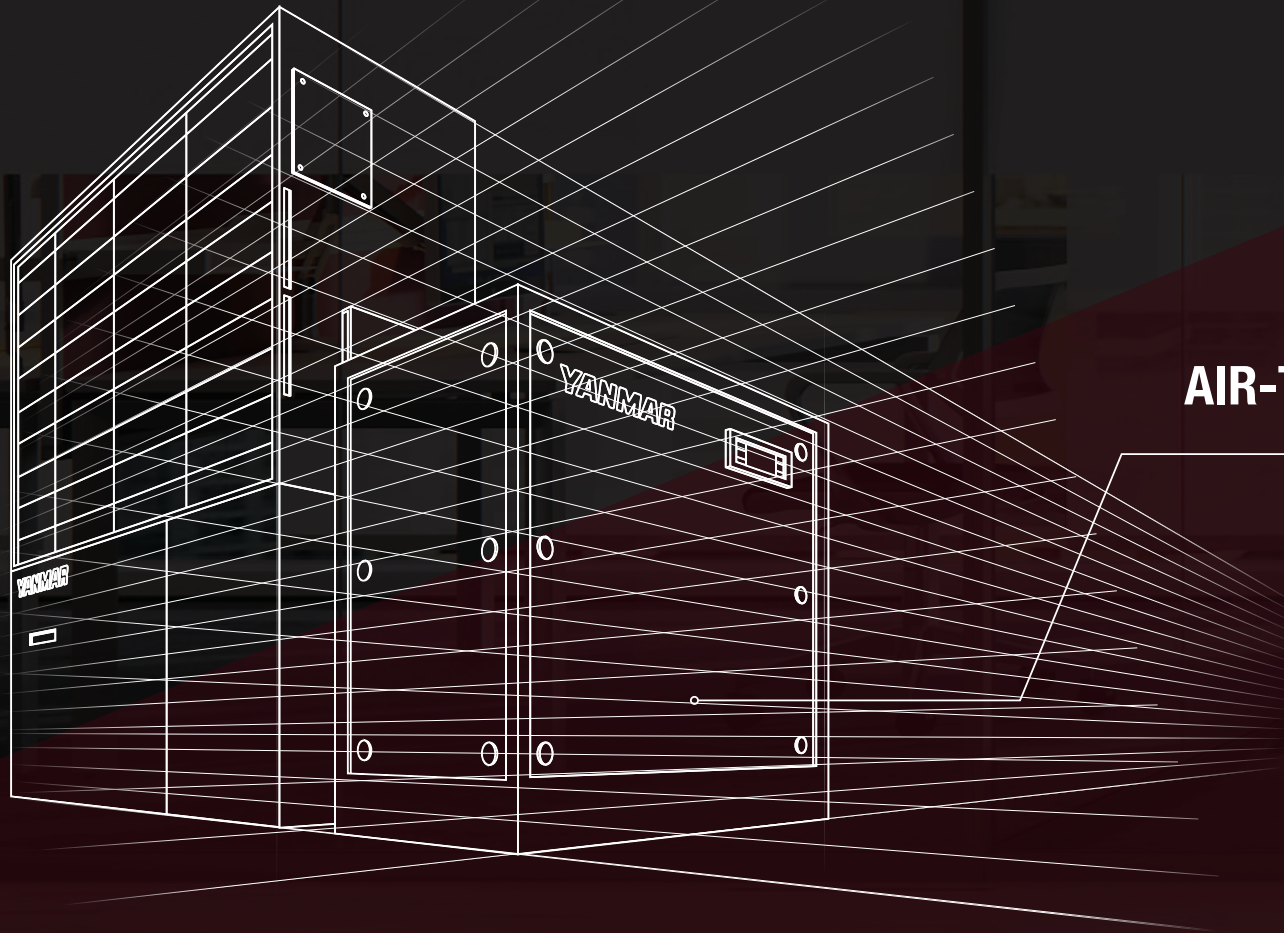




YANMAR



AIR-TO-WATER SYSTEM

AT A GLANCE

GAS HEAT PUMP + HYDRO BOX

SYSTEM INDEX					
OVERALL SYSTEM					
Nominal cooling capacity °F/(°C) *		A95/W45 (A35/W7)		Btu (kW)	154,000 (45.0)
Nominal heating capacity °F/(°C) *		A45/W95 (A7/W35)		Btu (kW)	177,000 (51.7)
GAS HEAT PUMP (NNCP168J)					
Electrical	Power Supply Voltage (Frequency)			V (Hz)	208V / 230V / 240V (60Hz)
	Power Consumption		Cooling	kW	0.86
			Heating	kW	0.95
	Fuel Data	Gas Type			
Nominal Gas Consumption		Cooling	Btu (kW)	143,000 (42.0)	
		Heating	Btu (kW)	134,000 (39.0)	
Gas Supply Pressure		Standard	in. WC(kPa)	8.0 (2.0)	
		Working Range	in. WC(kPa)	4.0 to 10.0 (1.0 to 2.5)	
Sound Pressure Level			dB(A)	58	
Fans	Number of Units			Units	2
	Rated Air Flow			CFM (m³/min)	13.420 (380)
Operation Range	Cooling **			°F/(°C)	+14 to +114 (-10 to 45)
	Heating			°F/(°C)	+5 to +78 (-15 to 25)
Pipe Size	Refrigerant	Suction Line	inch (mm)	1 ¹ / ₈ (28.6)	
		Liquid Line	inch (mm)	⁵ / ₈ (15.9)	
	Fuel Pipe Thread & Size			NPT	³ / ₄
	Exhaust Vent (O.D.)			inch (mm)	2- ³ / ₈ (60.5)
	Exhaust Drain Pipe (I.D.)			inch (mm)	¹⁹ / ₃₂ (15.0)
Dimensions	Height			inch (mm)	85- ⁷ / ₁₆ (2,170)
	Width			inch (mm)	66- ⁹ / ₁₆ (1,690)
	Depth			inch (mm)	31- ¹ / ₂ (800)
Weight			lbs (kg)	1,940 (880)	
HYDROBOX (Y-HB154 VPJ4)					
Rated Volume Flow	Cooling at 5 K spread			GPM (m³/h)	33.9 (7.7)
	Heating at 5 K spread			GPM (m³/h)	39.2 (8.9)
Internal Pressure Loss	V4 Cooling			psi (kPa)	2.0 (14)
	V4 Heating			psi (kPa)	2.7 (19)
External Pressure Increase	VP4 Heating			psi (kPa)	11.6 (80)
Electrical	Power Consumption	VP4	kW	0.7	
		V4	kW	0.2	
	Power Supply Voltage (Frequency)			V (Hz)	208-230V (60Hz)
Sound Pressure Level			dB(A)	35	
Water Outlet Temperature	Cooling			°F/(°C)	+43 to 64 (+6 to +18)
	Heating			°F/(°C)	+81 to 122 (+27 to +50)
Pipe Size	Water Lines			inch (mm)	1- ¹ / ₂ (38.1)
	Suction Line			inch (mm)	1- ³ / ₈ (35)
	Liquid Line			inch (mm)	³ / ₄ (19)
Dimensions	Height			inch (mm)	36.6 (930)
	Width			inch (mm)	20.7 (525)
	Depth			inch (mm)	30.9 (785)
Weight			lbs (kg)	364 (165)	
CONNECTION GAS HEAT PUMP + HYDROBOX					
Maximum Distances	Length			ft (m)	180 (55)
	Height			ft (m)	82 (25)

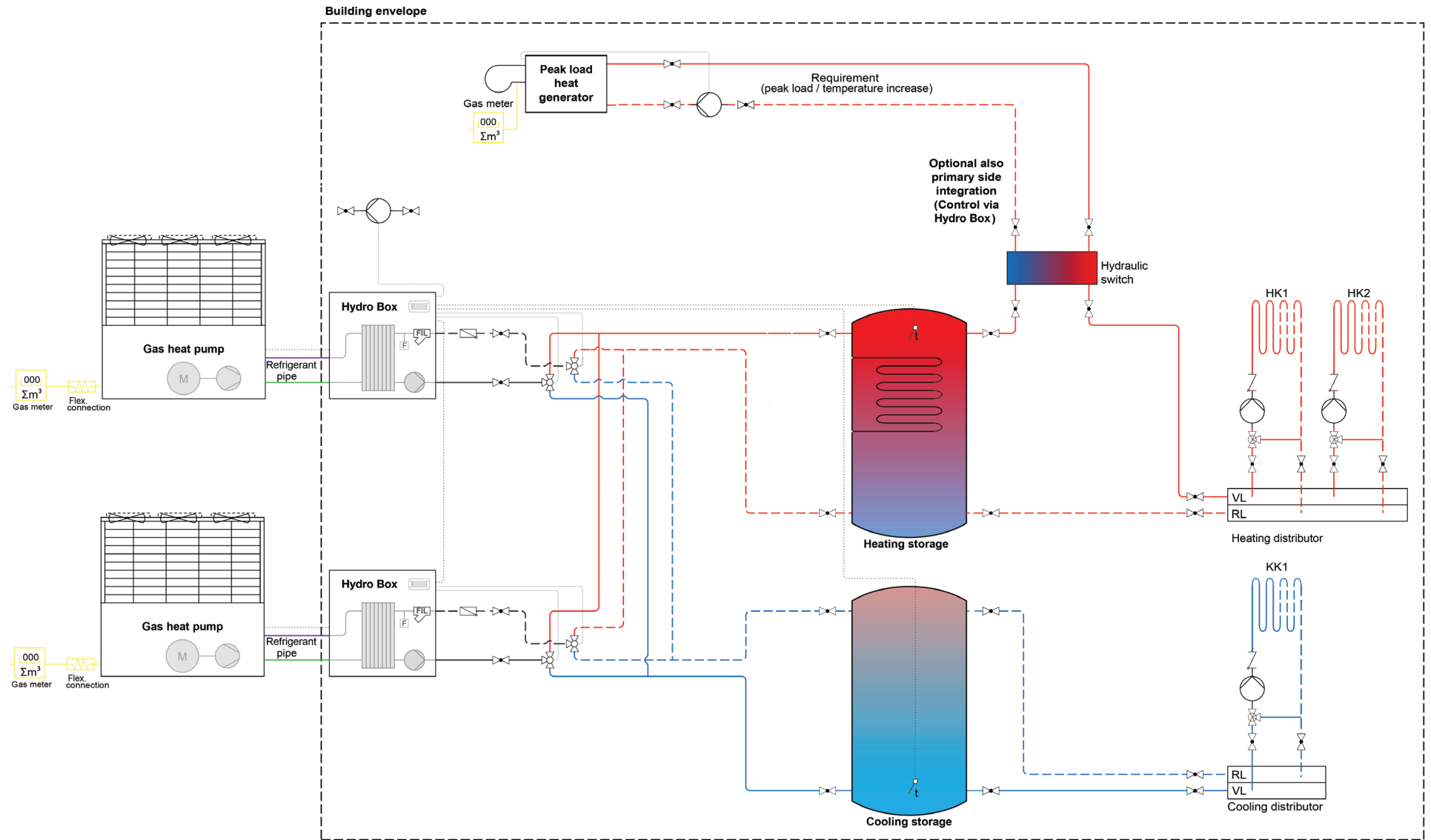
Technical specifications and appearance are subject to change without notice.

* Capacities are calculated for a standard indoor/outdoor unit combination with a 25ft (7.5 m) piping length and 0 ft level difference.

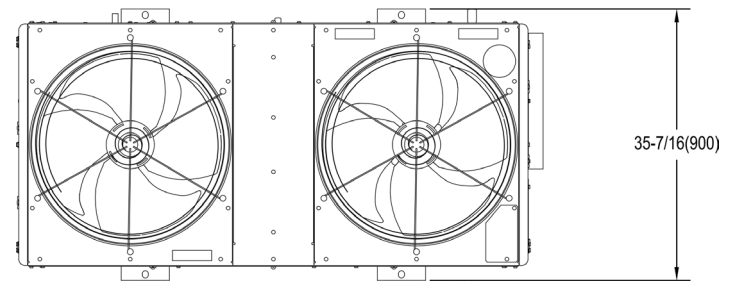
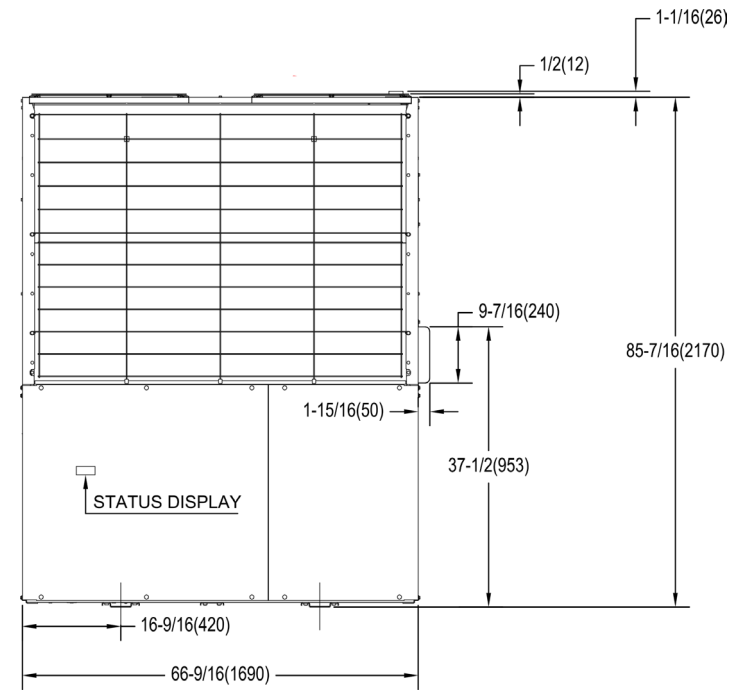
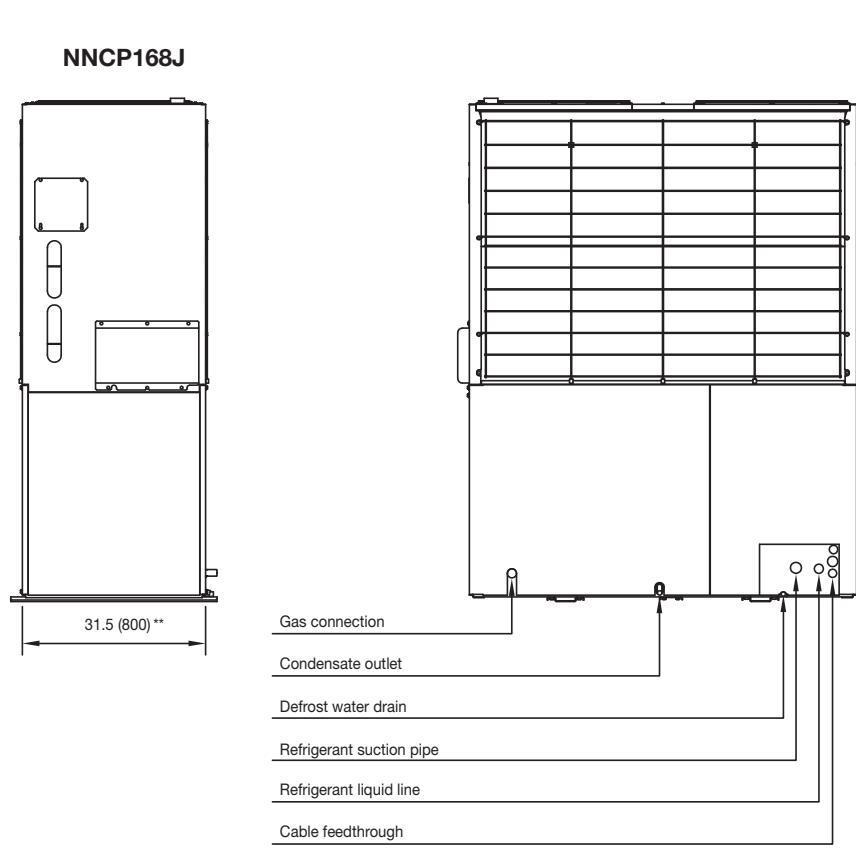
** 32°F (0°C) or less, optional accessory is necessary.

SYSTEM DIAGRAM EXAMPLE

GAS HEAT PUMP + HYDRO BOX



GAS HEAT PUMP
DIMENSIONAL DRAWINGS
in (mm)



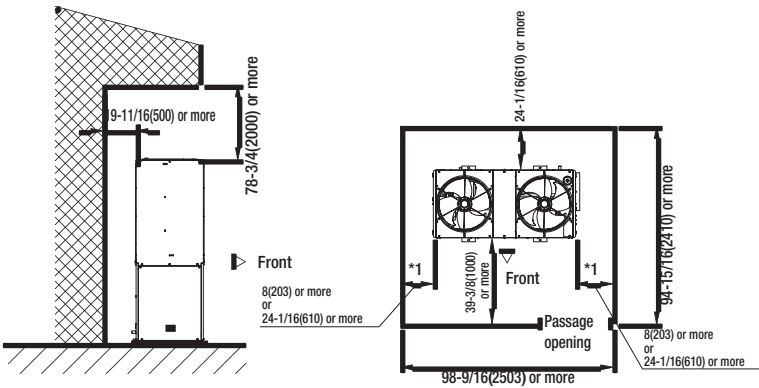
GAS HEAT PUMP

INSTALLATION / CLEARANCES

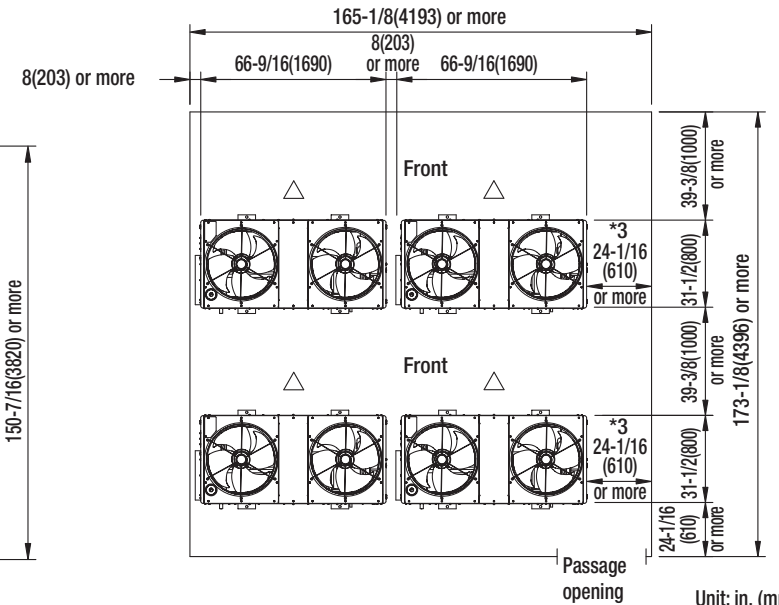
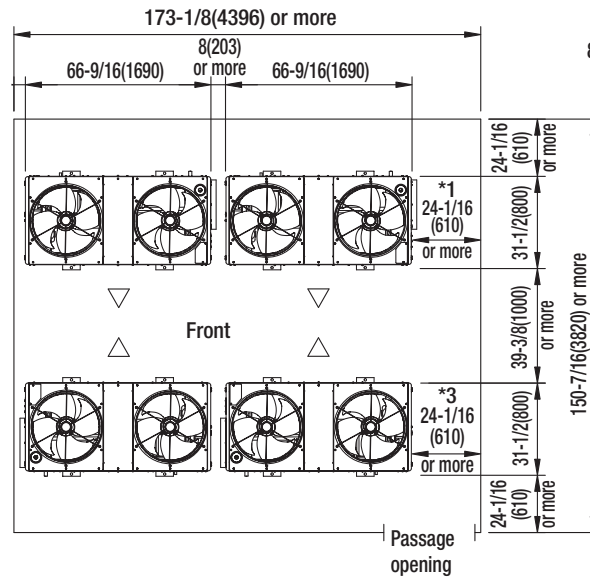
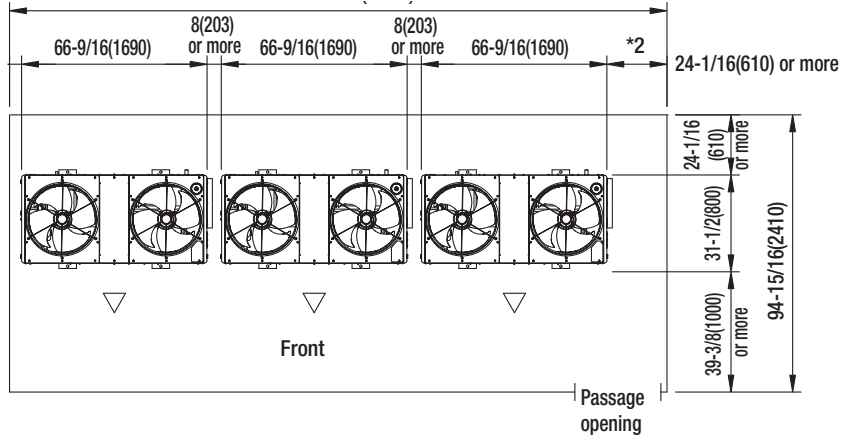
in (mm)

NNCP168J

Single Unit Installation

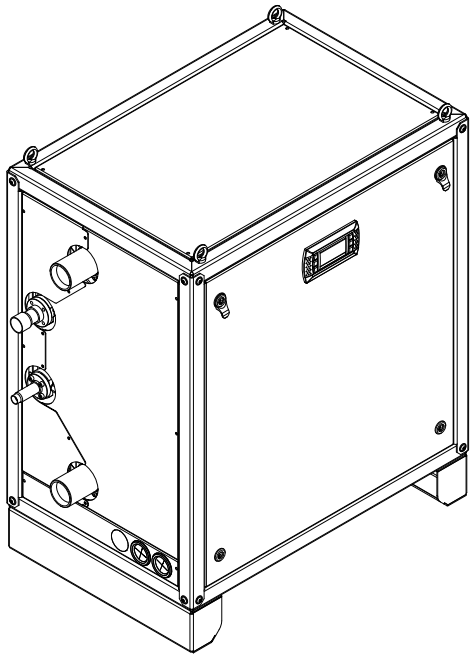
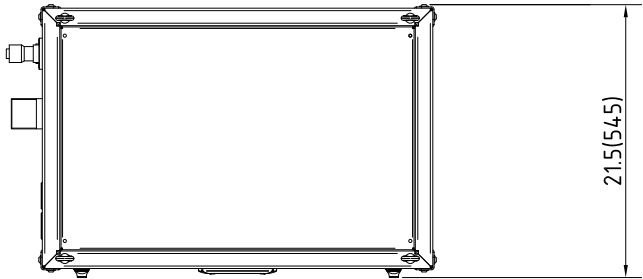
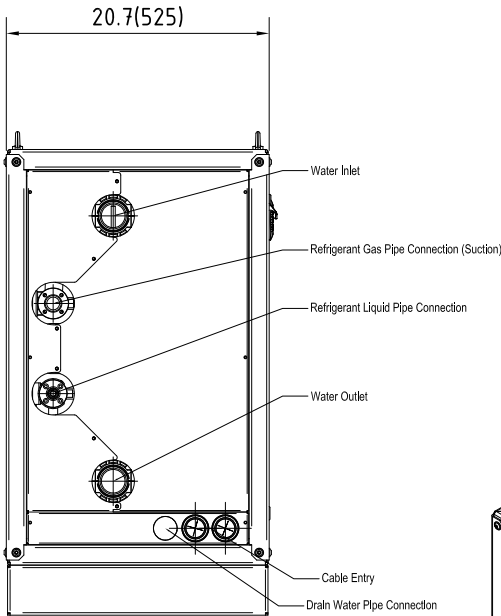
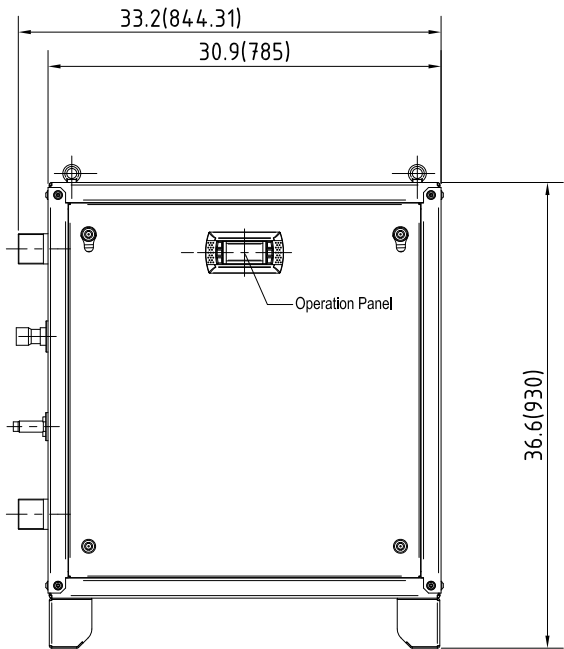


Multiple Unit Installation



Unit: in. (mm)

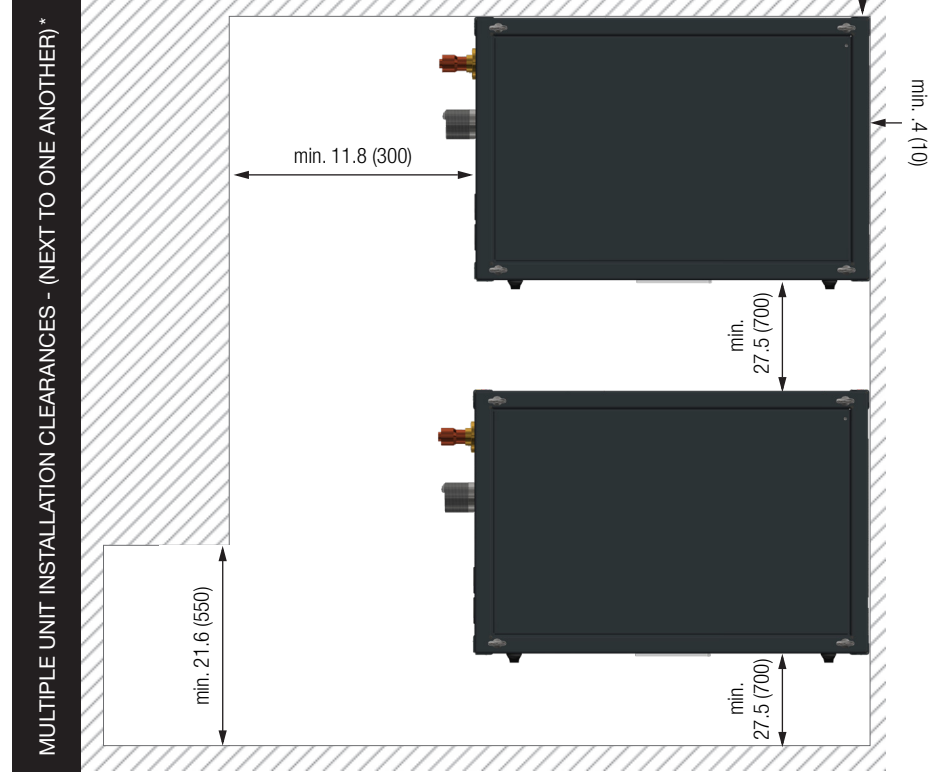
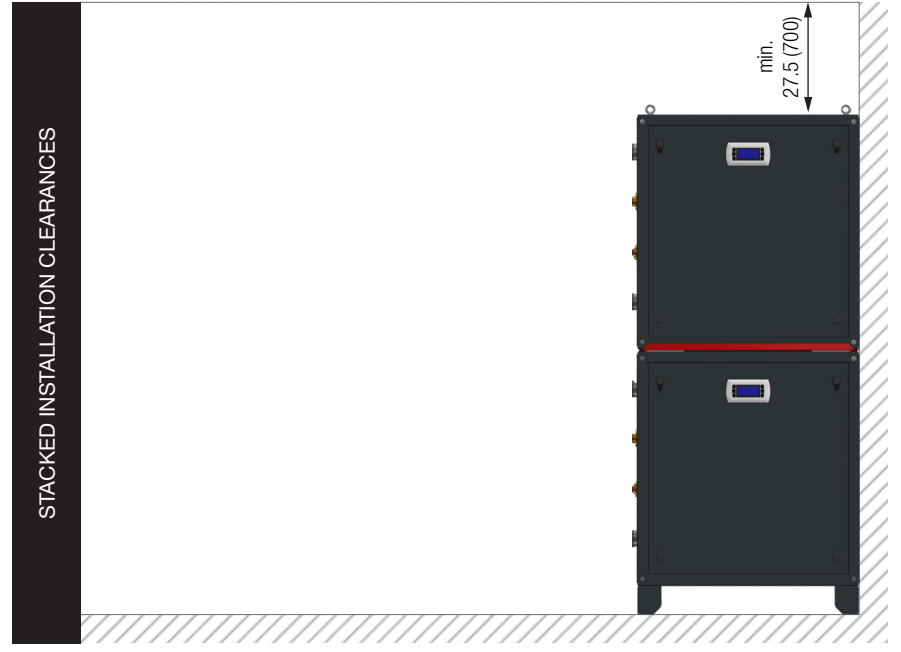
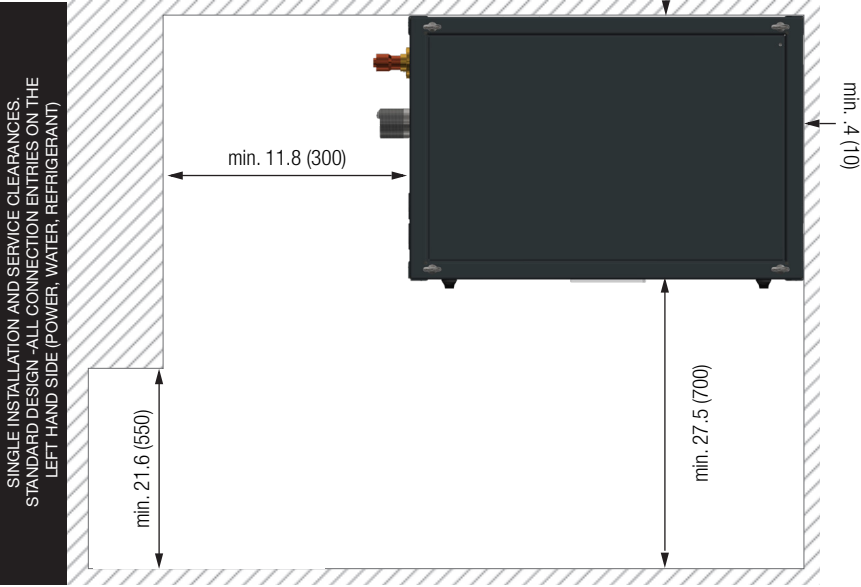
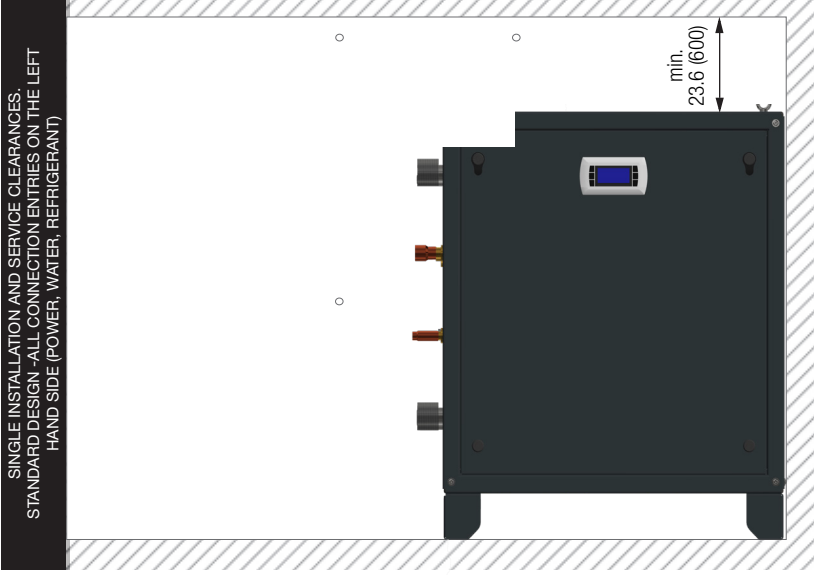
HYDRO BOX
DIMENSIONAL DRAWINGS
in (mm)



HYDRO BOX

INSTALLATION / CLEARANCES

*DRAWINGS NOT TO SCALE
in (mm)





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