

REQUESTED PERFORMANCE

VECTOR 3100 DUPLEX AIR COMPRESSOR PACKAGE – Requested Performance	
Gas	Air
Suction	Atmosphere
Discharge	125 PSIG
Flow (Compressor, Each)	50.5 SCFM
Dew Point	-40°F PDP

PERFORMANCE SUMMARY

VECTOR 3100 DUPLEX AIR COMPRESSOR PACKAGE – Design Point	
Gas	Air
Suction	Atmosphere
Discharge	150 PSIG
Flow (Compressor, Each)	54.7 SCFM
Shaft HP	15 HP

SKID EDGE PERFORMANCE (Net dryer purge air losses)	
Pressure	135 PSIG
Flow	46.75 SCFM
Dewpoint	-40°F PDP
Wet Receiver	120 GAL vertical
Dry Reciver	400 GAL vertical

DETAILED SCOPE OF SUPPLY VECTOR 3100 DUPLEX INSTRUMENT AIR COMPRESSOR PACKAGE

One (1) only Vector 3100 duplex instrument air compressor package designed for an unclassified electrical area and including the equipment listed on the following bill of materials:

MATERIAL	DESCRIPTION
COMPRESSOR	Two (2) only Mattei model RVD11H single-stage, air cooled, oil-lubricated rotary vane air compressors each rated for 54.7 CFM at 150 PSIG and including: - Dry type inlet air cleaner - Fully modulating inlet control system - Air/oil separator - Combination minimum pressure valve and check valve - Oil level indicator - Discharge safety relief valve - Thermal bypass valve - Oil filter - Integral air-cooled oil and after-cooler - The compressor would be direct coupled to a 15 horsepower, 480/3/60, (totally enclosed fan-cooled/explosion proof) and electric motor with flexible drive coupling. Maestro XB microprocessor controller - Ergonomic control panel with buttons for quick access to the menus. - Keys to access menus, start, stop, and reset buttons. - Backlit "Graphic" display 144 x 32 pixel. - Simple to use based on the menu structure. - Possibility of software updates.

	- Display of: - o Analogical data: line pressure, oil temperature. - o General data: alarms, operational messages, machine status, maximum and minimum pressure. - o Hours counters: displaying enabling, running, loading times, maintenance hours counters and maintenance alerts. - o Events Archive: storage of alarms and blocks, indication of event number, machine status and configuration, event code, working hours, pressure line, oil temperature. - Multilingual user interface - Weekly and hourly programming of starts and stops - Immediate reading of compressor operation data on the screen - Setting of basic operation parameters - Storing of faults
WET AIR RECEIVER	One (1) only 120-gallon, 200 PSIG MAWP, ASME code vertical air receiver of our <u>standard</u> design, materials, and construction, and including: - Automatic condensate drain - ASME code pressure relief valve - Pressure indicator
AIR DRYER	One (1) only Xebec model MAD55, modular heatless regenerative desiccant air dryer sized to induce a -40°F pressure dew point under inlet conditions of 53 CFM @ 100 PSIG & 100°F and including: - 115/1/60 control voltage - Coalescing 0.01-micron pre-filter c/w auto drain - Particulate 1-micron after-filter c/w auto drain - Integral discharge check valve - Switching valve - Purge valve - Initial charge of activated alumna.
DRY AIR RECEIVER	One (1) only 400-gallon, 165 PSIG MAWP, ASME code vertical air receiver of our <u>standard</u> design, materials and construction including: - Automatic condensate drain - ASME code pressure relief valve - Pressure indicator
PIPING AND VALVES	- All piping will be to ASME Code B31.3 - Process piping will be of cold formed CS tubing construction - Compressor check valve(s). - Compressor isolation valves for maintenance purposes. - Three (3) valve block and by-pass around complete dryer and filter assembly.
WIRING	All electrical end devices will be pre-wired to a terminal strip in the control panel. NOTE: The pricing quoted does not include motor starters, disconnects, variable speed drives or wiring of these components. PACKAGE WILL NEED SEPARATE INCOMING ELECTRICAL FEEDS FOR COMPRESSORS AND DRYER IF SINGLE POINT ELECTRICAL OPTION IS NOT SELECTED.
PACKAGING	All components would be mounted on a structural steel skid with lifting lugs. The above package is designed to be a fully assembled skid mounted unit including: - Interconnecting piping between each component. - Piping of all drains to skid edge - Finish coat would be our standard machinery enamel finish.
DRAWINGS AND OPERATING MANUALS	- Package general arrangement drawing. - Process flow (P&ID) drawings. - Electrical wiring diagram. - Base detail drawing.



	- Standard operating manuals and parts book. - QC documentation.
TESTING/FAT	Prior to shipping the completed compressor package will be mechanically test run under power using air at atmospheric suction pressure. All end devices will be function tested and a completed mechanical test run report will be provided.