



Industrial Systems-Light
Davidson, NC 28036

7100V

Ref: 9820.00
Sheet: 118
Date: 15 Jan. 2009
Cancels: 07 Feb. 2005

Engineering Data

Bore:	5.5" & 3"	Min RPM:	750	Aircooled Aftercooler CTD:	25° F
Stroke:	4"	Max RPM:	1100	(Package performance)	
Inlet Size:	1.5" NPT	Sheave OD:	18"	Number of Belts:	2
Discharge Size:	1" NPT	Sheave PD:	17.5"	Belt Section:	B

Performance						Nameplate Amp Ratings				
Bare	Motor HP	PSI	RPM	ACFM	BHP					
7100V	15	75	1100	51.6	13.5					
7100V	15	125	1100	50.5	15.1					
7100V	15	175	1100	50.0	16.3					

200-3-60

230-3-60

460-3-60

575-3-60

Nominal Amps are based on NEC full load amperage rating for this size motor. Actual nameplate amps may vary according to motor design and/or motor manufacturer.

NOTE: NO MODIFICATIONS OR OPTIONS ARE AVAILABLE FOR VALUE PACKAGE UNITS OTHER THAN THOSE DESCRIBED IN THIS SECTION.

Bare Pump Detailed Specifications

FRAME—The 100% cast iron frame is designed to support the overhung crankshaft. Cylinders bolt directly to the cast iron frame. Frame is completely sealed yet allows for maximum accessibility.

CRANKSHAFT—A unique overhung design supported by two heavy duty ball bearings with replaceable crankpin bushing. Entire shaft is balanced with an integral counterweight to insure smooth operation.

CONNECTING RODS—Solid one-piece design. These simple, easy to maintain rods can be used only with an overhung crankshaft. Crankpin bushing inside the rod is precision ground requiring no alignment.

CYLINDERS—These are 100% cast iron, separately cast and individually bolted to the frame in a V-type configuration. The cylinders are precision honed for low oil carryover. Radial fins on the cylinders help remove heat and ensure 360 degree cooling of the cylinders.

PISTONS—Precision balanced low pressure aluminum and high pressure cast iron pistons provide smooth operation.

RINGS—There are four piston rings for sealing compression and oil control. The taper faced compression ring and beveled oil scraper ring provide quick seating. Two, three-piece oil control rings maintain proper lubrication on cylinder wall. Precision honing used in conjunction with the ring stack up means low oil carryover.

FLYWHEEL—The cast iron fan type flywheel forces a “cyclone” air blast to provide cooling for the deep finned cylinders and multi-finned copper tube intercooler. The flywheel is balanced to keep vibration to a minimum.

INTERCOOLER—Two stage compressors use an intercooler. The intercooler between stages is of finned copper tube construction to provide maximum cooling area. It is located directly in the flywheel air blast to remove the heat of compression between stages. This keeps running temperatures and power needs to a minimum, ensuring high air delivery for horsepower expended. The intercooler is provided with a relief valve to prevent over-pressurization.

LUBRICATION—Splash lubrication of running parts is simple and reliable. Lubrication dippers are integral with connecting rods and cannot come loose.



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INLET FILTER—The filter has a durable canister with a dry type 10 micron inlet filter/silencer as standard.

VALVES—Efficient combination valve design is utilized. Inlet valves consist of finger valves which allow maximum air flow. Discharge valves are large bore ring valves which provide maximum efficiency. Valve plate is easily removed for maintenance.

OIL SIGHT GLASS—Indicates visible oil level at all times.

Simplex Detailed Specifications

BASE—The compressor and motor are aligned on a heavy steel base.

RECEIVER—Receiver mounted units are ASME, National Board coded, and include pressure gauge, drain valve, service valve, and relief valve.

DRIVE—The drive is V-belt type with provision for easy adjustment of belt slack*. An easily removed, totally enclosed beltguard is standard equipment.

MOTOR—Standard AC motors are 1800 rpm NEMA T frame with drip-proof enclosure, Class B insulation, 1.15 Service Factor, and grease lubricated ball bearings. Standard three phase motor voltages are 200, 230/460 and 575.

CONTROLS—Units are equipped for automatic start and stop operation with NEMA 1 unloading pressure switch.

15 HP Simplex “Value Fully Packaged” Detailed Specifications

RECEIVER MOUNTED—Simplex “Value Fully Packaged” units include one (1) bare compressor with oil site glass and one (1) ODP motor mounted on a single horizontal A.S.M.E. coded receiver tank. Standard controls are automatic start/stop with unloading pressure switch. These packages include an E-Series starter, mounted and wired, in a NEMA-1 enclosure. These packages also include an air-cooled aftercooler which removes up to 70% of the moisture in the compressed air. Package features a totally enclosed belt guard, belt guard mounted air-cooled aftercooler, with electric (115-volt) automatic tank drain. Standard voltage is 230-3-60 with optional voltages available to meet specific site needs. Simplex 15HP “Value Fully Packaged” options include install kit and start-up kit. No other options are available with these packages. Package is both U.L. and CSA approved.

15HP Duplex “Value” Package Detailed Specifications

RECEIVER MOUNTED—Duplex value packages include two (2) bare compressors with oil site glass and two (2) ODP motors mounted on a single horizontal A.S.M.E. coded receiver tank. Standard controls are automatic start/stop with unloading pressure switch. These packages include an E-Series alternator, mounted and wired, in a NEMA-1 enclosure. Panel is both U.L. and CSA approved. The alternator panel allows both compressor units to operate in response to system air pressure demand. For example, if system pressure dips below the preset lower pressure limit, compressor “A” will automatically start. If pressure rises to the upper set point limit, compressor “A” will shut down. Next time system pressure drops below the preset lower pressure limit, compressor “B” will automatically start. Should system demand require, both compressor units will start automatically to meet and maintain system air pressure demand. Alternator includes (2) duty rated starters with overload protection, (1) control relay for alternation, (1) on/off switch, fused control circuit, (2) reset buttons through the cover. Package features a totally enclosed belt guard, no aftercooler, with manual tank drain. Standard voltage is 230-3-60 with optional voltages available to meet specific site needs. Duplex value package options include install kit, start-up kit, and electric automatic tank drain with power cord. No other options are available with these packages.

Fully Packaged 15HP Duplex “Value” Compressor Detailed Specifications



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RECEIVER MOUNTED—“Fully Packaged” duplex value packages include two (2) bare compressors with oil site glass and two (2) ODP motors mounted on a single horizontal A.S.M.E. coded receiver tank. Standard controls are automatic start/stop with unloading pressure switch. These packages include an E-Series alternator, mounted and wired, in a NEMA-1 enclosure. Panel is both U.L. and CSA approved. The alternator panel allows both compressor units to operate in response to system air pressure demand. For example, if system pressure dips below the preset lower pressure limit, compressor “A” will automatically start. If pressure rises to the upper set point limit, compressor “A” will shut down. Next time system pressure drops below the preset lower pressure limit, compressor “B” will automatically start. Should system demand require, both compressor units will start automatically to meet and maintain system air pressure demand. Alternator includes (2) duty rated starters with overload protection, (1) control relay for alternation, (1) on/off switch, fused control circuit, (2) reset buttons through the cover. Package features a totally enclosed belt guard with air-cooled aftercooler, mounted and piped, and electric automatic tank drain with power cord (115-volt). Standard voltage is 230-3-60 with optional voltages available to meet specific site needs. “Fully Packaged” duplex value package options include install kit and start-up kit only. No other options are available with these packages.

Options Only Detailed Specifications

HIGH DUST FILTER—An optional heavy-duty, 10-micron, high dust inlet filter with built in centrifugal pre-cleaner and automatic dust ejector valve is available.

“E”-SERIES STARTER (MTD. & WIRED) -SIMPLEX UNITS—“E”-Series starters provide full voltage control of electric motors. They include thermal relays which protect the motor windings from harmful currents and resultant temperature rise caused by overloaded motor, low line voltage or stalled motor. Fused control circuit, on/off switch, reset button and NEMA 1 enclosure (UL & CSA approved) included.

START-UP KIT—Each start-up kits contains all the parts needed to correctly start up and maintain the compressor for the first year of operation. Kits include All Season Select lubricant (quantity dependent upon sump capacity), replacement filter element(s), MSDS sheet for lubricant, and (1) proof of warranty decal. The All Season lubricant is specifically formulated to protect and preserve the air compressor pump. All Season Select Lubricant can operate up to 2000 hours (under normal operating conditions) between oil changes. Use of All Season Select lubricant from start-up throughout the first 2-years of operation provides for a full **2-YEAR PUMP WARRANTY**, less consumables.

INSTALL KIT—Each install kit contains all the parts needed to correctly mount and install the compressor. Kits include a three (3) foot braided hose with NPT swivel connectors (size matches connection on compressor), vibration pads and foundation anchor bolts. The Install kit is specifically designed to ease installation of the air compressor and to protect and preserve the receiver tank. Use of the Install kit at initial start-up warrants the receiver tank for five (5) years, less package related components.

SEE CAMPBELLVILLE RECIP INTERNAL PRICESHEETS OR CONTACT YOUR INDUSTRIAL TECHNOLOGIES MARKETING MANAGER FOR NON-STANDARD PACKAGES, MODIFICATIONS, CONTROL PANELS OR OPTIONS FOR BASE MODELS LISTED IN THIS SECTION.