

High Efficiency Heating System **HE-12**



Hotstart's HE High Efficiency Heating System uses proven air-source heat pump technology to provide the most efficient engine heating solution for standby generators. HE systems use less energy to maintain water jacket temperatures than engine heaters powered by electric resistance.



HIGH EFFICIENCY ENGINE HEATING

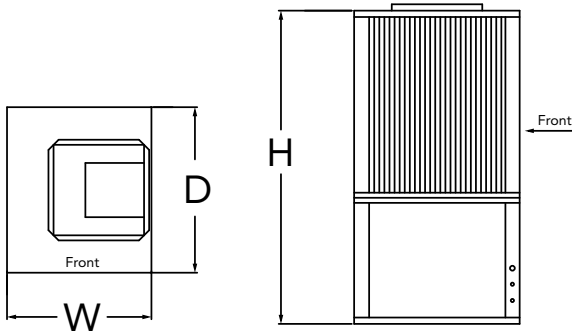
The HE-12, HE-18, HE-24, and HE-36 are efficient, single-stage air-source heat pumps capable of reducing engine heating costs by up to 75% compared to electric resistance heaters. The system design allows for effective heat transfer through a series of exchangers, using existing heat from the surrounding air rather than generating it through electrical resistance. The resulting reduction in carbon footprint contributes to end-users' net-zero goals.



PRECISE HEATING CONTROL

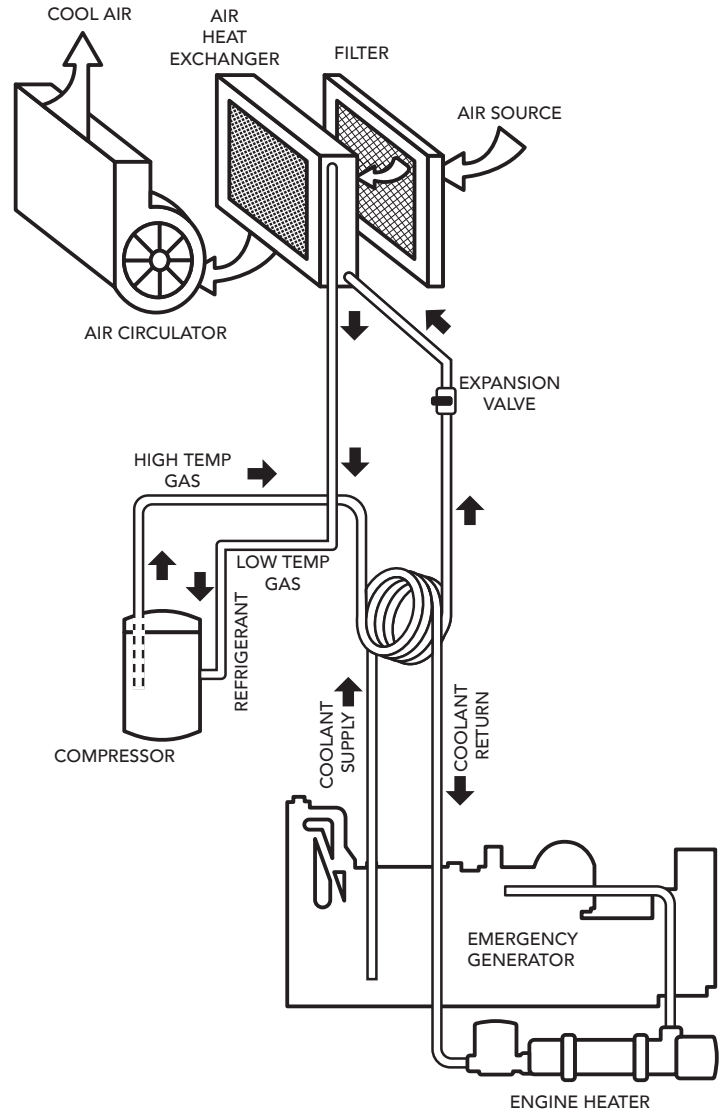
Standby generators equipped with a HE heating system and a standard Hotstart engine heater will reliably start in lower ambient temperatures. The two systems work in tandem to provide heating redundancy – the existing engine heater takes over if the heat pump technology alone cannot maintain adequate starting temperature. Connected controls allow for the systems to switch on/off automatically based on ambient temperatures.





| Depth (D) | Width (W) | Height (H) | Weight |
|-----------|-----------|------------|---------|
| 22" | 22.4" | 34.5" | 160 lbs |
| 559 mm | 569 mm | 876 mm | 73 kg |

| Specifications | |
|--------------------|--|
| Phase | single-phase (1 Ø) |
| Voltage (AC) | 208 / 230 |
| Environment Rating | Indoor locations* |
| Certification | ETL/C-US, AHRI, ASHRAE |
| Refrigerant | HFC-410A |
| Coolant Type | Water Coolant mix (50% water/50% glycol) |
| Circuit Ampacity | 10 |
| Total FLA. | 6.1 |
| Inlet/Outlet | 1/2" NPT |
| Heat Capacity** | 3.5 kW |



Heat is removed from the air and is transferred to the engine coolant system through pressurized refrigerant.

* Outdoor installations require additional guarding package.
 ** Heat capacity dependent on ambient temperatures.
 Contact Hotstart for recommendations based on your project specifications.

For assistance with your heating system application, contact Hotstart at 509.536.8660 or heatpumps@hotstart.com.