

Solar Powered Air Compressor

A.C.T. Part # (varies with the customization options)

DESCRIPTION

The Alert Control Technologies Solar Powered Air Compressor (S.P.A.C.) is an easy to install all-in-one solution that provides an automatically refilled and reliable source of compressed air for remote locations. Shipped as a completed assembly, installation is quick and simple at the desired location. The entire S.P.A.C. package is controlled by a Siemens LOGO! PLC that enables the operator to custom configure certain operating parameters like the pressure range to start/stop filling the tank (max 125 PSI) and is powered by a 100Ah Sealed Lead Acid 12VDC battery that, when the available voltage drops, is recharged by the specified solar panel configuration*.



FEATURES

- **Air Compressor** provides a reliable source of compressed air for remote locations.
- **10 Gal. Tank** provides a large capacity and ensures operation when needed.
- **Solar Power** provides an off the grid, virtually unlimited power source for recharging the units' battery.
- **Power Switch** allows the operator to manually enable or disable the unit.
- **Automated Control** prevents the need for user interaction after installation with normal use.
- **LCD** screen shows the current tank pressure and battery voltage and tracks running cycles per day and week as well as total running time.
- **Product Warranty** guarantees that all A.C.T. manufactured products are free from defects under normal operating conditions for 1 year from the purchase date.

WHAT'S INCLUDED

- Air Compressor Unit housed in an 18" x 16" Polycarbonate enclosure
- Air Receiver Tank Assembly
- All Weather Battery Enclosure containing a 100Ah sealed lead acid 12VDC battery
- Solar Panel Assembly with mounting bracket and power leads (specified upon order)
- AWG 14 - Battery Power leads
- AWG 4 - Battery Power leads

* The part number of this product varies with the customization options selected

CONFIGURATION OPTIONS*

The Solar Powered Air Compressor can operate with a variety of configurations and sizes of solar panels. As a rule of thumb, a single Air Compressor Unit can run approximately 1 minute for every 3 minutes of sunlight to which two 50 Watt solar panels are exposed. When placing your order, please keep that approximate ratio in mind to choose the best configuration for your needs.

Alert Control Technologies Part #	Solar Panel Configuration	Approx. Runtime to Sunlight Ratio (seconds)
VIA-AS003-008	50 Watt Solar Panel x 1	60:360
VIA-AS003-009	50 Watt Solar Panel x 2	60:180
VIA-AS003-011	125 Watt Solar Panel x 1	60:135
VIA-AS003-013	85 Watt Solar Panel x 1	60:270

SOLAR PANEL SPECIFICATIONS (50 & 85 Watt)

Maximum Power (Pmax)	50 Watt	85 Watt
Optimum Operating Voltage (Vmp)	17.1 Volts	17.1 Volts
Optimum Operating Current (Imp)	2.83 Amps	4.82 Amps
Open Circuit Voltage (Voc)	21.4 Volts	21.4 Volts
Short Circuit Current (Isc)	3.04 Amps	5.16 Amps
Nominal Voltage (V)	12 Volts	12 Volts

AIR TANK SPECIFICATIONS

Max. Pressure allowed by PLC	125 PSI
Maximum Pressure	150 PSI
Maximum Capacity	10 Gal.
Safety Valve Release Point	150psi

COMPRESSOR SPECIFICATIONS

Tank Max Pressure allowed by PLC	125 PSI
Battery Voltage Min. (Shutdown voltage)	11.5 Volts
Compressor Restart Volt. (Operating voltage)	12.5 Volts
Solar Panel Shunt Voltage	14.4 Volts
Typical Current Consumption (@ 100 PSI)	20 Amps
Max. Working Pressure	200 PSI
Max. Duty Cycle @72°F & 100PSI	100%
Ambient Min/Max Temperature	-40° F/158° F
Pressure Transducer Range	0-250 PSI
Tank Safety Valve Release Pressure	150 PSI

BATTERY SPECIFICATIONS

See included PDF.

* The part number of this product varies with the customization options selected

