

TECHNICAL SPECIFICATIONS



PREMIUM HIGH WALL HEAT PUMP



PARTS AND
COMPRESSOR



FEATURES

- **High Efficiency**
Boasts an impressive efficiency rating, maximizing energy savings and overall system efficiency.
- **Available Capacities**
Offered in 12,000 BTU/h, 18,000 BTU/h, and 24,000 BTU/h options to suit different room sizes and cooling needs.
- **Wide Operating Range**
Performs reliably in extreme temperatures, from -25°C (-13°F) to 50°C (122°F).
- **Energy Star & NEEP Certified**
Recognized for energy efficiency, meeting standards that help reduce operating costs and environmental impact. Eligibility for local rebate programs offers additional cost savings—check local Qualified Product Lists for details.
- **Efficient, Contemporary Indoor Units**
Sleek, modern design that complements any interior while delivering top performance with auto restart and louver position memory.
- **Multi-Zone Compatibility**
Easily integrates with multi-zone outdoor units to provide customized comfort across multiple rooms.
- **Wi-Fi Kit Included**
Allows remote monitoring and control for convenience and flexibility from anywhere.
- **User-Friendly Remote Control**
Elegant design with functions for Sleep Mode, LED light control, temperature adjustment, on/off, and a “Follow Me” feature for targeted comfort.

ENVIRONMENTALLY RESPONSIBLE

Napoleon uses R-454B refrigerant, which offers improved energy efficiency and reduces greenhouse gas (GHG) emissions. This refrigerant has a significantly lower Global Warming Potential (GWP), no ozone depletion potential (ODP), and low toxicity. R-454B's GWP is over 75% lower than its predecessor, R-410A, and it exceeds EPA requirements for low-GWP refrigerants (<700 GWP).

NOMENCLATURE

PREMIUM HIGH WALL HEAT PUMP SERIES

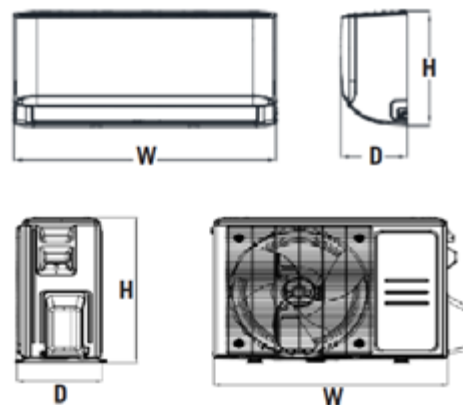


N	D	H	A	S	22	B	A	-	24	-	0
Brand	Configuration	Type (Heat Pump/ or Cool Only)	Sales Channel	Single/Multi	Efficiency	Refrigerant	Revision		Capacity in 000 BTU/h		Indoor/ Outdoor
N = Napoleon	Ductless	Heat Pump	Distribution	Single	22 = 22 SEER2	B = R454B			12 or 18 or 24		I = Indoor O = Outdoor
							A = Without Leak Sensor B = With Leak Sensor/ Shut off valve				

DUCTLESS SPECIFICATIONS

DIMENSIONS

INDOOR DIMENSIONS	NDHAS22BB-12-I	NDHAS22BB-18-I	NDHAS22BB-24-I
Width (mm/in)	802/31.57	1082/42.6	1082/42.6
Depth (mm/in)	200/7.87	234/9.21	234/9.21
Height (mm/in)	295/11.61	337/13.27	337/13.27
Net weight (lb/kg)	18.96/8.6	30.42/13.8	30.86/14
Gross weight (lb/kg)	24.25/11	39.68/18	40.56/18.4
OUTDOOR DIMENSIONS	NDHAS22BA-12-O	NDHAS22BA-18-O	NDHAS22BA-24-O
Width (mm/in)	765/30.12	890/35.04	946/37.24
Depth (mm/in)	303/11.93	342/13.46	410/16.14
Height (mm/in)	555/21.85	673/26.5	810/31.89
Net weight (lb/kg)	62.17/28.2	92.59/42	122.13/55.4
Gross weight (lb/kg)	67.68/30.7	100.31/45.5	132.28/60



SYSTEM DATA

	Ductless Heat Pump - Shipped in 2 PCS. NDHAS22SBB-12-I, NDHAS22BA-12-O	Ductless Heat Pump - Shipped in 2 PCS. NDHAS22BB-18-I, NDHAS22BA-18-O	Ductless Heat Pump - Shipped in 2 PCS. NDHAS22BB-24-I, NDHAS22BA-24-O
AHRI NUMBER	215213703	215213704	215213705
INDOOR SKU	NDHAS22BB-12-I	NDHAS22BB-18-I	NDHAS22BB-24-I
OUTDOOR SKU	NDHAS22BA-12-O	NDHAS22BA-18-O	NDHAS22BA-24-O
Cooling Capacity Rated BTU (Range)	12000 (2600~13700)	18000 (3600~20000)	24000 (9700~27000)
Heating Capacity Rated BTU (Range)	12000 (4100~14400)	18000 (7600~22000)	25000 (11300~32700)
SEER2	23.1	24	23.5
HSPF2 (REGION IV)	11.5	11.1	10
EER2	12.2	13.5	13
HSPF2 (REGION V)	8.5	8.3	7.7
Dehumidify (L/h)	1.3	1.40	2.7
Voltage	208/230V,1Ph,60Hz	208/230V,1Ph,60Hz	208/230V,1Ph,60Hz
Indoor noise level (Hi/Mi/Lo) dBA	43/37/20	45/40/26	48.5/43.5/27.5
Outdoor noise level dBA	54	59	60
Compressor & Parts Limited Warranty	10 years	10 years	10 years
Max. refrigerant pipe length (m)	25	30	50
Max. refrigerant pipe length (ft)	82	98.4	164
Max. difference in elevation (m)	15	20	25
Max. difference in elevation (ft)	49.2	65.6	82
Refrigeration GAS PIPE (mm/inch)	9.52mm(3/8in)	12.7mm(1/2in)	15.9mm(5/8in)
Refrigeration LIQUID PIPE (mm/in)	6.35mm(1/4in)	6.35mm(1/4in)	9.52mm(3/8in)
Heating at 17F (-8.33°C) BTU	9900	14500	21300
Heating at 5F (-15°C) BTU	8600	13000	17800
Heating at 5F (-15°C) COP	2.35	2.35	2.15
Connection Wiring	14AWG*4 Stranded, unshielded	14AWG*4 Stranded, unshielded	14AWG*4 Stranded, unshielded
Refrigerant Gas (oz/kg)	R454B 32.45/0.92	R454B 47.97/1.36	R454B 70.55/2
Additional charge per metre (oz/ft)(g/m)	0.16/15	0.16/15	0.32/30
Compressor	Rotary	Rotary	Rotary
MAX FUSE (A)	15	20	25
Minimum Circuit Capacity	12	18	24
Rated Cooling Current (A)	4.5	6	8
Rated Heating Current (A)	4.3	6.2	10.4
Indoor air flow (Hi/Mi/Lo) CFM	294.3/194.2/153	500.3/441.4/370.8	588.6/459.1/382.6
Outdoor air flow CFM	1235.3	1764.7	2235.3
Indoor(cooling/ heating)	-25°C (-13°F) to 50°C (122°F) / -25°C (-13°F) to 24°C (75°F)	-25°C (-13°F) to 50°C (122°F) / -25°C (-13°F) to 24°C (75°F)	-25°C (-13°F) to 50°C (122°F) / -25°C (-13°F) to 24°C (75°F)
Outdoor(cooling/heating)	16°C (60.8°F) to 32°C (89.6°F) / 0°C (32°F) to 30°C (86°F)	16°C (60.8°F) to 32°C (89.6°F) / 0°C (32°F) to 30°C (86°F)	16°C (60.8°F) to 32°C (89.6°F) / 0°C (32°F) to 30°C (86°F)

PERFORMANCE DATA – COOLING

DB – Dry Bulb			WB – Wet Bulb			TC: Total Cooling Capacity (BTU/hr)					S/T: Sensible Cooling Capacity Ratio					PI: Power Input(kW)					Input – Total Power (kW)				
COOLING			INDOOR CONDITIONS																						
OUT-DOOR DB(°F)	ID WB(°F)	60.8°F(16.0°C)					64.4°F(18.0°C)					67°F(19.4°C)					71.6°F(22.0°C)								
	ID DB(°F)	73.4°F (23.0°C)	77.0°F (25.0°C)	80.0°F (26.7°C)	80.6°F (27.0°C)	84.2°F (29.0°C)	73.4°F (23.0°C)	77.0°F (25.0°C)	80.0°F (26.7°C)	80.6°F (27.0°C)	84.2°F (29.0°C)	73.4°F (23.0°C)	77.0°F (25.0°C)	80.0°F (26.7°C)	80.6°F (27.0°C)	84.2°F (29.0°C)	73.4°F (23.0°C)	77.0°F (25.0°C)	80.0°F (26.7°C)	80.6°F (27.0°C)	84.2°F (29.0°C)				
NDHAS22BB-12-1/NDHAS22BA-12-0	5°F (-15.0°C)	TC	11251	11266	11278	11279	11294	11929	11943	11955	11957	11971	12642	12658	12672	12675	12689	13403	13418	13432	13435	13451			
		S/T	0.49	0.57	0.65	0.65	0.74	0.51	0.60	0.69	0.69	0.78	0.55	0.64	0.73	0.73	0.83	0.58	0.68	0.77	0.77	0.88			
		PI	0.78	0.78	0.78	0.78	0.78	0.82	0.82	0.82	0.82	0.82	0.87	0.87	0.87	0.87	0.87	0.92	0.92	0.93	0.93	0.93			
	17°F (-8.3°C)	TC	13338	13356	13370	13371	13389	14142	14159	14173	14175	14192	14987	15006	15023	15026	15043	15890	15907	15924	15927	15947			
		S/T	0.49	0.57	0.65	0.65	0.74	0.52	0.61	0.69	0.69	0.79	0.55	0.64	0.73	0.73	0.83	0.58	0.68	0.78	0.78	0.88			
		PI	0.81	0.81	0.81	0.81	0.81	0.86	0.86	0.86	0.86	0.86	0.91	0.91	0.91	0.91	0.91	0.96	0.96	0.96	0.96	0.96			
	35°F (1.7°C)	TC	11076	11091	11103	11103	11118	11744	11758	11769	11771	11785	12445	12461	12475	12478	12492	13195	13209	13224	13226	13242			
		S/T	0.49	0.58	0.66	0.66	0.75	0.52	0.61	0.70	0.70	0.79	0.55	0.65	0.74	0.74	0.84	0.59	0.69	0.78	0.78	0.89			
		PI	0.77	0.77	0.78	0.78	0.78	0.82	0.82	0.82	0.82	0.82	0.87	0.87	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.93			
	47°F (8.3°C)	TC	11334	11349	11362	11362	11378	12017	12032	12043	12046	12060	12735	12752	12766	12768	12783	13503	13517	13532	13534	13551			
		S/T	0.50	0.58	0.66	0.66	0.75	0.53	0.62	0.70	0.70	0.80	0.56	0.65	0.74	0.74	0.85	0.59	0.69	0.79	0.79	0.90			
		PI	0.43	0.43	0.43	0.43	0.43	0.45	0.45	0.45	0.45	0.45	0.48	0.48	0.48	0.48	0.48	0.51	0.51	0.51	0.51	0.51			
	82°F (27.8°C)	TC	11405	11420	11432	11433	11448	12092	12106	12118	12121	12135	12814	12831	12845	12848	12862	13587	13601	13616	13618	13635			
		S/T	0.53	0.62	0.70	0.70	0.80	0.56	0.66	0.75	0.75	0.85	0.59	0.70	0.79	0.79	0.90	0.63	0.74	0.84	0.84	0.95			
		PI	0.59	0.60	0.60	0.60	0.60	0.63	0.63	0.63	0.63	0.63	0.67	0.67	0.67	0.67	0.67	0.71	0.71	0.71	0.71	0.71			
	95°F (35.0°C)	TC	12172	12188	12201	12202	12218	12905	12920	12933	12936	12951	13676	13694	13709	13712	13727	14500	14516	14532	14534	14552			
		S/T	0.53	0.63	0.71	0.71	0.81	0.57	0.66	0.75	0.75	0.86	0.60	0.70	0.80	0.80	0.91	0.64	0.75	0.85	0.85	0.97			
		PI	1.07	1.08	1.08	1.08	1.08	1.14	1.14	1.14	1.14	1.14	1.21	1.21	1.21	1.21	1.21	1.28	1.28	1.28	1.28	1.28			
	110°F (43.0°C)	TC	9938	9951	9962	9963	9976	10537	10549	10560	10562	10575	11167	11181	11193	11196	11208	11839	11852	11865	11867	11882			
		S/T	0.57	0.67	0.76	0.76	0.86	0.60	0.71	0.80	0.80	0.91	0.64	0.75	0.85	0.85	0.97	0.68	0.79	0.90	0.90	1.00			
		PI	0.99	0.99	0.99	0.99	0.99	1.05	1.05	1.05	1.05	1.05	1.11	1.11	1.11	1.11	1.11	1.18	1.18	1.18	1.18	1.18			
	122°F (50.0°C)	TC	6683	6692	6699	6700	6709	7086	7094	7101	7103	7111	7509	7519	7527	7529	7537	7962	7970	7979	7980	7990			
		S/T	0.59	0.69	0.78	0.78	0.89	0.62	0.73	0.83	0.83	0.95	0.66	0.77	0.88	0.88	1.00	0.70	0.82	0.93	0.93	1.00			
		PI	0.76	0.76	0.76	0.76	0.76	0.80	0.80	0.81	0.81	0.81	0.85	0.85	0.85	0.85	0.86	0.90	0.90	0.91	0.91	0.91			
NNDHAS22BB-18-1/NDHAS22BA-18-0	5°F (-15.0°C)	TC	18333	18358	18378	18379	18404	19438	19461	19481	19484	19508	20600	20626	20649	20653	20676	21841	21865	21888	21892	21919			
		S/T	0.49	0.57	0.65	0.65	0.74	0.51	0.60	0.69	0.69	0.78	0.55	0.64	0.73	0.73	0.83	0.58	0.68	0.77	0.77	0.88			
		PI	0.60	0.60	0.60	0.60	0.60	0.64	0.64	0.64	0.64	0.64	0.68	0.68	0.68	0.68	0.68	0.72	0.72	0.72	0.72	0.72			
	17°F (-8.3°C)	TC	18824	18850	18870	18871	18896	19959	19982	20002	20006	20030	21151	21179	21202	21206	21230	22425	22450	22474	22478	22506			
		S/T	0.49	0.57	0.65	0.65	0.74	0.52	0.61	0.69	0.69	0.79	0.55	0.64	0.73	0.73	0.83	0.58	0.68	0.78	0.78	0.88			
		PI	0.59	0.59	0.59	0.59	0.59	0.62	0.62	0.63	0.63	0.63	0.66	0.66	0.66	0.66	0.66	0.70	0.70	0.70	0.70	0.70			
	35°F (1.7°C)	TC	18037	18061	18080	18081	18106	19124	19146	19165	19169	19192	20266	20292	20315	20319	20341	21487	21511	21534	21537	21564			
		S/T	0.49	0.58	0.66	0.66	0.75	0.52	0.61	0.70	0.70	0.79	0.55	0.65	0.74	0.74	0.84	0.59	0.69	0.78	0.78	0.89			
		PI	0.69	0.69	0.70	0.70	0.70	0.74	0.74	0.74	0.74	0.74	0.78	0.78	0.78	0.78	0.78	0.83	0.83	0.83	0.83	0.83			
	47°F (8.3°C)	TC	16373	16395	16412	16413	16435	17359	17380	17397	17400	17421	18396	18420	18441	18444	18465	19505	19526	19547	19550	19575			
		S/T	0.50	0.58	0.66	0.66	0.75	0.53	0.62	0.70	0.70	0.80	0.56	0.65	0.74	0.74	0.85	0.59	0.69	0.79	0.79	0.90			
		PI	0.74	0.74	0.74	0.74	0.74	0.78	0.78	0.78	0.78	0.79	0.83	0.83	0.83	0.83	0.83	0.88	0.88	0.88	0.88	0.88			
	82°F (27.8°C)	TC	18389	18414	18433	18434	18459	19497	19520	19539	19543	19566	20662	20689	20712	20716	20739	21907	21931	21955	21958	21985			
		S/T	0.53	0.62	0.70	0.70	0.80	0.56	0.66	0.75	0.75	0.85	0.59	0.70	0.79	0.79	0.90	0.63	0.74	0.84	0.84	0.95			
		PI	0.97	0.97	0.97	0.97	0.97	1.03	1.03	1.03	1.03	1.03	1.09	1.09	1.09	1.09	1.09	1.15	1.15	1.16	1.16	1.16			
	95°F (35.0°C)	TC	18083	18107	18126	18127	18152	19172	19195	19214	19218	19241	20318	20344	20367	20371	20393	21542	21565	21589	21592	21619			
		S/T	0.53	0.63	0.71	0.71	0.81	0.57	0.66	0.75	0.75	0.86	0.60	0.70	0.80	0.80	0.91	0.64	0.75	0.85	0.85	0.97			
		PI	1.50	1.51	1.51	1.51	1.51	1.59	1.60	1.60	1.60	1.60	1.69	1.69	1.69	1.69	1.70	1.79	1.79	1.80	1.80	1.80			
	110°F (43.0°C)	TC	12884	12901	12915	12916	12933	13660	13676	13690	13693	13709	14476	14495	14511	14514	14530	15349	15365	15382	15384	15403			
		S/T	0.57	0.67	0.76	0.76	0.86	0.60	0.71	0.80	0.80	0.91	0.64	0.75	0.85	0.85	0.97	0.68	0.79	0.90	0.90	1.00			
		PI	1.25	1.25	1.26	1.26	1.26	1.33	1.33	1.33	1.33	1.33	1.41	1.41	1.41	1.41	1.41	1.49	1.49	1.50	1.50	1.50			
	122°F (50.0°C)	TC	8194	8205	8214	8215	8226	8688	8698	8707	8709	8719	9207	9219	9229	9231	9241	9762	9773	9783	9785	9797			
		S/T	0.59	0.69	0.78	0.78	0.89	0.62	0.73	0.83	0.83	0.95	0.66	0.77	0.88	0.88	1.00	0.70	0.82	0.93	0.93	1.00			
		PI	0.97	0.97	0.97	0.97	0.97	1.03	1.03	1.03	1.03	1.03	1.09	1.09	1.09	1.09	1.09	1.15	1.16	1.16	1.16	1.16			
NDHAS22BB-24-1/NDHAS22BA-24-0	5°F (-15.0°C)	TC	22562	22593	22617	22618	22649	23922	23950	23974	23979	24007	25351	25384	25413	25417	25446	26879	26908	26937	26942	26975			
		S/T	0.49	0.57	0.65	0.65	0.74	0.51	0.60	0.69	0.69	0.78	0.55	0.64	0.73	0.73	0.83	0.58	0.68	0.77	0.77	0.88			
		PI	0.77	0.77	0.77	0.77	0.77	0.81	0.81	0.81	0.81	0.82	0.86	0.86	0.86	0.86	0.86	0.9							

PERFORMANCE DATA – HEATING

DB – Dry Bulb

WB – Wet Bulb

TC:Total Cooling Capacity (BTU/hr)

S/T:Sensible Cooling Capacity Ratio

PI:Power Input(kW)

Input – Total Power (kW)

HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE

	OUTDOOR DB(°F)	TC: Total Heating Capacity(BTU/hr)					PI: Power Input(kW)				
		Indoor Conditions(DB °F)					Indoor Conditions(DB °F)				
		60.8°F(16.0°C)	68°F(20.0°C)	70°F(21.1°C)	71.6°F(22.0°C)	75.2°F(24.0°C)	60.8°F(16.0°C)	68°F(20.0°C)	70°F(21.1°C)	71.6°F(22.0°C)	75.2°F(24.0°C)
NDHAS22BB-12-1/NDHAS22BA-12-0	-22°F(-30.0°C)	6012	5891	5862	5838	5786	0.98	0.99	0.99	0.99	1.00
	-13°F(-25.0°C)	7506	7356	7319	7289	7224	1.05	1.06	1.07	1.07	1.07
	-4°F(-20.0°C)	8829	8653	8609	8575	8498	1.11	1.12	1.12	1.12	1.12
	5°F(-15.0°C)	10475	10265	10214	10173	10082	1.15	1.16	1.16	1.16	1.17
	17°F(-8.3°C)	13120	12858	12794	12742	12628	1.34	1.35	1.36	1.36	1.36
	35°F(1.7°C)	14786	14490	14417	14360	14230	1.27	1.28	1.29	1.29	1.30
	47°F(8.3°C)	15062	14761	14687	14628	14496	1.00	1.01	1.01	1.01	1.01
	64.4°F(18.0°C)	10567	10355	10304	10262	10170	0.00	0.00	0.00	0.00	0.00
NDHAS22BB-18-1/NDHAS22BA-18-0	-22°F(-30.0°C)	9259	9074	9028	8992	8911	1.44	1.45	1.46	1.46	1.46
	-13°F(-25.0°C)	11243	11018	10963	10919	10821	1.50	1.51	1.52	1.52	1.52
	-4°F(-20.0°C)	13871	13593	13525	13471	13350	1.56	1.58	1.58	1.58	1.59
	5°F(-15.0°C)	15339	15032	14957	14897	14763	1.73	1.74	1.75	1.75	1.76
	17°F(-8.3°C)	18308	17942	17853	17781	17621	1.95	1.96	1.96	1.97	1.98
	35°F(1.7°C)	22767	22312	22200	22112	21913	1.73	1.74	1.75	1.75	1.76
	47°F(8.3°C)	22005	21565	21457	21371	21179	1.07	1.08	1.08	1.09	1.09
	64.4°F(18.0°C)	11894	11656	11597	11551	11447	2.12	2.13	2.14	2.14	2.15
NDHAS22BB-24-1/NDHAS22BA-24-0	-22°F(-30.0°C)	14182	13898	13829	13774	13650	2.21	2.23	2.23	2.24	2.25
	-13°F(-25.0°C)	18485	18115	18025	17953	17791	2.39	2.41	2.42	2.42	2.43
	-4°F(-20.0°C)	21835	21398	21291	21206	21015	2.56	2.58	2.58	2.59	2.60
	5°F(-15.0°C)	27535	26984	26849	26742	26501	3.11	3.13	3.14	3.15	3.16
	17°F(-8.3°C)	33559	32888	32724	32593	32299	3.29	3.32	3.32	3.33	3.34
	35°F(1.7°C)	31367	30740	30586	30464	30190	2.41	2.43	2.44	2.44	2.45
	47°F(8.3°C)	20774	20359	20257	20176	19994	1.85	1.87	1.87	1.88	1.88
	64.4°F(18.0°C)	18237	17872	17783	17711	17552	1.09	1.10	1.10	1.10	1.11