



 $\mathsf{TM}$ 

### AIR COMPRESSOR OFFERINGS

### Range of Solutions



Single Well
AC or DC

**Multi Well Pad** AC or DC

a)

Saylor-Beall [DC]

0.75 HP 2.7 CFM, Simplex 5.4 CFM, Duplex 60G Tank Size Saylor-Beall [AC]

5 HP 34 CFM, Duplex 120G Tank Size Saylor-Beall [AC]

15 HP 102 CFM, Duplex 240G Tank Size Saylor-Beall [AC] 30 HP 202 CFM, Duplex 240G Tank Size

ViAir [DC]

0.25 HP 2.48 CFM

10G Tank

**USA Made** 

**Fully Automated "Smart" Compressors** 

Services

Site Assessment & Leaks Detection Sizing

**Setup & Commissioning** 

Maintenance: Oil & Filter Changes Remote Diagnostics into SCADA

**Functionality** 

### AIR COMPRESSOR OFFERINGS

### **Total Portfolio with Options**



DC		AC		Optional Features			Services	
Light Duty	Heav	y Duty	Simplex	Duplex	Dryer Package	SMARTS Package	Power Package	
Duplex	Simplex	Duplex	5.8 CFM 1.5 HP	11.6 CFM (2) 1.5 HP	3⁄4 HP	DC SMARTS	Light Duty Duplex	
2.48 CFM ¼ HP	2.7 CFM ¾ HP	5.4 CFM (2) ¾ HP	11.1 CFM 3 HP	22.2 CFM (2) 3 HP	1.5 HP	AC SMARTS	Heavy Duty Simplex	
			17.3 CFM 5 HP	34.6 CFM (2) 5 HP	3 HP		Heavy Duty Duplex	
Pricing			26.2 CFM 7.5 HP	52.4 CFM (2) 7.5 HP	5 HP			
			34.4 CFM 10 HP	68.8 CFM (2) 10 HP	7.5 HP			
			51 CFM 15 HP	102 CFM (2) 15 HP	10 HP		CI	FM is Actually A

**CFM is Actually ACFM**Outlet CFM

15 HP

### SINGLE WELL SOLUTION

### **Light Duty Duplex DC Compressor**



#### **WITHOUT Controls**

Duplex only option

### **IO** [Automation Package]

Tank Pressure
Motor Run Status [A&B]
Internal Box Temp
ESD Button
Purge Button

### **Base Package**

Starts/stops
Via a pressure switch
Limited Local feedback
Run status

### **DC Option**

0.25 HP 2.48 CFM **Warranty**One Year

## Power Option 24VDC only

**Solar Skid w Batteries** Optional



### **Duplex Configuration**

Two pump/motor assemblies
Will alternate under normal operations
Only available w Automation Package
Will kick on both if one pump can't replenish
in a sufficient amount of time

### "SMART" Automation Package Option

SCADApack PLC

for Advanced Control and Feedback

**Actual Runtime** 

**Precise Pressure Control** 

Pressure Transmitter to control Start/Stop

Remote/Local Indication

Pressure, Temperature, Voltage

Pump/motor Runtime Hours

Lead/Lag Pump Management

**User Configurable Pressure Setpoints** 

Automated Drain Dump based on Runtime

### **Automation Alarming & Maintenance**

**Automation Option only** 

**Battery Voltage** 

Runtime

Solar Charging Status

Trending of all IO points

# MULTI WELL SOLUTION, Saylor-Beall Heavy Duty DC Compressor With No Extras



#### **WITHOUT SMART Controls**

Simplex or Duplex available [we recommend duplex]

**Warranty**One Year

### **Duplex Configuration**

Two pump/motor assemblies
Will alternate under normal operations
Will kick on BOTH if one pump can't replenish
In a sufficient amount of time

### Starts/Stops

Via a pressure switch

Limited Local feedback

Run status

### **DC Option**

0.75 HP 2.7 CFM, Simplex

z. / CFM, Simplex

5.4 CFM, Duplex

### **Duty Cycle Typical Solar**

2-3 Hours/Day

4 Days Autonomy

#### **RPM**

800 v 1000 RPM!! Less wear & tear

### **Moisture Purge**

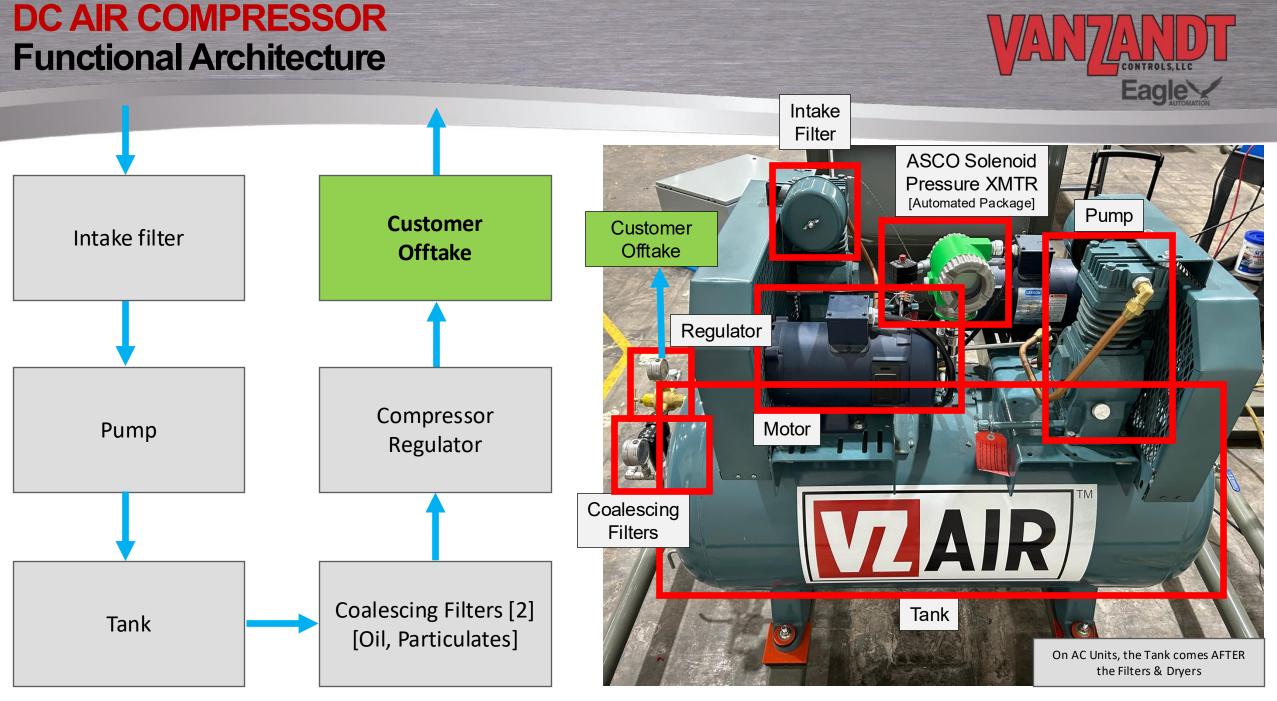
Automated Solenoid Dryer option available



### **Operating Pressures**

20-150 PSI

**Bypass Filter when plugged**SMART Option only



### SAYLOR BEALL AIR COMPRESSOR

### **Unique Value**



### Low RPMs = Longer Life Span

Versus Competition

More powerful compressor that's de-rated

Competition takes lower HP and ramps up

VZAIR takes higher HP and ramps down

800 RPM v 1000+

#### **USA Made**

Supply Chain issues better managed Extensive Spare Part Availability Substantial Castings = Better Quality

### **Splash/Pressure Oil System**

Splash Oil System, Standard Offering Pressure Oil is an Expensive Option Available

### **One Stop Shop**

Solar Packages
Automation Options

### **Optimized Dryer Location**

Mounted on the Compressor Smaller Footprint

Optional Dryer Typically Runs Purge Cycle to Regen the Desiccant
Only Purges When Motor is Running

Stored Wet Air Purges Run on Timed Cycles [Optional]
Leads to Unnecessary Purges & Run Times
Standard: Solenoid Drain

### **Optimized After Cooler Position** [AC Only]

Cools Motor!!
Cools Compressed Air

#### **Excellent Technical Support**

Easy Live Support Available Local and Vendor Support Available Large Drain Orifice
Will not clog easily

### **Optimized for Long Service Life**

Lower RPMs
Lead/Lag strategy equalizes Runtimes
Head Unloading Reducing Wear on Startup
Run Hours for Maintenance Scheduling
Not Calendar Based

### SAYLOR BEALL DC COMPRESSOR

### **Solar Packages**



Power Option 24VDC only

**Warranty**One Year

### **Base Package**

2 Solar Panels, 795 Watts Total 8 Batteries, 480 Amp Hours Total

#### **HD Package**

4 Solar Panels, 1590 Watts Total 16 Batteries, 960 Amp Hours Total

#### **Includes Enclosure with**

Solar Controller
Breakers
Terminals
Battery Box
Solar Panel Mounting

**LD Compressor** w Solar & Battery Skid





### **Custom Packages Available**

To meet your Autonomy Needs XX Solar Panels YY Batteries

### SAYLOR BEALL DC COMPRESSOR

### **Services Needed**



### **Weekly or After 40 Hours of Service**

Check the **lubricant level** to verify it is at the proper level.

If the lubricant becomes discolored, empty and refill.

Verify the **auto drains** are functioning correctly.

**Visually inspect** the compressor

Verify the safeguards are in place.

Check for leaks and vibrations.

Check the **pressure relief valves**.

Clean the **surfaces** of the compressor and intercooler.

Inspect the compressor and hoses for air leaks.

Inspect the **filter** 

Change the filter if applicable.

### **Required Oil Type**

ISO 150 or ASTM 700 Compressor Oil Holds 4 pints

### **Monthly or After 160 Hours of Service**

Perform Weekly Tasks PLUS
Inspect the Belt Tension inside the Air Compressor

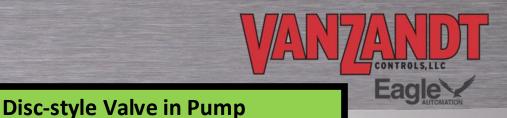
### **Quarterly or After 500 Hours of Service**

Perform Weekly & Monthly Tasks PLUS
Change out the Lubricant
Inspect the Torque on the Pulley Nuts & Screws
Inspect the Dryer & Separator Assembly & Filters

### **Bi-Annually or After 1000 Hours of Service**

Perform Weekly, Monthly & Quarterly Tasks PLUS
Check Valves for signs of leaks or carbon prints
Clean the Strainer Screen of the Crankcase
Examine the motor-area Contact Points
Examine Pressure Switch Diaphragm

### **MULTI WELL SOLUTION, Saylor-Beall Heavy Duty AC Compressor With No Extras**



#### WITHOUT Controls

Simplex or Duplex available [we recommend duplex]

### **Duplex Configuration**

Two pump/motor assemblies Will alternate under normal operations Only available w Automation Package Will kick on BOTH if one pump can't replenish in a sufficient amount of time

### Starts/Stops

Via a Pressure Switch **Limited Local feedback** Run status

**Operating Pressures** 20-170 PSI

**AC Option Simplex** [5-30 HP] 1.5 HP, 5.8 CFM 15 HP, 51 CFM **Duplex** [1.5-30 HP] 1.5HP, 11.6 CFM 15 HP, 102 CFM



### **Moisture Purge**

Mechanical Float Switch driven **Heat Exchanger** 

Mounted between Compressor & Tank Lowers the Discharge Temperature Helps reduce Moisture

### Warranty

One Year

### **Dry Receiver only**

Not Reed-style

Much longer wear life

Helps while in Peak Demand from overloading the Dryer Supplied Air is pre-dried and pre-filtered Will reduce maintenance on Customer equipment Bypass Filter when plugged [SMART only]

### AIR COMPRESSOR Amp Draw by HP



DC Motor			
НР	FLA		
ПР	24VDC		
3/4	33		

Single Phase Motors				
НР	FLA 110VAC	FLA 240VAC		
3/4	11	5		
1	15	6.7		
1.5	21	9		
2	26	12		
3	37	17		
4	49	22		
5	54	25		
5.5	60	27		
7.5	85	38		

<b>Three Phase Motors</b>				
НР	FLA 240VAC	FLA 460VAC		
3/4	2.8	1.8		
1.5	4.5	2.8		
2	5.8	3.6		
3	8.7	5.3		
5	13	8.9		
7.5	19	11		
10	25	15		
15	37	22		
20	50	28		

### DC AIR COMPRESSOR PRICING

### 2024 Price Table



	Name	Display Name	Description	Li	st Price
DC	C Air Compressors <b>WITHOUT</b> A	utomation			
	VZAIR-DC-24-LD-S-B25-5G	VZAir <b>Light Duty Simplex</b> , 24VDC	Single light duty compressor with a 24 Volt, 1/4HP motor and 5 gallons of storage	\$	4,100
	VZAIR-DC-24-LD-D-B25-10G	VZAir <b>Light Duty Duplex</b> , 24VDC	Two light duty compressors with two 24 Volt, 1/4HP motors and 10 gallons of storage capacity	\$	8,570
	VZAIR-DC-24-HD-S-B75-60G	VZAir <b>Heavy Duty Simplex</b> , 24VDC	Single heavy duty compressor with a 24 Volt, 3/4HP motor and 60 gallons of storage capacity	\$	9,650
		VZAir <b>Heavy Duty Duplex</b> , 24VDC	Two heavy duty compressors with two 24 Volt, 3/4HP motors and 60 gallons of storage capacity	\$	13,900
DC	C Air Compressors <b>WITH</b> Autor	mation			
	VZAIR-DC-24-LD-S-S25-5G	VZAir <b>Light Duty Simplex SMART,</b> 24VDC	Single light duty compressor with a 24 Volt, 1/4HP motor and 5 gallons of storage with Smart Package	\$	11,645
	VZAIR-DC-24-LD-D-S25-10G	VZAir <b>Light Duty Duplex SMART,</b> 24VDC	Two light duty compressors with two 24 Volt, 1/4HP motors and 10 gallons of storage capacity with Smart Package	\$	13,850
	VZAIR-DC-24-HD-S-S75-60G	VZAir <b>Heavy Duty Simplex SMART,</b> 24VDC	Single heavy duty compressor with a 24 Volt, 3/4HP motor and 60 gallons of storage capacity with Smart Package	\$	15,195
	VZAIR-DC-24-HD-D-S75-60G	VZAir <b>Heavy Duty Duplex SMART,</b> 24VDC	Two heavy duty compressors with two 24 Volt, 3/4HP motors and 60 gallons of storage capacity with Smart Package	\$	19,895
So	lar Packages				
	VZAIR-DC-24-790W-480AH	VZAir DC <b>Simplex Solar Power</b> Package	24VDC Power Package with 790 Watts of Solar and 480 Amp Hours of Batteries	\$	5,500
	VZAIR-DC-24-1580W-960AH	VZAir DC <b>Duplex Solar Power</b> Package	24VDC Power Package with 1580 Watts of Solar and 960 Amp Hours of Batteries	\$	11,000

### **AUTOMATION PACKAGE ADDER**

### **Control & Remote Diagnostics**



### **Automation Package**

SCADApack PLC

for advanced control and feedback

#### **Precise Pressure Control**

Pressure transmitter to control start/stop Discharge Pressure monitoring & control

#### **HMI Local Alarms and Status**

Clear the alarms
Web-based local interface [Beijer]

### **Communication Options**

Ethernet or Modbus Wired or wireless

Compressor doesn't start under load Pump/motor heads are bled off first

**Extends motor life significantly** 



### **Battery Backup**

Maintain Control Power Up to 24 Hours

### "SMART" Automation Package Option

SCADApack PLC

for Advanced Control and Feedback

**Actual Runtime** 

**Precise Pressure Control** 

Pressure Transmitter to control Start/Stop

Remote/Local Indication

Pressure, Temperature, Voltage

Pump/motor Runtime Hours

Lead/Lag Pump Management

**User Configurable Pressure Setpoints** 

Automated Drain Dump based on Runtime

### **Automation Alarming & Maintenance**

**Automation Option only** 

Remote/Local Monitoring

Battery Voltage

Runtime

Solar Charging Status

Trending of all IO points

### **AUTOMATION DETAILS**

### **Dialed-In Based on Customer Requirements**



#### 10

Motor Run [A&B]
Motor Run Status [A&B]
Compressor Temperature [A&B]
Customer Permissive
Power Fail [AC only]
ESD Button
Oil Level Monitor
Purge Solenoid
Header Pressure Relief Solenoid
Customer Alarm Light
Tank Pressure [4-20mA]
Moisture Analyzer [Modbus]



### **Setpoints**

Pump Lead/Lag
Pump ON/OFF
Low Battery
Air Fill Rate

#### **Alarms**

Leak Detection
Compressor Failure
Call to RUN, no START
Compressor High Temperature
Motor Over Current
Long Run "Shot Clock"
Low Oil Level

### VZAir Dual HD DC

Cmp 1 RunTime in Hr:Mn

Tank Pressure

Battery Voltage



### **AUTOMATION PACKAGE ADDER HMI Screens**

0:

Cmp 2 RunTime in Hr:Mn

Lead Run Time TDay in Hr

Lead Run Time YDay in Hr

Lead Run Time CMonth in Hr

Lead Run Time PMonth in Hr

Lag Run Time TDay in Hr

Lag Run Time YDay in Hr

Lag Run Time CMonth in Hr

Lag Run Time PMonth in Hr

0:

PLC Rev.



Set Points

Trend View

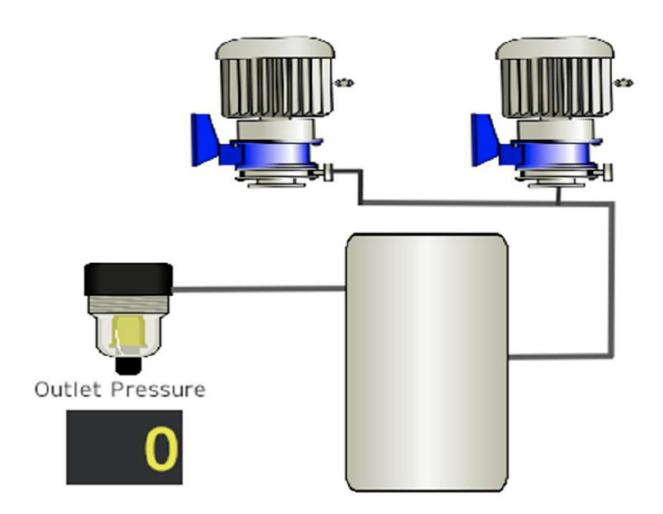
Overview

Purge

Maintenance

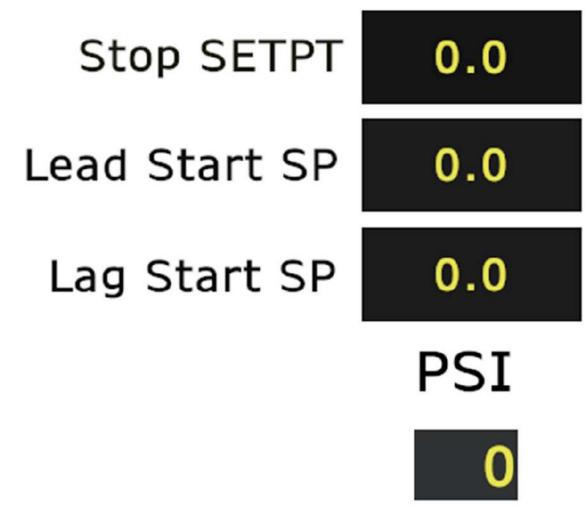








Alarm Description Current Hours Hours Set Point Reset CLEAR 0 0 RESET Comp 1 Oil Maintenance Hours CLEAR 0 0 RESET Comp 1 Air Filter Maintenance Hours CLEAR 0 RESET 0 Comp 1 Belt Maintenance Hours CLEAR 0 0 RESET Comp 1 Valves Maintenance Hours CLEAR 0 0 RESET Compe 2 Oil Maintenance Hours CLEAR 0 0 RESET Comp 2 Air Filter Maintenance Hours CLEAR 0 RESET Comp 2 Belt Maintenance Hours 0 **CLEAR** 0 0 RESET Comp 2 Valves Maintenance Hours MAIN



MAIN

Active Time Active Date AlarmMessage 13:09:03 10/20/2023 Cmp1 Fault 13:09:03 10/20/2023 Cmp2 Fault

MAIN

**RESET** 

