



TELEKTRON (INDIA) An Attitude in Engineering[®]



PORTABLE HVAC SYSTEM

This system is designed to operate in the harsh working conditions of Shipyards and Aircraft Hangers. Ships, Submarines, Aircrafts during repair and dry docking and in absence of their own air conditioning network. A portable, sturdy, weather proof package unit with multiple outlets and a powerful flow which can be used at various locations through flexible ducting without much effort. Currently being used in shipyards, dockyards and aircraft hangers in India, the system is also suitable for installation in large factories, warehouses etc. The Portable HVAC system is available in cooling / heating capacities ranging from 10 Tons to 30 Tons.





GENERAL

The units are having convertible airflow. All units are factory assembled, internally wired, fully charged refrigerant and 100% run tested to check cooling and heating operation, fan and blower rotation, and control sequence before leaving the factory. Internal Wiring to the unit is colored and numbered for simplified identification. The unit is provided with an integral weather resistant control panel.

CASING

The Unit casing is constructed of Zinc coated, heavy gauge, galvanised steel. Exterior surfaces are cleaned, G90 galvanized heavy gauge plate conforming to ASTM A 653, followed by baked on electrostatic polyester dry powder coat paint on all external panels, completely weatherproofed for outdoor installation and properly reinforced and brazed. Salt Spray Test for steel sheet under 1000 hours, specially treated can be up to 2000 hours and even more. Cabinet construction allows for all maintenance. Service panels can be easily removed and reinstalled by removing bolts. All panels and top covers indoor side of the unit are insulated with 16mm, foam-faced, closed-cell insulation. The unit has provisions for forklift and crane lifting, with forklift capabilities on four sides of the unit.

COMPRESSORS

All units have direct-drive, hermetic, scroll type compressors with centrifugal type oil pump. Motor is suction gas-cooled and has a voltage utilization range of plus or minus 10 percent of unit nameplate voltage. Internal overloads are provided with the scroll compressors. Compressors used in Rooftop Package unit are hermetically sealed reciprocating type. They are equipped with a crankcase heater as standard practise.

The compressors, incorporating a built-in muffler, are mounted on spring within a heavy gauge steel housing to give a low noise level. The unit contains the best compressor technology available to achieve the highest possible performance. Dual compressors are outstanding for humidity control, light load cooling conditions and system back-up applications.



CONTROLS

The unit is completely factory-wired with necessary controls and terminal block for power wiring. The unit provides an external location for mounting a fused disconnect device. Microprocessor controls provide for all 24V control functions. The precision control makes all heating, cooling, or ventilating decisions in response to electronic signals from sensors measuring indoor and outdoor temperatures. The control maintains accurate temperature control, minimizes drift from set point, and provides better building comfort. A centralized micro-processor provides a higher level of machine protection.

COILS

Internally finned, copper tubes mechanically bonded to a configured hydrophilic aluminum fin is standard. Coils are leak tested under 3100KPa (450 psig) at the factory to ensure the pressure integrity.

ELECTRONIC THERMOSTATS

A dedicated electronic thermostat is supplied with unit controls as standard. It controls one or two stage cooling applications. The thermostat normally displays room temperature and mode of operation. It also allows to select continuous fan operation, or has the fan on intermittent operation with the equipment. Finally, it displays the status of unit, thus providing maximum information for the user.