

FU SHENG BSAV Series Variable Speed Drive Technology

MOST SIGNIFICANT TECHNOLOGICAL ADVANCE

BSAV SERIES SCREW COMPRESSOR WITH INVERTER VARIABLE SPEED CONTROL MAXIMIZES EFFICIENCY FOR A WIDE SCALE OF AIR DEMAND FLUCTUATION.



Features :

■ AVAILABLE POWER RANGE 22~220kW

ENERGY SAVING

Inverter control unit in combination with D.I.C.S.(Digital Intelligent Control System) accurately reduces energy consumption by providing variable motor speed to meet your demand, resulting in significant 20-40% energy cost saving.

CONSTANT PRESSURE

Air delivery of BSAV compressor can be matched to actual air demand as indicated by the system pressure at constant working pressure sustained by inverter control unit within ± 0.1 bar range.

OUTSTANDING EFFICIENCY

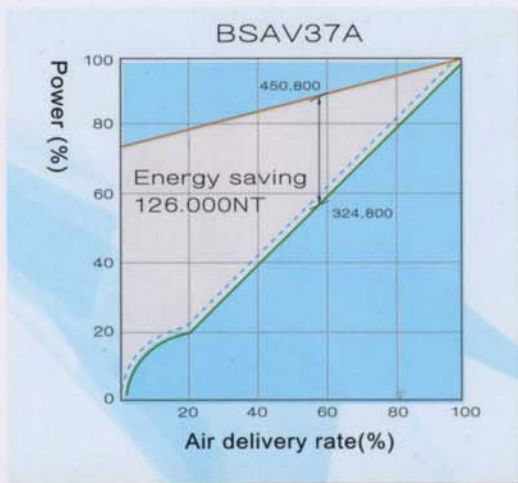
D.I.C.S. optimizes modulation control range from 40~100% providing the ability to precisely match power consumption with air demand.

BUILT FOR RELIABILITY

BSAV compressor applies large, 5 to 6 patented rotor profile, with reliable and durable bearings selected and low speed rotation, which make the compressor the best solution for continuous 100% duty-cycle operation. FS-600 high quality lubricant contributes to extended service life of compressor unit.

Practical energy saving calculation example

The following graph (calculation) is based on air demand standing at 60%, with electricity cost of 2.1 NTD/kWh and 6000 operational hours/year



MODEL	BSAV37A
Energy saving (kW)	10.0
CO ₂ reduction (kgC)	1.2
Electricity cost saving (thousand NTD/year)	126

CO₂ emission volume calculation:

CO₂ emission volume= Electric power consumption × 0.12

Absorption rate of one hectare of forest: 6,000 kgC/year

Emission rate of BSAV37A: 7,200kgC/year

* Saved money is calculated as follows :

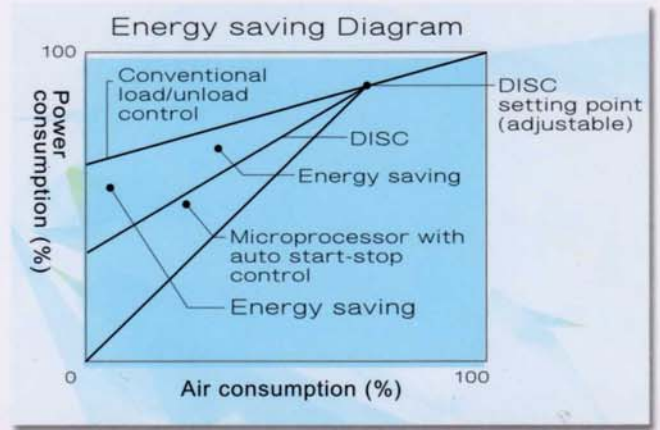
Saved money(1000NTD/year)=

Saved electricity(kW) X Operating(hours/year) X Electricity cost(NTD/kWh)

- Conventional unloading
- - - Working pressure 7 kg/cm²(0.69MPa)
- Working pressure 9.5 kg/cm²(0.93Mpa)

DICS (Digital Intelligent Control System) Energy Saving

- Compressed air consumption decrease
- Air system pressure increases
- Inverter control unit sends signal
- Inverter output frequency decreases
- Electrical motor rpm decreases
- Output pressure decreases and stabilizes on the set working pressure value



BSAV Specifications

Model		BSAV22A	BSAV37A	BSAV55A	BSAV75A	BSAV110A
Voltage	Volt	200-230, 380-460V				
Output Power	kW/HP	22/30	37/50	55/75	75/100	110/150
Working Pressure	kgf/cm ² G	7				
Control of Pressure		Inverter controller + Inverter constant pressure control				
Control Range	%	40~100				
Air Delivery	m ³ /min	3.7	6.5	10.5	14	21
Inlet Pressure & Temperature		2~45 °C at/atm				
Electrical Motor		3Ø/TEFC/IP54/SF1.15				
Starter		Inverter				
Drive		Coupling				
Cooling		Air-cooled				
Discharge Air Temperature		≤ Environment temperature + 15 °C				
Outlet Pipe	inch	1"	1 1/2"	2"		3"
Dimensions (L x W x H)	mm	1550x900x1375	1650x1050x1475	2200x1380x1780	2200x1380x1780	2982x2032x2300

Model		BSAV75W	BSAV110W	BSAV132W	BSAV150W	BSAV185W	BSAV220W
Voltage	Volt	200~230, 380~460					
Output Power	kW/HP	75/100	110/150	132/175	150/200	182/250	220/300
Working Pressure	kgf/cm ² G	7					
Control of Pressure		Inverter controller + Inverter constant pressure control					
Control Range	%	40~100					
Air Delivery	m ³ /min	14	21	26	29	35	42
Inlet Pressure & Temperature		2~45 °C at/atm					
Electrical Motor		3Ø/TEFC/IP54/SF1.15					
Starter		Inverter					
Drive		Coupling					
Cooling		Water-cooled					
Discharge Air Temperature		≤ Environment temperature + 15 °C					
Outlet Pipe	inch	2"	4"				
Dimensions(L x W x H)	mm	2800x1550 x1700	2916x2225x1700			3300x2400x2000	

POWERATE

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