

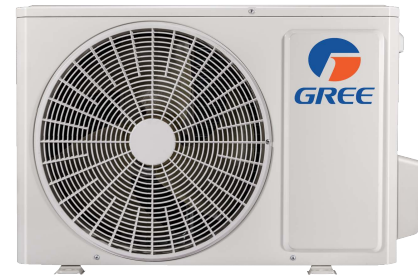


# CHARMO

Ductless Single Zone Heat Pump



Indoor Unit

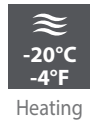


Outdoor Unit

### Performance Up to

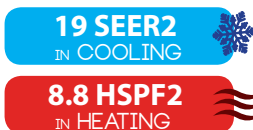


Cooling



Heating

### Up to



## Features

### Operation mode

- Cooling, heating, dehumidifying, fan and auto.

### Nominal capacity

- 9000, 12000, 18000, 24000 BTU/hr.

### Voltage

- 230/208V, 60 Hz, 1-phase.

### Indoor unit

- High wall installation, dual side connection.
- Plastic housing, standard white.
- 7-speed cross-flow fan (auto, turbo, high, medium-high, medium, low and very low)
- Washable filters.

### Outdoor unit

- Variable speed rotary compressor (INVERTER), with overload protection.
- Electronic expansion valve for precise control of refrigerant flow.
- Condenser fins covered with a hydrophilic coating for improved corrosion resistance.
- Large diameter quiet axial-flow fan for more efficient heat exchange.
- Smart pan heater to prevent ice formation.
- Compressor blanket and preheating technology.
- Installation on aluminum wall bracket or ground stand (optional).

### Connection piping

- Minimum piping length of 10 ft. (3 m).
- Flared connections.

### Control

- Wireless remote included.
- Wired wall controller available.
- Wi-Fi.
- Set temperature: 16 to 30 °C (61 to 86 °F).
- Temperature display format: °C or °F.

### Warranty

- 10-year basic warranty on parts and 10-year basic warranty on the compressor (labor not included).

### Application

- Dining room-kitchen, living room, family room, commercial building, office building, condo, restaurant.

## Includes



Smart Pan Heater



Crankcase Heater



Fin Coating



Quiet Design



Smart Defrosting



Smart Preheating



Auto Restart



Auto-Clean



Self-Diagnosis



Sleep Mode



Turbo Mode



Up & Down Swing



Left & Right Swing



Timer



I Feel



Lock



Wireless Remote



Wi-Fi

# Charmo

## Models

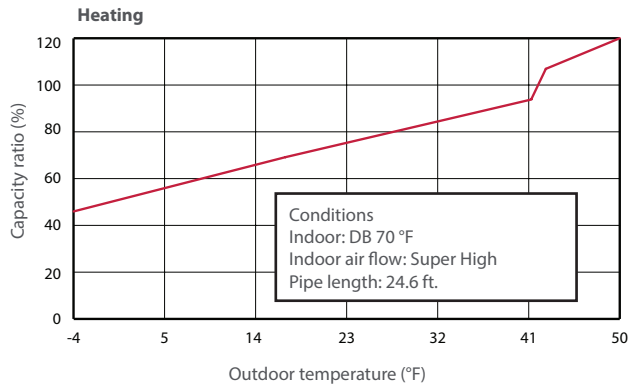
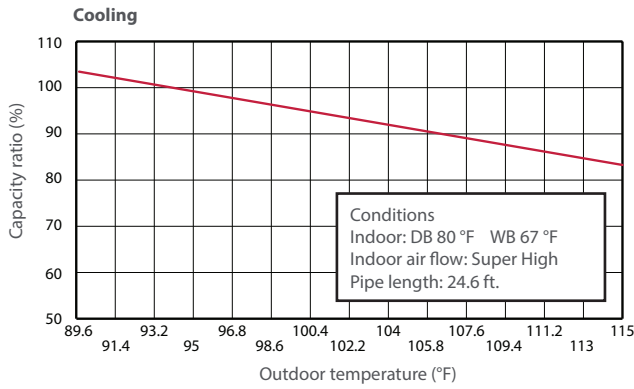
Product # <sup>1</sup>	Indoor Unit Outdoor Unit	GWH09ATCXB-D3DNA4AI GWH09ATCXB-D3DNA1AO	GWH12ATCXB-D3DNA4CI GWH12ATCXB-D3DNA1CO	GWH18ATDXD-D3DNA4AI GWH18ATDXD-D3DNA1AO	GWH24ATEXF-D3DNA4EI GWH24QEXF-D3DNC4CO	
<b>Technical Performance</b>						
Voltage		Volts	230/208	230/208	230/208	
Cooling capacity	Nominal	W (BTU/hr)	2667 (9100)	3517 (12000)	5159 (17600)	6450 (22000)
	Min. – max.	W (BTU/hr)	820 - 3018 (2800 - 10300)	700 - 3700 (2388 - 13307)	1100 - 5850 (3753 - 19960)	2000 - 7400 (6824 - 25249)
Heating capacity	Nominal	W (BTU/hr)	2931 (10000)	3517 (12000)	5598 (19100)	7040 (24000)
	Min. – max.	W (BTU/hr)	655 - 3575 (2200 - 12200)	700 - 4400 (2388 - 15013)	800 - 6600 (2730 - 22519)	1750 - 8000 (5971 - 27296)
Used cooling power input	Nominal	W	805	1334	1750	1896
	Min. – max.	W	180 - 1350	180 - 1500	200 - 2300	340 - 2350
Used heating power input	Nominal	W	781	1004	1750	2051
	Min. – max.	W	150 - 1450	260 - 1650	260 - 2300	370 - 2400
Used rated input		W	1450	1650	2300	2400
Rated current		A	6.5	6.7	9.5	12
MCA		A	9	11	14	15
Max. over-current protection (MOCP)		A	15	15	20	20
SEER2 (SEER)		-	19.5 (19.5)	17.5 (17.5)	17.5 (17.5)	18 (18)
HSPF2 (HSPF)		-	8.8 (10)	8.5 (10)	8.5 (9)	8.5 (10)
EER		W/W	3.30	2.64	2.95	3.40
COP		W/W	3.75	3.50	3.20	3.43
AHRI number		-	209271943	209276088	209424849	209248932
ENERGY STAR		-	-	-	-	-
<b>Indoor Unit</b>						
Dehumidification		pt/hr (l/hr)	1.69 (0.80)	2.96 (1.40)	3.8 (1.80)	5.28 (2.50)
Air flow volume		cfm	353 / 282.5 / 264.8 / 229.5 / 211.86 / 194.2 / 158.8	424 / 353 / 324 / 277 / 247 / 224 / 182	618 / 512 / 471 / 436 / 395 / 336 / 283	677 / 588 / 559 / 500 / 471 / 441 / 412
Sound level		dB (A)	51 / 47 / 44 / 42 / 41 / 38 / 36	57 / 49 / 48 / 45 / 43 / 42 / 37	60 / 56 / 54 / 52 / 50 / 46 / 42	61 / 57 / 55 / 52 / 50 / 48 / 46
Fan motor power output		W	20	15	45	60
Fan motor RLA		A	0.30	0.40	0.70	0.45
Deflector stepper motor power output		W	1.5	1.5	2.5	2.5
Net weight		lb (kg)	19.8 (9)	19.8 (9)	28.7 (13)	33 (18)
<b>Outdoor Unit</b>						
Air flow volume		m <sup>3</sup> /hr	1950	1950	2520	3200
Sound level		dB (A)	61	62	67	67
Compressor power input		W	756	587	1295	1330
Compressor LRA		A	-	-	25	35
Compressor RLA		A	5.20	7.30	9.35	10.45
Fan motor power output		W	30	30	30	60
Fan motor RLA		A	0.4	0.6	0.9	0.6
Refrigerant volume (R410A)		oz (g)	24.7 (700)	27.5 (750)	44.1 (1150)	52.9 (1500)
Net weight		lb (kg)	56.22 (25.5)	57.33 (26)	71.70 (32.5)	97 (44)
Operating ambient temperature	Cooling	°C (°F)				-18 to 46 (0 to 115)
	Heating	°C (°F)				-25 to 24 (-13 to 75)
<b>Connection Piping/Refrigerant</b>						
Pre-charge length		ft. (m)	25 (7.5)	25 (7.5)	25 (7.5)	25 (7.5)
Additional refrigerant charge		oz/ft. (g/m)	0.2 (20)	0.2 (20)	0.2 (20)	0.5 (50)
Liquid pipe outer diameter		in.	1/4	1/4	1/4	1/4
Gas pipe outer diameter		in.	3/8	3/8	1/2	5/8
Maximum height difference		ft. (m)	33 (10)	33 (10)	33 (10)	82 (25)
Maximum total length		ft. (m)	66 (20)	66 (20)	82 (25)	82 (25)

<sup>1</sup> 1 indoor unit and 1 outdoor unit. Note that each unit is individually packaged.

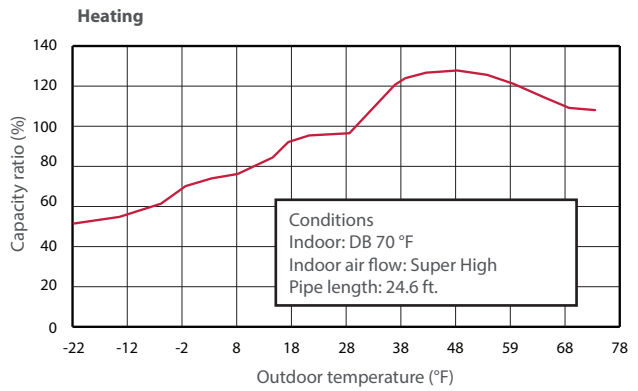
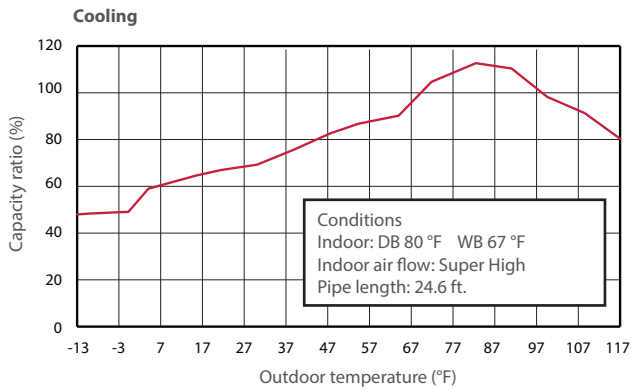
# Charmo

## Capacity Variation Ratio According to Temperature

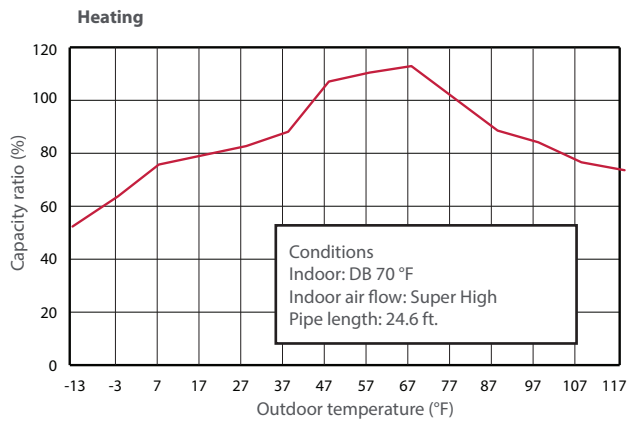
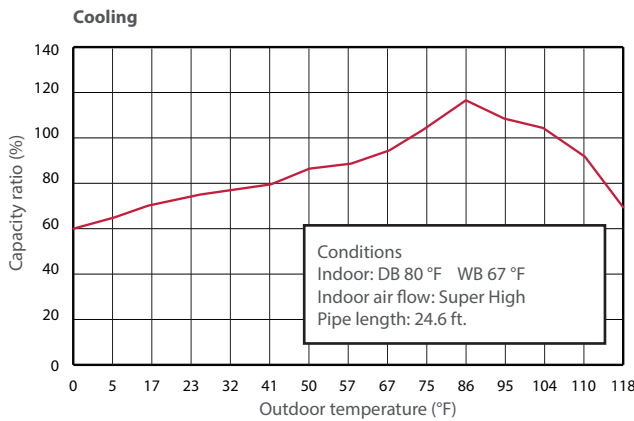
### GWH09



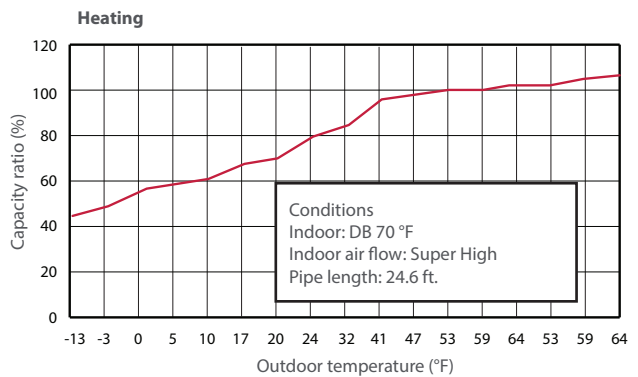
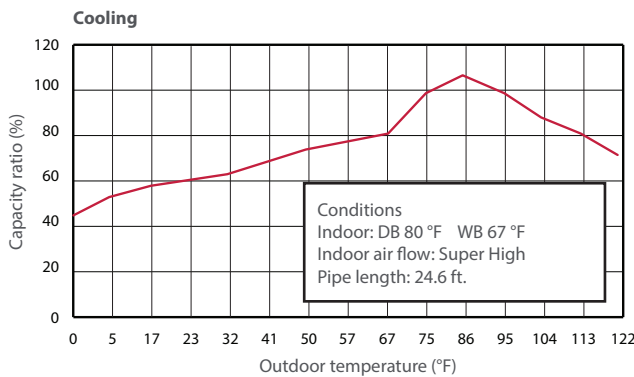
### GWH12



### GWH18

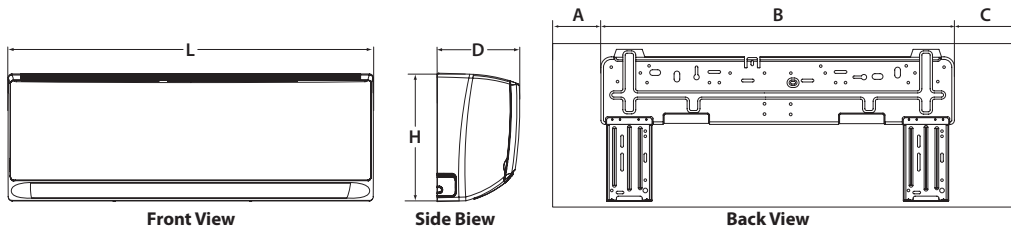


### GWH24

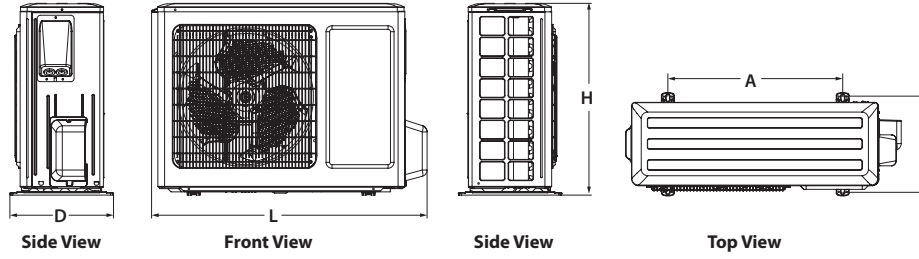


# CHARMO

## Indoor Unit



## Outdoor Unit



Indoor Unit	L		H		D		A		B		C	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
GWH09ATCXB-D3DNA4AI GWH12ATCXB-D3DNA4CI	32 7/8	835	10 7/8	275	7 7/8	200	4 11/16	119	21 5/16	542	7 1/4	184
GWH18ATDXD-D3DNA4AI	37 1/8	943	13 1/8	333	9 11/16	246	4	102	27	686	7 3/16	183
GWH24ATEXF-D3DNA4EI	42 7/16	1078	13 1/8	333	9 11/16	246	8 1/8	206	27	686	7 5/16	186

Outdoor Unit	L		H		D		A		B	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
GWH09ATCXB-D3DNA1AO GWH12ATCXB-D3DNA1CO	28 13/16	732	21 54/64	555	13	330	21 1/4	540	11 1/4	286
GWH18ATDXD-D3DNA1AO	31 37/64	802	21 54/64	555	13 50/64	350	22	559	14 5/16	364
GWH24QEXF-D3DNC4CO	37 3/4	958	26	660	15 53/64	402	24	610	15 9/16	395