



Submittal Data Sheet: WMMS-90CH-V2B(59)2



WMMS-90CH-V2B(59)2
up to 9 zones

ACCESSORIES

- MOUNTING BRACKETS
- FOOT RISERS
- COPPER/WIRE/ACC.SET
- LINESET COVERS
- WINTER WIND BAFFLE

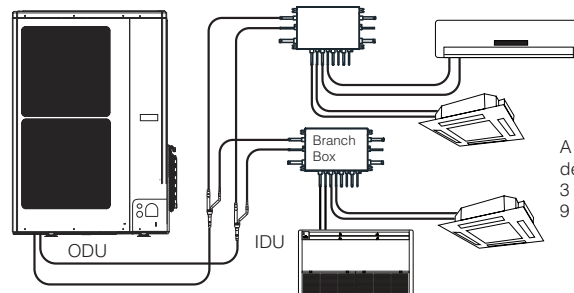
Connection Pipes		
R410A Refrigerant Factory Pre-Charge	lbs.	10.9
Additional Refrigerant Charge	oz/ft.	0.54
Liquid Valve Sizes	inches	3/8"
Gas Valve Sizes	inches	5/8"
Maximum allowable length		
Between outdoor unit and BU	ft	≤ 180
Between unit and BU	ft	≤ 295
Between indoor unit and BU module	ft	≤ 49
Between indoor unit and 1st branch	ft	≤ 131
Maximum allowable length		
Between outdoor and indoor units	ft	98
Between outdoor units and BU	ft	98
Between indoor unit and BU module	ft	49
Between indoor unit and 1st branch	ft	49
Minimum allowable length		
Between outdoor and indoor units	ft	10
Between outdoor units and BU	ft	short as possible

Dimensions & Weight Outdoor Unit		
Dimensions (W x H x D)	inches	35.4 x 14.8 x 53.1
Net Weight /Gross Weight	lbs.	256 / 275

Job Name:		Tag #:	
Location		Date:	
Engineer:		Approval:	
Submitted to:		Unit #:	
Submitted by:		Drawing #:	
Reference		PO #:	

The CHOIR outdoor condensing unit has a 16 SEER rating. With a 90k Btu/h capacity and capable of heating and cooling up to 9 zones. The CHOIR requires 208-230 volt, 1 phase, 60Hz power. The compact design allows for ground installation, or mounting in a variety of discreet locations, including on a wall, under a deck or a balcony.

Model	WMMS-90CH-V2B(59)2	
Rated Cooling Capacity	Btu/h	53,000
Rated Heating Capacity (47°F)	Btu/h	61,500
Rated Heating Capacity (17°F)	Btu/h	43,500
Cooling Capacity Range	Btu/h	3412-61416
Heating Capacity Range (47°F)	Btu/h	4094-63122
Max Heating Capacity (17°F)	Btu/h	51901
Cooling Power Input (Max)	W	5,600
Heating Power Input (Max)	W	5,200
SEER		16
HSPF		8.2
EER	W/ W	9.5
COP	W/ W	3.5
Cooling Operation Range	° F (° C)	23-118 (-5-48)
Heating Operation Range	° F (° C)	5-80 (-15-27)
Power Supply		208/230v 1Ph 50/60Hz
Min/Max Voltage	V	187-253
Power Supply Wire Size		
Communication Cable		
MCA/ Power Cable Size	A	
MOCP Breaker Size	A	
Outdoor Unit Data		
Compressor Type		DC Inverter Driven Rotary
Fan Motor Air Flow (Max)	CFM	4,120
Sound Pressure Level	dB(A)	57
Unit Dimensions (LxHxD)	mm	900 x 1350 x 378
	in	35.4 x 53.1 x 14.9
Weight (Net/Shipping)	lbs	256/276
Min Number of Indoor Units		2
Max Number of Indoor Units		9
Refrigerant Piping Data		
Refrigerant Type		R410A
Connection Method		Flared
Factory Charge for Total Lineft		98
Additional Charge Per Line	oz/ft	0.54
Total Refrigerant Pipe Length	ft.	476
Refrigerant Piping Length to the Farthest Indoor Unit	ft.	230
Refrigerant Piping Length to the Nearest Indoor Unit	ft.	10
Max Refrigerant Pipe Elevationft.	ft.	50
Max Height Difference Outdoor to Indoor Unit	ft.	98



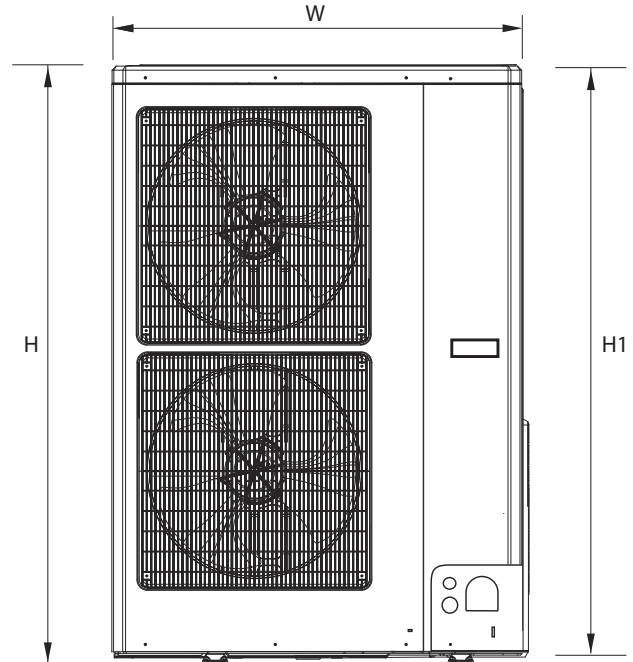
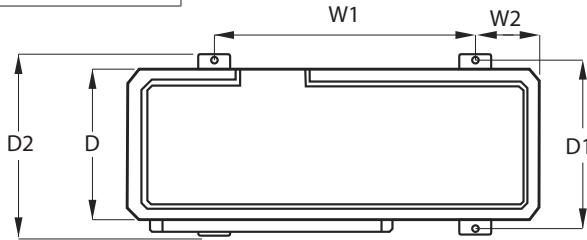
A system can be designed with up to 3 Branch Boxes and 9 Indoor Units.



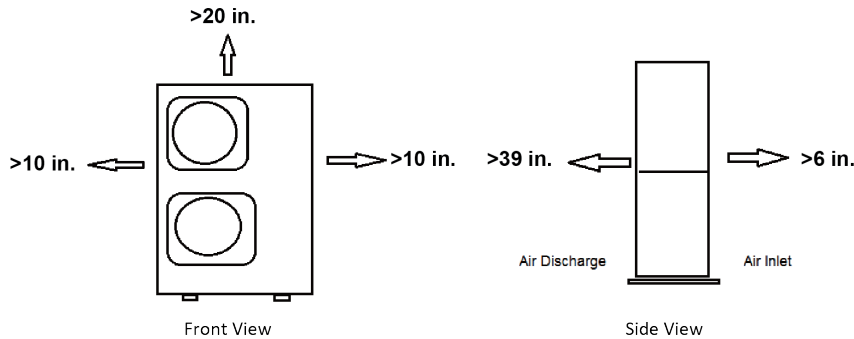
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OUTDOOR UNIT

Dimensions (inches)	
W	35.4"
W1	22.5"
W2	5.5"
H	53.1"
H1	52.25"
D	13.4"
D1	14.9"
D2	16.2"

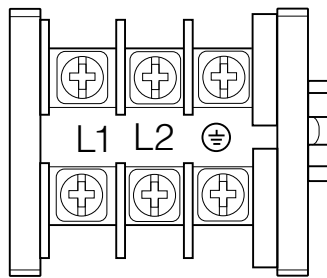


CLEARANCES

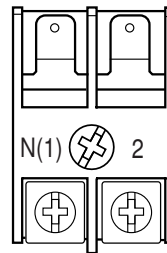


TERMINAL BLOCKS

Incoming Power



Communication



WIRING

Equipment	Model	Power Supply, if ODU Separately from Branch Boxes/IDUs				Power Supply, first ODU and then to Branch Boxes/IDUs			
		V/Ph/Hz	Circuit Breaker	Line AWG	Ground AWG	V/Ph/Hz	Circuit Breaker	Line AWG	Ground AWG
Outdoor Unit (ODU)	WMMS-80CH-V2B(59)2	208-230/1/60	40AMP	>=8	>=12	208-230/1/60	50AMP	>=6	>=10
	WMMS-90CH-V2B(59)2		50AMP	>=8	>=12		60AMP	>=6	>=10
Branch Unit Box (BU)	1-2S	208-230/1/60	15, if by Itself	>=14	>=16	208-230/1/60	NA	NA	NA
	1-3S		15, if by Itself	>=14	>=16		NA	NA	NA
	1-5S		20, if by Itself	>=12	>=14		NA	NA	NA
Indoor Units (IDU)	Up to 5 from Each Branch Box	N(1)/2/3/G from Branch Box	NA	>=18	>=18	N(1)/2/3/G from Branch Box	NA	>=18	>=18



COOLING PERFORMANCE

Outdoor Ambient Temperature (DB)	Indoor Entering Air Temperatures (DB) 50% RH					
	62 °F		67 °F		72 °F	
	TC	SHC	TC	SHC	TC	SHC
25 °F	51,830	41,059	54,215	42,740	56,352	44,780
35 °F	50,990	41,010	53,535	41,780	55,648	43,020
45 °F	49,859	39,843	52,555	40,834	54,523	42,279
55 °F	47,930	38,995	51,892	41,919	52,965	41,219
65 °F	48,150	38,555	52,730	42,710	53,160	40,819
75 °F	47,520	37,540	50,620	40,265	53,150	43,520
85 °F	46,330	39,000	49,255	40,390	52,760	42,200
95 °F	45,620	35,665	47,800	37,162	49,196	38,234
105 °F	39,900	33,295	42,250	35,716	43,020	37,895
115 °F	35,220	30,253	36,320	32,235	36,960	33,825

HEATING PERFORMANCE

Outdoor Ambient Temperature (DB) (80% RH)	Indoor Entering Air Temperatures (DB) 50% RH					
	62 °F		67 °F		72 °F	
	TC	SHC	TC	SHC	TC	SHC
5 F	31,628	31,628	31,131	31,131	30,715	30,715
15 F	36,463	36,463	35,970	35,970	35,111	35,111
25 F	41,200	41,200	40,664	40,664	39,633	39,633
35 F	46,886	46,886	45,513	45,513	44,875	44,875
45 F	53,552	53,552	52,886	52,886	51,950	51,950
55 F	54,197	54,197	53,400	53,400	52,698	52,698
65 F	54,938	54,938	54,249	54,249	53,834	53,834

TC- Total Capacity (BtuH)
SHC- Sensible Capacity (BtuH)

Unit capacity for heating and cooling for residential and commercial installation is up to 150% of the rated capacity of the unit.

FEATURES

- 208-230/1/60 power input
- Quiet and efficient heating & cooling.
- DC Inverter technology
- Wide working ambient temperature ranges
- Compact outdoor unit with side discharge
- Outdoor unit ships pre-charged.
- High quality compressors
- Durable powder coated cabinet
- Standard flare brass connection valves
- Built to ETL/UL/CSA/AHRI standards
- Easy installation and maintenance

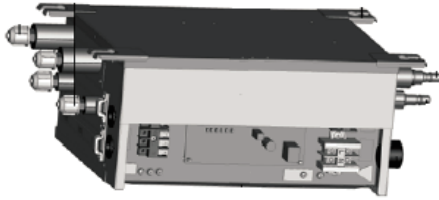
YMGI Group
601 Arrow Ln, O'Fallon, Missouri 63366
Phone: 1-866-833-3138
Fax: 1-866-377-3355
ymgigroup.com

Sales Representative or Distributor:



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BRANCH BOXES



1-Port In/2-Ports Out
Model no: WMMS-(59)2-ModuleS2



1-Port In/3-Ports Out
Model no: WMMS-(59)2-ModuleS3

Electrical

		WMMS-(59)2-ModuleS2	WMMS-(59)2-ModuleS3
No. of Indoor Units		2	3
Power Supply	volts	208/230v	208/230v
Fuse on Board	amps	3.15	3.15

Piping

		WMMS-(59)2-ModuleS2	WMMS-(59)2-ModuleS3
Max Equivalent Length (BU to last Indoor Unit)	ft	60	60

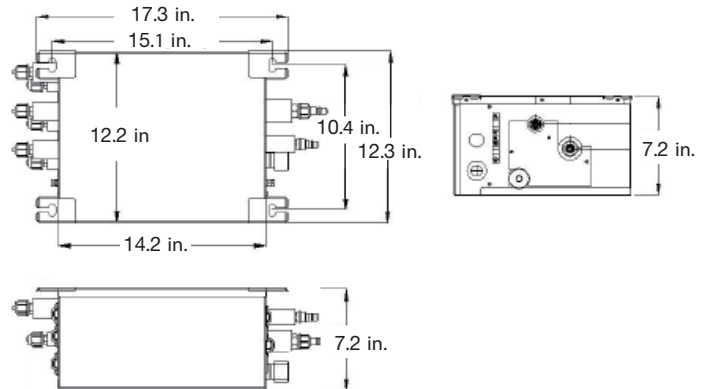
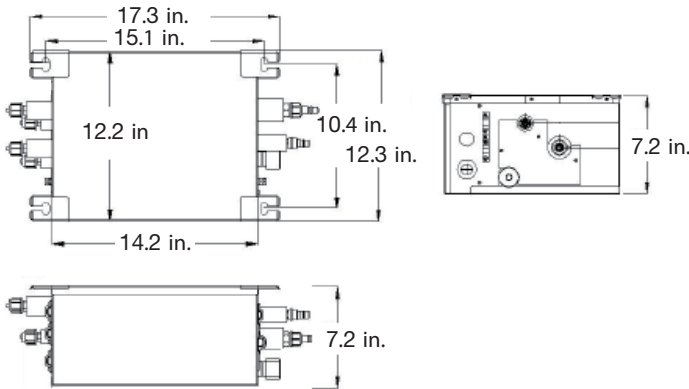
Notes:

1. Communicon Cable minimum 18 AWG Type Stranded Copper Conductors THHN 600V Unshielded Wire
2. Power wiring cable size must comply with applicable nonal and local codes.

BRANCH (BU) BOX DIMENSIONAL SPECIFICATIONS

WMMS-(59)2-ModuleS2

WMMS-(59)2-ModuleS3



	Indoor Unit Side		Outdoor Unit	Weight	
	Port A1	Port B1	Side1	Net	12 lbs
Liquid Pipe	Ø 1/4	Ø 1/4	Ø 3/8	Gross	16 lbs
Gas Pipe	Ø 3/8	Ø 3/8	Ø 5/8		

	Indoor Unit Side			Outdoor Unit	Weight	
	Port A1	Port B1	Port C1	Side1	Net	13 lbs
Liquid Pipe	Ø 1/4	Ø 1/4	Ø 1/4	Ø 3/8	Gross	17 lbs
Gas Pipe	Ø 3/8	Ø 3/8	Ø 3/8	Ø 5/8		

CLEARANCES

