



## **FAS 15 - 250 KW**

The FAS product range includes air cooled, single stage silenced and packaged screw compressors in the power range of 15 - 250kW. These compressors are designed for industrial application and 24x7 continuous duty. All models are driven by highly efficient IE3 efficiency class electric motors.

#### **FEATURES & BENEFITS**



- Compact and accessible design
- Reliable EUCOMP airend technology
- IE3 premium efficiency drive
- Optimum assembly of air-end and motor
- Generous designed aluminium cooler



- Small footprint + easy to maintain
- Proven technology with high volume flow
- · Developed for high loads
- Low speed operation
- Ambient temperatures up to 45°C



- · Quick installation and low service costs
- · High reliability for demanding industries
- Durable and energy cost saving operation
- Long lifetime
- Risk free operation



#### **EXCELLENT QUALITY**

High quality components in combination with decades of experience in building air ends ensure durability with constantly high efficiency.





#### INTEGRATED OIL SEPARATOR IN THE OIL TANK

The large oil tank is equipped with all necessary connections and safety installations and therefore ensures the highest operational safety. The internal high efficiency oil separator guarantees excellent compressed air quality with a remaining oil content of  $< 3mg/m^3$ .

Through an inspection glass the oil level can be controlled at all times. Service can be conducted quickly and safely—the inlet neck as well as the oil drain valve can be easily accessed.

### HIGH PERFORMANCE SUCTION FILTER

In all models a high performance suction filter is installed. Sucked particles are filtered in two stages: first by centrifugal forces and second by a high efficiency filter element.

### **ELECTRIC MOTOR**

The driving motor conforms to energy efficiency class IE3, protection class IP55, insulation class F and is thus most suited for rugged, continuous duty industrial application, with highest efficiency.

### HIGH EFFICIENCY COOLING

The cooling system for both air and oil is designed in a way that the compressor can efficiently operate even at high ambient temperature of 45°C.



#### CONTROLLER

With the intelligent compressor control, you have full control over the operating status: maintenance indication and fault indication. The control also features fully automatic full load, idle and intermittent control as well as remote on/off and direction control



# **TECHNICAL DATA - FIX SPEED COMPRESSOR**

Machine Model		FAS-15	FAS-18	FAS-22	FAS-30	FAS-37	FAS-45	FAS-55	FAS-75								
Cooling Type		Air-cooled															
	5 kg/cm² (g)	108	131	145	212	263	304	415	540								
	7 kg/cm² (g)	95	117	129	191	237	280	378	487								
Working pressure/kg/cm <sup>2</sup> Free Air Delivery CFM	8 kg/cm² (g)	85	106	127	184	222	268	339	459								
,	10 kg/cm² (g)	72	92	120	170	205	244	311	413								
	12 kg/cm² (g)	69	85	106	148	187	222	286	362								
	14 kg/cm² (g)	57	71	92	124	154	191	237	311								
	16 kg/cm² (g)	51	60	78	102	134	171	207	279								
	Power (kW)	15	18.5	22	30	37	45	55	75								
	Starting method	Star-Delta															
	Voltage (V), Frequency (Hz)	400V, 50Hz															
Electric Motor	Protection Level	IP 55															
	Insulation Class	F Class															
	Motor Efficiency	IE3															
Drive				Belt [	Oriven			Direct	Driven								
Noise (dBA)		70 +/-3			72 +	-/-3		75+/-3									
Oil Carryover (ppm)					<b>&lt;</b>	3											
Outlet (inch)		3/4"	3/4" 1-1/4"		1-1/2"			2"									
	Length (mm)	880	10	50	1000		1400	2250									
External Dimension	Width (mm)	830	880		1250		1100	1344									
	Height (mm)	1075	075 1260		1310		1600	1694									
Weight (kg)		400	500	570	850	880	1080	2150	2250								
Machine Model		FAS-90	FAS-110	FAS-132	FAS-160	FAS-185	FAS-200	FAS-220	FAS-250								
Cooling Type		Air-cooled															
3 -/	5 kg/cm² (g)	622	812	975	1123	1254	1377	1430	1660								
	7 kg/cm² (g)	565	742	890	1014	1130	1240	1289	1501								
Working pressure/kg/cm <sup>2</sup>	8 kg/cm <sup>2</sup> (g)	537	700	848	975	1074	1183	1218	1483								
Free Air Delivery CFM	10 kg/cm² (g)	480	600	742	869	968	1067	1130	1434								
	12 kg/cm² (g)	434	540	646	759	876	936	1042	1278								
	14 kg/cm <sup>2</sup> (g)	374	466	554	653	752	805	897	1098								
	16 kg/cm <sup>2</sup> (g)	350	408	487	572	653	706	777	936								
	Power (kW)	90	110	132	160	185	200	220	250								
		Star-Delta															
	Starting method				Star-	Delta			400V, 50Hz								
	Starting method Voltage (V), Frequency (Hz)																
Electric Motor	Starting method  Voltage (V), Frequency (Hz)  Protection Level				400V,	50Hz											
Electric Motor	Voltage (V), Frequency (Hz) Protection Level				400V, IP	50Hz 55											
Electric Motor	Voltage (V), Frequency (Hz) Protection Level Insulation Class				400V, IP F CI	50Hz 55 ass											
Electric Motor  Drive	Voltage (V), Frequency (Hz) Protection Level				400V, IP	50Hz 55 ass											
	Voltage (V), Frequency (Hz) Protection Level Insulation Class	75 +/-3			400V, IP F CI IE	50Hz 55 ass		85 -	·/-3								
Drive	Voltage (V), Frequency (Hz) Protection Level Insulation Class	75 +/-3			400V, IP F CI IE Direct	50Hz 55 ass 3 Driven		85 +	-/-3								
Drive Noise (dBA)	Voltage (V), Frequency (Hz) Protection Level Insulation Class	75 +/-3			400V, IP F CI IE Direct 82 +/-3	50Hz 55 ass 3 Driven		85 -I									
Drive Noise (dBA) Oil Carryover (ppm)	Voltage (V), Frequency (Hz) Protection Level Insulation Class		26	00	400V, IP F CI IE Direct 82 +/-3  <	50Hz 55 ass 3 Driven			100								
Drive Noise (dBA) Oil Carryover (ppm)	Voltage (V), Frequency (Hz) Protection Level Insulation Class Motor Efficiency	2"		00 50	400V, IP F CI IE Direct 82 +/-3  <	50Hz 55 ass 3 Driven		DN	100 50								
Drive Noise (dBA) Oil Carryover (ppm) Outlet (inch)	Voltage (V), Frequency (Hz) Protection Level Insulation Class Motor Efficiency  Length (mm)	2" 2250	17		400V, IP F CI IE Direct 82 +/-3  <	50Hz 55 ass 3 Driven 3		DN 37	100 50 50								

The data & performance were recorded in accordance with latest ISO 1217 standard.

The sound level was measured in accordance with PNEUROP/CAGI standard.

Water cooled options available, details on request.

VFD with Star-Delta bypass option available, details on request.

 $Tank\ mounted\ \&\ Ultrapack\ models\ are\ also\ available\ for\ 15-22\ Kw\ with\ 500L\ tank,\ details\ on\ request.$ 

Due to continous engineering improvements, above features are subject to change without prior notice.



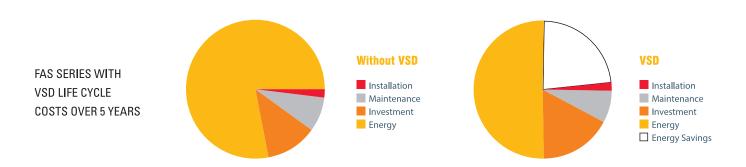
## **ENERGY SAVINGS ARE SMART SAVINGS**

Take control of your energy savings with our optional Energy Management System, which includes the controller, variable-speed drive, and air end to create greater overall efficiency. This innovative design maximizes energy savings and reduces overall operating costs.

## INTELLIGENT VARIABLE SPEED DRIVE

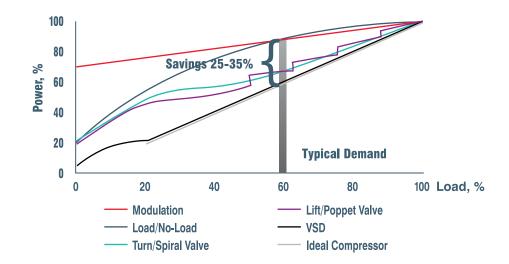
One of the ways in FAS Series compressors maximizes energy savings is with a variable speed drive (VSD). The VSD allows you to match your energy usage to current system demands, eliminating the need to overpressure the system, so you'll save money by not wasting energy.

In addition, the softstarting capability of firstAir' VSD reduces inrush current requirements, decreasing your power demand — and, of course, increasing your energy savings



- The VSD time-proven directly coupled design offers faster response and greater operational efficiency
- Variable operation slows air end speed, which lowers energy costs and reduces noise
- Matching the operating speed with changes in demand reduces component wear
- The VSD enhances quality by stabilizing air pressure at  $\pm$  0.1 kg/cm<sup>2</sup>
- Built-in DC choke protects against harmonic disturbances and eliminates the need to source additional corrective devices

ENERGY SAVINGS WITH VSD COMPARING LOAD/NO-LOAD POWER CONSUMPTION





# **TECHNICAL DATA - VFD COMPRESSOR**

Machine Model		FASV-15	FASV-18	FASV-22	FASV-30	FASV-37	FASV-45	FASV-55	FASV-75		
Cooling Type		Air-cooled Air-cooled									
Working pressure/kg/cm² Free Air Delivery CFM	5 kg/cm² (g)	43-108	52-131	58-145	85-212	105-263	121-304	166-415	216-540		
	7 kg/cm² (g)	38-95	47-117	52-129	76-191	95-237	110-280	151-378	195-487		
	8 kg/cm² (g)	34-85	42-106	51-127	74-184	89-222	107-268	136-339	184-459		
	10 kg/cm² (g)	29-72	37-92	48-120	68-170	82-205	98-244	124-311	165-413		
	12 kg/cm² (g)	28-69	34-85	42-106	59-148	75-187	89-222	114-286	145-362		
	14 kg/cm²(g)	23-57	28-71	37-92	49-124	61-154	76-191	95-237	124-311		
	16 kg/cm² (g)	20-51	24-60	31-78	41-102	54-134	69-171	83-207	112-279		
Electric Motor	Power (kW)	15	18.5	22	30	37	45	55	75		
	Starting method	VFD									
	Voltage (V), Frequency (Hz)	400V, 50Hz									
	Protection Level	IP 55									
	Insulation Class	F Class									
	Motor Efficiency	IE3									
Drive		Belt Driven Direct Driven									
Noise (dBA)		70 +/-3			72 +/-3		75 +/-3				
Oil Carryover (ppm)		≤3									
Outlet (inch)		3/4"	1-1/4"		1-1/2"		2"				
External Dimension	Length (mm)	960	1140		1000		1400	2250			
	Width (mm)	930	880		1250		1100	1344			
	Height (mm)	1075	12	:60	13	1310 1600	16	94			
Weight (kg)		425	530	600	900	930	1120	2220	2350		

Machine Model		FASV-90	FASV-110	FASV-132	FASV-160	FASV-185	FASV-200	FASV-220	FASV-250	
Cooling Type		Air-cooled								
Working pressure/kg/cm² Free Air Delivery CFM	5 kg/cm² (g)	249-262	325-812	390-975	449-1123	501-1254	551-1377	572-1430	664-1660	
	7 kg/cm² (g)	226-565	297-742	356-890	406-1014	452-1130	496-1240	516-1289	600-1501	
	8 kg/cm² (g)	215-537	280-700	339-848	390-975	430-1074	473-1183	487-1218	593-1483	
	10 kg/cm² (g)	192-480	240-600	297-742	348-869	387-968	427-1067	452-1130	574-1434	
	12 kg/cm² (g)	174-434	216-540	258-646	304-759	350-876	374-936	417-1042	511-1278	
	14 kg/cm² (g)	150-374	186-466	222-554	261-653	301-752	322-805	359-897	439-1098	
	16 kg/cm² (g)	140-350	163-408	195-487	229-572	261-653	283-706	311-777	374-936	
	Power (kW)	90	110	132	160	185	200	220	250	
	Starting method	VFD								
Electric Motor	Voltage (V), Frequency (Hz)	400V, 50Hz								
Electric Motor	Protection Level	IP 55								
	Insulation Class	F Class								
	Motor Efficiency	IE3								
Drive		Direct Driven								
Noise (dBA)		75 +/-3 82 +/-3 85 +/-3								
Oil Carryover (ppm)		≤3								
Outlet (inch)		2"	DN80						100	
	Length (mm)	2250	2600 2900				3750			
External Dimension	Width (mm)	1344	17	1750		1600		2150		
	Height (mm)	1694	18	50	1600 2 2350 2	00				
Weight (kg)		2520	3150	3350	4200	4450	4600	5300	5500	

The data & performance were recorded in accordance with latest ISO 1217 standard.

The sound level was measured in accordance with PNEUROP/CAGI standard.

Water cooled options available, details on request.

VFD with Star-Delta bypass option available, details on request.

Tank mounted & Ultrapack models are also available for 15-22 Kw with 500L tank, details on request.

Due to continous engineering improvements, above features are subject to change without prior notice.





Compressors! No compromises.

Email: info@firstair.in www.india.firstaircompressor.com

FS Compressors India Pvt. Ltd.
Plot No. S-3, Phase-II, Chakan MIDC, Village,
Sawardari, Khed, Maharashtra 410501

# **Distributor**

aflet firstAir EN 03/1

Errors and omissions excepted.