	Remote Control
Room temperature	Indoor(cooling)/ heating	°C 17~32/0~30	17~32/0~30	17~32/0~30	17~32/0~30
	Indoor(cooling)/ heating	°F 62~90/32~86	62~90/32~86	62~90/32~86	62~90/32~86
	Outdoor(cooling)/heating	°C -15~50/15~30	-15~50/15~30	-15~50/15~30	-15~50/15~30
	Outdoor(cooling)/heating	°F 5~122/59~86	5~122/59~86	5~122/59~86	5~122/59~86
Application area (cooling standard)	m2 16-23.4	16-23.4	23-34.2	30.6-44.2	
Application area (cooling standard)	sq.ft 172-252	172-252	251-368	330-484	
Qty per 20' /40' /40TH	84/178/214		84/178/214	74/160/186	60/126/151