

FREE MATCH Series

Ductless Multi zone heat pump



Performance up to



Up to



Features

Operation mode

Nominal capacity

Voltage

Indoor unit

Outdoor unit

Connection piping

Control

Warranty

Application















- Cooling, heating, dehumidifying, fan and auto.
- 18000, 24000, 36000, 42000 BTU/hr.
- 230/208V, 60 Hz, 1-phase.
- High wall installation, dual side connection.
- Plastic housing, standard white.
- 4-speed cross-flow fan (turbo, high, medium, and low).
- Washable filters.
- Variable speed rotary (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.
- Minimum piping length of 10 ft (3 m).
- Flared connections.
- Wireless remote included for each indoor unit (except for the ductable unit).
- Wired wall controller available.
- Wi-Fi (KIT-WIFI option required).
- Set temperature: 16 to 30 °C (61 to 86 °F).
- Temperature display format : °C or °F.

Note : All heat pump systems must be installed by a certified Dettson installer to benefit from the basic warranty.

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

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

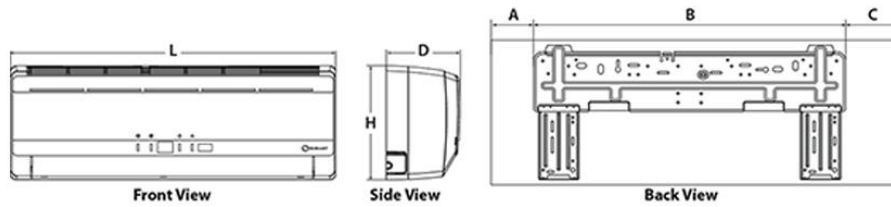
Includes

 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	 Timer	 Lock

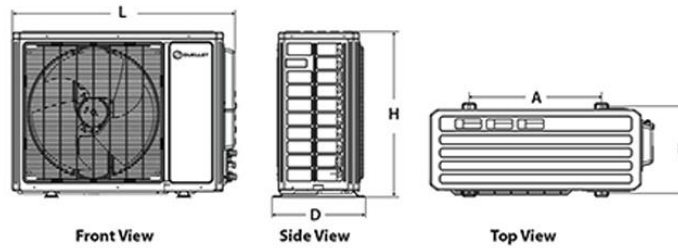
Outdoor unit models

# Product		GWHD(18)ND3GO	GWHD(24)ND3GO	GWHD(30)ND3GO	GWHD(36)ND3GO	GWHD(42)ND3EO	
Qty							
Technical performance							
Number of connectable indoor unit-		1 to 2	2 to 3	2 to 4	2 to 5	2 to 5	
Voltage		Volts	230/208	230/208	230/208	230/208	
Cooling capacity	Nominal	W (BTU/hr)	5280 (18000)	7034 (24000)	8300 (28400)	9970 (34000)	
	Min. – max.	W (BTU/hr)	2051 - 6155 (6998 - 21000)	2198 - 9672 (7500 - 33000)	2400 - 9800 (8189 - 33438)	2600 - 10500 (8871 - 35826)	2600 - 12000 (8871 - 40944)
Heating capacity	Nominal	W (BTU/hr)	5570 (19000)	7620 (26000)	8792 (30000)	12460 (42500)	
	Min. – max.	W (BTU/hr)	2052 - 6624 (7000 - 22600)	2198 - 8200 (7500 - 27978)	2400 - 9500 (8188 - 32414)	2600 - 13000 (8871 - 44356)	2600 - 13500 (8871 - 46062)
Used cooling power input	Nominal	W	1440	1920	2280	2720	
Used heating power input	Nominal	W	1520	2050	2350	3370	
MCA	A		16	23	20	23	
Max. over-current protection (MOCP)	A		25	30	30	35	
SEER	-		22	21	21	21	
HSPF	-		11	11	11.5	10.5	
EER	W/W		12.5	12.5	12.5	12.5	
COP	W/W		3.66	3.72	3.74	3.70	
ENERGY STAR	-		✓	✓	✓	✓	
Air flow volume	cfm		1883	2354	2354	4531	
Sound level	dB (A)		56	59	59	61	
Compressor power input	W		1440	2550	4150	4150	
Compressor LRA	A		-	-	-	-	
Compressor RLA	A		10.82	15.82	13.9	15.6	
Fan motor power input	W		60	90	100	170	
Fan motor RLA	A		0.62	0.59	0.68	0.82	
Refrigerant volume (R410A)	oz (g)		56.5 (1600)	77.6 (2200)	98.8 (2800)	128.8 (3651)	
Net weight	lb (kg)		115 (52)	153 (69)	154 (70)	199 (90)	
Operating ambient temperature	Cooling	°C (°F)	-18 to 48 (0 to 118)			-18 to 48 (0 to 118)	
	Heating	°C (°F)	-20 to 24 (-5 to 75)			-20 to 30 (-5 to 86)	
Connection Piping/Refrigerant							
Pre-charge lenght	ft (m)		33 (10)	98 (30)	131 (40)	131 (40)	
Additional refrigerant charge	oz/pi (g/m)		0.2 (20)	0.2 (20)	0.2 (20)	0.2 (20)	
Liquid pipe outer diameter	in		1/4	1/4	1/4	1/4	
Gas pipe outer diameter	in		3/8	3/8	3/8	3/8	
Max. height difference outdoor to indoor unit	ft (m)		33 (10)	33 (10)	49 (15)	49 (15)	
Max. height difference between indoor unit	ft (m)		33 (10)	33 (10)	25 (7.5)	25 (7.5)	
Max. lenght outdoor to last indoor unit	ft (m)		33 (10)	66 (20)	82 (25)	82 (25)	
Max. total lenght	ft (m)		66 (20)	197 (60)	230 (70)	246 (75)	

Indoor Unit



Outdoor Unit



Indoor units (Wallmount)	L		H		D		A		B		C	
	po	mm	po	mm	po	mm	po	mm	po	mm	po	mm
GWH09QC-D3DNB6D-I GWH12QC-D3DNB6D-I	33 1/4	845	11 3/8	289	8 1/4	209	4 11/16	119	21 5/16	542	7 1/4	184
GWH18QD-D3DNB6G-I	38 3/16	970	11 13/16	300	8 13/16	224	4	102	27	686	7 3/16	183
GWH24QE-D3DNB6D-I	42 7/16	1078	12 13/16	325	9 11/16	246	8 1/8	206	27	686	7 5/16	186

Outdoor units	L		H		D		A		B	
	po	mm	po	mm	po	mm	po	mm	po	mm
GWHD(18)ND3GO	38	955	27 9/16	700	15 5/8	396	22	559	14 1/2	368
GWHD(24)ND3GO	38 9/16	980	31 1/8	790	17 5/16	427	22	559	14 1/2	368
GWHD(30)ND3GO	38 7/16	980	31	787	17 5/16	427	24	610	15 3/4	399
GWHD(36)ND3GO	42 1/2	1080	43 7/16	1103	17 5/16	440	24 13/16	630	14 13/16	376
GWHD(42)ND3EO										

Indoor Unit Models

Wallmount

# Product	GWH09QC-D3DNB6D-I		GWH12QC-D3DNB6D-I		GWH18QD-D3DNB6G-I		GWH24QE-D3DNB6D-I			
Qty										
Cooling capacity	Nominal	W (BTU/hr)	2638 (9000)		3517 (12000)		5275 (18000)		6448 (22000)	
	Min. - max.	W (BTU/hr)	909 - 2813 (3100 - 9600)		909 - 3810 (3100 - 13000)		1993 - 5861 (6800 - 20000)		2000 - 8000 (6824 - 27296)	
Heating capacity	Nominal	W (BTU/hr)	3224 (11000)		3810 (13000)		5803 (19800)		6741 (23000)	
	Min. - max.	W (BTU/hr)	560 - 3517 (1911 - 12000)		703 - 4103 (2400 - 14000)		2151 - 6887 (7340 - 23500)		2000 - 9000 (6824 - 30708)	
Dehumidification		pt/hr (l/hr)	1.69 (0.8)		2.96 (1.4)		3.8 (1.8)		4.23 (2)	
Air flow volume	T / H / M / L ¹	cfm	377 / 288 / 241 / 170		400 / 288 / 241 / 171		559 / 488 / 412 / 335		706 / 647 / 589 / 530	
Sound level	T / H / M / L ¹	dB (A)	43 / 39 / 35 / 29		45 / 39 / 35 / 29		47 / 43 / 40 / 39		48 / 44 / 40 / 36	
Fan motor power input		W	20		20		60		60	
Fan motor RLA		A	0.09		0.09		0.24		0.38	
Deflector motor power input		W	1.5		1.5		2.5		2.5	
Net Weight		lb (kg)	22 (10)		22 (10)		28 (12.5)		34 (15.5)	
Liquid pipe outer diameter		In.	1/4		1/4		1/4		1/4	
Gaz pipe outer diameter		In.	3/8		1/2		5/8		5/8	

¹ Cross-flow fan speeds : (T) Turbo / (H) High / (M) Medium / (L) Low.

Console

# Product			GEH09AA-D3DNA1C/I	GEH12AA-D3DNA1C/I	GEH18AA-D3DNA1C/I
Qty					
Cooling capacity	Nominal	W (BTU/hr)	2638 (9000)	3510 (12000)	5270 (18000)
Heating capacity	Nominal	W (BTU/hr)	2784 (9500)	3810 (13000)	5800 (19800)
Dehumidification		pt/hr (l/hr)	1.69 (0.8)	2.96 (1.4)	1.8 (3.80)
Air flow volume	Min. – max.	cfm	188 / 382	206 / 441	650
Sound level	Min. – max.	dB (A)	26 / 40	27 / 43	35 / 48
Dimensions	L x H x W	po. (mm)	27 5/8 x 23 5/8 x 8 1/2 (701 x 599 x 216)	27 5/8 x 23 5/8 x 8 1/2 (701 x 599 x 216)	27 5/8 x 23 5/8 x 8 1/2 (701 x 599 x 216)
Net weight		lb (kg)	33 (15)	33 (15)	33 (15)
Liquid pipe outer diameter		in.	1/4	1/4	1/4
Gas pipe outer diameter		in.	3/8	3/8	1/2

Floor or Ceiling Unit

# Product			GTH09BA-D3DNA1A/I	GTH12BA-D3DNA1A/I	GTH18BA-D3DNA1A/I	GTH24BA-D3DNA1A/I
Qty						
Cooling capacity	Nominal	W (BTU/hr)	2500 (8500)	3500 (11900)	5000 (17000)	6680 (22800)
Heating capacity	Nominal	W (BTU/hr)	2800 (9500)	3850 (13100)	5500 (18700)	8030 (27400)
Dehumidification		pt/hr (l/hr)	1.69 (0.8)	2.96 (1.4)	3.80 (1.80)	5.28 (2.50)
Air flow volume	Min. – max.	cfm	265 / 383	265 / 383	294 / 559	412 / 736
Sound level	Min. – max.	dB (A)	36 / 40	36 / 40	40 / 45	44 / 48
Dimensions	L x H x W	po. (mm)	48 x 27 5/8 x 8 7/8 (1220 x 700 x 225)	48 x 27 5/8 x 8 7/8 (1220 x 700 x 225)	48 x 27 5/8 x 8 7/8 (1220 x 700 x 225)	48 x 27 5/8 x 8 7/8 (1220 x 700 x 225)
Net weight		lb (kg)	88 (40)	88 (40)	88 (40)	99 (45)
Liquid pipe outer diameter		in.	1/4	1/4	1/4	3/8
Gas pipe outer diameter		in.	3/8	3/8	1/2	5/8

Ductable unit

# Product			GFH09EA-D3DNA1A/I	GFH12EA-D3DNA1A/I	GFH18EA-D3DNA1A/I	GFH24EA-D3DNA1A/I
Qty						
Cooling capacity	Nominale	W (BTU/hr)	2500 (8500)	3500 (11900)	4484 (15300)	6975 (23800)
Heating capacity	Nominale	W (BTU/hr)	2800 (9500)	3850 (13100)	5500 (18700)	8030 (27400)
Dehumidification		pt/hr (l/hr)	1.69 (0.8)	2.96 (1.4)	3.80 (1.80)	5.28 (2.50)
Air flow volume	Min. – max.	cfm	125/ 264	176 / 324	294 / 412	324 / 588
Sound level	Min. – max.	dB (A)	31 / 37	32 / 39	33 / 41	34 / 42
Dimensions	L x H x W	po. (mm)	27 5/8 x 7 7/8 x 24 3/16 (700 x 200 x 615)	27 5/8 x 7 7/8 x 24 3/16 (700 x 200 x 615)	35 3/8 x 7 7/8 x 24 3/16 (900 x 200 x 615)	43 5/16 x 7 7/8 x 24 3/16 (1100 x 200 x 615)
Net weight		lb (kg)	49 (22)	51 (23)	60 (27)	68 (31)
Liquid pipe outer diameter		in.	1/4	1/4	1/4	3/8
Gas pipe outer diameter		in.	3/8	3/8	1/2	5/8

Cassette

# Product			GKH12BB-D3DNA3A/I	GKH18BB-D3DNA3A/I	GKH24BC-D3DNA4A/I
Qty					
Cooling capacity	Nominale	W (BTU/hr)	12000.004	14400.346	22800.349
Heating capacity	Nominale	W (BTU/hr)	12999.72	16000.233	27400.066
Dehumidification		pt/hr (l/hr)	2.96 (1.4)	3.80 (1.80)	5.28 (2.50)
Air flow volume SS/H/MH/M/ML/L/SL)		m ³ /h	650/560/520/450	710/670/590/450	1280/1220/1100/880
Sound level	Min. – max.	dB (A)	34 / 44	35 / 47	36 / 47
Unit Dimensions	W x D x H	po. (mm)	596×596×240	596×596×240	840×840×240
Package Dimensions	W x D x H	po. (mm)	763×763×105	763×763×105	1033×1038×133
Net weight		lb (kg)	44 (20)	44 (20)	57 (26)
Liquid pipe outer diameter		mm	6	6	9.52
Gas pipe outer diameter		mm	9.52	12	16

Specifications can change without notice

Note that each unit is individually packaged.

Project :	Approval Information
Consultant Engineer:	
Electrical Contractor:	
Distributor:	
Date:	
Contact at Dettson:	
Comments :	