Dial® HVAC



SENTINEL

PRO SERIES

QUIET & EFFICIENT WHOLE HOUSE AIR CONDITIONERS

Sentinel Pro Series Air Conditioners deliver reliable, energy-efficient comfort with advanced inverter technology and durable engineering designed for whole-home performance, even in extreme temperatures. With a compact footprint and whisper-quiet operation, they provide big performance while saving valuable space.

Choose from a multi-position air handler or multi-position cased coil to fit virtually any home or installation. Whether adapting to an existing furnace or pairing with a high-efficiency ECM-blower air handler, the **Sentinel Pro Series** delivers dependable comfort you can count on.

- Up t o 18.4 SEER2, 11.6 EER2 efficiency using eco-friendly R454B and inverter compressors.
- dB Whisper-quiet operation – high speed outdoor as low as 54.0 dB(A) for blissful silence.
- Multiple control options allow for standard 24V thermostats or optional programmable control.
- Premium constant-volume multi-position air handler for up, down, or horizontal air flow.
- Premium cased multi-position A-coil for dual-fuel installation with new or existing gas furnaces.
- True ECM indoor blower motor provides constant volume even at high static conditions.

AHRI CERTIFIED® www.ahridirectory.org
Unitary Small HP
AHRI Standard 210/240
Certification applies only when the complete system is listed with AHRI.

ETL LISTED c US

R454B

10 YEARS WARRANTY COMPRESSOR

10 YEARS WARRANTY PARTS

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PRO SERIES

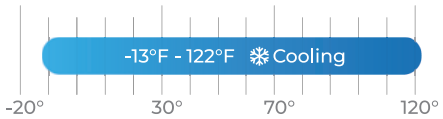
Dial HVAC

OUTDOOR UNIT



- Compact, Space-Saving Design Allows for Flexible Installation
- Install with Sentinel Pro Series Multi-Position Air Handler or Cased Coil
- Quiet Outdoor Operation

OPERATING TEMPERATURE RANGES



Model	DSP181A2A1	DSP241A2A1	DSP301A2A1	DSP361A2A1	DSP481A2A1	DSP601A2A1
Part No.	80658	80661	80662	80663	80664	80668
MATCHED SYSTEM PERFORMANCE						
Air Handler Model	DSP1824M2A1	DSP1824M2A1	DSP3036M2A1	DSP3036M2A1	DSP4860M2A1	DSP4860M2A1
Air Handler Part No.	80632	80632	80636	80636	80641	80641
Cooling Capacity (BTU/H)	18000	24000	30000	36000	48000	54000
SEER2 / EER2	18.4 / 11.5	17.0 / 11.6	16.9 / 11.0	17.0 / 10.7	16.2 / 10.0	15.9 / 9.8
Outdoor Sound Level dB(A)	54.0	56.0	58.0	58.0	65.0	63.0
SYSTEM						
Factory Charge oz.	R454B 65.0	R454B 52.21	R454B 81.13	R454B 91.71	R454B 141.10	R454B 169.32
Max. Single Line Set	98 ft.	164 ft.	164 ft.	246 ft.	246 ft.	246 ft.
Max. Height Diff.	66 ft.	82 ft.	98 ft.	98 ft.	98 ft.	98 ft.
Line Set Diameter	3/8" x 3/4"	3/8" x 3/4"	3/8" x 3/4"	3/8" x 3/4"	3/8" x 3/4"	3/8" x 3/4"
Fan Configuration	Single Fan	Single Fan	Single Fan	Single Fan	Single Fan	Dual Fan
ELECTRICAL						
Voltage / Freq. / Ph.	208/230V / 60 / 1	208/230V / 60 / 1	208/230V / 60 / 1	208/230V / 60 / 1	208/230V / 60 / 1	208/230V / 60 / 1
Max. Fuse / Breaker Size	20A	20A	20A	25A	40A	40A
Min. Circuit Amp. (A)	16.0	19.0	20.0	25.0	36.0	37.0
DIMENSIONS & WEIGHT						
H x W x D (in.)	21.8 x 31.7 x 13.0	26.5 x 35.0 x 13.5	26.5 x 35.0 x 13.5	32.0 x 37.2 x 16.1	38.4 x 38.6 x 16.3	52.5 x 37.5 x 16.3
Weight (lbs.)	66.8	89.3	98.3	134.3	187.2	212.3

Nomenclature:

D	S	P	18	1	A	2	A	1
Dial	Sentinel	Pro	kBTU	Zones	Air Conditioner	230V	Min. Rev.	Maj. Rev.

Notes:
1. Refer to all local, state, and national electrical codes.
2. Minimum 10 ft. line set required, 15 ft. recommended.
3. Oil traps should be installed for every 20 feet of elevation between IDU and ODU.
4. Factory charge of refrigerant is sufficient for up to 25 feet of line set. For longer line sets, refer to IOM for additional charge required.
5. See Cased Coil Performance Data for rated efficiency with outdoor unit.

MULTI-POSITION AIR HANDLER



- 120V or 208/230V Operation
- Aluminum-Alloy Fin/Tube Coil
- Durable, High-Quality Construction with Less Than 2% Cabinet Leakage
- Optional Electric Heat
- Multi-Position Design Supports Vertical, Horizontal Left, and Horizontal Right Installations
- Compatible with Optional Programmable Wi-Fi Enabled Control or Most Conventional 24VAC Thermostats
- Built-In Filter Rack (Filter Not Included)

Model	DSP1824M2A1	DSP3036M2A1	DSP4860M2A1
Part No.	80632	80636	80641
Voltage / Freq. / Ph.	120V / 208/230V / 60 / 1	120V / 208/230V / 60 / 1	120V / 208/230V / 60 / 1
Fuse / Breaker Size	15A	15A	15A
MCA 120V / 208/230V	5.5 / 4.0	8.0 / 6.0	14.5 / 11.0
CFM (T/H/M/L)	824/759/695/630	1189/1083/971/865	1807/1583/1360/1136
Line Set Diameter	3/8" x 3/4"	3/8" x 3/4"	3/8" x 3/4"
Filter Bracket Size (in.)	16 x 20 x 1	20 x 20 x1	20 x 24 x 1
Supply Air Plenum Opening (in.)	10.25 x 15.63	10.25 x 19.13	10.25 x 22.63
Return Air Opening (in)	18.75 x 15.13	18.75 x 18.63	18.75 x 22.63
H x W x D (in.)	45.0 x 17.5 x 21.0	49.0 x 21.0 x 21.0	53.0 x 24.5 x 21.0
Weight (lbs.)	105.6	129.4	162.9

Nomenclature:

D	S	P	1824	M	2	A	1
Dial	Sentinel	Pro	kBTU	Multi-Pos. Air Handler	230V	Min. Rev.	Maj. Rev.

CASED COIL

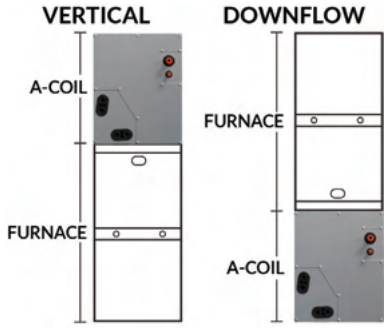


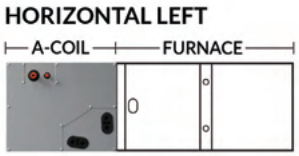
- Multi-Position Design for Use with Standard Natural or LP Gas Furnaces (AHRI Rated as Coil-Only Matches)
- Compatible with Most 24VAC Thermostats

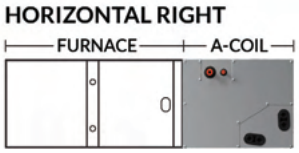
Model	DSP1824ATA1	DSP1824BTA1	DSP3036ATA1	DSP3036BTA1	DSP3036CTA1	DSP4860CTA1
Part No.	80647	80648	80649	80650	80651	80652
H x W x D (in.)	18 x 14.5 x 21.0	18 x 17.5 x 21.0	23.3 x 14.5 x 21.0	23.3 x 17.5 x 21.0	24 x 21 x 21.0	27.8 x 21 x 21.0
Supply W x D (in.)	13.25 x 18.5	16.2 x 18.5	13.25 x 18.5	16.2 x 18.5	19.75 x 18.5	19.75 x 18.5
Return W x D (in.)	11.9 x 18.5	14.9 x 18.5	11.9 x 18.5	14.9 x 18.5	19.5 x 18.5	19.5 x 18.5
Condensate Diameter	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Weight (lbs.)	42.0	42.0	57.0	60.0	64.4	97.0

Nomenclature:

D	S	P	1824	A	T	A	1
Dial	Sentinel	Pro	kBTU	A Cabinet Width 14.5" B Cabinet Width 17.5" C Cabinet Width 21.0"	TXV	Min. Rev.	Maj. Rev.





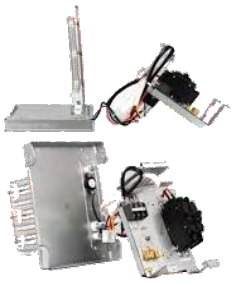


CASED COIL PERFORMANCE

Outdoor Model	Compatible Cased Coil Model(s)	H/C Capacity (Btu/h)	SEER2 / EER2
DSP181A2A1	DSP1824AT1	18000	16.0 / 11.2
	DSP1824BT1		
DSP241A2A1	DSP1824AT1	23000	15.5 / 10.6
	DSP1824BT1		
DSP301A2A1	DSP3036ATA1	29000	15.2 / 10.2
	DSP3036BTA1		
	DSP3036CTA1		
DSP361A2A1	DSP3036ATA1	34000	15.6 / 10.2
	DSP3036BTA1		
	DSP3036CTA1		
DSP481A2A1	DSP4860CTA1	44000	15.3 / 9.8
DSP601A2A1	DSP4860CTA1	52000	15.6 / 9.8

Electric Heat Kit (Optional)

Model	EAH-05E(UL)	EAH-08E(UL)	EAH-10E(UL)	EAH-15E(UL)	EAH-20E(UL)
Part No.	80653	80654	80655	80656	80657
Voltage / Freq. / Ph.	208/230V / 60 / 1	208/230V / 60 / 1	208/230V / 60 / 1	208/230V / 60 / 1	208/230V / 60 / 1
Applicable Models	18K, 24K, 30K, 36K	18K, 24K, 30K, 36K, 48K	All Models	24K, 30K, 36K, 48K, 60K	36K, 48K, 60K
Number of Circuits	1	1	1	2	2
Circuit 1 MCA	23A / 27A	37A / 42A	46A / 53A	23A / 27A	46A / 53A
Circuit 2 MCA	N/A	N/A	N/A	46A / 53A	46A / 53A
Circuit 1 Max Fuse	25A / 30A	40A / 45A	50A / 60A	25A / 30A	50A / 60A
Circuit 2 Max Fuse	N/A	N/A	N/A	50A / 60A	50A / 60A



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DIAL MANUFACTURING, INC.
430 N 47TH AVE, PHOENIX, AZ 85043

1.800.350.DIAL (3425)
www.dial-hvacpro.com

COMPLETE INSTALLATION SOLUTIONS



Wired Programmable Control, Wi-Fi Enabled

Part No. 80669



120/240V 25kA Surge Protective Device

Part No. 73021



60A 120/240V Non-Fusible Surge-Guard Disconnect

Part No. 76140



Replacement 60A Surge-Guard Pullout

Part No. 76141

OTHER AVAILABLE ACCESSORIES

- Wi-Fi Modules
- EZ-Pull UV Line Sets
- Line Set Covers
- Condensate Management
- PolarPad Equipment Pads
- Electrical Disconnects

Refer to the **Accessories Guide** for complete specifications, compatibility details, and system integration information to ensure proper selection across all installation accessories.

SCAN ME