

TECHNICAL SPECIFICATIONS



NDCAS21 - 21 SEER DUCTLESS COOLING ONLY SERIES



FEATURES AND BENEFITS

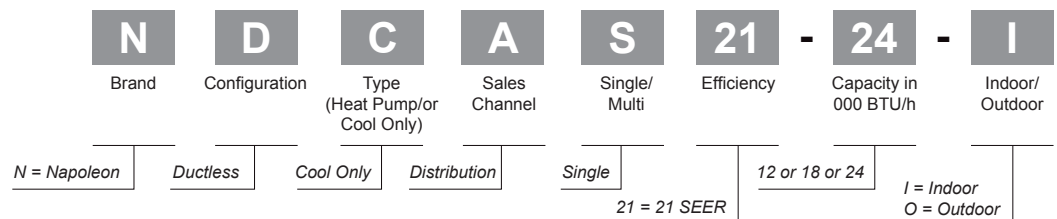
- Efficient and contemporary looking indoor units
- Available capacities: 12,000 BTU/h, 18,000 BTU/h, 24,000 BTU/h
- Works even at 50°C (122°F)
- Wi-Fi Capable (NDWC-KT to be purchased separately)
- Includes remote control for conveniently adjusting the settings for Sleep Mode, LED light, and room temperature, as well as turning the unit on/off
- Higher efficiency rating, 21 SEER

ENVIRONMENTALLY RESPONSIBLE

NDCAS21 Cooling Series are ranked among the most energy-efficient and cost-effective ways of cooling a home. Napoleon's ductless heat pumps use a high efficiency direct current compressor motor for a smooth, quiet operation that reduces energy consumption.

NOMENCLATURE

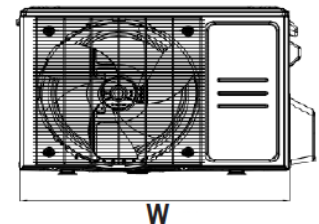
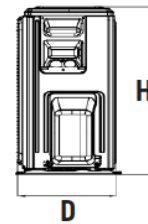
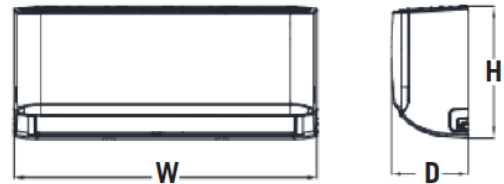
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DUCTLESS SPECIFICATIONS

DIMENSIONS

INDOOR UNIT INFORMATION	NDCAS21-12-I	NDCAS21-18-I	NDCAS21-24-I
Width (mm/in)	802/31.57	971/38.23	1082/42.6
Depth (mm/in)	200/7.87	228/8.98	234/9.21
Height (mm/in)	295/11.61	321/12.64	337/13.27
Net weight (lb/kg)	19.18/8.7	24.69/11.2	29.98/13.6
Gross weight (lb/kg)	24.47/11.1	31.75/14.4	37.70/17.1
OUTDOOR UNIT INFORMATION	NDCAS21-12-O	NDCAS21-18-O	NDCAS21-24-O
Width (mm/in)	720/28.35	765/30.12	805/31.69
Depth (mm/in)	270/10.63	303/11.93	330/12.99
Height (mm/in)	495/19.49	555/21.85	915/21.81
Net weight (lb/kg)	50.71/23	61.51/27.9	67.24/30.5
Gross weight (lb/kg)	54.45/24.7	66.8/30.3	72.97/33.1



SYSTEM DATA

	NDCAS21-12	NDCAS21-18	NDCAS21-24
	NDCAS21-12 Ductless Air Conditioner - Shipped in 2 PCS. NDCAS21-12-I, NDCAS21-12-O	NDCAS21-18 Ductless Air Conditioner - Shipped in 2 PCS. NDCAS21-18-I, NDCAS21-18-O	NDCAS21-24 Ductless Air Conditioner - Shipped in 2 PCS. NDCAS21-24-I, NDCAS21-24-O
AHRI Number	207683225	207683226	207683227
Indoor SKU	NDCAS21-12-I	NDCAS21-18-I	NDCAS21-24-I
Outdoor SKU	NDCAS21-12-O	NDCAS21-18-O	NDCAS21-24-O
Cooling Capacity Rated BTU (Range)	11500 (3300~12500)	17500 (~17000)	22000 (~)
Heating Capacity Rated BTU (Range)	N/A	N/A	N/A
SEER	21	21	20
EER	11.9	11.26	10.2
Gas Pipe (mm/inch)	12.7 (1/2)	12.7 (1/2)	15.9 (5/8)
Liquid Pipe (mm/in)	6.35 (1/4)	6.35 (1/4)	9.52(3/8)
Max. refrigerant pipe length (m)	25	30	30
Max. refrigerant pipe length (ft)	82.02	98.42	98.42
Max. difference in level (m)	10	20	20
Max. difference in level (ft)	32.81	65.62	65.62
Connection Wiring	16#x4	16#x4	16#x4
Refrigerant Gas (oz/kg)	R410A 23.28/0.66	R410A 31.75/0.9	R410A 37.74/1.07
Additional charge per metre (oz/ft)(g/m)	0.16/15	0.16/15	0.3/30
Max Fuse	30	20	20
Minimum Circuit Capacity	18	16	16
Power Supply	115V,1Ph,60Hz	208-230V,1Ph,60Hz	208-230V,1Ph,60Hz
Indoor air flow (Hi/Mi/Lo) CFM	332.94/252.94/211.76	470.59/352.94/305.88	588.24/470.59/400.00
Indoor noise level (Hi/Mi/Lo) dBA	40.5/35.5/33	46/38.5/31.5	47.5/39.5/36
Outdoor air flow CFM	1058.82	1235.29	1352.94
Outdoor noise level dBA	54	55.5	56.5
Outdoor Cooling Range	0°C~50°C / 32°F~122°F	0°C~50°C / 32°F~122°F	0°C~50°C / 32°F~122°F
Indoor Cooling Range	16°C~32°C / 0°F~30°F	16°C~32°C / 0°F~30°F	16°C~32°C / 0°F~30°F



PERFORMANCE DATA - COOLING

DB – Dry Bulb WB – Wet Bulb TC – Total Net Capacity (1000 Btu/hour) SC – Sensible Capacity (1000 Btu/hour) Input – Total Power (kW)

COOLING			OUTDOOR CONDITIONS (DB)															
INDOOR			5°F	17°F	25°F	35°F	47°F	55°F	65°F	75°F	80°F	85°F	95°F	105°F	110°F	115°F	122°F	
DB	WB		-15°C	-8.3°C	-3.9°C	1.7°C	8.3°C	12.8°C	18.3°C	24°C	26.7°C	29.4°C	35°C	40.5°C	43.3°C	46°C	50°C	
NDCAS21-12-1 / NDCAS21-12-0	65°F (18.3°C)	54°F (12.2°C)	TC	11.59	11.38	11.3	11.53	10.78	10.61	10.95	10.51	10.71	10.78	10.65	9.94	9.75	8.85	7.97
			SC	8.06	8.06	8.17	8.21	8.03	7.96	8.49	8.23	8.37	8.51	8.68	8.24	8.87	8.36	7.94
			Input	0.7	0.7	0.75	0.88	0.82	0.84	0.87	0.87	0.92	1.04	1.13	1.1	1.15	1.12	1.15
	70°F (21.1°C)	63°F (17.2°C)	TC	12.12	12	11.94	12.21	11.3	11.24	11.41	11.18	11.23	11.29	11.29	10.53	10.19	9.33	8.4
			SC	8.38	8.46	8.59	8.66	8.37	8.39	8.8	8.7	8.74	8.87	9.14	8.68	9.23	8.77	8.34
			Input	0.7	0.69	0.75	0.88	0.82	0.84	0.87	0.87	0.91	1.03	1.15	1.12	1.13	1.12	1.12
	75°F (23.9°C)	63°F (17.2°C)	TC	12.71	12.64	12.58	12.72	11.81	11.82	11.89	11.89	11.93	11.87	11.78	11.1	10.66	9.87	8.92
			SC	8.73	8.87	9	8.96	8.7	8.76	9.12	9.2	9.23	9.27	9.49	9.1	9.6	9.23	8.82
			Input	0.69	0.7	0.76	0.87	0.82	0.85	0.86	0.89	0.9	1.01	1.15	1.13	1.12	1.14	1.14
	80°F (26.7°C)	67°F (19.4°C)	TC	13.41	13.28	13.28	13.28	12.54	12.52	12.51	12.49	12.47	12.44	12.41	11.77	11.17	10.38	9.33
			SC	9.16	9.26	9.46	9.3	9.19	9.24	9.54	9.61	9.61	9.67	9.96	9.6	10.01	9.65	9.19
			Input	0.68	0.69	0.77	0.86	0.83	0.84	0.86	0.89	0.91	1.09	1.14	1.13	1.12	1.14	1.14
NDCAS21-18-1 / NDCAS21-18-0	65°F (18.3°C)	54°F (12.2°C)	TC	18.45	17.91	18.43	18.26	17.54	17.01	17.28	17.17	17.26	17.05	17.3	16.12	15.39	14.08	12.78
			SC	12.65	12.78	13.36	13.53	12.89	13.02	13.3	13.21	13.59	13.82	13.72	13.86	13.67	13.23	12.72
			Input	1.06	1.13	1.29	1.36	1.31	1.27	1.28	1.32	1.31	1.55	1.83	1.78	1.79	1.78	1.81
	70°F (21.1°C)	59°F (15°C)	TC	19.36	18.94	19.22	19.3	18.33	18.02	18.06	18.24	17.99	18.12	18.04	17.13	16.22	14.86	13.47
			SC	13.21	13.44	13.86	14.23	13.4	13.7	13.83	13.96	14.09	14.62	14.23	14.64	14.32	13.9	13.35
			Input	1.06	1.14	1.27	1.35	1.29	1.28	1.27	1.32	1.29	1.55	1.82	1.78	1.77	1.77	1.8
	75°F (23.9°C)	63°F (17.2°C)	TC	20.42	20.08	20.19	20.14	19.3	19.09	18.95	19.01	18.92	18.9	19.05	18.03	17	15.79	14.31
			SC	13.85	14.18	14.48	14.78	14.03	14.43	14.43	14.47	14.74	15.17	14.94	15.31	14.93	14.69	14.13
			Input	1.07	1.15	1.26	1.34	1.28	1.28	1.28	1.3	1.29	1.52	1.81	1.8	1.77	1.8	1.8
	80°F (26.7°C)	67°F (19.4°C)	TC	21.54	21.34	21.34	21.34	20.14	20.12	20.09	20.07	20.04	20	19.94	19.02	17.95	16.58	14.99
			SC	14.52	14.98	15.24	15.58	14.56	15.11	15.21	15.21	15.53	15.98	15.56	16.07	15.69	15.36	14.73
			Input	1.08	1.16	1.25	1.34	1.28	1.28	1.28	1.29	1.29	1.72	1.79	1.78	1.76	1.79	1.78
NDCAS21-24-1 / NDCAS21-24-0	65°F (18.3°C)	54°F (12.2°C)	TC	20.74	19.99	19.86	20.37	19.33	19.17	19.21	19.02	19.02	19.31	18.6	18.03	17.25	16.06	14.56
			SC	13.89	14.48	14.31	14.65	14.53	14.67	15.19	15.03	15.21	15.72	15.41	15.08	15.22	15.12	14.53
			Input	1.29	1.32	1.4	1.47	1.51	1.48	1.48	1.52	1.53	1.81	2.09	2.13	2.12	2.21	2.29
	70°F (21.1°C)	59°F (15°C)	TC	21.74	21	21.11	21.45	20.33	20.28	20.09	20.06	20.02	20.11	19.75	19.06	18.02	16.82	15.25
			SC	14.48	15.12	15.11	15.33	15.18	15.46	15.81	15.78	15.94	16.28	16.25	15.87	15.83	15.73	15.16
			Input	1.29	1.32	1.42	1.48	1.49	1.49	1.47	1.52	1.52	1.77	2.13	2.15	2.11	2.22	2.28
	75°F (23.9°C)	63°F (17.2°C)	TC	22.71	22.34	22.22	22.67	21.18	21.31	21.08	20.92	21.16	21.13	20.9	20.15	18.83	17.65	15.9
			SC	15.06	15.99	15.82	16.11	15.73	16.15	16.52	16.37	16.76	17.01	17.11	16.67	16.45	16.41	15.75
			Input	1.27	1.35	1.41	1.5	1.47	1.48	1.47	1.5	1.51	1.76	2.14	2.16	2.1	2.2	2.27
	80°F (26.7°C)	67°F (19.4°C)	TC	23.86	23.64	23.64	23.64	22.31	22.29	22.26	22.23	22.2	22.15	22.09	21.1	19.88	18.54	16.92
			SC	15.75	16.83	16.74	16.69	16.49	16.78	17.34	17.3	17.5	17.72	17.98	17.36	17.28	17.13	16.66
			Input	1.28	1.36	1.43	1.5	1.47	1.48	1.49	1.5	1.51	2.05	2.13	2.13	2.09	2.19	2.3