



Diesel engine pre-heating is an essential process that keep the jacket water warm when the engine is not running or when the ship is passing through colder areas ensuring reliable engine starts, which extends the service life of the engine. Also a preheated engine consumes less fuel and releases fewer emissions, making pre-heating beneficial for the environment.

The pre-heater heats all parts of the engine, which in turn heats the air in the cylinder. This reduces cold corrosion and thermal stresses during starting. When the engine is warm, the clearances are correct, thus lubrication is made easier, and there is less chance of undue wear of moving parts.

Pre-heating also has a positive effect on the life of liquids. Liquids age quicker at extreme temperatures or extreme temperature differences. Pre-heating results in a more stable temperature, which makes the liquids last longer.

In summary, pre-heating the cooling water of a diesel engine is an essential process that ensures reliable engine starts in cold weather conditions while reducing engine wear, extending the service life of the engine. It also has a positive effect on the life of liquids and is beneficial for the environment.



COOLING WATER PRE HEATER UNIT

The AV-PRO cooling water pre heater units are designed with proven technology and the smallest footprint. The pre heaters are user friendly to operate, easy to install and have low maintenance.

ELECTRICAL COOLING WATER PRE HEATER UNIT

Power Supply 380..480 V / 50..60 Hz.					
Size		1	2	3	4
Heating Capacity	kW	4,5 - 12	12 - 40	30 - 80	60 - 160
	Groups	1	1	2	4
Pump capacity	m3/h	2,0 - 3,0	3,2 - 6,0	5,4 - 12	9,6 - 24
	mWc	10 - 30	10 - 28	10 - 27	10 - 24
Control type	Junction box	Yes	Yes	Yes	Yes
	Basic	Yes	No	No	No
	Thermostat	Yes	Yes	Yes	Yes
	Stepless PID	No	Yes	Yes	Yes
Length	mm	305	550	750	750
Width	mm	230	310	310	310
Height	mm	700	780	930	1450
Weight	kg	25 - 30	45 - 55	75 - 85	120 - 140



HOT WATER, STEAM OR THERMAL OIL COOLING WATER PRE HEATER UNIT

Power Supply 380..480 V / 50..60 Hz.				
Size		1	2	3
Heating Capacity	kW (1)	5 - 50	25 - 100	50 - 200
Pump capacity	m3/h	3,2 - 6,0	5,4 - 12	9,6 - 24
	mWc	10 - 28	10 - 27	10 - 24
Control type	Junction box	Yes	Yes	Yes
	Thermostat	Yes	Yes	Yes
	PID	Yes	Yes	Yes
Length	mm	500	700	900
Width	mm	320	380	400
Height	mm	800	1100	1550
Weight	kg	45	75	115



(1) Final capacity depending on media and temperature

