

PURCHASER	P.O. #	DATE
PROJECT	LOCATION	
ENGINEER	ARCHITECT	
SUBMITTED BY	FOR APPROVAL	FOR REFERENCE

ITEM	PLAN DESIGNATION	QUANTITY	COOLING BTU/H	VOLTAGE	FRIEDRICH MODEL

FEATURES

- Inverter technology (variable speed compressor)
- Internal condensate pump with 23" lift* included
- Natural air flow
- 4-Way cooling
- Cooling/Heating/Fan mode
- Dry Mode
- Night Quiet Operation
- Built-in low ambient standard, down to 14°F (Cooling mode)
- 5 Fan speeds
- Evaporator frost control
- 24-hour on/off timer
- Auto restart
- Temperature display on remote
- Ultra-quiet turbo fan
- DiamonGold Advanced Corrosion Protection™
- Clean, modern look
- Flexible installation
- ENERGY STAR® qualified models
- Precise air distribution
- BLDC Motors



MC12Y3JM, MC18Y3JM



WIRELESS
REMOTE CONTROL

* Lift from drain pan to drain outlet. Use external drain pump for installations requiring condensate lift exceeding 23"

All Inverter line



MR24DY3JMA



MR36TQY3JMA



MR48DEY3JM

SPECIFICATIONS

PERFORMANCE RATINGS		Multizone Cassette - Heat Pumps	
INDOOR MODEL		MC12Y3JM	MC18Y3JM
SPECIFICATIONS			
CAPACITY COOLING (RATED)	Btu	12,000	18,000
CAPACITY HEATING (RATED)	Btu	13,800	19,000
MOISTURE REMOVAL	Pts/h	4.2	4.2
AIRFLOW (LOW, MED, HIGH)	CFM	247 / 283 /335	388 / 424 / 459
SOUND RATING - INDOOR	dB-A	32/35/38	34/37/38
ELECTRICAL DATA			
POWER SOURCE	V, Ø, Hz	208/230, 1, 60	208/230, 1, 60
POWER AND COMMUNICATION CABLE	No. x AWG	4C x 14	4C x 14
REFRIGERATION SYSTEM			
CONNECTIONS		Flare	Flare
LIQUID LINE O.D.	in	1/4	1/4
SUCTION LINE O.D.	in	3/8	1/2
DIMENSIONS & WEIGHT			
W X H X D	in	22-7/16 x 8-7/16 x 22-7/16	22-7/16 x 10-3/32 x 22-7/16
NET WEIGHT	lbs	31	33
SHIPPING WEIGHT	lbs	36	42
INDOOR UNIT GRILLE* W X H X D	in	27-9/16 x 7/8 x 27-9/16	27-9/16 x 7/8 x 27-9/16
INDOOR UNIT GRILLE* NET WEIGHT	lbs	7	7

PERFORMANCE RATINGS		Multi Outdoor		
		24k	36k	48k
OUTDOOR MODEL		MR24DY3JMA	MR36TQY3JMA	MR48DEY3JM
SPECIFICATIONS				
POWER SOURCE		208/230/60/1	208/230/60/1	208/230/60/1
EST. YEARLY OPERATING COST	\$	122-125	170-245	
RUNNING CURRENT COOLING MIN.-RATED-MAX.	A	1.7~6.4~9.0	2.9~10.7~15.7	4.6~16.7~24.8
RUNNING CURRENT HEATING MIN.-RATED-MAX.	A	1.8~7.8~11.2	3.3~11.9~18.3	6.2~18.8~26.2
POWER INPUT COOLING MIN.-RATED-MAX.	W	390~1480~2070	670~2460~3610	970~3840~5710
POWER INPUT HEATING MIN.-RATED-MAX.	W	420~1800~2580	760~2740~4210	1420~4320~6020
POWER AND COMMUNICATION CABLE	No. x AWG	4 X 14	4 X 14	4 X 14
DIMENSIONS W X H X D	inch	34-1/4 x 25-3/4 x 12-5/8	37-3/8 x 32-7/8 x 13	37-3/8 x 54-5/16 x 13
NET WEIGHT	lbs	99	137	214
SHIPPING WEIGHT	lbs	139	148	236
REFRIGERATION SYSTEM				
REFRIGERANT		R410A	R410A	R410A
FACTORY PRECHARGE	ft	63	98	155
REFRIGERANT CHARGE	oz	74	99	Main= 16, Branch= 131
LIQUID LINE O.D.	in	1/4	1/4	3/8
SUCTION LINE O.D.	in	3/8	3/8	3/4
MIN./MAX. LINE LENGTH (EACH)	ft	10~82	10~82	10~49*
MIN./MAX. LINE LENGTH (TOTAL)	ft	75~246	75~246	30~475*
MAX. HEIGHT DIFFERENCE	ft	49	49	98*
SOUND PRESSURE LEVEL COOLING	A	51	52	54
SOUND PRESSURE LEVEL HEATING	A	51	55	56
OPERATING RANGE COOLING (WIND BAFFLE)	°F DB	14 (-4) ~ 118	14 (-4) ~ 118	14 (-4) -118
OPERATING RANGE HEATING	°F WB	5 ~ 64	-4 ~ 64	-4 ~ 64
MINIMUM AMPACITY	A	15	17	27.3
MAX. TD FUSE/BREAKER	A	25	25	40

*System requires branch box D4PBB. See page 33 for piping guidelines. For branch box to indoor line sizes, please see Indoor System Components Chart

**Models require grille. Grille sold separately.

Your operating costs will depend on your utility rates and use. The estimated operating cost is based on a electricity cost of \$.12 per kWh.

For more information, visit www.ftc.gov/energy.

Due to continuing research in new energy-saving technology, specifications are subject to change without notice.



ACCESSORIES

Refrigeration line sets*

USED WITH	Length Ft.	Liquid	Suction	Kit#
9000 and 12000 BTU indoor units	15'	1/4"	3/8"	T32150
	35'	1/4"	3/8"	T32350
18000 BTU indoor units	15'	1/4"	1/2"	T42150
	35'	1/4"	1/2"	T42350
24000,30000 and 36000 BTU indoor units	15'	3/8"	5/8"	T53150
	35'	3/8"	5/8"	T53350

*Insulated line sets are available for all Friedrich split systems in 15 ft. and 35 ft. lengths. Each line set is equipped with flare nuts on both ends. Both liquid and suction lines are insulated. Line sets can be joined together with field supplied double male connectors. Each system requires one line set for each indoor unit installed.

On multi-zone systems, line sets should be ordered based on individual indoor unit capacities not total system capacity.

Ceiling Cassette Grilles

DECORATIVE GRILLE	USED WITH
DCG1218	MC12Y3JM, MC18Y3JM models

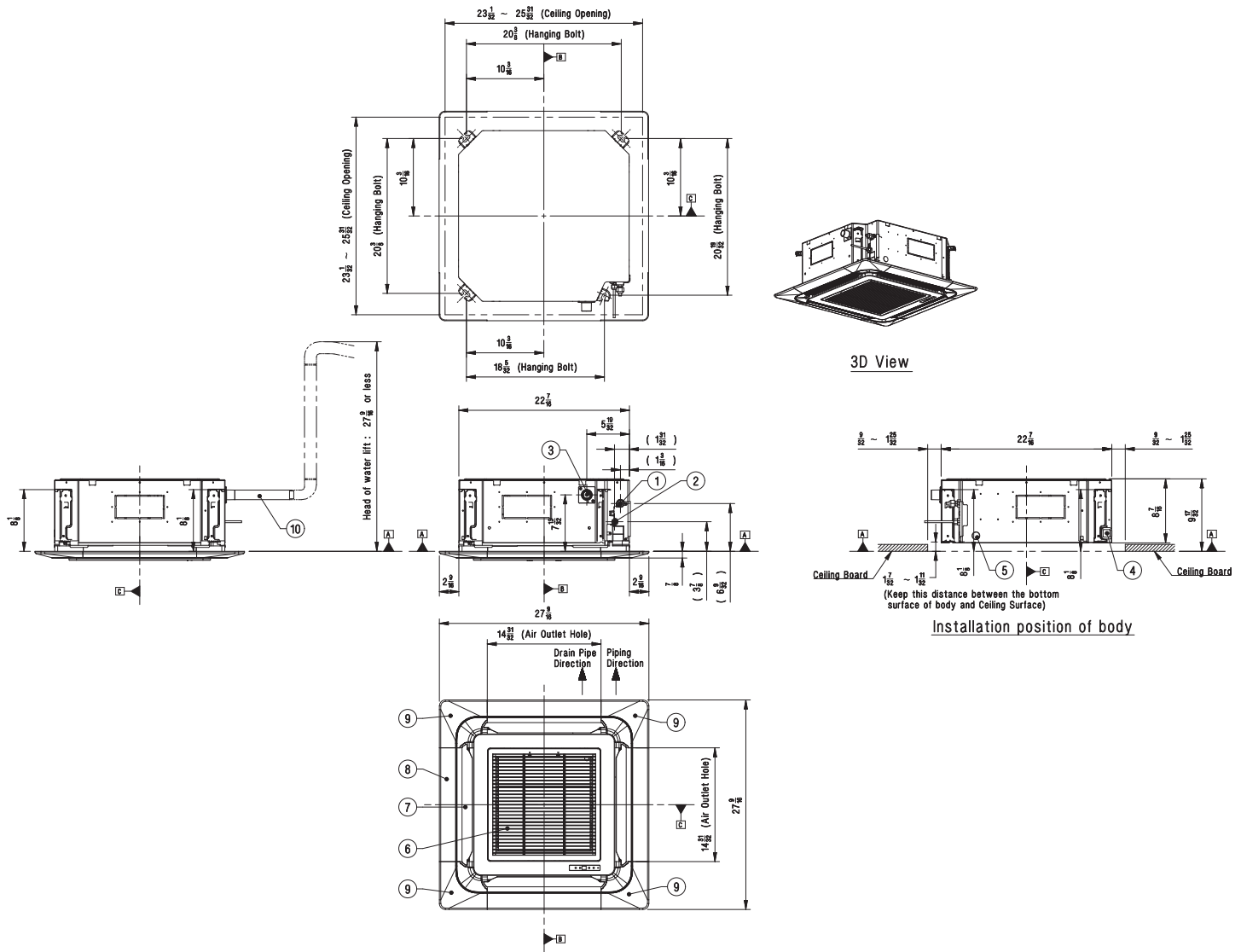
Optional Thermostat

* WIRED CONTROLLER
DWC1




*Works with all Friedrich models.

DIMENSIONAL DRAWINGS

INDOOR UNITS / MC12Y3JM



Symbols

-  Datum line
-  Refrigerant/Drain Piping Direction

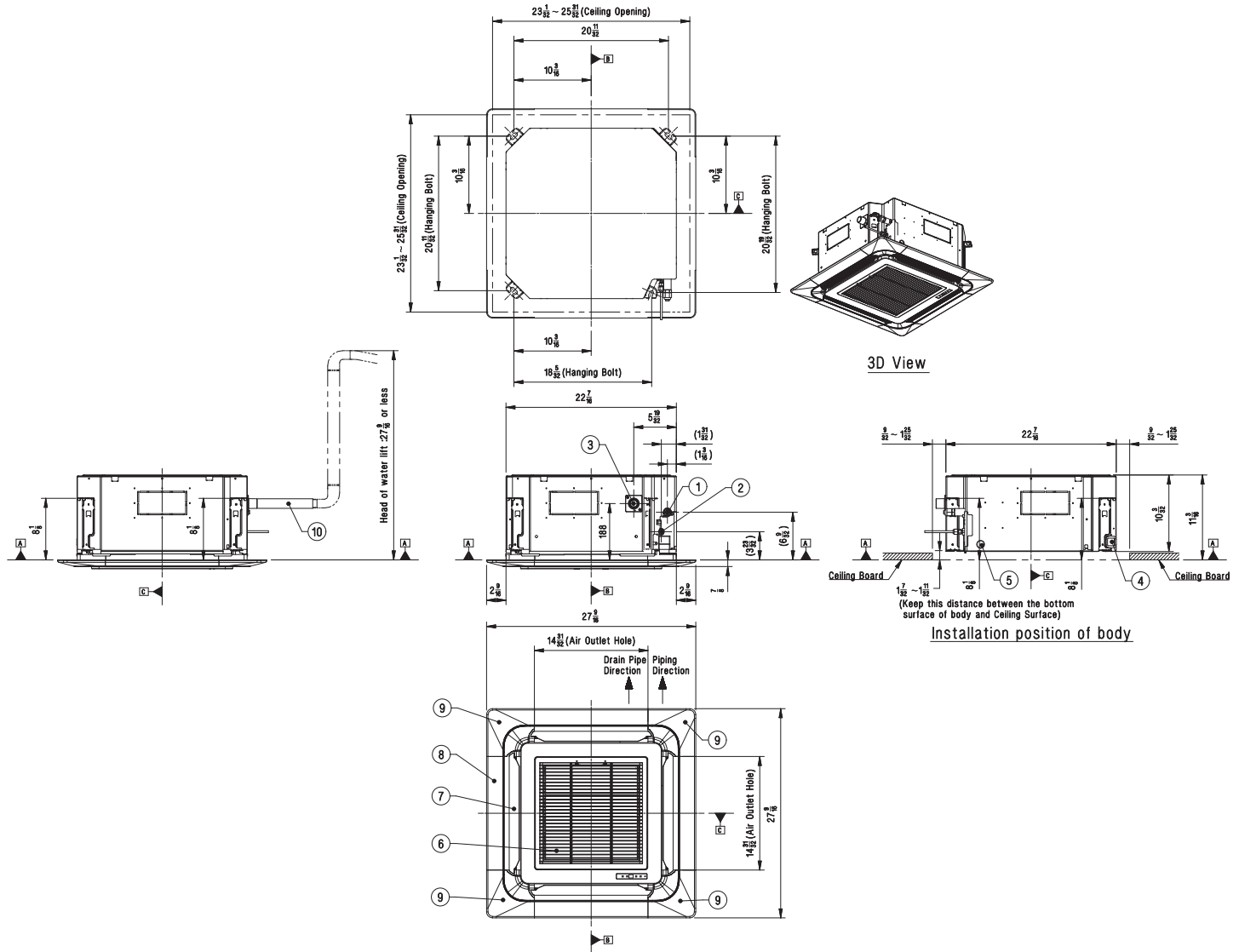
Item No.	Part Name	Description
1	Gas Pipe Connection	-
2	Liquid Pipe Connection	-
3	Drain Pipe Connection	-
4	Power and Communication cable routing whole	-
5	Wired remote controller wire routing hole	-
6	Air Inlet	-
7	Air Outlet	-
8	Decoration Panel (Accessory)	PT-UQC
9	Decoration Corner Cover	Supplied with panel
10	Flexible Drain Hose	Supplied with product

Note



1. Unit should be installed in compliance with the installation manual in the product box.
2. Unit should be grounded in accordance with the local regulations or applicable national codes.
3. All electrical components and materials to be supplied from the site must comply with the local regulations or international codes.
4. Electric characteristics chapter should be considered for electrical work and design. Especially, the power cable and circuit breaker should be selected in accordance with that.

DIMENSIONAL DRAWINGS

INDOOR UNITS / MC18Y3JM



Symbols

-  Datum line
-  Refrigerant/Drain Piping Direction

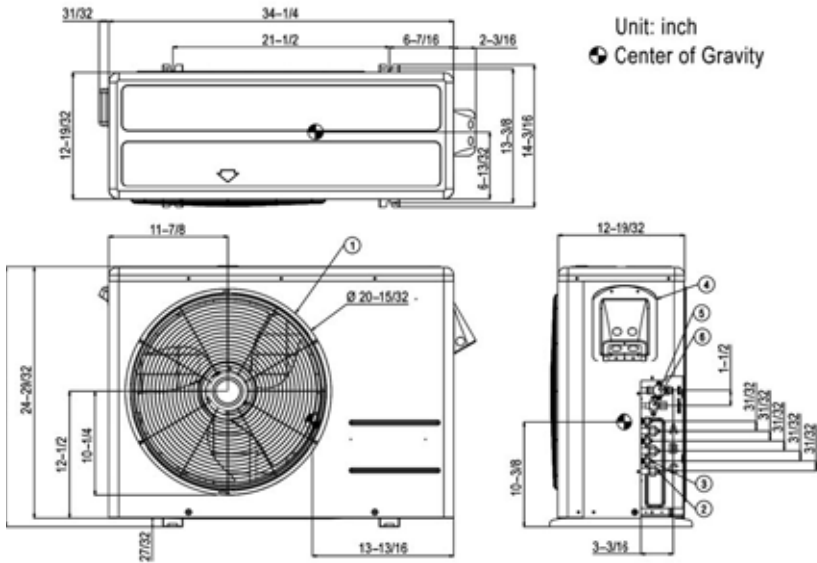
Item No.	Part Name	Description
1	Gas Pipe Connection	-
2	Liquid Pipe Connection	-
3	Drain Pipe Connection	-
4	Power and Communication cable routing whole	-
5	Wired remote controller wire routing hole	-
6	Air Inlet	-
7	Air Outlet	-
8	Decoration Panel (Accessory)	PT-UQC
9	Decoration Corner Cover	Supplied with panel
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DIMENSIONAL DRAWINGS

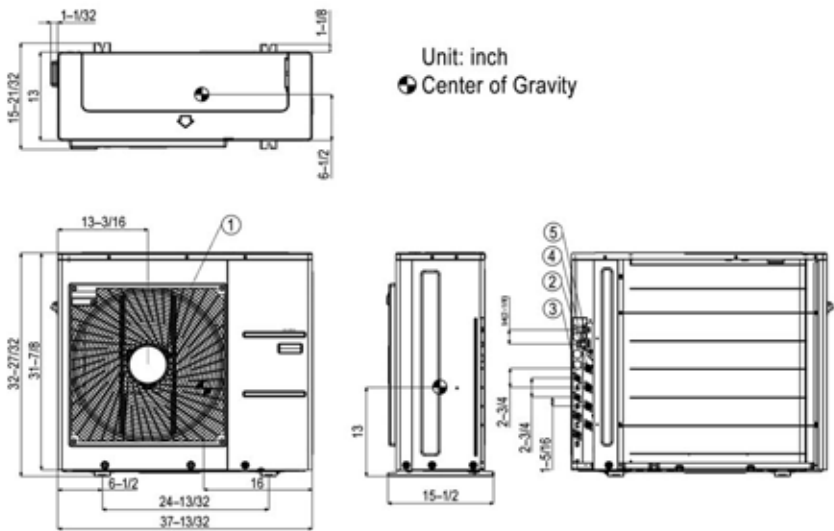
OUTDOOR UNITS / MR24DY3JMA



Item No.	Part Name
1	Air Discharge Grille
2	Gas Pipe Connection
3	Liquid Pipe Connection
4	Power and Transmission Connection
5	Main Service Valve (Gas)
6	Main Service Valve (Liquid)

- Note**
- Unit should be installed in compliance with the installation manual in the product box.
 - Unit should be grounded in accordance with the local regulations or applicable national codes.
 - All electrical components and materials to be supplied from the site must comply with the local regulations or international codes.
 - Electric characteristics chapter should be considered for electrical work and design. Especially, the power cable and circuit breaker should be selected in accordance with that.

OUTDOOR UNITS / MR36TQY3JMA

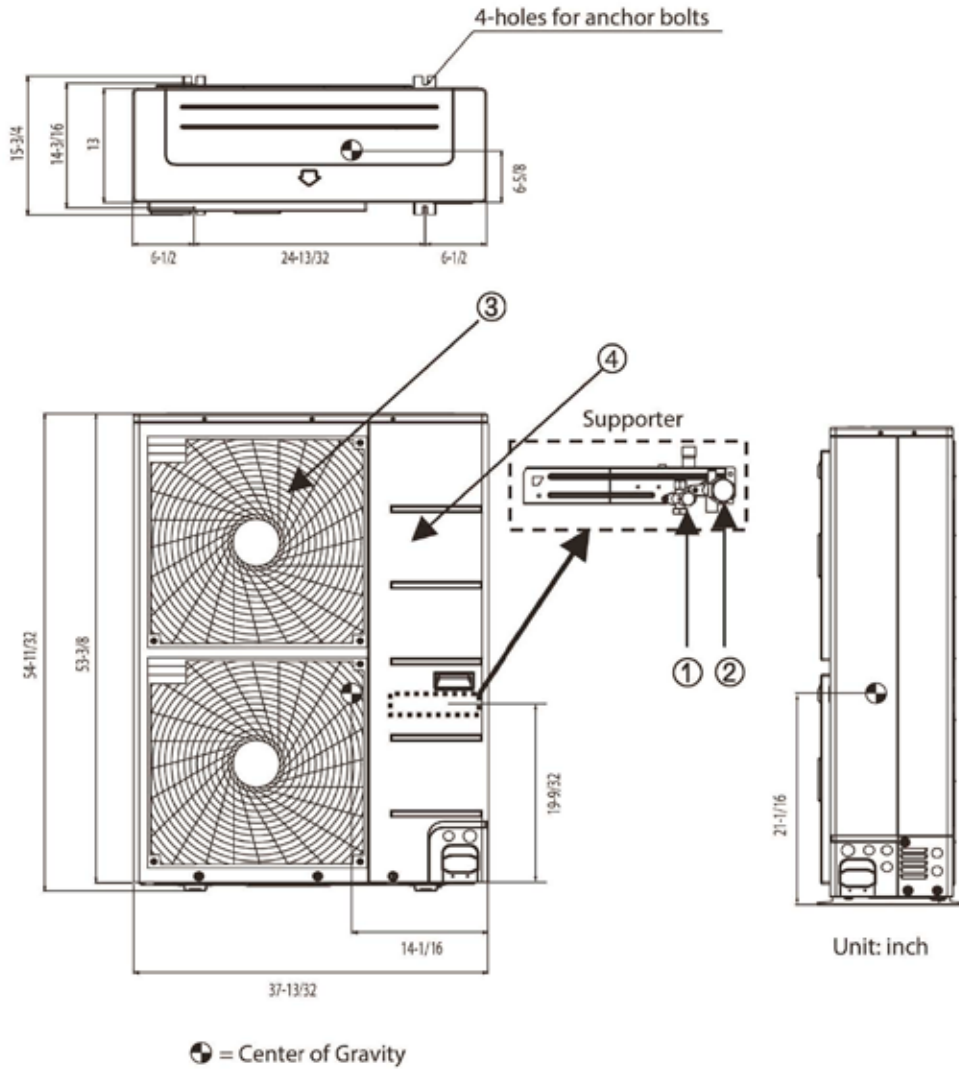


Item No.	Part Name
1	Air discharge grille
2	Gas pipe connection
3	Liquid pipe connection
4	Main Service Valve (Liquid)
5	Main Service Valve (Gas)

- Note**
- Unit should be installed in compliance with the installation manual in the product box.
 - Unit should be grounded in accordance with the local regulations or applicable national codes.
 - All electrical components and materials to be supplied on the site must comply with the local regulations or international codes.
 - Electrical characteristics chapter should be considered for electrical work and design. Especially the capacity of power cable and circuit breaker for outdoor unit should be more than that of electrical characteristics chapter.

DIMENSIONAL DRAWINGS

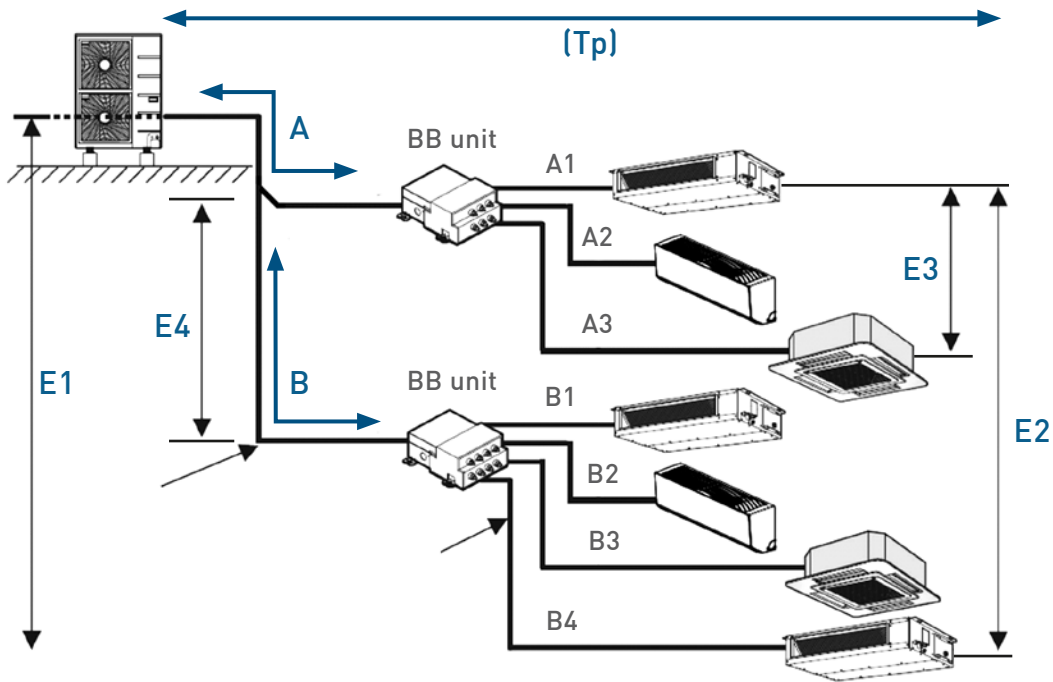
OUTDOOR UNITS / MR48DEY3JM



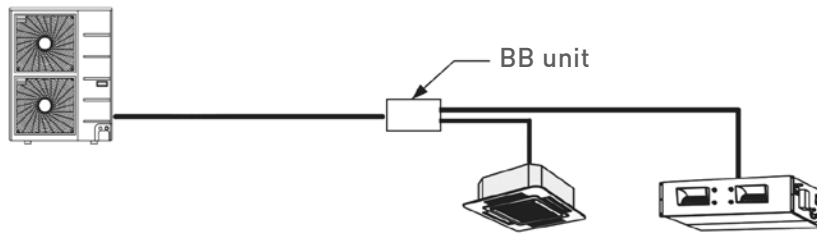
Item No.	Part Name	Description
1	Liquid pipe connection	
2	Gas pipe connection	
3	Air discharge grille	
4	Power & transmission connection	

REFRIGERATION LINE SETS MINIMUM/MAXIMUM LENGTHS MULTIZONE | 48,000 BTU

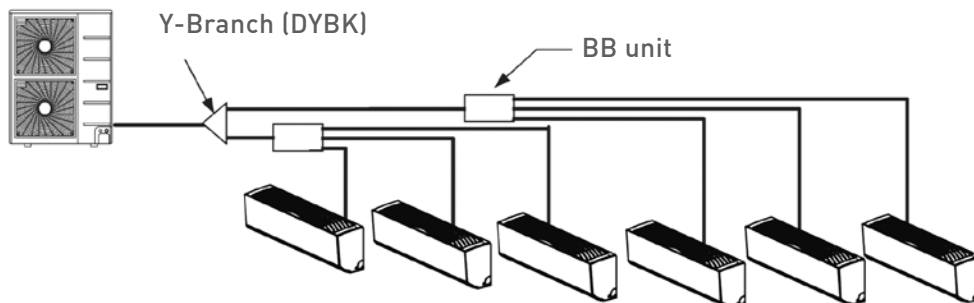
Multizone 48,000 BTU/h Eight Zone			
System Pipe Lengths	Total piping length (Outdoor to Indoor) (Tp)		(ft.) ≤ 476
	Outdoor to Branch box (A, B)	Min. (ft.)	10
		Max. (ft.)	≤ 180
	Total branch piping length (Branch Box to indoor units) (A1-A3, B1-B4)		(ft.) ≤ 295
Branch box to Indoor units	Min. (ft.)	10	
	Max. (ft.)	≤ 49	
Elevations	If outdoor unit is above or below indoor unit (E1)		(ft.) ≤ 98
	Between the farthest two indoor units (E3)		(ft.) ≤ 43
	Between branch distribution unit and farthest connected indoor unit(s) (E2)		(ft.) ≤ 33
	Between branch boxes (E4)		(ft.) ≤ 43



SINGLE AND DUAL BB CONFIGURATIONS



Branch Box D4PBB



Y - Branch DYBK