

COST COMPARISONS

NOREN'S HEAT EXCHANGER

VS

AIR CONDITIONERS or COMPRESSED AIR

MODEL	CC600F NOREN AIR-TO-AIR	CC3060 NOREN AIR-TO-WATER	HOFFMAN CR290216G200 AIR CONDITIONER	VORTEX#785 W/FILTER #7015-54 COMPRESSED AIR COOLER
COOLING CAPACITY	3300 (988 Watts) rated at 20°C∆T	9300 (2752 Watts) rated at 40°C∆T to water	2200 (644 Watts) net cooling output	2500 (732 Watts)
OPERATING TEMPERATURE RANGE	$70^{\circ}\text{C} \ge \text{T}_{\text{operating range}} \ge -30^{\circ}\text{C}$	70°C ≥ T _{operating range} ≥ 1°C	$55^{\circ}\text{C} \ge \text{T}_{\text{operating range}} \ge 10^{\circ}\text{C}$	52°C ≥ T _{operating range} ≥ 10°C
SIZE (HxWxD)	30" x 8-3/4" x 4"	30" x 8-3/4" x 4"	29-1/2" x 15-3/4" x 8-5/8"	10" x 1-3/4" Diameter
WEIGHT	14 lbs	35 lbs	98 lbs	5 lbs
POWER DRAW	70 Watts	35 Watts	851 Watts	N/A
POWER REQUIRED	0.6 amps	0.3 amps	7.4 amps (10 amp circuit required)	N/A
ESTIMATED LIFE	10+ years	10+ years	3 years	10+ years
INITIAL INVESTMENT	2016 LIST PRICE			
PURCHASE PRICE	\$1,450.00	\$1,275.00	\$3,027.00	\$870.00
FREIGHT & HANDLING	\$72.00	\$72.00	\$115.00	\$20.00
INSTALLATION	\$120.00	\$120.00	\$480.00	\$120.00
TOTAL INITIAL COST	\$1,642.0	\$1,467.0	\$3,622.0	\$1,010.0
ANNUAL COST	65% Duty Cycle	23% Duty Cycle	100% Duty Cycle	88% Duty Cycle
ENERGY COST (@0.140 \$/kWh)	\$55.80	\$9.87	\$1,043.67	\$5,656.44
MAINTENANCE COST/YEAR	\$66.00	\$54.00	\$80.00	\$40.00
OPERATING COST/YEAR	\$121.80	\$63.87	\$1,123.67	\$5,696.44
INSTALLED COST (AMORTIZED OVER 3 YEARS)	\$547.30	\$489.00	\$1,207.30	\$336.60
TOTAL ANNUAL COST	\$669.10	\$552.87	\$2,330.97	\$6,033.04

Noren Products manufactures heat exchangers in a variety of sizes and integrations. We offer UL Listed Certified Type 12, 3R, 4, 4X, and HazLoc ATEX / IECEX units.

NOTES:

Water inlet temperature is assumed to be at 20C. Water cost is not taken into account as it is assumed that it will be closed loop system with a chiller / cooling tower installed already.

The amount of energy spent to cool and pump cold water was not taken into consideration.