AIR COMPRESSOR SYSTEMS

TECHNICAL SPECIFICATION SHEET

50 HP 3-IN-1 AIR COMPRESSOR

PM VSD screw compressor · refrigerated dryer · 500 L receiver

Compressor, dryer and air tank in one package.



50 HP PM VSD motor (37 kW), IP55	**226 CFM** Free air at 116 psi (6.40 m³/min)	**191 CFM** At 145 psi, option (5.40 m³/min)	**132 gal** ASME receiver (500 L)
3-in-1 Compressor, refrigerated dryer, receiver	**220 V** 60 Hz, 3-phase	**74.8 × 39.6 × 80.3 in** L × W × H (1,900 × 1,005 × 2,040 mm)	**1,764 lb** Weight (800 kg)

A 37 kW permanent-magnet motor drives the screw air end directly; the Inovance inverter matches its speed to your air demand.

KEY FEATURES

- **Direct-drive PM VSD**
  The 37 kW permanent-magnet motor is coupled straight to the rotary-screw air end: no belts to tension or replace.
- **Three filter stages. Auto drains**
  C, T and A grade filter elements in series, each with an automatic drain.
- **Inovance inverter**
  The variable-speed drive sits in its own electrical compartment behind the front door.
- **Built-in refrigerated dryer**
  Panasonic refrigeration compressor, aluminum plate heat exchanger with a built-in water separator, and an LED display with real-time dew point, run time and alarm codes.
- **ASME vessels**
  The 500 L receiver and the oil-gas separator are ASME certified.

APPLICATIONS Shop air for pneumatic tools and equipment within the rated air delivery; stone fabrication: CNC, saws, polishers and air-powered tools; production and maintenance shops that need dry, filtered air; indoor installations with a three-phase 220 V supply.

50 HP 3-IN-1 AIR COMPRESSOR · TECHNICAL DATA

PACKAGE	
Configuration	Rotary-screw air compressor, refrigerated air dryer, three-stage line filters and receiver on one base
Compression	Oil-injected rotary screw, air cooled
Drive	Direct drive: permanent-magnet motor coupled to the air end

PRESSURE AND AIR DELIVERY	
Working pressure, standard	116 psi (8 bar)
Free air delivery, 8 bar	226 CFM (6.40 m³/min) at 116 psi (8 bar)
Working pressure, option	145 psi (10 bar), chosen at order
Free air delivery, 10 bar	191 CFM (5.40 m³/min) at 145 psi (10 bar)

MOTOR AND CONTROL	
Motor	50 HP (37 kW) permanent magnet
Speed control	Variable speed (VSD), Inovance inverter
Motor protection / insulation	IP55 / Class F
Motor bearings	SKF
Controller	PLC controller with display; emergency stop

AIR TREATMENT	
Air dryer	Built-in refrigerated dryer with Panasonic refrigeration compressor
Heat exchanger	Aluminum alloy plate, max. 16 bar, foam insulated, built-in water separator
Dryer controls	LED display: real-time dew point, run-time record, self-diagnostic alarm codes
Expansion valve	Constant-pressure (bypass) valve

AIR TREATMENT (CONT.)	
Line filters	Three stages: C, T and A grade elements
Condensate	Automatic drains

AIR STORAGE	
Receiver	132 US gal (500 L), horizontal, ASME certified
Oil-gas separator	ASME certified

ELECTRICAL	
Compressor supply	220 V / 60 Hz / 3-phase
Dryer supply	220 V / 60 Hz / single phase, separate feed (not 120 V)

SERVICE AND WARRANTY	
Air filter / oil separator	Every 3,000 h
Oil filter	First at 500 h, then every 3,000 h
Line filter elements	Every 4,000 h
Warranty	1 year whole machine, 2 years air end

UTILITIES	
Air outlet	G 1 1/2
Noise level	66 ± 2 dB(A)

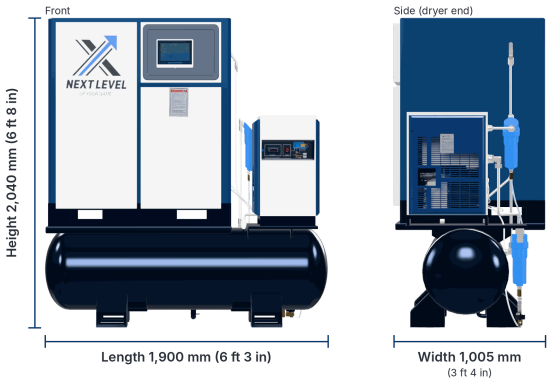
DIMENSIONS AND WEIGHT	
L × W × H	74.8 × 39.6 × 80.3 in (1,900 × 1,005 × 2,040 mm)
Weight	1,764 lb (800 kg)

DETAILS	
Protection	IP55, Class F insulation, SKF bearings
Cooling	Air cooled

INCLUDED AS STANDARD

- 50 HP (37 kW) permanent-magnet motor, direct drive, Inovance inverter
- Oil-injected rotary-screw air end, air cooled
- PLC controller with display and emergency stop
- Built-in refrigerated dryer (Panasonic refrigeration compressor)
- Three-stage line filters (C, T, A grade) with automatic drains
- 500 L ASME receiver and ASME oil-gas separator
- Next Level front panels, logo and nameplates; parts booklet
- Export wooden crate; online owner manual

LAYOUT AND DIMENSIONS



Front and side views of the 50 HP 3D model, sized to the factory's overall dimensions.

Factory quotation, September 2026. Free air delivery is the factory's m³/min; CFM values are converted (× 35.315). Weight and dimensions are the factory's values for the package. U.S. values first, metric in brackets. Specifications are subject to change without notice. Images may show optional equipment. All dimensions and weights are approximate; U.S. values are converted from the factory's metric data. Document date: Nov 2026. Next Level Enterprises · www.nextlevel.plus · +1 941-900-3018 · sales@nextlevel.plus