Technical Specification for Air Cooled Condensing Unit

GENERAL

The air cooled screw condensing unit will be designed and manufactured in accordance with following European directives:

Construction of pressure vessel	97/23/EC (PED)
Machinery Directive	2006/42/EC
Low Voltage	2006/95/EC
Electromagnetic Compatibility	2004/108/EC
Electrical & Safety codes	EN 60204–1 / EN 60335-2-40
Manufacturing Quality Stds	UNI – EN ISO 9001:2004

Before shipment a full test will be held to avoid any losses.
Condensing unit will be delivered to the job site completely assembled and charged with holding charge nitrogen 0.5 bar and with right oil quantity.
Comply with the manufacturer instructions for rigging and handling equipment.

The unit will be able to start up and operate as standard at full load and outside air temperature from …. °C to …. °C with an evaporator leaving fluid temperature between …. °C and ….. °C

REFRIGERANT

Only R-134a will be accepted.

PERFORMANCE

- ✓ Number of air cooled screw condensing unit: .....
- ✓ Cooling capacity for single air cooled screw condensing unit: ..... kW
- ✓ Power input for single air cooled screw condensing unit in cooling mode: ..... kW
- ✓ Nominal outside working ambient temperature in cooling mode: ..... °C
- ✓ Operating voltage range should be 400V ±10%, 3ph, 50Hz, voltage unbalance maximum 3%, without neutral conductor and shall only have one power connection point.

UNIT DESCRIPTION

Condensing unit shall include as standard: one refrigerant circuit, semi-hermetic type rotary single screw compressor, air-cooled condenser section, R134a refrigerant, lubrication system, motor starting components, discharge line shut-off valve, suction line shut-off valve, control system and all components necessary for safe and stable unit operation.
Condensing unit will be factory assembled on a robust base-frame made of galvanized steel, protected by an epoxy paint.

SOUND LEVEL AND VIBRATIONS

Sound pressure level at 1 meter distance in free field, semispheric conditions, shall not exceed ……dB(A). The sound pressure levels must be rated in accordance to ISO 3744.
Other types of rating unacceptable. Vibration on the base frame should not exceed 2 mm/s.