

# **OABC D** Series

Screw Booster Compressor Series



www.ozenairtech.com

# THE DETAILS THAT DELIVER THE RIGHT RESULTS...

#### EXPERIENCE

Ozen Air Technology, with its industry experience of half-a-century and its large portfolio of compressed air products, provides, reliable, efficient and smart solutions.

#### TRUST

Ozen's dedication to customer satisfaction has helped the company to build lasting relationships of trust and loyalty with its customers.

#### DURABLE AND EFFICIENT

All of the compressed air equipment in Ozen's portfolio have proven their durability under toughest conditions. They provide high-quality, high-efficiency air.

#### QUALITY

Manufacturing consistently high-quality products is one of Ozen's fundamental tenets. To that end, Ozen continuously enhances its quality policies.

# **ÖZEN**

#### TECHNOLOGY

Ozen Air Technology is innovative. It always uses up-to-date technologies in compliance with world-standards.

#### R & D

With its creative team and competent infrastructure, Ozen is capable of developing its own technology through collaborations with several universities.

#### STRONG SERVICE NETWORK

Ozen Air Technology believes in maintainability. Its customers can enjoy uninterrupted manufacturing thanks to its accessible, fast and reliable service network.

#### COMPETITIVE

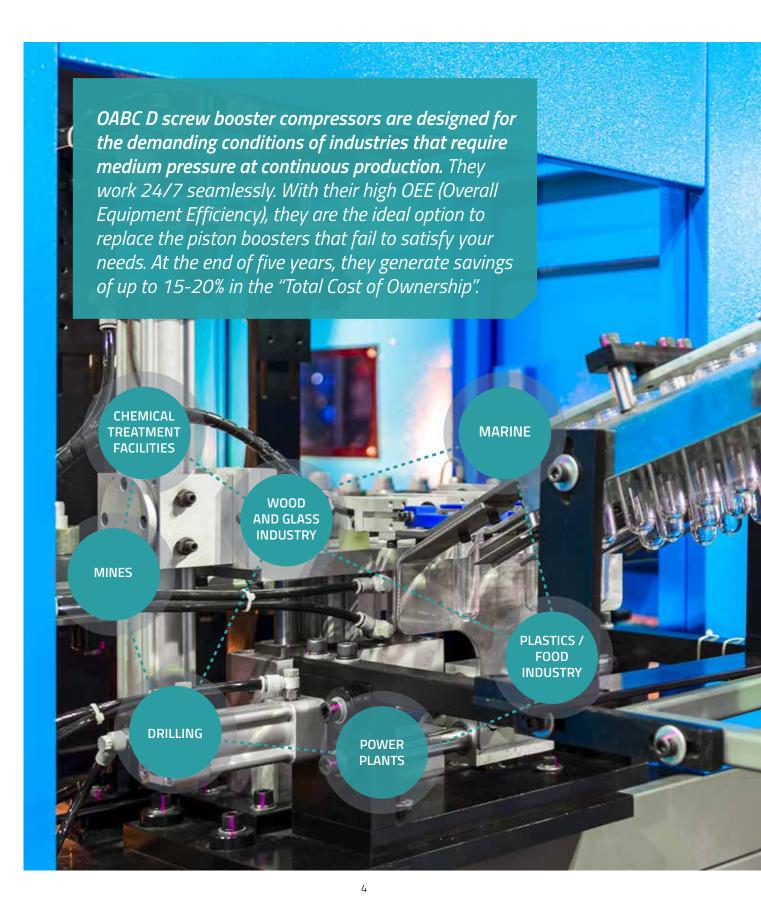
Ozen Air Technology acts in favor of its customers. Providing them with leverage is one of Ozen's strong suits.

#### **RESPECT FOR THE ENVIRONMENT**

Striving for a sustainable future, Ozen Air Technology selects for environmentally friendly practices and takes all necessary precautions while structuring its work processes.

## **Screw Booster Compressor Series**

OABC D (18-45 kW)









#### Industries that Use OABC D Series

- Plastics/Food Industry PET blow molding
- Marine Initial motor start
- Metalworking Industry Laser cutting
- Wood and Glass Industry Surface coating
- Drilling Deep well drilling
- Power Plants
- Chemical Treatment Facilities High pressure oxygen supply
- Mines Removal of toxic gasses







### **Screw Booster Compressor Series**

#### OABC D (18-45 kW)

Screw-Separator Components • High-efficiency, high-quality screw block components

- Mono-block screw-separator design
  - Minimum pressure drop
    - Oil level control
    - Spin-on separator

**NEMA TEFC Premium Efficient Motor** Provides high efficiency and performance thanks to its outstanding IP 54 motor.



• Improves compressor efficiency by the motor power transmission to the screw block with a rate of 1:1 ratio.

 Saves energy by eliminating losses due to friction.

#### "SCS" - Symmetrical Cooling System

• Guaranteed cooling performance with large size radiator pack.

 Strong, compact design provides durability that is tested and proven under tough work conditions.

 Enables your compressor to keep working with high efficiency under various climate conditions.



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#### Maestro

• User-friendly control panel indicators facilitate the assessment of the equipment as well as the planning of maintenance.

• All the functions of the OABC D series screw boosters are monitored by 21 sensors and any potential problem is prevented by the electronic control system.

• Up to four compressors can be managed from a single control point, providing ease of use and energy savings.

- Support for 12 languages
- Equal aging option is available

#### **Quality Equipment**

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• Product durability is improved with reinforced body design.

- Ozen Air Technology uses components that are compatible with world standards.
- High performance and durability provide peace of mind.
- It is easy to find the products with the desired specifications.
- Access to after-sales services is effortless.

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#### **Ease of Service**

• The strategic positioning of product components provides ease of maintenance.

• With easily available spare parts, maintenance is no longer an issue.

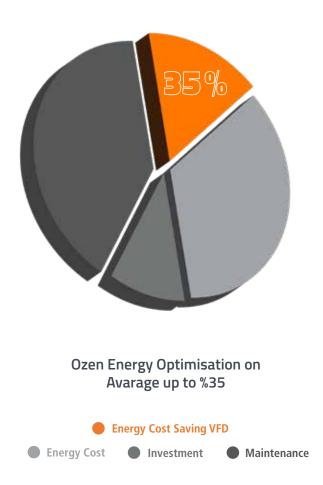
• Maintenance and overhaul intervals are long (oil-filter change every 4000 hours / overhaul every 35,000 to 40,000 hours).



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## **OEO - Ozen Energy Optimization**

#### OABC D (18-45 kW)



# Energy savings even during low-capacity utilization

Since the OABC D series screw compressors with frequency inverter adjust the motor speed according to the actual air need of the facility, high energy use during low-capacity utilization is avoided.

#### The advantage of constant pressure

As the actual air demand is continuously monitored, the air production is steady and pressure is constant in the compressed air-pipe line at all times. Energy loss due to load/unload work modes is avoided. These compressors can respond to different pressure needs with simple settings on the control panel, without changing anything in the compressor itself.

#### Smooth initial start-up

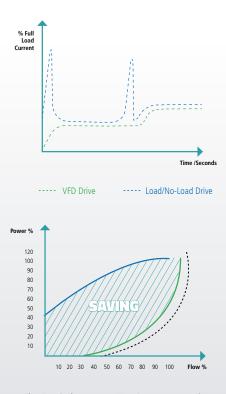
Because motor speed is controlled by the frequency inverter, the initial start-up is significantly simpler and smoother than wye-delta, direct connected compressors. Controlled motor speed also helps the motor and screw components last longer.



#### Variable Frequency Drive (VFD)

In manufacturing facilities, the need for air tends to fluctuate throughout the day for various reasons. Standard compressors continuously work in load/unload mode in order to satisfy changing air demands. A screw compressor working in unload mode spends about 30-35% of the installed motor power and wastes energy even though it does not produce any air.

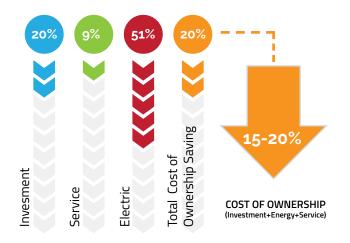
In OABC D series compressors, the built-in frequency inverter adjusts the motor speed according to the actual air need of the facility. Achieving energy savings of up to 35%, these compressors help reduce operating costs.





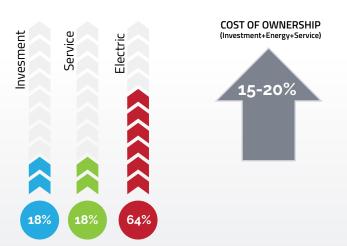
#### OABC D (18-45 kW)

## SCREW BOOSTER **ws** PISTON BOOSTER



#### SCREW BOOSTER

- > 10% higher specific power (Full load).
- ▶ 15-20% lower electric consumption. VFD controlled.
- > 8000 h service time. 50% lower service cost.
- > 30% higher OEE. Due to sparse service and maintenance period.
- > 15-20% lower cost of ownership
- ▶ 100% Duty Cycle
- > Silent as an rotary screw compressor.



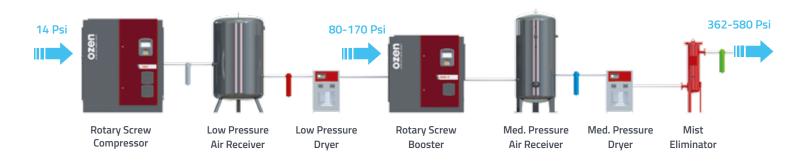
#### **PISTON BOOSTER**

- > Lower specific power due to piston compressing efficency.
- > Works load, no-load with higher electric consumption.
- > Every 2000h, 4000h, 8000h service time.
- > Frequent service and maintenance period.
- ▶ 50% Duty Cycle
- Extremely loud

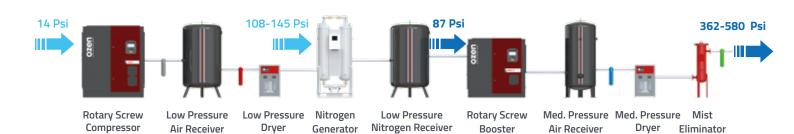
# **Screw Booster Compressor Series**

OABC D (18-45 kW)

# 80 Psi Inlet - Air / 580 Psi Discharge - Air



# 80 Psi Inlet - Air / 580 Psi Discharge - Nitrogen







Technical Specifications OABC D (18-45 kW)

MODEL	kW	hp	Pressure / Psig (bar)		Flow / Cfm (m³/min)		Diamensions (inch)			Weight/lbs
				Discharge						
OABC D 18	185	25	80 (5.5)	362 (25)	min. max.	65.91 (1.87) 151.71 (4.30)	-	82.7	62.9	3090
				580 (40)	min. max.	61.05 (1.73) 74.3 (2.10)				
			100 (6.9)	362 (25)	min.	76.31 (2.16)	_			
				580 (40)	max. min.	188 (5.32) 71.31 (2.02)	_			
				362 (25)	max. min.	91.053 (2.58) 96.061 (2.72)	62.9			
			140 (9.7)		max. min.	246.78 (6.99) 91.036 (2.58)	_			
				580 (40)	max. min.	127.11 (3.60) 104.3 (2.95)				
			170 (11.7)	362 (25)	max. min.	282.705 (8.01)	_			
				580 (40)	max.	99.56 (2.82) 149.42 (4.23)				
OABC D 22	22	30	80 (5.5)	362 (25)	min. max.	65.92 (1.87) 188.9 (5.35)	-	82.7	62.9	3140
				580 (40)	min. max.	61.05 (1.73) 98.15 (2.78)				
			100 (6.9)	362 (25)	min. max.	76.32 (2.16) 229.88 (6.51)	-			
				580 (40)	min.	71.31 (2.02)	-			
					max. min.	120.66 (3.42) 96.061 (2.72)	62.9			
			140 (9.7)	362 (25)	max. min.	298.59 (8.46) 91.036 (2.58)	-			
				580 (40)	max. min.	163.196 (4.62) 104.3 (2.95)	-			
			170 (11.7)	362 (25)	max.	340.25 (9.63)	_			
				580 (40)	min. max.	99.56 (2.82) 193.74 (5.49)	-			
	30	37	80 (5.5)	362 (25)	min. max.	65.92 (1.87) 237.52 (6.73)	_	82.7	62.9	3200
				580 (40)	min. max.	61.05 (1.73) 156.44 (4.43)	-			
			100 (6.9)	362 (25)	min.	76.32 (2.16)	-			
OABC D 30				580 (40)	max. min.	285.72 (8.09) 71.31 (2.02)	-			
				362 (25)	max. min.	189.75 (5.37) 96.061 (2.72)	62.9			
			140 (9.7)		max. min.	378.66 (10.72) 91.036 (2.58)				
				580 (40)	max. min.	248.89 (7.05) 104.3 (2.95)				
			170 (11.7)	362 (25)	max.	449.6 (12.73)				
				580 (40)	min. max.	99.56 (2.82) 293.46 (8.31)				
OABC D 37	37	45	80 (5.5)	362 (25)	min. max.	65.92 (1.87) 237.52 (6.73)	-	82.7	62.9	3250
				580 (40)	min. max.	61.05 (1.73) 204.145 (5.78)				
			100 (6.9)	362 (25)	min. max.	76.32 (2.16)	-			
				580 (40)	min.	285.72 (8.09) 71.31 (2.02)	_			
			140 (9.7)	362 (25)	max. min.	248.973 (7.05) 96.061 (2.72)	62.9			
					max. min.	378.66 (10.72) 91.036 (2.58)	-			
				580 (40)	max. min.	325.56 (9.22) 104.3 (2.95)	-			
			170 (11.7)	362 (25)	max.	449.6 (12.73)	-			
				580 (40)	min. max.	99.56 (2.82) 382.1 (10.82)				
OABC D 45	45	55	80 (5.5)	362 (25)	min. max.	65.92 (1.87) 237.52 (6.73)	-			
				580 (40)	min. max.	61.05 (1.73) 220.05 (6.23)	_	82.7	62.9	3310
			100 (6.9)	362 (25)	min.	76.32 (2.16)	_			
				580 (40)	max. min.	285.72 (8.09) 71.31 (2.02)				
				362 (25)	max. min.	268.71 (7.61) 96.061 (2.72)	62.9			
			140 (9.7)		max. min.	378.66 (10.72) 91.036 (2.58)				
				580 (40)	max.	361.64 (10.24)	_			
			170 (11.7)	362 (25)	min. max.	104.3 (2.95) 449.6 (12.73)				
				580 (40)	min. max.	99.56 (2.82) 431.96 (12.23)	_			

Compressor performance measured according to ISO 1217, Annex C Edt. 4 (2009). Reference conditions:
Absolute inlet pressure 14,5 psi (1 bar)
Intake air temperature 68°F (20°C)

Ozen Compressed Air Technology and Equipment LLC. 4205 Golf Acres Drive Charlotte NC 28208 Office (704) 660 0334 E-mail info@ozenairtech.com



Ozen, all technical data and colors are subject to change without notice.