

# 38MURA Outdoor Unit & 40MUAA Air Handler



## SYSTEM FEATURES

- Anti-corrosive fin coating
- Traditional unitary line set sizes
- Quiet operation

## OUTDOOR FEATURES

- Factory installed basepan heater
- Factory installed crankcase heater
- Low voltage controls
- 24V Interface pre-installed
- Standard heat and high heat options
- Auto-restart function
- Condenser high temp protection

## INDOOR FEATURES

- Modes: Cool, Heat, Dry, Fan, Auto
- 4-way installation (Up flow, Down flow, Right, Left)
- New aluminum coil
- Automatic airflow technology with static pressure up to 0.8 inWG
- Less than 2% air leakage
- Easy maintenance

## Heat Pump with Basepan Heater

Inverter-driven, variable speed, rotary compressor

Up to 18.0 SEER2

Up to 10.0 HSPF2

Sizes: 18 / 24 / 30 / 36 / 48 / 60

## KEY FEATURES

### Minimal Footprint

A low-profile, unobtrusive outdoor unit makes this system an ideal option for homes with zero lot lines or limited outdoor space.

### Whole-Home Solution

This versatile, energy efficient system can be easily retrofitted to combine with existing connections, providing an efficiency upgrade for your entire home.

## CONTROLS

Built-in 24V Interface for third-party thermostat control

## OPTIONAL ACCESSORIES

Electric heater kit

7-day programmable wired controller

## LIMITED WARRANTY\*

10-year limited to original purchaser on compressor and parts upon timely registration. Otherwise, 5 years.

\*For residential applications. See warranty for full details.

**SPECIFICATIONS:**

38MURA Outdoor Unit							
Heat Pump (Standard Heat)							
System							
Outdoor Size		1.5T	2T	2.5T	3T	4T	5T
Outdoor Model		38MURQA18AA3	38MURQA24AA3	38MURQA30AA3	38MURQA36AA3	38MURQA48AA3	38MURQA60AA3
Electrical							
Voltage, Phase, Cycle	V/Ph/Hz	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60
MCA	A.	16	19	20	24	34	34
Recommended Fuse Size	A.	20	20	25	25	35	35
MOPA - Fuse Rating	A.	20	30	35	40	50	60
Short Circuit Current Rating (SCCR)	kA	2.4	2.4	2.4	2.4	2.4	2.4
Operating Range							
Cooling Outdoor DB Min - Max	° F(° C)	5~130 (-15~55)	5~130 (-15~55)	5~130 (-15~55)	5~130 (-15~55)	5~130 (-15~55)	5~130 (-15~55)
Heating Outdoor DB Min - Max	° F(° C)	-5~86 (-15~30)	-5~86 (-15~30)	-5~86 (-15~30)	-5~86 (-15~30)	-5~86 (-15~30)	-5~86 (-15~30)
Piping							
Total Piping Length	ft (m)	98 (30)	164 (50)	164 (50)	213 (65)	213 (65)	213 (65)
Piping Lift*	ft (m)	65 (20)	82 (25)	82 (25)	98 (30)	98 (30)	98 (30)
Pipe Connection Size - Liquid	in (mm)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)
Pipe Connection Size - Suction	in (mm)	3/4 (19)	3/4 (19)	3/4 (19)	3/4 (19)	3/4 (19)	7/8 (22)
Refrigerant							
Refrigerant Type		R410A	R410A	R410A	R410A	R410A	R410A
Charge	lbs (kg)	3.53 (1.6)	4.63 (2.1)	6.72 (3.05)	8.16 (3.7)	10.4 (4.7)	10.8 (4.9)
Add'l Refrigerant (between Std & Max Piping Lngths)	Oz/ft (g/m)	0.69 (65)	0.69 (65)	0.69 (65)	0.69 (65)	0.69 (65)	0.69 (65)
Metering Device		EEV	EEV	EEV	EEV	EEV	EEV
Outdoor Coil							
Face Area	Sq. Ft.	5	5.9	8.18	8.14	13.53	13.36
No. Rows		2	2	2.6	3	2	3
Fins per inch		20	20	18	18	18	18
Circuits		4	6	6	6	8	14
Compressor							
Type		Rotary Inverter	Rotary Inverter	Rotary Inverter	Rotary Inverter	Rotary Inverter	Rotary Inverter
Model		KSN140D21UFZ	KTM240D57UMT	KTF250D22UMT	KTF250D22UMT	KTQ420D1UMU	KTQ420D1UMU
Oil Type		VG74	VG74	VG74	VG74	VG74	VG74
Oil Charge	Fl. Oz.	14.9	22.7	22.7	22.7	47.3	47.3
Rated Current	RLA	9	14	16	17.6	24	24.6
Airflow & Sound							
Airflow	CFM	1,450	1,765	3,000	2,235	4,500	4,412
Sound Pressure	dB(A)	54	60	62	61	59	61

\* Condensing unit above or below indoor unit

**PERFORMANCE:**

38MURA Outdoor Unit							
Heat Pump (Standard Heat)							
Outdoor Size		1.5T	2T	2.5T	3T	4T	5T
M Ratings							
Indoor Size		18K	24K	30K	36K	48K	60K
Cooling Rated Capacity	Btu/h	18,000	24,000	30,000	36,000	47,000	57,000
Cooling Cap. Range Min - Max	Btu/h	5400~18700	7500~26000	9500~33000	8900~38900	10500~48000	4400~60200
SEER		19.0	19.4	19.5	18.0	17.3	18.0
EER		11.1	11.3	10.9	10.4	9.3	10.3
Heating Rated Capacity (47° F)	Btu/h	18,000	26,000	31,000	36,000	55,000	60,000
Heating Rated Capacity (17° F)	Btu/h	12,000	21,000	20,000	20,400	37,000	37,000
Heating Rated Capacity (5° F)	Btu/h	9,550	17,000	20,000	21,000	27,000	29,000
Heating Cap. Range Min - Max	Btu/h	5600~18700	5600~30000	12200~32000	6000~36400	11700~57000	11400~63100
HSPF		10.8	11.3	10.3	9.1	10.0	9.2
COP (47° F)	W/W	3.49	3.54	3.19	3.02	3.00	3.55
COP (17° F)	W/W	2.70	2.75	2.30	2.25	2.00	2.45
COP (5° F)	W/W	1.85	1.75	1.95	1.80	1.72	1.80
M1 Ratings							
Cooling Rated Capacity	Btu/h	18,000	24,000	30,000	36,000	47,000	57,000
Cooling Cap. Range Min - Max	Btu/h	5400~18700	7500~26000	9500~33000	8900~38900	10500~48000	4400~60200
SEER2		16.0	17.0	17.3	16.9	15.8	14.7
EER2		10.9	10.5	10.6	10.1	8.8	8.8
Heating Rated Capacity (47° F)	Btu/h	18,000	26,000	31,000	36,000	55,000	60,000
Heating Rated Capacity (17° F)	Btu/h	11,500	20,700	20,000	20,500	36,500	36,000
Heating Rated Capacity (5° F)	Btu/h	10,000	17,000	17,800	21,000	36,500	34,800
Heating Cap. Range Min - Max	Btu/h	5600~18700	5600~30000	12200~32000	6000~36400	11700~57000	11400~63100
HSPF2		8.8	9.2	8.5	8.2	9.4	8.5
COP (47° F)	W/W	3.50	3.45	3.25	3.39	3.15	3.45
COP (17° F)	W/W	2.75	2.40	2.45	2.40	2.30	2.35
COP (5° F)	W/W	1.90	2.00	1.75	1.88	1.98	1.89

# 38MURA Outdoor Unit & 40MUAA Air Handler

## SPECIFICATIONS:

38MURA Outdoor Unit							
Heat Pump (High Heat)							
System							
Outdoor Size		1.5T - HH	2T - HH	2.5T - HH	3T - HH	4T - HH	5T - HH
Outdoor Model		38MURAQ18AB3	38MURAQ24AB3	38MURAQ30AB3	38MURAQ36AB3	38MURAQ48AB3	38MURAQ60AB3
Electrical							
Voltage, Phase, Cycle	V/Ph/Hz	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60
MCA	A.	16	20.5	23	41	42	42
Recommended Fuse Size	A.	20	25	25	45	45	45
MOCP - Fuse Rating	A.	20	35	35	50	50	60
Short Circuit Current Rating (SCCR)	kA	2.4	2.4	2.4	2.4	2.4	2.4
Operating Range							
Cooling Outdoor DB Min - Max	° F(° C)	-22~-130 (-30~-55)	-22~-130 (-30~-55)	-22~-130 (-30~-55)	-22~-130 (-30~-55)	-22~-130 (-30~-55)	-22~-130 (-30~-55)
Heating Outdoor DB Min - Max	° F(° C)	-22~-86 (-30~-30)	-22~-86 (-30~-30)	-22~-86 (-30~-30)	-22~-86 (-30~-30)	-22~-86 (-30~-30)	-22~-86 (-30~-30)
Piping							
Total Piping Length	ft (m)	98 (30)	164 (50)	164 (50)	213 (65)	213 (65)	213 (65)
Piping Lift*	ft (m)	65 (20)	82 (25)	82 (25)	98 (30)	98 (30)	98 (30)
Pipe Connection Size - Liquid	in (mm)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)
Pipe Connection Size - Suction	in (mm)	3/4 (19)	3/4 (19)	3/4 (19)	3/4 (19)	3/4 (19)	7/8 (22)
Refrigerant							
Refrigerant Type		R410A	R410A	R410A	R410A	R410A	R410A
Charge	lbs (kg)	5.07 (2.3)	6.39 (2.9)	8.38 (3.8)	10.36 (4.7)	10.58 (4.8)	10.58 (4.8)
Add'l Refrigerant (between Std & Max Piping Lngths)	Oz/ft (g/m)	0.69 (65)	0.69 (65)	0.69 (65)	0.69 (65)	0.69 (65)	0.69 (65)
Metering Device		EEV	EEV	EEV	EEV	EEV	EEV
Outdoor Coil							
Face Area	Sq. Ft.	5.9	8.16	8.16	14.08	13.53	13.29
No. Rows		2	2	3	1.6	2	2.6
Fins per inch		20	20	20	18	18	20
Circuits		6	4	4	8	8	10
Compressor							
Type		Rotary Inverter	Rotary Inverter	Rotary Inverter	Rotary Inverter	Rotary Inverter	Rotary Inverter
Model		KTM240D57UMT	KTM240D57UMT	KTF310D43UMT	EAPQ420D1UMUA	EAPQ420D1UMUA	EAPQ440D1UMUA
Oil Type		VG74	VG74	VG74	VG74	VG74	VG75
Oil Charge	Fl. Oz.	22.7	22.7	33.8	49.4	49.4	43.96
Rated Current	RLA	10	15	16.5	32	33	28
Airflow & Sound							
Airflow	CFM	1,279	3,000	3,000	4,500	4,412	4,500
Sound Pressure	dB(A)	58	64	62	64	64	64

\* Condensing unit above or below indoor unit

## PERFORMANCE:

38MURA Outdoor Unit							
Heat Pump (High Heat)							
Outdoor Size		1.5T - HH	2T - HH	2.5T - HH	3T - HH	4T - HH	5T - HH
M Ratings							
Indoor Size		18K	24K	30K	36K	48K	60K
Energy Star		YES	YES	NO	NO	NO	NO
Cooling Rated Capacity	Btu/h	18,000	24,000	30,000	36,000	47,000	55,000
Cooling Cap. Range Min - Max	Btu/h	6900~21000	6400~27000	10400~33600	12000~47400	18000~48000	18000~56000
SEER		20.0	20.0	18.0	18.0	16.0	16.4
EER		12.5	12.5	11	10.5	8.5	9
Heating Rated Capacity (47° F)	Btu/h	19,000	24,000	33,000	41,500	50,000	59,000
Heating Rated Capacity (17° F)	Btu/h	13,500	19,200	21,000	30,400	36,000	42,000
Heating Rated Capacity (5° F)	Btu/h	19,000	24,000	28,500	43,300	47,000	50,000
Heating Cap. Range Min - Max	Btu/h	2800~21000	10100~31000	12000~37000	9000~57200	20000~55000	20000~68000
HSPF		11.0	12.0	10.5	10.5	10.0	10.5
COP (47° F)	W/W	3.59	3.45	3.48	3.45	3.00	3.50
COP (17° F)	W/W	2.75	2.70	2.60	2.65	2.30	2.60
COP (5° F)	W/W	1.90	1.80	1.95	1.80	1.88	1.96
M1 Ratings							
Cooling Rated Capacity	Btu/h	18,000	24,000	30,000	36,000	47,000	55,000
Cooling Cap. Range Min - Max	Btu/h	6900~21000	6400~27000	10400~33600	12000~47400	18000~48000	18000~56000
SEER2		18.0	17.4	16.2	15.8	15.6	15.0
EER2		12.4	11.7	9.8	9.8	8.2	8.5
Heating Rated Capacity (47° F)	Btu/h	19,000	24,000	33,000	40,000	50,000	59,000
Heating Rated Capacity (17° F)	Btu/h	13,000	18,600	20,400	29,500	35,000	42,000
Heating Rated Capacity (5° F)	Btu/h	16,500	22,700	24,100	34,500	46,000	50,000
Heating Cap. Range Min - Max	Btu/h	2800~21000	10100~31000	12000~37000	9000~57200	20000~55000	20000~68000
HSPF2		9.3	10.0	8.9	9.5	9.4	9.0
COP (47° F)	W/W	3.60	3.40	3.30	3.35	3.15	3.00
COP (17° F)	W/W	2.50	2.40	2.30	2.40	2.30	2.60
COP (5° F)	W/W	2.00	1.85	1.80	1.95	1.90	1.96

**SPECIFICATIONS:**

40MUA Air Handler							
System							
Indoor Size		18K	24K	30K	36K	48K	60K
Indoor Model		40MUAQ18XA3	40MUAQ24XA3	40MUAQ30XA3	40MUAQ36XA3	40MUAQ48XA3	40MUAQ60XA3
Electrical							
Voltage, Phase, Cycle	V/Ph/Hz	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60
MCA	A.	2.5	4	4.5	5	7.5	9
Recommended Fuse Size	A.	5	5	5	10	10	10
MOPA - Fuse Rating	A.	15	15	15	15	15	15
Operating Range							
Cooling Indoor DB Min - Max	° F(° C)	60~90 (16~32)	60~90 (16~32)	60~90 (16~32)	60~90 (16~32)	60~90 (16~32)	60~90 (16~32)
Heating Indoor DB Min - Max	° F(° C)	32~86(0~30)	32~86(0~30)	32~86(0~30)	32~86(0~30)	32~86(0~30)	32~86(0~30)
Piping							
Pipe Connection Size - Liquid	in (mm)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)
Pipe Connection Size - Suction	in (mm)	3/4 (19)	3/4 (19)	3/4 (19)	3/4 (19)	3/4 (19)	7/8 (22)
Refrigerant							
Refrigerant Type		R410A	R410A	R410A	R410A	R410A	R410A
Metering Device		EEV	EEV	EEV	EEV	EEV	EEV
Indoor Coil							
Face Area	Sq. Ft.	3	3	3.8	3.8	3.8	4.88
No. Rows		3	3	4	4	4	5
Fins Per Inch		20	20	20	20	20	20
Circuits		6	6	10	10	10	14
Airflow & Sound							
Number of Fan Speeds (low/med/high/turbo)		4	4	4	4	4	4
Airflow (lowest to highest)	CFM	488/529/576/618	629/694/759/824	712/806/894/1088	865/971/1082/1188	906/1094/1282/1471	1135/1359/1582/1806
Cooling Sound Pressure (low to high)	dB(A)	30.5/31.4/33.4/35.2	33.6/36.6/38.7/40.4	37.7/41.3/43.0/45.6	40.2/43.2/45.7/48.0	42.5/47.1/50.3/54.0	45.0/49.1/52.1/55.3
Heating Sound Pressure (low to high)	dB(A)	29.8/30.7/34.0/35.3	32.4/36.9/39.6/40.6	29.5/36.9/43.0/43.2	35.6/40.7/46.8/46.7	43.7/46.8/50.2/52.7	43.4/48.0/53.0/60.5
Max Static Pressure	In. W.G.	0.8	0.8	0.8	0.8	0.8	0.8
Field Drain Pipe Size O.D.	in (mm)	3/4 (19.1)	3/4 (19.1)	3/4 (19.1)	3/4 (19.1)	3/4 (19.1)	3/4 (19.1)

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