Technical Data Sheet

Aegis A
Air Source

Lync's Aegis A is a powerful commercial CO_2 air source heat pump water heater powered by R744, better known as refrigerant grade CO_2. Aegis A produces hot water up to 185° at air temperatures as low as -4°F with no need for supplemental heat. By simply absorbing and moving heat from the surrounding area instead of needing to generate heat, this heat pump is extremely efficient thus saving energy and lowering operating costs.

Because it uses a natural refrigerant CO_2, Lync's Aegis A is a safe, environmentally friendly heat pump water heater: R744 is non-toxic, non-flammable, has an ODP (Ozone Depletion Potential) of zero and a low GWP (Global Warming Potential) of one. R744 outperforms other refrigerants, like R134a and R410a, by having a much lower GWP (1.0 vs 1430 and 2088 respectively) and a wider range of ambient operating temperatures, making Aegis A a better, longer-lasting option as more states introduce stricter environmental guidelines.

Features

High Performance Operation

- Produces hot water up to 185°F at air temperatures as low as -4°F **with no need for supplemental heat**
- Wide ambient operating conditions provide high COP (Coefficient of Performance) year-round
- Complete solution with long-lasting duplex stainless tanks, highly accurate digital mixing valves, and more

Environmentally Friendly Technology

- Eco-friendly refrigerant R744 has an OPD of 0 and low GWP of 1
- Non-toxic and non-flammable
- Natural R744 provides long-lasting refrigerant option to increasingly stringent environmental guidelines

Energy Saving

- Energy efficient with lower operating costs – provides heat by absorbing and moving heat from the surrounding area instead of generating supplemental heat
- Lower peak energy demands and peak use and can lead to additional electricity savings

Additional Features

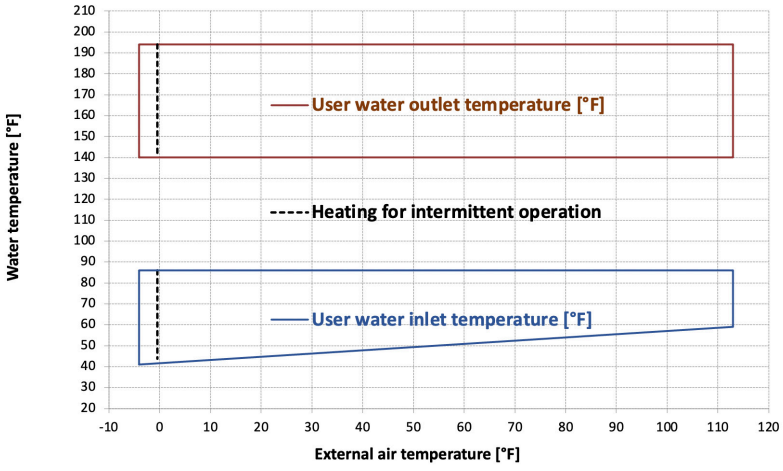
- Cool recovery option provides simultaneous production of cold water along with hot water, further increasing COP
- The heat pump can be remotely controlled through the building automation system (BAS) allowing users to check the status of the unit real time, record operational data, check for faults with alarms and warnings, change set point and operating modes and much more
- Fan coil coating available for coastal areas
- Advanced defrost cycle with electric coil eliminates the need to reverse operation to defrost
- Ideal for new and retrofit, multifamily, gyms, industrial, hospitality, education and healthcare

Technical Data

			250	350	500
Performance	Nominal Heating Capacity* **@ 45°F air**	MBH	191	305	430
	Input Power	kW	17.4	29.4	42.8
	Nominal Recovery Capacity	GPH	212	339	479
	COP		3.2	3.0	3.0
	Nominal Heating Capacity** **@ 77°F air**	MBH	210	329	494
	Input Power**	kW	16.1	26.8	41.9
	Nominal Recovery Capacity	GPH	233	365	549
	COP		3.8	3.6	3.5
	Heating Capacity w/ Recovery*	MBH	199	319	477
	Cooling Capacity	MBH	145	229.0	340
	Input Power	kW	15.7	26.3	40.1
	TER (Total Efficiency Ratio)		6.4	6.1	6.0
	Cool Recovery Water Flow Rate	GPH	1938	3064	4556
	Cool Recovery HX Pressure Drop	PSI	3.5	7.7	7.1
	Cool Recovery Pump Power Available		230 V / 1 ph / 60 Hz / 2.1 A		
	Nominal Compressor Size	HP	14	25	35
	Number of Fans		3	2	2
	Refrigerant Charge	lbs	44	55	66
	Sound Pressure	dB(A)	68	73	76
Electric	Max Power	kW	19	31	46
	Full Load Current	A	39	53	83
	Max Starting Current	A	175	211	268
	Power Supply		480 V / 3 ph / 60 Hz		
Dimensions	Width	in	104	138	138
	Depth	in	41	50	50
	Height	in	72	75	75
	Shipping Weight	lbs	1658	2403	2800
	Operating Weight	lbs	1670	2418	2820

*Nominal performance based on: Air temperature 45°F (7°C), 87% RH, domestic water 68°F (20°C)-176°F (80°C). Cool recovery option at 54°F (12°C) - 45°F (7°C)
**Nominal performance based on: Air temperature 77°F (25°C), 60% RH, domestic water 68°F (20°C) -176°F (80°C)

Operating Limits



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