

Haier

Single-Zone Ductless Mini-Split Heat Pumps



1Q09TE1BEA / QS09WB1BEA
1Q12TE1BEA / QS12WB1BEA



GE APPLIANCES
a Haier company

AIR & WATER
SOLUTIONS



TABLE OF CONTENTS

1. SPECIFICATIONS.....	3
2. SYSTEM.....	4
2.1 General.....	4
2.2 Installation Requirements	4
2.3 Electrical Requirements.....	4
2.4 Refrigerant System Diagrams	5
3. OUTDOOR UNITS	6
3.1 Dimensions.....	6
3.2 General.....	6
3.3 Installation	6
3.4 Components.....	7
3.5 Wiring Diagrams	8
4. HIGHWALL INDOOR UNITS.....	9
4.1 Dimensions.....	9
4.2 Center of Gravity.....	9
4.3 General.....	10
4.4 Installation	10
4.5 Electrical Requirements.....	10
4.6 Components.....	11
4.7 Wiring Diagrams	12
4.8 Air Velocity and Temperature Distribution	13
5. CONTROLS AND ACCESSORIES.....	14
5.1 Outdoor Unit Accessories	14
5.2 Indoor Unit Accessories.....	14
5.3 Controllers.....	15
5.4 Indoor Unit Accessory Compatibility Table	16

Revision History

11-21-25: Edition release.

1. SPECIFICATIONS

NOTE

Our continued commitment to quality products may mean a change in specifications without notice.
Visit GEAppliancesAirandWater.com to access current specification tables online.



	Outdoor Unit	1Q09TE1BEA	1Q12TE1BEA
	Indoor Unit	QS09WB1BEA	QS12WB1BEA
Cooling	Rated Capacity Btu/hr	9,000	11,500
	Capacity Range Btu/hr	3,400-10,000	3,400-12,000
	SEER2	20	20
	EER2	12	12
	Moisture Removal Pt./hr	2.7	2.8
Heating	Rated Heating Capacity 47°F Btu/hr	10,000	13,000
	Heating Capacity Range Btu/hr	3,400-11,000	3,400-13,500
	HSPF2 (IV)	9.5	9.5
	Rated Heating Capacity 5°F Btu/hr	7,000	9,000
	Heating Capacity at 5°F / Capacity at 47°F	70%	69%
Operating Range	COP 5°F	1.8	1.8
	Cooling (Without Wind Baffle or Top Cover)	23~115°F (-5~46°C)	23~115°F (-5~46°C)
Power Supply	Heating	-4~75°F (-20~24°C)	-4~75°F (-20~24°C)
	Voltage, Cycle, Phase (V/Hz/-)	115/60/1	115/60/1
	Maximum Fuse Size A	25	25
	Minimum Circuit Amp A	18	18
	Compressor Type	DC Inverter Rotary	DC Inverter Rotary
Outdoor Unit	Outdoor Noise Level dB	54	55
	Dimension: Height in (mm)	21 3/4 (553)	21 3/4 (553)
	Dimension: Width in (mm)	34 (863)	34 (863)
	Dimension: Depth in (mm)	11 (280)	11 (280)
	Weight (Net/Ship) - lbs (kg)	65.31/78.11 (29.6/35.4)	70.17/82.96 (31.8/37.6)
	Basepan Heater	Yes	Yes
Indoor Unit	Fan Speed Stages	5 + Auto	5 + Auto
	Airflow CFM: Cooling (Turbo/High/Med/Low/Quiet)	360/290/260/230/210	360/300/272/240/210
	Airflow CFM: Heating (Turbo/High/Med/Low/Quiet)	350/290/250/220/200	350/290/260/230/200
	Indoor Sound Level dB: Cooling (Turbo/High/Med/Low/Quiet)	46/43/40/39/32	46/44/43/39/32
	Indoor Sound Level dB: Heating (Turbo/High/Med/Low/Quiet)	44/41/38/37/34	45/43/41/39/33
	Auto Up-Down Louver	Yes	Yes
	Auto Left-Right Louver	No	No
	Drain Pipe Size O.D in	5/8	5/8
	Dimension: Height in (mm)	11 7/8 (301)	11 7/8 (301)
	Dimension: Width in (mm)	33 3/4 (856)	33 3/4 (856)
	Dimension: Depth in (mm)	7 3/4 (196)	7 3/4 (196)
	Weight (Net/Ship) - lbs (kg)	21.84/26.92 (9.9/12.2)	21.84/26.92 (9.9/12.2)
	Factory-Installed Refrigerant Detection Sensor (RDS)	No	No
	Refrigerant Detection Sensor (RDS)Compatible	Yes (UALS01A, sold separately)	Yes (UALS01A, sold separately)
	WiFi*	Built-in	Built-in
Refrigerant Lines	Refrigerant	R454B	R454B
	Connections	Flare	Flare
	Liquid O.D. in	1/4	1/4
	Suction O.D. in	3/8	3/8
	Factory Charge Oz	30.3	36.5
	Maximum Line Length Ft / m	66/20	66/20
	Maximum Height Ft / m	33/10	33/10

*WiFi includes SmartHQ™ Home and SmartHQ™ Service compatibility.

2.1 General

(2.1.1) Description

- A. The single heat pump air conditioner shall be a variable capacity, mini-split type system comprised of a single outdoor and a single wall-mounted indoor unit.

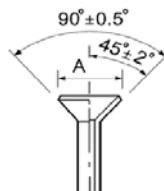
(2.1.2) Toxicity

- A. The heat pump system shall participate in RoHS compliance and listed in the directory.

2.2 Installation Requirements

(2.2.1) Lineset

- A. The connecting refrigerant lines between the indoor and outdoor units are to be supplied by the installer.
 B. The tubing must be annealed ACR-type copper, meeting ASTM B280 standards.
 C. The connecting tubing between the outdoor and indoor units shall be continuous in all possible situations.
 D. The tubing ends must be reamed inside and out, and must be flared using a 45° flaring tool approved for R454B.
 E. Connections to the indoor and outdoor units shall be made with flare nuts that are supplied with the individual units.
 F. The flare nuts must be attached to indoor and outdoor units using a torque wrench and back-up wrench.

Pipe Size	Torque	A (inch)	Flare Shape
1/4	12 lb/ft 16.3 Nm	0.327-0.343	
3/8	27 lb/ft 36.6 Nm	0.472-0.488	
1/2	40 lb/ft 54.2 Nm	0.488-0.654	
5/8	50 lb/ft 67.8 Nm	0.732-0.748	
3/4	80 lb/ft 108.5 Nm	0.902-0.917	

- G. Each tube must be insulated with a minimum of 1/2 inch (12.7mm) closed-foam insulation that is UV resistant and meets ASTM Standard E84 25/50 flame spread/smoke development.
 H. The lineset between the indoor and outdoor must not exceed the listed maximum length and maximum height difference. (See section 1. Specifications).

2.3 Electrical Requirements

(2.3.1) Electrical Supply

- A. The operating electrical requirements shall be 115 volts AC, single-phase, 60 hertz. Voltage supplied to the outdoor unit must be between 104-127 volts.
 B. Power supply must be installed in accordance to local building and electrical code.

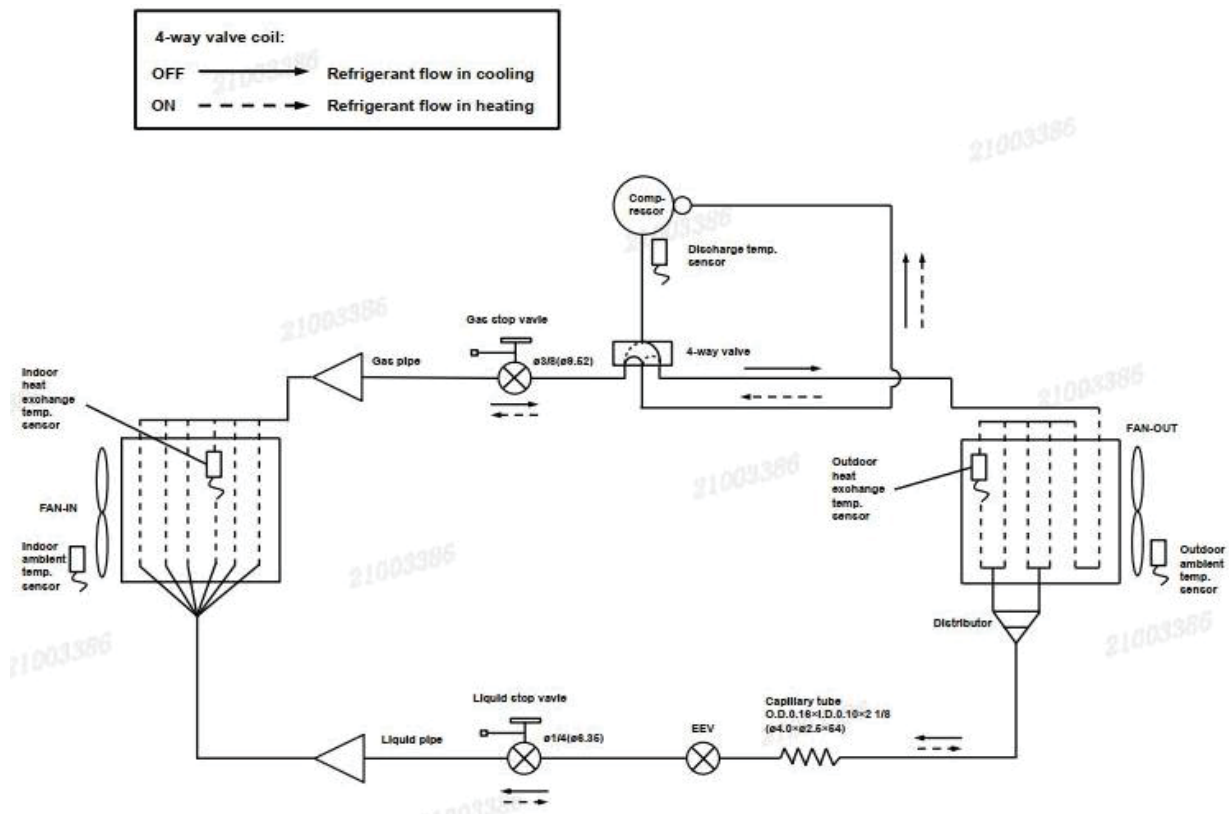
(2.3.2) Connecting Wire to Indoor

- C. Connecting cable between the indoor unit(s) must be made with 4 conductor - 14 AWG stranded copper wire.
 D. Connecting wire must be continuous (without break) unless local code requires power disconnect next to indoor unit.

2.4 Refrigerant System Diagrams

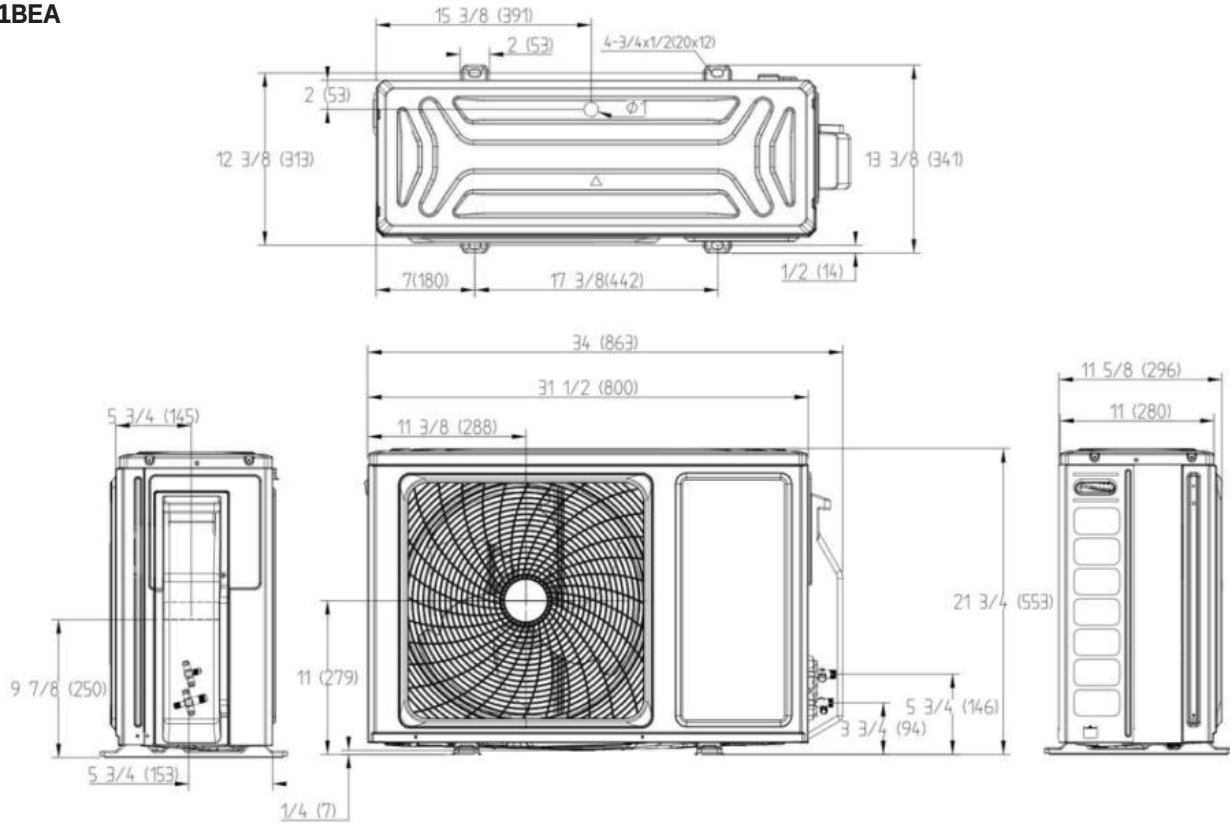
1Q09TE1BEA/QS09WB1BEA

1Q12TE1BEA/QS12WB1BEA



3.1 Dimensions

1Q09TE1BEA
1Q12TE1BEA



3.2 General

(3.2.1) Outdoor Unit Description

- A. The outdoor unit shall be comprised of a condenser coil with all components and controls necessary to perform the rated operation.

(3.2.2) Sound Pressure Rating

- A. Sound pressure rating as measured according to test standard JIS C 961:

Model	Sound Pressure Rating dB(A)	Microphone Location (ft)
1Q09TE1BEA	53	3.28
1Q12TE1BEA	53	3.28

3.3 Installation

(3.3.1) Condensate

- A. The installer must adhere to local building codes for managing condensate water produced by the outdoor unit.

(3.3.2) Clearances

- A. The installer must follow the recommended clearances provided in the Installation Manual.

3.4 Components

(3.4.1) Coil

- A. The outdoor coil shall be made with a blue colored hydrophilic coating on the aluminum fins and packed with internally grooved copper tubing, to increase the effective heat exchange surface area by 25%, resulting in higher efficiencies and shorter defrost cycles(approx. 29%).
- B. Coils shall be helium pressure tested at the factory within a range of 600 - 650 PSI.
- C. Outdoor unit shall be factory charged with R454B refrigerant for 25 feet of lineset.
- D. The coils have passed 1,000 hours salt spray test.

(3.4.2) Fan Motor

- A. The outdoor fan motor shall be a brushless, variable speed DCV motor type.
- B. The fan motor shall be molded with heat-hardened resin.
- C. The fan motor shall have permanently lubricated SRC bearings.

(3.4.3) Fan Blade

- A. The outdoor fan blade shall be a UL flame rated plastic-resin design.
- B. The fan blade shall be factory balanced in quiet performance and enhanced velocity.

(3.4.4) Compressor

- A. The compressor shall be a DC rotary type and A-PAM inverter-driven for stable operation in lower and higher frequency.
- B. The compressor shall be variable speed, variable capacity.
- C. The compressor shall have an internal overload protection device.
- D. The compressor shall use RM68EH refrigerant oil for better anti-wear effectiveness, superior resistance to capillary tube blockage and no hydrolysis compared to POE oil.

(3.4.5) 4WV

- A. The outdoor unit shall contain a four-way reversing valve (4WV) to change system mode from cool to heat.

(3.4.6) EEV

- A. The refrigerant flow shall be regulated by an electronic expansion valve (EEV).
- B. The outdoor control shall monitor the refrigerant flow through the EEV using a pulse-operated coil.
- C. The EEV shall maintain the target of 10°F (5.5°C) of superheat.

(3.4.7) Base Pan

- A. The base pan shall be constructed of commercial grade DC51/DC52 hot-dip galvanized steel with coating.

(3.4.8) Copper Piping

- A. All internally connected copper tubing shall conform to ASTM B280 tubing tolerances.

(3.4.9) Outdoor Enclosure Materials

- A. The outdoor cabinet shall be constructed of commercial grade DC51/DC52 hot-dip galvanized steel with coating.
Screw Size: #4x1/4in Phillips Pan Head Zinc Plated Sheet Metal Screw.

(3.4.10) Defrost

- A. The outdoor unit shall have a reverse-cycle (hot gas) defrost system to maximize heat pump operation and minimize energy consumption.

(3.4.11) Accumulator

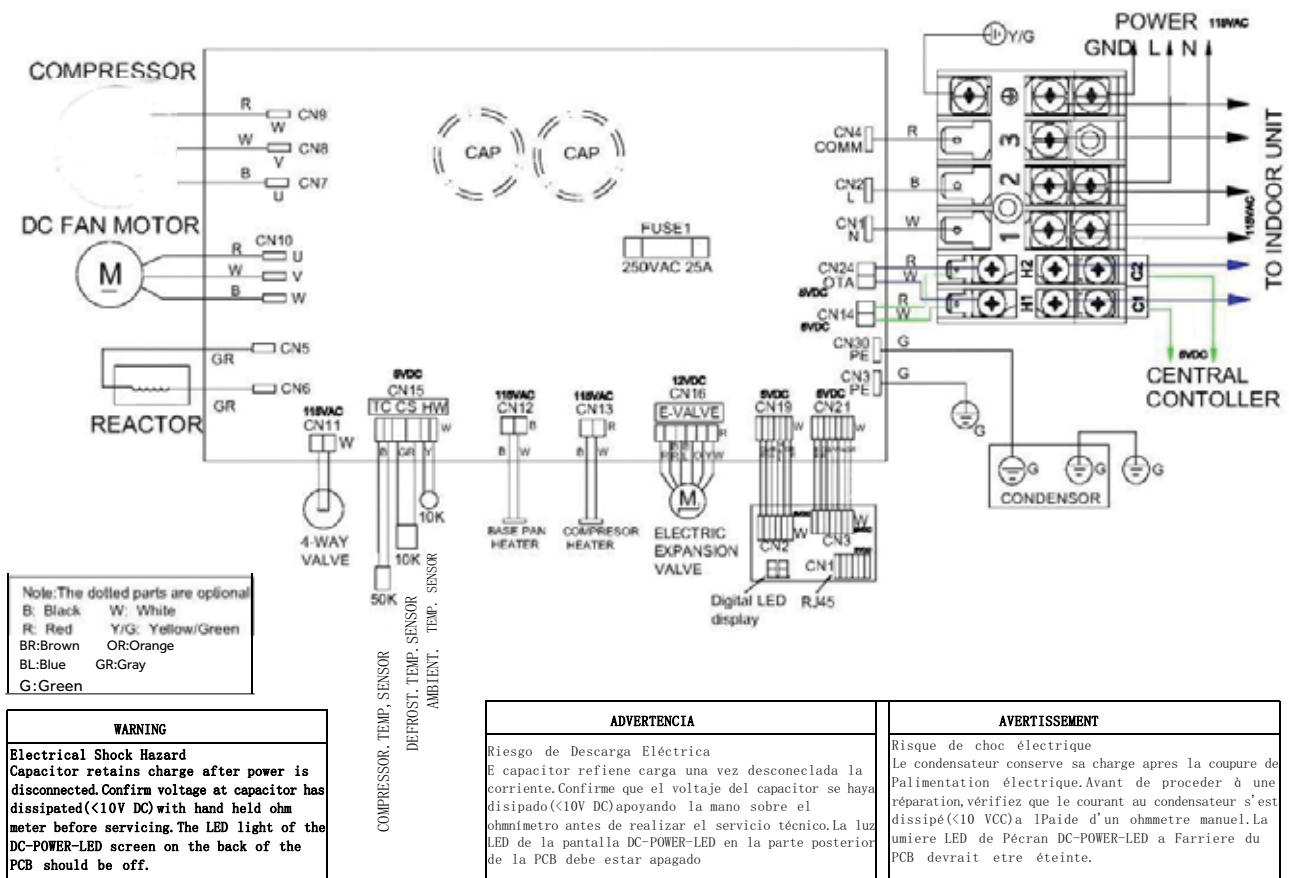
- A. The accumulator shall be connected to the compressor return line to prevent liquid refrigerant from entering the compressor during operation.

3. OUTDOOR UNITS

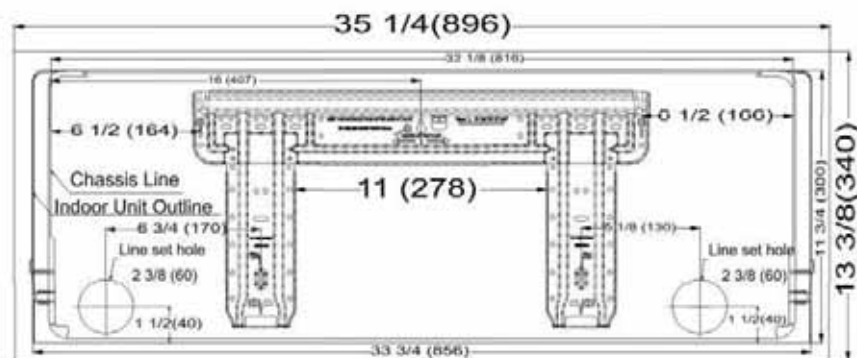
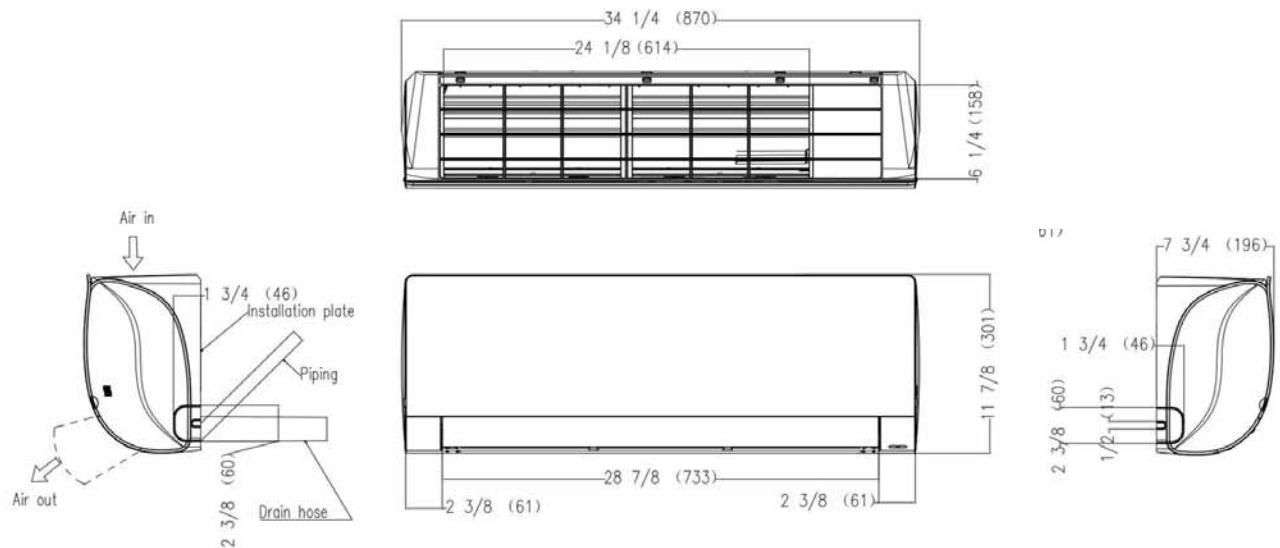
3.5 Wiring Diagrams

OUTDOOR UNIT WIRING DIAGRAM

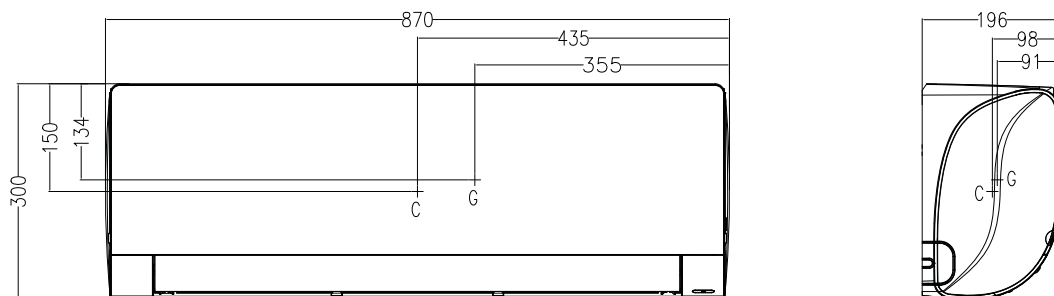
0011534808A



QS09WB1BEA
QS12WB1BEA



QS09WB1BEA
QS12WB1BEA



4. HIGHWALL INDOOR UNITS

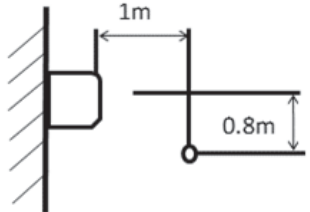
4.3 General

(4.3.1) Indoor Unit Description

- A. The wall mounted indoor section completes the system when connected to the matching outdoor unit and field-supplied piping and wiring.

(4.3.2) Sound Ratings

- A. Sound ratings as measured according to test standard JIS C 9612:

Model	Sound Pressure Level dB(A) (Turbo/High/Med/Low/Quiet)	Sound Power Level dB(A) (Turbo/High/Med/Low/Quiet)	Microphone Location
QS09WB1BEA	46/43/40/39/32	54/51/48/47/40	
QS12WB1BEA	46/44/43/39/32	54/52/51/47/40	

4.4 Installation

(4.4.1) Condensate

- A. The wall mounted indoor shall be shipped with a insulated polyethylene condensate tubing (5/8"ID) attached from the factory.
- B. The wall mounted indoor unit shall ship with a 65ft (2m) corrugated drain tube that connects to the insulated drain tube.
- C. The wall mounted indoor unit shall be a gravity drain.

(4.4.2) Clearances

- A. The installer must follow the minimum clearances illustrated in the Installation Manual when installing the indoor unit.

(4.4.3) Mounting

- A. The wall mounted indoor unit shall ship with a galvanized metal wall bracket.
- B. The wall bracket shall have multiple anchor points to provide the installer with many options to firmly attach the wall mounted indoor unit the wall.
- C. The field-supplied mounting hardware must be adequate to support the indoor unit.

4.5 Electrical Requirements

(4.5.1) Electrical Disconnect

- A. Connecting wire must be continuous (without break) unless local code requires a disconnect at the indoor unit.
- B. If a disconnect is required by local code, it must be a 3-pole, single-throw type.

Model	Fan Motor Power Output (kW)
QS09WB1BEA	.03
QS12WB1BEA	.03

4. HIGHWALL INDOOR UNITS

4.6 Components

(4.6.1) Coil

- A. The indoor coil shall be made with a blue colored hydrophobic coating on the aluminum fins and packed with internal grooved copper tubing, to increase the effective heat exchange surface area by 25%.
- B. Copper tubing shall have inner micro-grooves to increase effective heat transfer capabilities.
- C. Coils shall be pressure tested at 600-650 PSI using helium leak detection.
- D. The coil shall be charged with dry nitrogen for shipping at 70-100 PSI.

(4.6.2) Fan Motor

- A. The fan motor shall be a sealed DC multiple-speed resin-packed motor
- B. The fan motor shall have permanently lubricated bearings.

(4.6.3) Fan Blade

- A. The fan blade shall be a corrosion-resistant cross-flow blower.
- B. The fan shall be designed with optimized diameter and surface area to deliver quiet and even air flow.

(4.6.4) Copper Piping

- A. The coil shall be connected to a length of insulated annealed copper.
- B. The ends of the tubing shall have male flare connections.

(4.6.5) Air Louvers

- A. The supply air shall be distributed by horizontal non-motorized and vertical motorized louvers.
- B. Air Louvers shall provide wide angle of operation for both horizontal (120°) and vertical (90° from top to down) airflow movement to provide room comfort for each corner.

(4.6.6) Display

- A. The wall mounted indoor unit shall have a 4.5 x 1.1-inch backlit temperature display capable of showing set or room temperatures.
- B. The display shall also have colored icons representing set mode.
- C. The display can be turned off from the wireless remote control.

(4.6.7) WiFi

- A. Wall mounted indoor units shall come equipped with WiFi capabilities.

(4.6.8) Filter

- A. The wall mounted indoor unit shall have removable air filters.
- B. The air filters shall be washable and reusable.

(4.6.9) Control

- A. The wall mounted indoor unit shall ship with the standard hand-held remote control.
- B. The wall mounted indoor unit shall be compatible with the simple wired controller and the programmable wired controller.

(4.6.10) Installation Clip

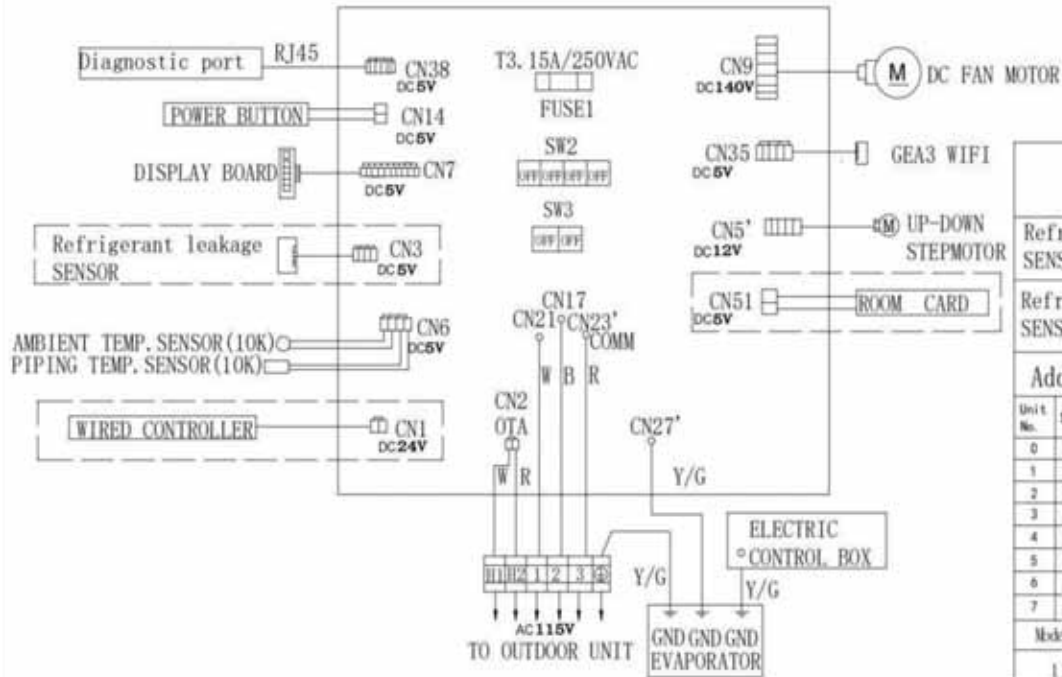
- A. The wall mounted indoor unit shall have a built-in clip that swings out and acts as a kick stand to allow for easier access to the rear of the unit during installation and repair.

4. HIGHWALL INDOOR UNITS

4.7 Wiring Diagrams

INDOOR UNIT WIRING DIAGRAM

0011534809C



CONTROLLER MODE SW3 DIP Switch position 1

CENTRAL CONTROLLER OFF
24V CONTROLLER (WITH ADAPTER) ON

Function SW3 DIP Switch position 2

Refrigerant leakage SENSOR enable ON
Refrigerant leakage SENSOR disable OFF

Address for Wired Controller

Unit No.	SW2-1	SW2-2	SW2-3	SW2-4	Unit No.	SW2-1	SW2-2	SW2-3	SW2-4
0	OFF	OFF	OFF	OFF	8	ON	OFF	OFF	OFF
1	OFF	OFF	ON	ON	9	ON	OFF	OFF	ON
2	OFF	OFF	ON	OFF	10	ON	OFF	ON	OFF
3	OFF	OFF	ON	ON	11	ON	OFF	ON	ON
4	OFF	ON	OFF	OFF	12	ON	ON	OFF	OFF
5	OFF	ON	OFF	ON	13	ON	ON	OFF	ON
6	OFF	ON	ON	OFF	14	ON	ON	ON	OFF
7	OFF	ON	ON	ON	15	ON	ON	ON	ON
Model Description					J7	J8			
115V 09K					OFF	OFF			
115V 12K					OFF	ON			

Note: Before replacing the board, ensure the jumper wires are cut to match the model description.

Remarque: avant de remplacer la carte, assurez-vous que les fils de raccordement sont coupés pour correspondre à la description du modèle ci-dessous.

Nota: antes de reemplazar la placa, asegúrese de que los cables puente estén cortados para que coincidan con la descripción del modelo a continuación.

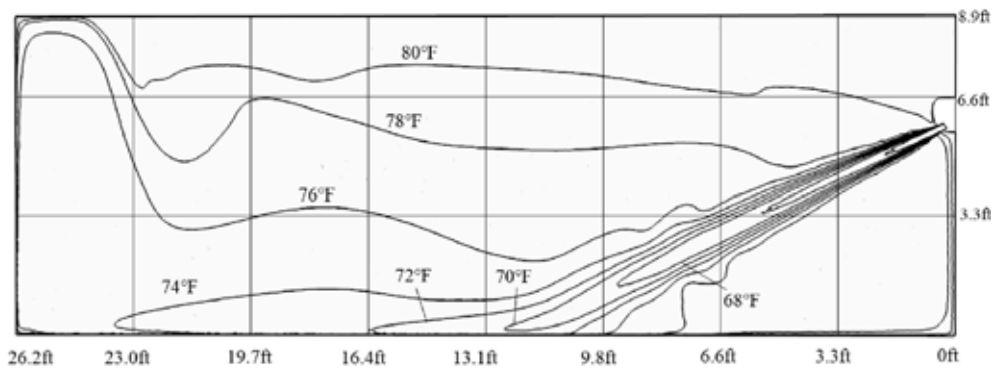
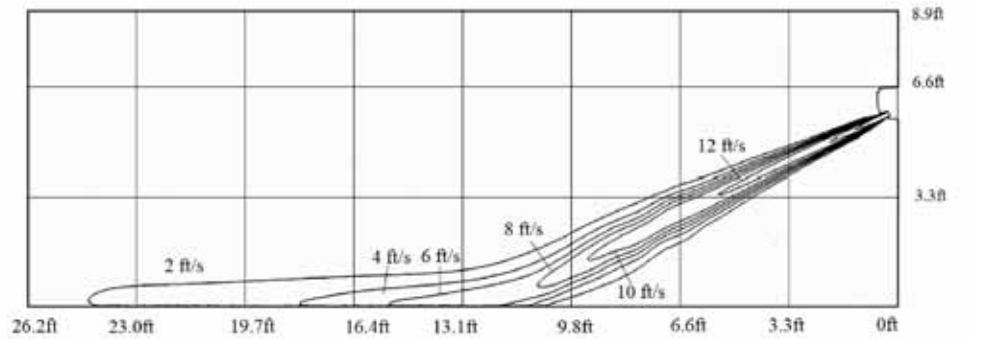
W: WHITE
Y/G: YELLOW/GREEN
R: RED
B: BLACK

Notes:
1. The dotted parts are optional.
2. The two pins of CN51 should be shorted, when the J5 is cut.
3. Before replacing the board, it is necessary to ensure that the machine is matched with the board code.

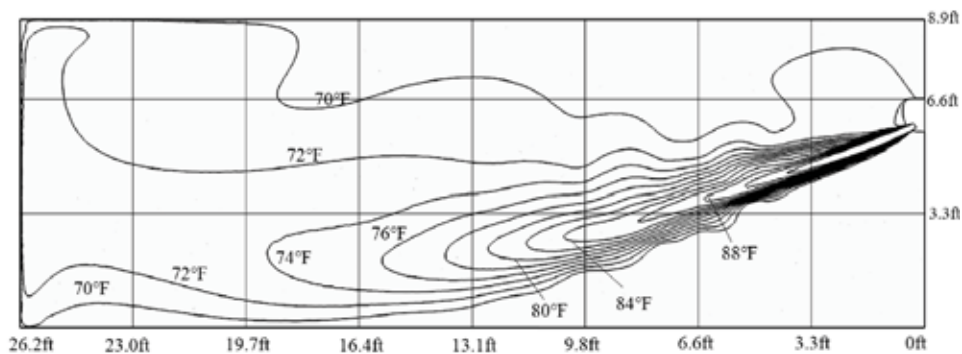
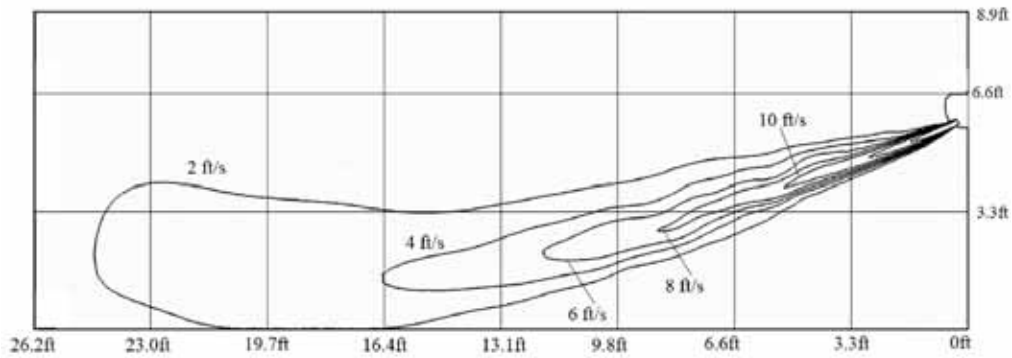
4.8 Air Velocity and Temperature Distribution

QS09WB1BEA
QS12WB1BEA

COOLING



HEATING

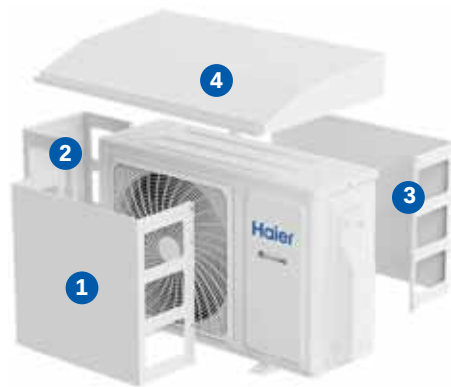


8. CONTROLS AND ACCESSORIES

5.1 Outdoor Unit Accessories

(5.1.1) Wind Baffles & Top Covers

Operating Conditions	Recommended Accessories			
	1 Front Wind Baffle	2 Side Wind Baffle	3 Back Wind Baffle	4 Top Cover
Low Ambient Cooling below 23°F (5°C) (server/mechanical room)	Required	Required	Required	Required
Low Ambient Heating below 5°F (-15°C)	-	Strongly Recommended	Strongly Recommended	Strongly Recommended
Unit installed on a flat roof or facing prevailing wind	Required	-	-	-



Fabricated from durable 20 gauge G90 galvanized steel and engineered to provide optimal performance when operating the outdoor unit in cold, harsh climates.

A front wind baffle is required for all climates when mounted on a flat roof or facing prevailing winds.

Model	Front or Back Wind Baffles (If both a front and back wind baffle are needed, order two (2) of the required part)	Side Wind Baffles	Top Covers
1Q09TE1BEA	UAWB15WA	UASWB15WA	UATC15WA
1Q12TE1BEA	UAWB15WA	UASWB15WA	UATC15WA

5.2 Indoor Unit Accessories

(5.2.1) UALS01A Refrigerant Detection Sensor (RDS)

Note: See room sizing requirements to determine if the Refrigerant Detection Sensor (RDS) is required and needs to be purchased separately for highwall and cassette indoor units. RDS is factory-installed on console and ducted units.



(5.2.5) WiFi

General

- A. Units to come complete with WiFi Built in.

Connection

- B. The WiFi adapter shall have an app that is compatible with both iOS and Android.
- C. The WiFi adapter shall be paired with existing 2.4GHz network.
- D. The WiFi adapter shall comply with Part 15 of the FCC rules..

Warranty

- A. The warranty shall cover all defects in workmanship or material for a period of 1 year. Haier will provide a new or refurbished controller, at its sole discretion.

Features

- A. The WiFi adapter shall be Google Home compatible.
- B. The WiFi adapter shall be Amazon Alexa compatible.
- C. The homeowner shall have the ability to install and configure the WiFi adapter.

8. CONTROLS AND ACCESSORIES

5.3 Controllers

Controllers from Haier allow you to take command of your environment. With convenient user-friendly button layouts and clear digital displays, the system can be easily set to meet and maintain comfort levels.

(5.3.1) Remote Controllers

General

- A. Standard Remote Control shall be compatible with wall mounted indoor units.
- B. Standard Remote Control shall come packaged with wall mounted indoor units.

Connection

- A. Standard remote control shall be infrared.

Compatibility

- A. The wireless control shall be compatible with all wall mounted, floor console and cassette indoor models.

Warranty

- A. The warranty shall also cover all defects in workmanship or material for the unit accessory for a period of 1 year. Haier will provide a new or refurbished controller at its sole discretion.

Features

- A. The Standard Remote Control shall have a power button, individual mode buttons (heat, cool, dehumidify), temperature +/-, fan speed, vertical and horizontal louver adjust.
- B. The Standard Remote Control shall be capable of setting a precise temperature of $\pm 1^{\circ}\text{F}$ ($\pm 0.5^{\circ}\text{C}$).
- C. The Standard Remote Control shall have a backlight.
- D. The Standard Remote Control shall have vertical and horizontal louver control.
- E. The Standard Remote Control shall have a child lock function.
- F. The Standard Remote Control shall have the ability to turn on/off the indoor unit display.
- G. The Standard Remote Control shall have Fahrenheit and Celsius temperature functions.



(5.3.2) Wired Controller

General

- A. The wired controller shall be a wall-mounted control that operates the indoor unit.

Connection

- A. The wired controller shall connect to an indoor unit using the supplied 3-pin cable.
- B. 2 wired controls shall be connectable to one indoor unit.
- C. A single wired controller shall be able to connect up to 16 of the same model type of indoor units. The connected units shall work in unison as a single zone.

Compatibility

- A. The wired controller shall be compatible with all Haier indoor units.

Warranty

- A. The warranty shall also cover all defects in workmanship or material for the unit accessory for a period of 1 year. Haier will provide a new or refurbished controller, at its sole discretion.

Features

- A. The wired controller shall have large physical buttons for easy operation.
- B. The wired controller shall have a power button, a mode button (heat, cool, dry), a fan speed button, a temperature up button and a temperature down button.
- C. The wired controller shall be capable of setting a precise temperature of $\pm 1^{\circ}\text{F}$ ($\pm 0.5^{\circ}\text{C}$).
- D. The wired controller shall have a backlight.
- E. The wired controller shall have vertical and horizontal louver control.
- F. The wired controller shall have a child lock function.
- G. The wired controller shall display either Fahrenheit or Celsius.
- H. The wired controller shall have the ability to display indoor ambient temperature.
- I. The wired controller shall have a Clean Filter reminder.
- J. The wired controller shall display error codes.
- K. The wired controller shall have an infrared receiver that can receive commands from a Haier hand-held remote control.

5.4 Indoor Unit Accessory Compatibility Table

		Remote Controllers			Wired Controller	Refrigerant Detection Sensor (RDS)
		WJ26X35393	WJ26X35813	WJ26X35394	QACT17B	UALS01A
115V Highwall	Model Number					
	Model Number					
	QS09WB1BEA	●			○	○
	QS12WB1BEA	●			○	○

● = Included ○ = Required, sold separately ○ = Optional; sold separately

See Outdoor Unit Accessory Compatibility Table for 5" Central Controller compatibility

[This page intentionally left blank.]



GE APPLIANCES
a Haier company

AIR&WATER
SOLUTIONS

Ductless Technical Support

Phone: 866.814.3633

Email: HVACSupport@GEAppliances.com

Online: GEAppliancesAirAndWater.com



Pub No. TBD

Rev. 11-21-25

©Copyright 2025 GE Appliances, a Haier Company.
Our continued commitment to quality products may
mean a change in specifications without notice.