

SUBMITTAL DATA SHEET

Series Name: Star Pro Series
Model Number: CSS18CD(O)(29P)/ASH18SG32(29H)

Air Handler Heat Pump System			
Location:		Approval:	
Engineer:		Date:	
Submitted to:		Construction:	
Submitted by:		Unit #:	
Reference:		Drawing #:	



INDOOR SPECIFICATION			
Indoor Air Flow (High/Low) (CFM)			650/420
Indoor Noise Level (High/Low) (dBA)			38.5/34
Dimension (W×D×H)	inch		17-33/64×21-1/32×45
	mm		445×534×1143
Package (W×D×H)	inch		20-55/64×26-37/64×46-17/64
	mm		530×675×1175
Net/Gross Weight	lbs		114/127
	kg		51.5/57.5

OUTDOOR SPECIFICATION			
Compressor Type			ROTARY
Compressor Model			KSN140D33UFZ3
Refrigerant			R32
Refrigerant Oil Charge(mL)			420
Refrigerant Oil			VG74
Outdoor Air Flow (Max) (CFM)			2000.0
Outdoor Noise Level (dBA)			54
Dimension (W×D×H)	inch		36-1/32×25-19/32×13-37/64
	mm		915×650×345
Package (W×D×H)	inch		40-5/32×28-15/16×17-1/8
	mm		1020×735×435
Net/Gross Weight	lbs		84/92
	kg		38/41.5

EFFICIENCY			
Cooling		Heating	
SEER2	18.4	HSPF2	8.60
EER2	11.5	COP	3.85

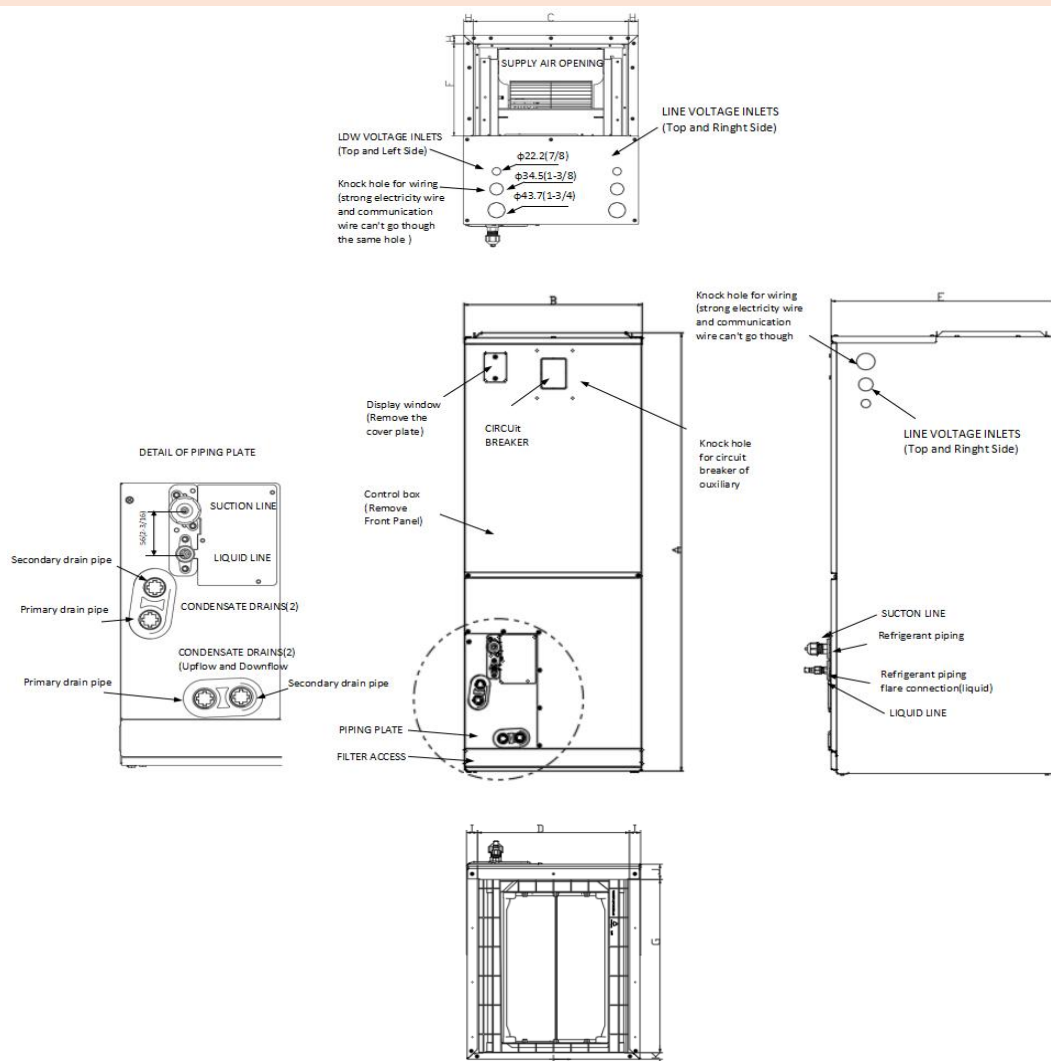
PERFORMANCE of Cooling	
Cooling (Btu/hr)	
Rated Capacity	1565
Min/Max Capacity	400 ~ 1900
Standard Operating Range(°F/°C)	5~131(-15~55)
Rated Cooling Conditions:	
Indoor: 80°F DB/67°F WB	
Outdoor: 95°F DB/75°F WB	

PERFORMANCE of Heating	
Heating (Btu/hr)	
1. @ 47°F Rated	1450
1. @ 47°F Min/Max Capacity	340 ~ 1650
2. @ 17°F Rated	2.77
3. @ 5°F Rated: Capacity	14500
Standard Operating Range(°F/°C)	-4~75(-20~24)
1. Rated Heating Conditions:	
Indoor: 70°F DB/60°F WB	
Outdoor: 47°F DB/43°F WB	
2. Rated Heating Conditions:	
Indoor: 70°F DB/60°F WB	
Outdoor: 17°F DB/15°F WB	
3. Heating Conditions, Compressor	
Indoor: 70°F DB/60°F WB	
Operating at Max. Frequency	
Outdoor: 5°F DB/5°F WB	

ELECTRICAL	
Indoor Power Supply	208/230V,60Hz,1Ph
Indoor MCA 115V/(208/230V)	3.5
Indoor MOP	6
Outdoor Power Supply	208/230V,60Hz,1Ph
Outdoor MCA	16
Outdoor MOP	20
Communication Wiring	AWG 25×3 Shielded
Compressor RLA	6.8
Outdoor Fan Motor RLA	2
Outdoor Fan Motor W	75
Indoor Fan Motor RLA	2.6
Indoor Fan Motor W	249
System Power Input @ Cooling (W)	1565(400 ~ 1900)
System Power Input @ Heating (W)	1450(340 ~ 1650)
MCA: Min. circuit amps (A)	MOCP: Max. over current protection (A)
RLA: Rated load amps (A)	W: Fan motor rated output (W)

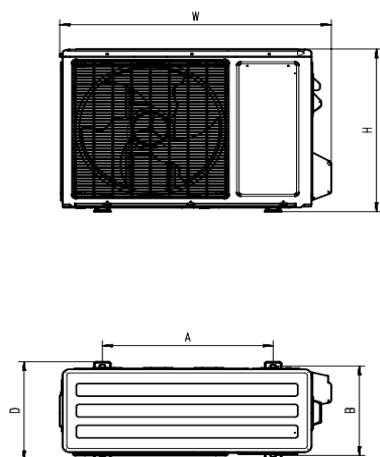
PIPING	
Throttle type(Indoor)	Piston
Throttle type(Outdoor)	Capillary
Liquid Size	9.52mm(3/8in)
Gas Size	19mm(3/4in)
Max. Piping Length(ft/m)	98.4(30)
Max. Height Difference(ft/m)	65.6(20)
Max. Pre-charged Length(ft/m)	24.6(7.5)
Refrigerant Pre-charged Amount(oz/kg)	56.44(1.6)
Additional Charge of Refrigerant((oz/ft)/(g/m))	0.52(48)
Connection Method	Flared

Indoor Unit Dimension



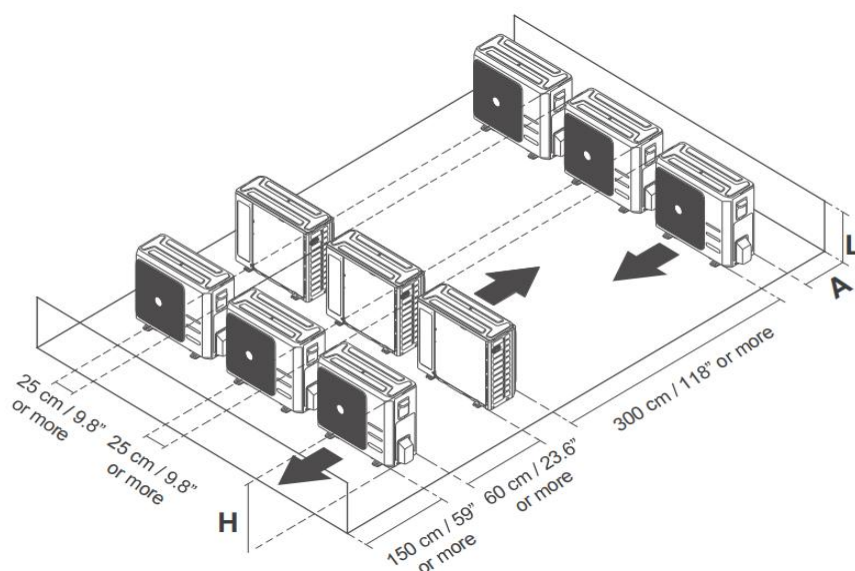
Dimensions		Model		18K/24K		30K/36K		48K/60K	
				inch	mm	inch	mm	inch	mm
A	Model Height			45-3/4	1162	49-49/64	1264	53-47/64	1365
B	Model width			17-41/64	448	21-9/64	537	24-39/64	625
C	Supply Air Opening width			15-5/8	397	19-9/64	486	22-19/32	574
D	Return Air Opening Width			15-25/64	391	18-47/64	476	22-23/64	568
E	Model Depth			21-7/64	536	21-7/64	536	21-7/64	536
F	Supply Air Opening Depth			10-9/32	261	10-9/32	261	10-9/32	261
G	Return Air Opening Depth			18-23/32	475.5	18-23/32	475.5	18-23/32	475.5
H	Supply Air Opening Clearance			15/16	24	15/16	24	15/16	24
I	Return Air Opening Side Clearance			1-1/8	28.5	1-1/8	28.5	1-1/8	28.5
J	Return Air Opening Front Clearance			1-21/32	42	1-21/32	42	1-21/32	42
K	Return Air Opening Back Clearance			45/64	18	45/64	18	45/64	18

Outdoor Unit Dimension

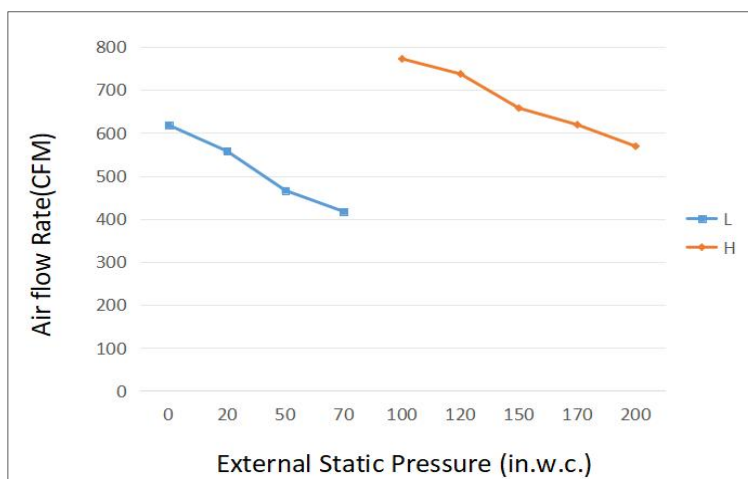


Dimensions \ Model		18K/24K		30K/36K/48K/60K	
		inch	mm	inch	mm
W	Model width	915	36-1/32	965	37-63/64
H	Model height	650	25-19/32	810	31-57/64
A	Distance between left and right foot bolts	605	23-13/16	635	25
B	Distance between front and rear foot bolts	357	14-1/16	405	15-15/16
D	Model depth	392	15-7/16	448	17-41/64

Installation Instruction For Outdoor Unit



Fan Performance For Indoor Unit



Features

- High efficiency and energy-saving, SEER2 up to 18.4
- Multi-position installation: horizontal(left or right), vertical(up or down)
- ECM fan motor with constant torque technology
- External static pressure up to 0.80 In.W.G
- 1 inch R4.2 fiberglass free insulation reduces condensation and boosts efficiency(optional)
- Optional Auxiliary heat kit up to 20kW
- Easy Maintenance
- Multiple control options available:
 - Wired controller with built-in WiFi
 - Third-Party 24V Thermostat
- Adaptive Control System
- Crankcase heater equipped as standard