## Technical Data Sheet

# **Solution** by watts

Engineered Solutions

## Aegis W Water Source

Lync's Aegis W is a powerful commercial CO<sub>2</sub> water source heat pump water heater powered by R744, better known as refrigerant grade CO<sub>2</sub>. Aegis W produces hot water up to 185° at source temperatures as low as 14°F with no need for supplemental heat. By simply absorbing and moving heat from the source loop 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<sub>2</sub>, Aegis W 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 Lync's Aegis W a better, longer-lasting option as more states introduce stricter environmental guidelines.

## **Features**

#### **High Performance Operation**

- Produces hot water up to 185°F at source temperatures as low as 14°F with no need for supplemental heat
- Wide ambient operating conditions provide high COP (Coefficient of Performance) year-round
- Compact footprint is perfect for installations with limited mechanical space

#### **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
- Source water from a cooling plant can further increase the performance of both domestic and cooling systems

#### **Additional Features**

- Capable of providing simultaneous production of cold water along with hot water
- 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
- Ideal for new and retrofit, multifamily, gyms, industrial, hospitality, education and healthcare



### **Technical Data**

			250	350	500
Performance	Nominal Heating Capacity* at 54°F water	MBH	199	319	477
	Nominal Cooling Capacity	MBH	145	229	340
	Input Power	kW	15.7	26.3	40.1
	Nominal Recovery Capacity	GPH	221	355	531
	COP		3.7	3.6	3.5
	Source Side Nominal Flow Rate	GPH	1938	3064	4556
	Source Side Nominal Pressure Drop	PSI	3.5	7.7	7.1
	Source Side Pump Power Available		230 V / 1 ph / 60 Hz / 2.1 A		
	Compressor Size	HP	14	25	35
	Refrigerant Charge	lbs	15.4	17.6	17.6
	Sound Pressure	dB(A)	57	62	65
Electric	Max Power	kW	16.4	27.0	41.6
	Full Load Current	А	34.7	45.7	75.7
	Max Starting Current	А	171	204	261
	Power Supply		480 V / 3 ph / 60 Hz		
Dimensions	Width	in	30	30	30
	Depth	in	46	46	46
	Height	in	69	69	69
	Shipping Weight	lbs	1188	1282	1336
	Operating Weight	lbs	1208	1307	1371

\*Nominal performance based on: Source temperature 54°F (12°C) - 45°F (7°C). Domestic water 68°F (20°C)-176°F (80°C)

## **Operating Limits**



#### **Engineered Solutions**

Fort Worth, TX • (817) 335-9531