

RECOMMENDED MATCHING INDOOR AND OUTDOOR UNITS (NOT ALL POSSIBILITIES BEING LISTED)

Indoor Unit Mix and Match Size Possibilities (Samples), to Work with: Outdoor Unit WMMS-21CH-V2B(59)(2) / WMMS-30CH-V2B(59)(2)											
1 BU Box		2 BU Boxes			3 BU Boxes			4 Indoor Units			
09K	12K	09K+09K	09K+12K	09K+12K	Not allowed			Not allowed			
18K	24K	12K+12K	12K+18K								
Indoor Unit Mix and Match Size Possibilities (Samples), to Work with: Outdoor Unit WMMS-24CH-V2B(59)(2) / WMMS-36CH-V2B(59)(2)											
1 Indoor Unit		2 Indoor Units		3 Indoor Units			4 Indoor Units				
Not allowed		09K+12K	12K+12K	09K+09K+09K	09K+09K+12K	09K+09K+18K	Not allowed				
		09K+18K	18K+18K	09K+12K+12K	09K+12K+18K	12K+12K+12K					
Indoor Unit Mix and Match Size Possibilities (Samples), to Work with: Outdoor Unit WMMS-42CH-V2B(59)(2)											
1 Indoor Unit		2 Indoor Units		3 Indoor Units			4 Indoor Units				
Not allowed		12K+12K	09K+18K	9K+9K+9K	09K+09K+12K	09K+12K+12K	09K+09K+09K+09K	09K+09K+09K+12K	09K+09K+12K+12K		
		12K+18K	12K+24K	9K+9K+18K	09K+12K+18K	12K+12K+18K	09K+12K+12K+12K	12K+12K+12K+12K	09K+09K+09K+18K		
		18K+18K	18K+24K	12K+12K+12K	09K+09K+24K	09K+12K+24K	09K+09K+12K+18K	09K+09K+12K+18K	09K+09K+12K+24K		
Indoor Unit Mix and Match Size Possibilities (Samples), to Work with: Outdoor Unit WMMS-48CH-V2B(59)(2)											
1 Indoor Unit		2 Indoor Units		3 Indoor Units			4 Indoor Units				
Not allowed		12K+18K	09K+24K	09K+09K+09K	09K+09K+12K	09K+12K+12K	09K+09K+09K+09K	09K+09K+09K+12K	09K+09K+09K+18K		
		18K+18K	12K+24K	09K+09K+18K	12K+12K+12K	09K+12K+18K	09K+09K+12K+18K	09K+12K+12K+18K	12K+12K+12K+12K		
		18K+24K	24K+24K	12K+12K+18K	09K+12K+24K	12K+12K+24K	09K+09K+09K+24K	09K+09K+12K+24K	09K+12K+12K+24K		
Indoor Unit Mix and Match Size Possibilities (Samples), to Work with: Outdoor Unit WMMS-60CH-V2B(59)(2)											
1 Indoor Unit		2 Indoor Units		3 Indoor Units			4 Indoor Units			5 Indoor Units	
Not allowed		12K+12K	12K+18K	09K+09K+09K	09K+09K+12K	09K+12K+12K	09K+09K+09K+12K	09K+09K+09K+18K	09K+09K+09K+12K/18K/24K	09K+09K+09K+12K+12K/18K/24K	09K+09K+09K+12K+12K/18K/24K
		18K+18K	12K+24K	09K+09K+18K	12K+12K+18K	09K+12K+18K	09K+09K+12K+18K	12K+12K+12K+18K	09K+09K+12K+18K/24K	09K+12K+12K+18K/24K	09K+12K+12K+18K/24K
		18K+24K	24K+24K	12K+12K+12K	12K+12K+24K	09K+12K+24K	09K+09K+12K+24K	09K+12K+12K+24K	12K+12K+12K+18K	09K+09K+12K+18K	09K+09K+12K+18K

Important Notes:

* When the rated total capacity of all the indoor units exceeds the rated capacity of outdoor unit, each indoor unit may not output the rated capacity and one may differ from other, upon other installation/operation factors, it all units are turned on to run compressor simultaneously.
 * Must follow pipe length and refrigerant charge adjustment as instructed in below table:

Valve sizes at outdoor unit	Model	WMMS-21CH-V2B(59)(2)		WMMS-24CH-V2B(59)(2)		WMMS-30CH-V2B(59)(2)		WMMS-36CH-V2B(59)(2)		WMMS-42CH-V2B(59)(2)		WMMS-48CH-V2B(59)(2)		WMMS-60CH-V2B(59)(2)	
		In.	Out.	In.	Out.	In.	Out.	In.	Out.	In.	Out.	In.	Out.	In.	Out.
Liquid valve		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
Gas valve		3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8
Max. pipe length (add up length of all liquid lines only), if not upper sizing pipes		120		200		230		260		300		300		300	
Max. installed indoor and outdoor unit elevation difference	Outdoor unit is installed below the indoor unit	15		25		30		30		30		30		30	
	Outdoor unit is installed above indoor unit	25		25		30		30		30		30		30	
Max. pipe length, if not adjusting factory pre-charged refrigerant		60 (add up length of all liquid lines only)		100 (add up length of all liquid lines only)		100 (add up length of all liquid lines only)		130 (add up length of all liquid lines only)		130 (add up length of all liquid lines only)		130 (add up length of all liquid lines only)		130 (add up length of all liquid lines only)	
Minimum pipe length (for each indoor unit)		/		/		/		/		/		/		/	
Refrigerant charge adjustment, if actual length is different from the number in the line above		+		Oz/Ft		15ft		0.23		0.23		0.23		0.23	

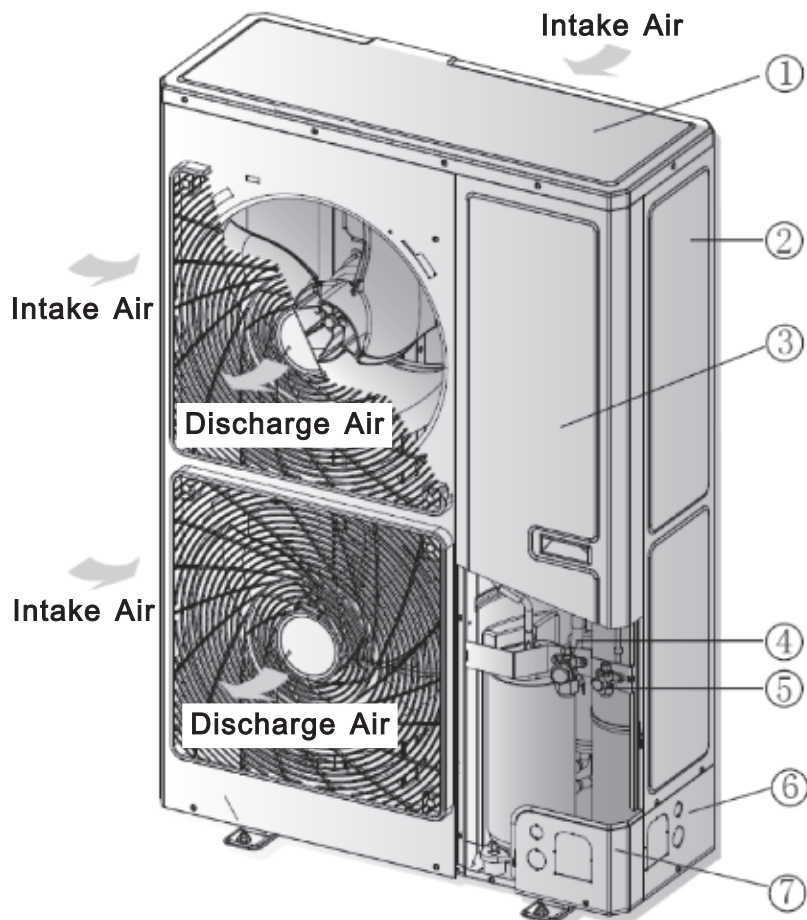
* Adjust refrigerant charge, following instructions, if the actual installation elevation difference is different from 7' and length is different from the listed numbers above.
 * Any indoor unit is 30' or more apart from the BU box, better to adjust refrigerant. If it is 50' or more, better to upper size the copper lines and adjust refrigerant.
 * Any run can not be more than 100' apart from the BU box; otherwise, that indoor unit's capacity may be decreased too much.

PIPE ADAPTOR

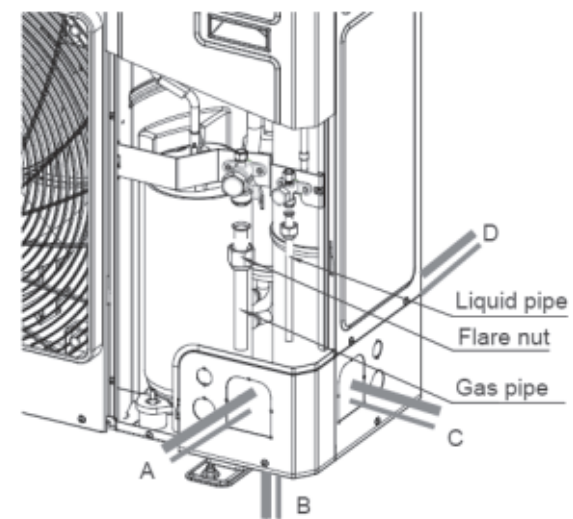
Whenever the outdoor unit gas valve of size 3/8" is to connect with indoor unit gas pipe of 1/2", one 3/8" female-1/2"male adaptor" is to be used in between. This adaptor is packed separately and shall be installed at job site.



CONNECTION OF REFRIGERANT PIPE



NO.	Name
①	Coping plate
②	Rear side plate
③	Front side plate
④	Gas side stop valve
⑤	Liquid side stop valve
⑥	Right connection board
⑦	Front connection board
A	Front connection
B	Bottom connection
C	Side connection
D	Rear connection



SYMPHONY-CHOIR (59)2S



DC Inverter Any Mix & Match-II

1 Outdoor Unit, to Work with Up to 9 Indoor Units

More Than 200 Indoor Unit Type/Size Combinations, of Four Styles: Wall, Ceiling, Ceiling/Floor, and Recessed Fan Coil Unit(Low Profile) Crankcase Heater and/or De-ice/Snow Heater, Low Ambient Control for a Better Performance in Cold Weather

MANY ADVANTAGES OVER CONVENTIONAL CENTRAL SYSTEMS:

- * Eliminate health threats from dust, mold or fungus which hide and grow in central duct systems
- * Reduce noise for more comfort
- * Zone control and high energy efficiency to help save your utility payment
- * Removable (by professional), if needed, to go wherever you decide to

INDOOR UNIT OPTIONS (Run Same Mode on All Indoor Units)



YMGI, Engineered Comfort Products for A Sustainable and Efficient Green World!

APPLICATIONS:

- * LIBRARIES
- * HOTELS
- * HOMES
- * SUNROOMS
- * CONDOS
- * RESORTS
- * GALLERIES
- * NURSING HOMES
- * APARTMENTS
- * OFFICES
- * RESTAURANTS
- * MOBILE HOMES

FEATURES:

- * DC INVERTER
- * ADAPTIVE SMART CONTROL
- * HIGH EFFICIENCY
- * QUICK COOLING AND HEATING
- * INDEPENDENT DEHUMIDIFICATION
- * INTELLIGENT DEFROSTING
- * QUIET OPERATION
- * SOFT START
- * LOW VOLTAGE START
- * STABLE OPERATION AT LOW FREQUENCY
- * RANDOM PITCH CROSS FLOW FAN WHEEL
- * WIDE ANGLE AIR DISTRIBUTION
- * LONG AIR THROW
- * WASHABLE FILTER
- * AUTO DRYING & CLEANING
- * DRY ANTI-MOLD COIL
- * REMOTE CONTROL
- * 12 OR 24-HOUR TIMER
- * MEMORIES & AUTO RESTART
- * PRE-HEATING PRIOR TO HEATING START
- * OVERCORRECT & THERMAL PROTECTION
- * SLEEP MODE
- * ENHANCED COPPER/COIL
- * PRE-CHARGED
- * DIGITAL DISPLAY (LIGHT ON/OFF)
- * EASY OPERATION
- * EASY DIAGNOSIS & TROUBLE-SHOOTING
- * THOROUGHLY TESTED
- * RELIABLE QUALITY

ADD-ON ACCESSORIES:

- * ADVANCED HEALTHY KIT (HEPA/Enzyme/Cold Catalyst Filter, Anion Generator)
- * "U-TOUCH" REMOTE CONTROL
- * REMOTE CONTROL LOCK
- * BRACKETS (FOR OUTDOOR UNIT)
- * FOOT RISERS (FOR OUTDOOR UNIT)
- * COPPER/WIRE/ACC.SET (ACC. KIT)
- * LINESET COVERS
- * WINTER WIND BAFFLE

YMGI, Engineered Comfort Products for A Sustainable and Efficient Green World!

APPLICATIONS:

- * LIBRARIES
- * CONDOS
- * APARTMENTS
- * HOTELS
- * RESORTS
- * OFFICES
- * HOMES
- * GALLERIES
- * RESTARAUNTS
- * SUNROOMS
- * NURSING HOMES
- * MOBILE HOMES

FEATURES:

- * DC INVERTER
- * STABLE OPERATION AT LOW FREQUENCY
- * PRE-HEATING PRIOR TO HEATING START
- * ADAPTIVE SMART CONTROL
- * RANDOM PITCH CROSS FLOW FAN WHEEL
- * OVERCORRECT & THERMAL PROTECTION
- * HIGH EFFICIENCY
- * WIDE ANGLE AIR DISTRIBUTION
- * SLEEP MODE
- * QUICK COOLING AND HEATING
- * LONG AIR THROW
- * ENHANCED COPPER/COIL
- * INDEPENDENT DEHUMIDIFICATION
- * WASHABLE FILTER
- * PRE-CHARGED
- * INTELLIGENT DEFROSTING
- * AUTO DRYING & CLEANING
- * DIGITAL DISPLAY (LIGHT ON/OFF)
- * QUIET OPERATION
- * DRY ANTI-MOLD COIL
- * EASY OPERATION
- * SOFT START
- * REMOTE CONTROL
- * EASY DIAGNOSIS & TROUBLE-SHOOTING
- * LOW VOLTAGE START
- * 12 OR 24-HOUR TIMER
- * THOROUGHLY TESTED
- * MEMORIES & AUTO RESTART
- * RELIABLE QUALITY

ADD-ON ACCESSORIES:

- * ADVANCED HEALTHY KIT (HEPA/Enzyme/Cold Catalyst Filter, Anion Generator)
- * REMOTE CONTROL LOCK
- * COPPER/WIRE/ACC.SET (ACC. KIT)
- * "U-TOUCH" REMOTE CONTROL
- * BRACKETS (FOR OUTDOOR UNIT)
- * LINESET COVERS
- * WINTER WIND BAFFLE
- * FOOT RISERS (FOR OUTDOOR UNIT)



INDOOR UNIT-ANY ONE OR FEW OF FOLLOWING CONFIGURATIONS (TO CONNECT TO OUTDOOR UNIT)

INDOOR UNIT OPTION-CEILING MOUNT CASSETTE



EC

Items	Unit / Conditions	WMMS-12EC-V2B(59)2	WMMS-18EC-V2B(59)2	WMMS-24EC-V2B(59)2
Power Supply	Voltage/Ph/Hz	208-230/1/60	208-230/1/60	208-230/1/60
	Allowed Voltage Range	187-253V	187-253V	187-253V
Cooling Capacity (Btu/h)	High/Standard/Low	13900/12000/5200	20800/17200/6200	26500/22800/9600
	ID 70/60, OD 47/43F	13000	18100	27400
	ID 70/60, OD 17/15F	11600	16200	23800
Heating Capacity (Btu/h)	ID 70/60, OD 17/5F	9000	13100	20600
	Btu/h.W	16	16	16
	HSPF	8.2	8.2	8.2
Dehumidifying Capacity	Pints/Hr.	2.96	3.8	5.28
Air Flow (CFM)	High/Medium/Low	353/312/245	353/312/245	694/522/366
Air-throw (FT)	Horizontal Installation	25-18 Upon Mounting Height/Speed/Temp.		
External Static Pressure	Water In.	0	0	0
	Pressure dB(A) (H/M/L)	39/37/35	39/37/35	45/43/41
Sound Level	Power dB(A) (H/M/L)	49/47/45	49/47/45	55/53/51
	Model	FN11T-2	FN11T-2	FN35B-1
Fan Motor	Shaft	Single	Single	Single
	Speed (RMP, H/M/L)	700/600/515	700/600/515	570/520/280
	Output (W)	11	11	50
	Input (W)	50	50	165
	Capacitor (uF)	1	1	3
Fan Wheel	Type-Piece	Centrifugal-1	Centrifugal-1	Centrifugal-1
	Diameter x Height (In.)	11.1 x 5.8	11.1 x 5.8	17.7 x 4.4
Swing/Step Motor	Model	MP35CB	MP35CB	MP35CB
	Piece	2	2	2
	Output (W)	2	2	2
Input Power of Ele. Heater	Type-W	NA	NA	NA
Electrical Protection Fuse	PCB / Transformer	T3.15A 250V / 0.2A		
Evaporator Coil	Type	Alu. Fin/Inner Grooved Copper Tube		
	Color	Blue	Blue	Blue
Copper Line Connections	Sealed by Dry Nitrogen	Yes	Yes	Yes
	Flare/Nut-Liquid + Gas	1/4" + 3/8"	1/4" + 1/2"	3/8" + 5/8"
Drain Hose Connection	OD (In.)	1.22	1.22	1.22
Condensate Pump	Installed-Lift (In.)	Yes-25	Yes-25	Yes-25
Refrigerant Environmental Friendly	R410A	Yes	Yes	Yes
Filter	Type-Feature	Standard-Washable	Standard-Washable	Standard-Washable
	Size WxH (In.) - Qty.	13.56 x 13.13 - 1	13.56 x 13.13 - 1	21.38 x 21.34 - 1
Clean Coil Surface	Anti-Mildew Function	Yes	Yes	Yes
Pre-heating Function	Anti-Cold Blowing	Yes	Yes	Yes
Memory of Previous Set-ups	Power is Lost/Resumed	Yes	Yes	Yes
Auto-Restart Function	If Power is Resumed	Yes	Yes	Yes
Unit Dimensions	Net L x W x H (In.)	22.4 x 22.4 x 9.1	22.4 x 22.4 x 9.1	33.1 x 33.1 x 9.4
	Package L x W x H (In.)	33.4 x 28.7 x 12.2	33.4 x 28.7 x 12.2	37.8 x 37.8 x 12.2
	Net (LBs)	39.7	39.7	66
Unit Weight	Packaged (LBs)	50.7	50.7	84
	Net L x W x H (In.)	25.6 x 25.6 x 2	25.6 x 25.6 x 2	37.4 x 37.4 x 2.4
	Package L x W x H (In.)	28.7 x 26.4 x 4	28.7 x 26.4 x 4	40.9 x 40.4 x 4.5
Face Panel Weight	Net (LBs)	5.5	5.5	14
	Packaged (LBs)	8.1	8.1	22
Loading Capacity	20/40/40/HQ	102/209/246	102/209/246	72/72/144

INDOOR UNIT OPTION-WALL MOUNT



EW

Items	Unit / Conditions	WMMS-09EW-V2B(59)2	WMMS-12EW-V2B(59)2	WMMS-18EW-V2B(59)2	WMMS-24EW-V2B(59)2
Power Supply	Voltage/Ph/Hz	208-230/1/60	208-230/1/60	208-230/1/60	208-230/1/60
	Allowed Voltage Range	187-253V	187-253V	187-253V	187-253V
Cooling Capacity (Btu/h)	High/Standard/Low	12000/9000/4400	14000/12000/4500	21500/17000/6800	26500/22800/9600
	Max./Min.	12500/3400	14500/3800	22500/9500	28500/9800
	ID 70/60, OD 47/43F	9500	13000	18700	27400
Heating Capacity (Btu/h)	ID 70/60, OD 17/15F	8800	11600	16600	23600
	ID 70/60, OD 17/5F	8000	9100	13800	20600
	Btu/h.W	22-16	20-16	18-16	18-16
HSPF	Btu/h.W	9.8-8.2	9.6-8.2	10.2-8.2	10.2-8.2
Dehumidifying Capacity	Pints/Hr.	1.7	2.96	3.8	5.28
Air Flow (CFM)	High/Medium/Low	300/253/218	330/253/218	780/650/550	800/700/600
Air-throw (FT)	Horizontal Installation	35-30 Upon Mounting Height/Speed/Temp.			
External Static Pressure	Water In.	0	0	0	0
	Pressure dB(A) (H/M/L)	34/30/26	36/32/26	45/42/40	48/46/44
Sound Level	Power dB(A) (H/M/L)	44/40/36	46/42/36	55/52/50	58/56/54
	Model	FN20T-PG	FN20T-PG	FN20W-PG	FN25B-PG
Fan Motor	Shaft	Single	Single	Single	Single
	Speed (RMP, H/M/L)	1050/980/920	1050/980/920	1200/1050/900	1150/1000/850
	Output (W)	20	20	20	35
	RLA (AMP)	0.2	0.2	0.25	0.45
	Capacitor (uF)	1	1	1.5	2.5
Fan Wheel	Type-Piece	Cross Flow-1	Cross Flow-1	Cross Flow-1	Cross Flow-1
	Diameter x Width (In.)	φ 3.6 x 25.4	φ 3.6 x 25.4	φ 3.9 x 28	φ 3.9 x 30
Swing/Step Motor	Model	MP24AA	MP24AA	MP28VB	MP35XX
	Piece	2	2	2	2
	Output (W)	2.4	2.4	2	2
Input Power of Ele. Heater	Type-W	NA	NA	NA	NA
Electrical Protection Fuse	PCB / Transformer	T3.15A 250V / 0.2A			
Evaporator Coil	Type	Alu. Fin/Inner Grooved Copper Tube			
	Color	Blue	Blue	Blue	Blue
Copper Line Connections	Sealed by Dry Nitrogen	Yes	Yes	Yes	Yes
	Flare/Nut-Liquid + Gas	1/4" + 3/8"	1/4" + 3/8"	1/4" + 1/2"	1/4" + 5/8"
Drain Hose Connection	OD (In.)	0.67	0.67	0.67	0.67
Condensate Pump	Installed-Lift (In.)	NA	NA	NA	NA
Refrigerant Environmental Friendly	R410A	Yes	Yes	Yes	Yes
Filter	Type-Feature	Standard-Washable	Standard-Washable	Standard-Washable	Standard-Washable
	Qty.	2	2	2	2
Clean Coil Surface	Anti-Mildew Function	Yes	Yes	Yes	Yes
Pre-heating Function	Anti-Cold Blowing	Yes	Yes	Yes	Yes
Memory of Previous Set-ups	Power is Lost/Resumed	Yes	Yes	Yes	Yes
Auto-Restart Function	If Power is Resumed	Yes	Yes	Yes	Yes
Unit Dimensions	Net WxHxD (In.)	30.3 x 9.8 x 7.5	32.7 x 11.2 x 7.9	37 x 11.7 x 7.9	39.7 x 12.4 x 7.9
	Package WxHxD (In.)	33.7 x 13.0 x 10.4	35.7 x 15.2 x 10.7	39.8 x 15.0 x 11.2	42.2 x 15.6 x 12.3
	Net (LBs)	18.7	24.3	28.6	35.2
Unit Weight	Packaged (LBs)	27.5	30.8	37.4	46.3
	20/40/40/HQ	378/792/890	240/480/540	207/431/488	200/410/450

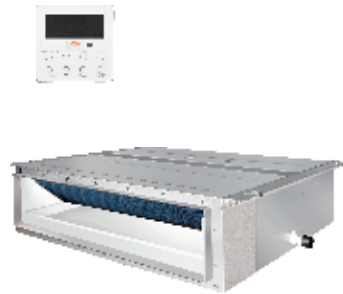
INDOOR UNIT OPTION-CEILING/FLOOR MOUNT UNIVERSAL



Items	Unit / Conditions	WMMS-09EU-V2B(59)2	WMMS-12EU-V2B(59)2	WMMS-18EU-V2B(59)2	WMMS-24EU-V2B(59)2
Power Supply	Voltage/Ph/Hz	208-230/1/60	208-230/1/60	208-230/1/60	208-230/1/60
	Allowed Voltage Range	187-253V	187-253V	187-253V	187-253V
Cooling Capacity (Btu/h)	High/Standard/Low	10700/8500/4600	14100/11900/5900	21500/17000/6800	26500/22800/9600
	ID 70/60, OD 47/43F	9500	13100	18700	27400
	ID 70/60, OD 17/15F	8800	11600	16600	23600
Heating Capacity (Btu/h)	ID 70/60, OD 17/15F	8000	9100	13800	20600
	Btu/h.W	16	16	16	16
	Btu/h.W	8.2	8.2	8.2	8.2
Dehumidifying Capacity	Pints/Hr.	1.7	2.96	3.8	5.28
Air Flow (CFM)	High/Medium/Low	383/324/265	383/324/265	559/412/294	736/530/412
	Horizontal Installation	35-30 Upon Mounting Height/Speed/Temp.			
Air-throw (Ft.)	Upright Installation	35-20 Upon Mounting Location/Speed/Temp.			
	Water In.	0	0	0	0
External Static Pressure	Pressure dB(A) (H/M/L)	40/38/36	40/38/36	45/42/40	48/46/44
	Power dB(A) (H/M/L)	50/48/46	50/48/46	55/52/50	58/56/54
Fan Motor	Model	FG10A	FG10A	FG20E	FG50A
	Shaft	Double	Double	Double	Double
	Speed (RMP, H/M/L)	690/610/480	690/610/480	985/800/680	985/800/680
	Output (W)	15	15	20	40
	Input (W)	55	55	110	145
	Capacitor (uF)	1	1	2.5	2
Fan Wheel	Type-Piece	Centrifugal-2	Centrifugal-2	Centrifugal-4	Centrifugal-4
	Diameter x Width (In.)	5.5 x 4.1	5.5 x 4.1	5.5 x 4.1	5.5 x 4.1
Swing/Step Motor	Model	MP35CB	MP35CB	MP35CB	MP35CB
	Piece	2	2	2	2
	Output (W)	2	2	2	2
Input Power of Ele. Heater	Type-W	NA	NA	NA	NA
Electrical Protection Fuse	PCB/Transformer	T3.15A 250V / 0.2A			
Evaporator Coil	Type	Alu. Fin/Inner Grooved Copper Tube			
	Color	Blue or the Like	Blue or the Like	Blue or the Like	Blue or the Like
Copper Line Connections	Sealed by Dry Nitrogen	Yes	Yes	Yes	Yes
	Flare/Nut-Liquid + Gas	1/4" + 3/8"	1/4" + 3/8"	1/4" + 1/2"	1/4" + 5/8"
Drain Hose Connection	OD (In.)	0.67	0.67	0.67	0.67
Condensate Pump	Installed-Lift (In.)	NA	NA	NA	NA
Refrigerant Environmental Friendly	R410A	Yes	Yes	Yes	Yes
Filter	Type-Feature	Standard-Washable	Standard-Washable	Standard-Washable	Standard-Washable
	Size WxH (In.) - Qty.	21.8 x 8.68 - 2	21.8 x 8.68 - 2	21.8 x 8.68 - 2	21.8 x 8.68 - 2
Clean Coil Surface	Anti-Mildew Function	Yes	Yes	Yes	Yes
Pre-heating Function	Anti-Cold Blowing	Yes	Yes	Yes	Yes
Memory of Previous Set-ups	Power is Lost/Resumed	Yes	Yes	Yes	Yes
Auto-Restart Function	If Power is Resumed	Yes	Yes	Yes	Yes
Unit Dimensions	Net WxHxD (In.)	48 x 27.6 x 8.9	48 x 27.6 x 8.9	48 x 27.6 x 8.9	48 x 27.6 x 8.9
	Package WxHxD (In.)	52.8 x 32.3 x 11.8	52.8 x 32.3 x 11.8	52.8 x 32.3 x 11.8	52.8 x 32.3 x 11.8
Unit Weight	Net (LBs)	88	88	88	99
	Packaged (LBs)	110	110	110	119
Loading Capacity	20/40/40HQ	66/132/132	66/132/132	66/132/132	66/132/132

EU

INDOOR UNIT OPTION - FAN COIL RECESSED MOUNT



Items	Unit / Conditions	WMMS-09EF-V2B(59)2	WMMS-12EF-V2B(59)2	WMMS-18EF-V2B(59)2	WMMS-24EF-V2B(59)2
Power Supply	Voltage/Ph/Hz	208-230/1/60	208-230/1/60	208-230/1/60	208-230/1/60
	Allowed Voltage Range	187-253V	187-253V	187-253V	187-253V
Cooling Capacity (Btu/h)	High/Standard/Low	10700/8500/4600	14100/11900/5900	21500/15300/6800	26500/23800/9600
	ID 70/60, OD 47/43F	9500	13100	18700	27400
	ID 70/60, OD 17/15F	8800	11600	16600	23600
Heating Capacity (Btu/h)	ID 70/60, OD 17/15F	8000	9100	13800	20600
	Btu/h.W	16	16	16	16
	Btu/h.W	8.2	8.2	8.2	8.2
Dehumidifying Capacity	Pints/Hr.	1.7	2.96	3.8	5.28
Air Flow (CFM)	High/Medium/Low	260/180/150	320/240/180	410/350/295	590/440/320
	Horizontal Installation	25-20 Upon Mounting Height/Speed/Temp.			
External Static Pressure	Water In.	0	0	0	0
	Pressure dB(A) (H/M/L)	37/34/31	39/35/32	41/37/33	42/38/34
Sound Level	Power dB(A) (H/M/L)	47/44/41	49/45/42	51/47/43	52/48/44
	Model	FG30A	FG40A	FG60A	FG20E
Fan Motor	Shaft	Double	Double	Double	Double
	Speed (RMP, H/M/L)	970/760/640	960/830/700	920/780/720	985/800/680
	Output (W)	40	49	75	2 x 45
	Input (W)	80	90	100	2 x 85
	Capacitor (uF)	1	3	3	3
	Fan Wheel	Type-Piece	Centrifugal-2	Centrifugal-2	Centrifugal-2
Swing/Step Motor	Model	NA	NA	NA	NA
	Piece	NA	NA	NA	NA
Input Power of Ele. Heater	Type-W	NA	NA	NA	NA
	Type-W	NA	NA	NA	NA
Electrical Protection Fuse	PCB/Transformer	T3.15A 250V / 0.2A			
Evaporator Coil	Type	Alu. Fin/Inner Grooved Copper Tube			
	Color	Blue	Blue	Blue	Blue
Copper Line Connections	Sealed by Dry Nitrogen	Yes	Yes	Yes	Yes
	Flare/Nut-Liquid + Gas	1/4" + 3/8"	1/4" + 3/8"	1/4" + 1/2"	1/4" + 5/8"
Drain Hose Connection	OD (In.)	1	1	1	1
Condensate Pump	Installed-Lift (In.)	NA	NA	NA	NA
Refrigerant Environmental Friendly	R410A	Yes	Yes	Yes	Yes
Filter	Type-Feature	Standard-Washable	Standard-Washable	Standard-Washable	Standard-Washable
	Size WxH (In.) - Qty.	23.7 x 7.6 - 1	23.7 x 7.6 - 1	31.6 x 7.6 - 1	39.4 x 7.7 - 1
Clean Coil Surface	Anti-Mildew Function	Yes	Yes	Yes	Yes
Pre-heating Function	Anti-Cold Blowing	Yes	Yes	Yes	Yes
Memory of Previous Set-ups	Power is Lost/Resumed	Yes	Yes	Yes	Yes
Auto-Restart Function	If Power is Resumed	Yes	Yes	Yes	Yes
Unit Dimensions	Net WxHxD (In.)	27.6 x 24.2 x 7.9	27.6 x 24.2 x 7.9	35.4 x 24.2 x 7.9	43.3 x 24.2 x 7.9
	Package WxHxD (In.)	35.0 x 29.1 x 11.4	35.0 x 29.1 x 11.4	44.0 x 29.1 x 11.4	52.0 x 29.1 x 11.4
Unit Weight	Net (LBs)	48	51	59	68
	Packaged (LBs)	59	64	79	90
Loading Capacity	20/40/40HQ	108/234/234	108/234/234	90/192/192	72/162/162

EF

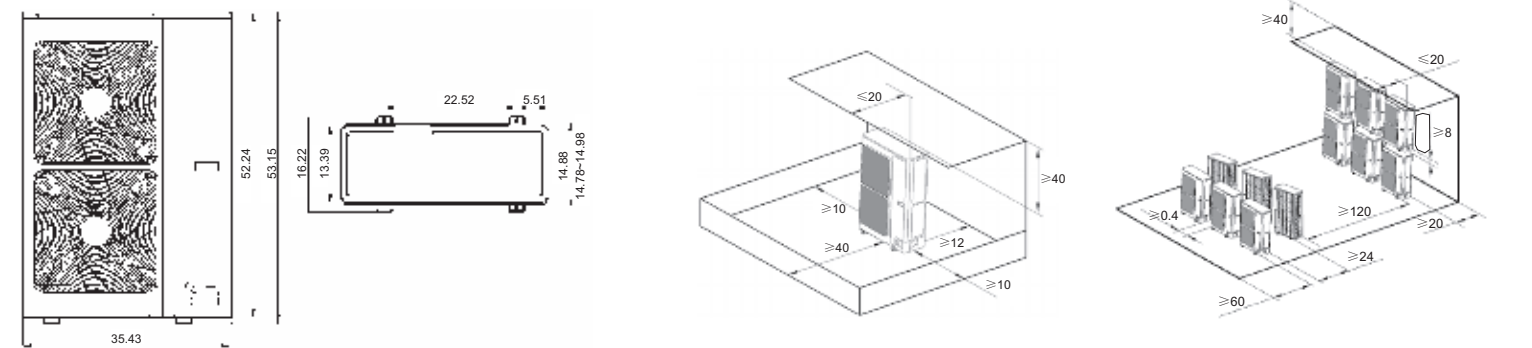
OUTDOOR UNIT SPECIFICATION AND ENGINEERING SUBMITTAL SPECIFICATION

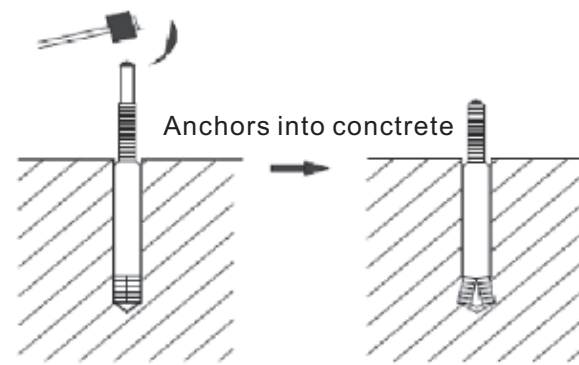
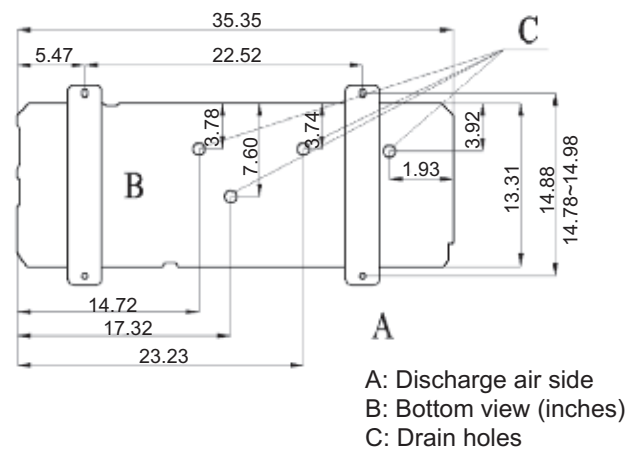
Model	-	WMMS-80CH-V2B(59)2	WMMS-90CH-V2B(59)2
Allowed Capacity Rating Totals-All Indoor Units	Btu/h	86,000	98,000
Cooling Capacity-Rating	Btu/h	47800.00	52900.00
Min. Cooling Capacity	Btu/h	3412.00	3412.00
Max. Cooling Capacity	Btu/h	54592.00	61416.00
Heating Capacity-Rating	Btu/h	54600.00	61400.00
Min. Heating Capacity	Btu/h	4094.40	4094.40
Max. Heating Capacity	Btu/h	59368.80	63122.00
EER	W/W	2.80	2.77
EER	Btu/h/W	9.56	9.45
COE	Btu/h/W	12.41	11.81
SEER	Btu/h/W	16	11.81
HSPF	Btu/h/W	8	8
Air Flow Volume	CFM	3766.40	4119.50
Sound Pressure Level Low-High	dB(A)	43-57	43-58
Sound Power Level Low-High	dB(A)	52-67	52-68
Rated Input Ele. Power Supply	V	208-230/1/60	208-230/1/60
Cross-sectional Area of Power Cable Conductor	mm ²	6.00	6.00
Recommended Power Cable (Core)	N	3.00	3.00
Fuse Current	A	50	50
HVAC Type Circuit Breaker	A	50	50
Cooling Power Input	KW	5.00	5.60
Heating Power Input	KW	4.40	5.20
Rated Power Input	KW	5.60	6.50
Cooling Current Input	AMP	23.00	25.00
Heating Current Input	AMP	20.00	22.50
Rated Current	AMP	28.00	28.00
Starting Current	AMP	10	10
Compressor Make	-	Landa(LD)	Landa(LD)
Compressor Model	-	QXAS-F428x050A or Equivalent	
Compressor Type1	-	Inverter Rotary	Inverter Rotary
Compressor Capacity	Btu/h	46075	46076
Compressor Power Input	W	4580.00	4580.01
Compressor Rated Load Amp (RLA)	A	23.00	23.00
Compressor Locked Rotor Amp (L.R.A)	A	-	-
Compressor Thermal Protector	-	NO	NO
Compressor Crankcase	W	40.00	40.00
Compressor Refrigerant Oil Type	-	FV50S	FV50S
Compressor Refrigerant Oil Charge Volume	L	1.35	1.35
Chassis Electrical Heater Power Input	W	140.00	140.00
Chassis Electrical Heater Current	A	0.6	0.6
Fan Type	-	Axial-flow	Axial-flow
Fan Quantity	-	2	2
Fan Diameter-height	mm	472-160	472-160
Motor Model	-	SWZ120A	SWZ120A
Motor Type	-	DC Motor	DC Motor
Motor Insulation Class	-	B	B
Motor Safe Class	-	IP44	IP45

IMPORTANT NOTES-ABOUT THE DC INVERTER SYSTEM'S VARIOUS PERFORMANCES:

- 1) The rated performance data printed on the nameplate were tested per AHRI 210/240 standards at standard indoor & outdoor conditions and standard installation set-up.
- 2) Actually the DC inverter outdoor unit could modulate to match whatever capacity needs are called/requested from indoor side, to produce a wide range of capacities, minimum could be about 15% of the rated number and maximum could be around 160% of the rated number.
- 3) Once the DC inverter system is installed, each indoor unit's output and so the outdoor unit performance will all vary over the operation period: soft-starting, turbo quick cooling/heating, maintaining, defrosting, switching, and other condition changes.
- 4) Actual performance varies upon many factors such as indoor and outdoor temperatures, inter-connecting pipe length/bending, elevation difference between indoor and outdoor units, refrigerant charging level, vacuum level, leakage, air or moisture or contamination level, foreign substance left in the piping, indoor filter clean level, indoor and outdoor coil conditions, and other factors.

DIMENSIONS OF OUTDOOR UNITS AND INSTALLATION CLEARANCE

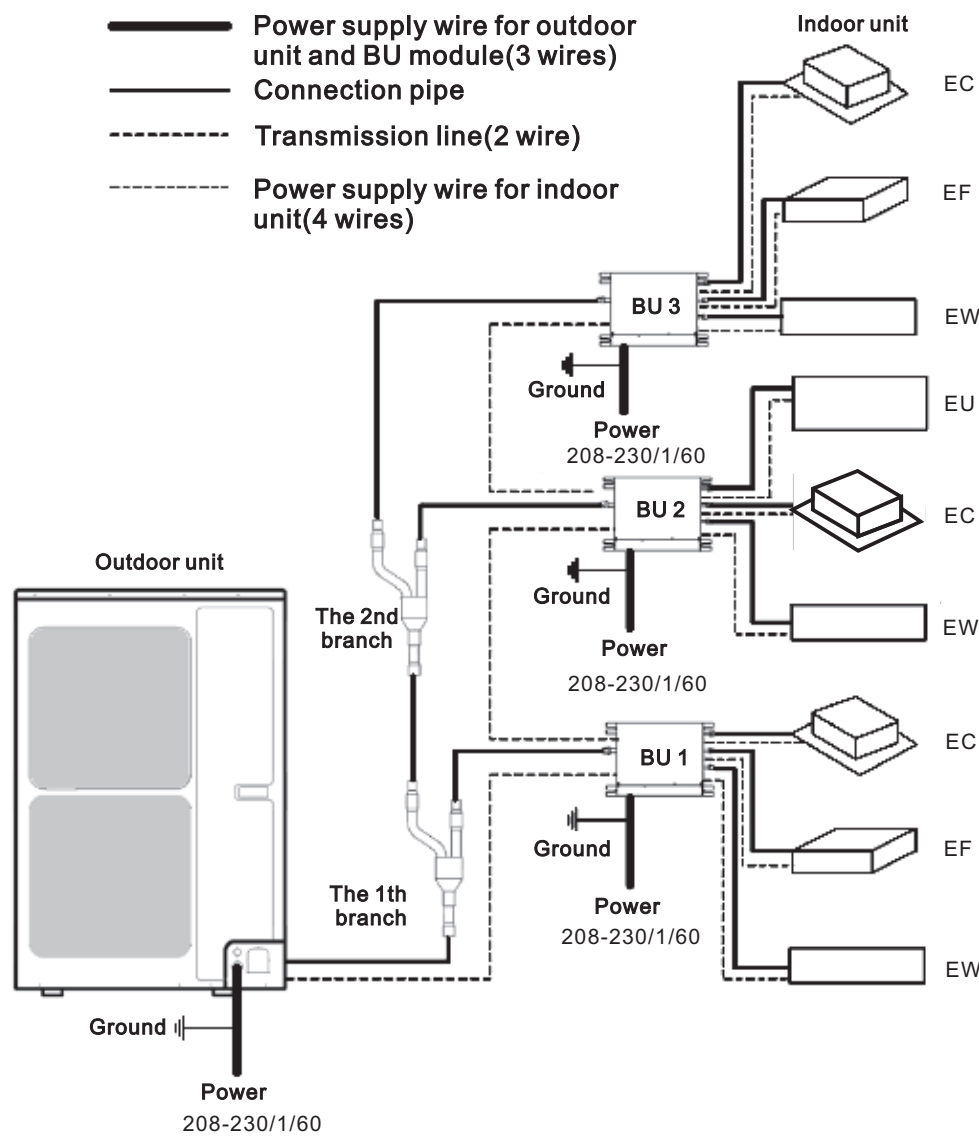




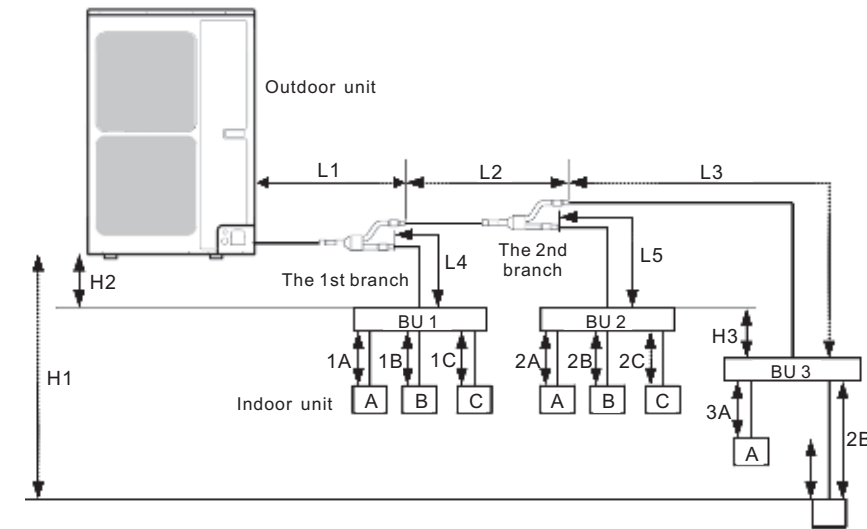
WORKING TEMPERATURE RANGE

Items	Outside temperature DB/WB (°F)
Maximum cooling	118 / NA
Minimum cooling	5 / NA
Maximum heating	81 / NA
Minimum heating	-4 / NA

SYSTEM LAYOUT EXAMPLE(3 BU BOXES)



ALLOWABLE LENGTH AND DROP HEIGHT OF CONNECTING PIPES



Items	The pipes	Length (Ft.)	
Maximum allowable length	Between outdoor unit and BU	$L1+L2+L3+L4+L5$	≤ 180
	Between indoor unit and BU	WMMS-80CH-V2B(59)2	≤ 262
		WMMS-90CH-V2B(59)2	≤ 295
	Between indoor unit and BU module	1A;1B;1C;2A;2B;2C;3A;3B	≤ 49
	Between indoor unit and the 1st branch	$L4+1B;L2+L5+2A; L2+L3+3B$	≤ 131
Maximum allowable length	Between outdoor and indoor units	H1	≤ 98
	Between outdoor units and BU	H2	≤ 98
	Between BU and BU modules	H3	≤ 49
	Between indoor and indoor units	H4	≤ 49
Minimum allowable length	Between outdoor and the 1st branch	L1	≥ 16
	Between BU and the branch	L3;L4;L5	as possible as short

DIMENSIONS OF CONNECTING PIPES

Items	Gas Pipe (Inch)	Liquid Pipe(Inch)
Capacity of indoor unit(Btu/h)	9000, 12000	3/8
	18000	1/2
	21000, 24000	5/8
BU module	Connecting to Indoor unit (I.D)	5/8
	Connecting to Outdoor unit (I.D)	3/4
Outdoor unit	WMMS-80CH-V2B(59)2	5/8
	WMMS-90CH-V2B(59)2	5/8
Between outdoor unit and the 1st branch	The pipe L1	3/4
Between the 1st and the 2nd branch	The pipe L2	5/8

CONNECTION OF BRANCH PIPES

If two or three BU modules used, Y-type branch pipe of (59)2S-00-BranchY will be chosen

