TECHNICAL SPECIFICATIONS

PREMIUM 4 WAY CASSETTE SERIES

10 YEAR LIMITED WARRANTY PARTS AND COMPRESSOR

R454B

ENERGY STAR



FEATURES

- **High Efficiency Rating**
  Delivers exceptional energy savings and performance, reducing utility costs.
- **Available Capacities**
  Choose from 12,000 BTU/h and 18,000 BTU/h, to meet a variety of heating and cooling needs.
- **Wide Operating Range**
  Performs efficiently in extreme temperatures, from -25ºC (-13ºF) to 50ºC (122ºF).
- **Multi-Zone Compatibility**
  Easily integrates with multi-zone outdoor units to provide customized comfort across multiple rooms.
- **Built-in Drain Pump**
  Lift the condensing water up to 1m (3.28ft). Install drainpipe on either left or right side.
- **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.
- **Wireless remote and Wired LCD controller (120L)**
  Included for temperature setting,schedules and timers. Choose mode of Auto, Cool, Dry, Heat, Fan. Control fan speed and dehumidification.
- **Manage Airflow Directions**
  Individual airflow control, all the way down to 1-way output, for customized 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

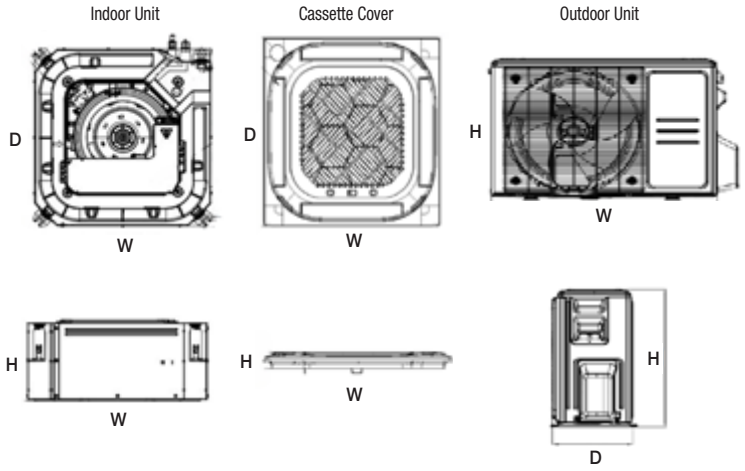
PREMIUM 4 WAY CASSETTE SERIES



			H						
N	D	C	A	S	4C	B	B	-	12
Brand	Product Category	Product Type	Sales Channel	Single/Multi	Indoor Unit OR Efficiency	Refrigerant	Revision		Capacity in 000 BTU/h
N = Napoleon	*Ductless Mini-Split*	*H = Heat Pump* *C = Cool Only*	*Distribution*	*Single*	*C = Console* *4C = Four Way Cassette* *HD = High Static Duct*	*B= R454B*	*A = Without Leak Sensor* *B = With Leak Sensor*		*12 or 18*

DUCTLESS SPECIFICATIONS

DIMENSIONS			
INDOOR UNIT	NDHAS4CBB-12	NDHAS4CBB-18	CASETTE COVER
Width (mm/in)	570/22.44	570/22.44	620/24.38
Depth (mm/in)	570/22.44	570/22.44	620/24.38
Height (mm/in)	245/9.65	245/9.65	50/2
Net weight (lb/kg)	35.27/16	35.27/16	5.73/2.6
Gross weight (lb/kg)	41.89/19	41.89/19	9.26/4.2
OUTDOOR UNIT	NDHAS22BA-12-0	NDHAS22BA-18-0	
Width (mm/in)	765/30.12	890/35.04	
Depth (mm/in)	303/11.93	342/13.46	
Height (mm/in)	555/21.85	673/26.5	
Net weight (lb/kg)	62.17/28.2	92.59/42	
Gross weight (lb/kg)	67.68/30.7	100.31/45.5	



SYSTEM DATA		
INDOOR SKU	NDHAS4CBB-12	NDHAS4CBB-18
OUTDOOR SKU	NDHAS22BA-12-0	NDHAS22BA-18-0
AHRI NUMBER	217605555	217605554
Cooling Capacity Rated BTU (Range)	3700~14000	5300~17800
Heating Capacity Rated BTU (Range)	4700~15000	7100~21500
SEER2	21.1	20.7
HSPF2 (REGION IV)	10.4	11.4
EER2	12.5	12.5
HSPF2 (REGION V)	7.9	8.5
Dehumidify (L/h)	1.485	2.7675
Voltage	208/230V,1Ph,60Hz	208/230V,1Ph,60Hz
Indoor noise level (Hi/Mi/Lo) dBA	42.0/38.5/26.5	44.0/41.0/28.5
Outdoor noise level dBA	54.5	57.5
Compressor & Parts Limited Warranty	10 years	10 years
Max. refrigerant pipe length (m)	25	30
Max. refrigerant pipe length (ft)	82.00	98.40
Max. difference in elevation (m)	15	20
Max. difference in elevation (ft)	49.20	65.60
Refrigeration GAS PIPE (mm/inch)	9.52mm(3/8in)	12.7mm(1/2in)
Refrigeration LIQUID PIPE (mm/in)	6.35mm(1/4in)	6.35mm(1/4in)
Heating at 17ºF (-8.33ºC) BTU	9300	14800
Heating at 5ºF (-15ºC) BTU	8400	12800
Heating at 5ºF (-15ºC) COP	2.39	2.19
Connection Wiring	14AWG*4 Stranded, unshielded	14AWG*4 Stranded, unshielded
Refridgerant Gas (oz/kg)	R454B 32.45/0.92	R454B 47.97/1.36
Additional charge per metre (oz/ft)/(g/m)	0.16/15	0.16/15
Compressor	Rotary	Rotary
MAX FUSE (A)	15	20
Minimum Circuit Capacity	12.00	18.00
Rated Cooling Current (A)	4.3	6.1
Rated Heating Current (A)	4.4	11.0
Indoor air flow (Hi/Mi/Lo) CFM	364.9 / 306.1 / 194.2	388.5 / 317.8 / 194.2
Outdoor air flow CFM	1236.1	1765.8
Indoor Temperature Cooling Range ºC/ºF	16~32/60~90	16~32/60~90
Indoor Temperature Heating Range ºC/ºF	0~30/32~86	0~30/32~86
Outdoor Temperature Cooling Range ºC/ºF	-25~50/-13~122	-25~50/-13~122
Outdoor Temperature Heating Range ºC/ºF	-25~24/-13~75	-25~24/-13~75

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																			
OUTDOOR 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)
NDHAS4CBB-12/NDHAS22BA-12-0																					
-13°F (-25.0°C)	TC	10311	10325	10336	10336	10350	10932	10945	10956	10958	10971	11585	11600	11613	11615	11628	12283	12297	12310	12312	12327
	S/T	0.48	0.56	0.64	0.64	0.73	0.51	0.60	0.68	0.68	0.77	0.54	0.63	0.72	0.72	0.82	0.57	0.67	0.76	0.76	0.87
	PI	0.55	0.55	0.55	0.55	0.55	0.59	0.59	0.59	0.59	0.59	0.62	0.62	0.62	0.62	0.62	0.66	0.66	0.66	0.66	0.66
5°F (-15.0°C)	TC	11897	11913	11926	11926	11943	12614	12629	12642	12644	12659	13368	13385	13400	13402	13417	14173	14189	14204	14206	14224
	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	0.64	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	0.76	0.76	0.76	0.76	0.76
17°F (-8.3°C)	TC	11557	11572	11585	11585	11601	12253	12268	12280	12282	12297	12985	13002	13017	13019	13034	13768	13783	13798	13800	13817
	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	0.62	0.62	0.62	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	11954	11970	11983	11983	11999	12674	12689	12702	12704	12719	13431	13449	13464	13466	13481	14241	14256	14272	14274	14292
	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	0.64	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	0.76	0.76	0.76	0.76	0.76
47°F (8.3°C)	TC	11287	11302	11315	11315	11330	11967	11982	11994	11996	12010	12682	12699	12713	12715	12730	13447	13461	13476	13478	13495
	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	0.40	0.40	0.40	0.40	0.40	0.42	0.42	0.42	0.42	0.42	0.45	0.45	0.45	0.45	0.45	0.47	0.47	0.47	0.47	0.48
82°F (27.8°C)	TC	10664	10679	10690	10691	10705	11307	11321	11332	11334	11347	11983	11998	12012	12014	12027	12705	12719	12732	12734	12750
	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	0.58	0.58	0.58	0.58	0.58	0.62	0.62	0.62	0.62	0.62	0.65	0.65	0.66	0.66	0.66	0.69	0.69	0.69	0.69	0.70
95°F (35.0°C)	TC	12519	12535	12549	12550	12566	13273	13289	13302	13305	13320	14066	14084	14100	14103	14118	14914	14930	14946	14948	14967
	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	1.03	1.03	1.03	1.03	1.03	1.09	1.09	1.09	1.09	1.10	1.16	1.16	1.16	1.16	1.16	1.23	1.23	1.23	1.23	1.23
110°F (43.0°C)	TC	10388	10402	10413	10413	10427	11014	11027	11038	11040	11053	11672	11687	11700	11702	11715	12375	12389	12402	12404	12419
	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	1.01	1.01	1.01	1.01	1.01	1.07	1.07	1.07	1.07	1.07	1.13	1.14	1.14	1.14	1.14	1.20	1.20	1.20	1.20	1.21
122°F (50.0°C)	TC	5980	5988	5994	5995	6003	6340	6348	6354	6355	6363	6719	6728	6735	6737	6744	7124	7132	7139	7141	7149
	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	0.78	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	0.93	0.93	0.93	0.93	0.94
NDHAS4CBB-18/NDHAS22BA-18-0																					
-13°F (-25.0°C)	TC	15537	15558	15575	15576	15597	16474	16493	16509	16513	16532	17458	17481	17500	17503	17523	18510	18530	18550	18553	18576
	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	0.63	0.63	0.63	0.63	0.64	0.67	0.67	0.67	0.67	0.67	0.71	0.71	0.71	0.71	0.71	0.75	0.76	0.76	0.76	0.76
5°F (-15.0°C)	TC	15801	15822	15839	15840	15861	16753	16773	16790	16793	16813	17754	17777	17797	17800	17820	18824	18844	18865	18868	18891
	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	0.62	0.62	0.62	0.62	0.62	0.65	0.65	0.66	0.66	0.66	0.69	0.69	0.69	0.69	0.70	0.73	0.74	0.74	0.74	0.74
17°F (-8.3°C)	TC	16231	16253	16270	16271	16293	17209	17230	17247	17250	17271	18237	18261	18281	18285	18305	19336	19357	19378	19381	19406
	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	0.61	0.61	0.61	0.61	0.62	0.65	0.65	0.65	0.65	0.65	0.69	0.69	0.69	0.69	0.69	0.73	0.73	0.73	0.73	0.73
35°F (1.7°C)	TC	15847	15868	15885	15886	15907	16802	16822	16838	16842	16862	17806	17829	17849	17852	17872	18878	18899	18919	18922	18946
	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	0.68	0.68	0.68	0.68	0.68	0.72	0.72	0.72	0.72	0.72	0.76	0.76	0.76	0.76	0.76	0.81	0.81	0.81	0.81	0.81
47°F (8.3°C)	TC	17438	17461	17480	17481	17504	18488	18510	18529	18532	18554	19593	19618	19640	19644	19666	20773	20796	20819	20822	20848
	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	0.96	0.96	0.96	0.96	0.96	1.02	1.02	1.02	1.02	1.02	1.08	1.08	1.08	1.08	1.08	1.14	1.14	1.15	1.15	1.15
82°F (27.8°C)	TC	15892	15914	15931	15932	15953	16850	16870	16887	16890	16910	17857	17880	17900	17903	17923	18933	18953	18974	18977	19001
	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	1.44	1.44	1.44	1.44	1.44	1.52	1.53	1.53	1.53	1.53	1.62	1.62	1.62	1.62	1.62	1.71	1.72	1.72	1.72	1.72
95°F (35.0°C)	TC	11897	11913	11926	11926	11943	12614	12629	12642	12644	12659	13368	13385	13400	13402	13417	14173	14189	14204	14206	14224
	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	1.25	1.25	1.25	1.32	1.33	1.33	1.33	1.33	1.40	1.40	1.41	1.41	1.41	1.49	1.49	1.49	1.49	1.49
110°F (43.0°C)	TC	4180	4186	4191	4191	4196	4432	4438	4442	4443	4448	4697	4703	4709	4709	4715	4980	4986	4991	4992	4998
	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	0.72	0.73	0.73	0.73	0.73	0.77	0.77	0.77	0.77	0.77	0.81	0.82	0.82	0.82	0.82	0.86	0.86	0.87	0.87	0.87
122°F (50.0°C)	TC	5822	5830	5836	5837	5845	6173	6181	6187	6188	6195	6542	6551	6558	6559	6566	6936	6944	6951	6952	6961
	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	0.60	0.60	0.60	0.60	0.60	0.63	0.64	0.64	0.64	0.64	0.67	0.67	0.67	0.67	0.68	0.71	0.71	0.71	0.71	0.72

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)
NDHAS4CBB-12/NDHAS22BA-12-0	-22°F (-30.0°C)	5435	5327	5300	5279	5231	0.92	0.93	0.93	0.93	0.94
	-13°F (-25.0°C)	6871	6734	6700	6673	6613	0.98	0.99	0.99	0.99	1.00
	-4°F (-20.0°C)	8615	8442	8400	8366	8291	1.02	1.02	1.03	1.03	1.03
	5°F (-15.0°C)	9537	9347	9300	9263	9179	1.06	1.07	1.07	1.08	1.08
	17°F (-8.3°C)	11036	10815	10761	10718	10622	1.08	1.09	1.09	1.09	1.09
	35°F (1.7°C)	15383	15075	15000	14940	14806	1.19	1.20	1.20	1.20	1.21
	47°F (8.3°C)	8512	8342	8300	8267	8192	1.47	1.48	1.48	1.49	1.49
	64.4°F (18.0°C)	10871	10653	10600	10558	10463	1.55	1.57	1.57	1.57	1.58
NDHAS4CBB-18/NDHAS22BA-18-0	-22°F (-30.0°C)	13127	12864	12800	12749	12634	1.69	1.70	1.71	1.71	1.72
	-13°F (-25.0°C)	15178	14874	14800	14741	14608	1.82	1.83	1.84	1.84	1.85
	-4°F (-20.0°C)	18307	17941	17851	17780	17620	1.92	1.93	1.94	1.94	1.95
	5°F (-15.0°C)	22152	21709	21600	21514	21320	1.91	1.93	1.93	1.93	1.94
	17°F (-8.3°C)	16716	16382	16300	16235	16089	1.32	1.33	1.33	1.33	1.34
	35°F (1.7°C)	10255	10050	10000	9960	9870	1.93	1.95	1.95	1.96	1.97
	47°F (8.3°C)	14358	14070	14000	13944	13819	2.26	2.27	2.28	2.28	2.29
	64.4°F (18.0°C)	17434	17085	17000	16932	16780	2.60	2.62	2.62	2.63	2.64