

OUR PLANTS ARE CERTIFIED RECOGNIZED AS
BEING WORTHY OF ISO 9001/14001 CERTIFICATION.

Niigata plant:

Shimo Aozu, Tsubame-shi, Niigata, Japan.



ISO9001 : JQA-0581

ISO14001 : JQA-EM4670

! SAFETY

- Operate safely in accordance with proper instruction manual.
- To prevent trouble and accidents, perform daily and preventive checks without fail.

AIRMAN®

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DISTRIBUTOR:

**STATIONARY AIR COMPRESSORS
GENERAL CATALOGUE**

EXPECTATION FOR NEXT GENERATION
AND FLIGHT FOR NEXT CENTURY
AIRMAN®

Screw Compressor

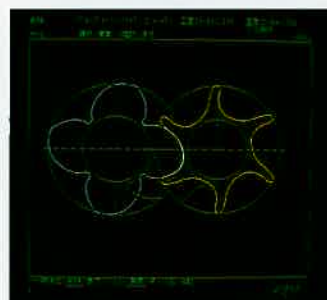
SAS/SWS/SAD/SWD/SMS/SDS series

Ranging from 3.7kW to 160kW

HOKUETSU INDUSTRIES CO., LTD.

NEW ASYMMETRIC ROTOR PROFILE

Fully Rationalized Plant



DESIGNED BY CAD



THREE DIMENSION MEASUREMENT



ACCURACY OF CUTTING BLADE



CHECK WITH THREE DIMENSION MEASURING MACHINE



CLEAN FOUNDRY



AUTOMATIC SAND TREATMENT LINE



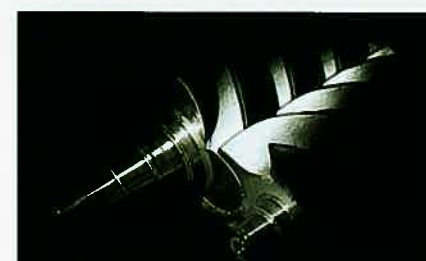
AUTOMATIC SCREW CUTTING



AUTOMATIC PROCESSING OF SCREW CASING



Air is a must to support human life and wildlife.
Clean pure air is used as energy for the dedications to
the affluent progress of the society and industry.
This is the origin of air technology.



AIRMAN STATIONARY AIR COMPRESSORS SC SERIES' MAIN FEATURES:

Saving Energy and also Saving Maintenance:

- Extended overhaul cycle : Air ends : 6 to 8 years
- No longer daily draining is required
- Extended belt replacement cycle : 4 years
- Totally enclosed squirrel cage motor equipped as standard equipment except one model.

series line up

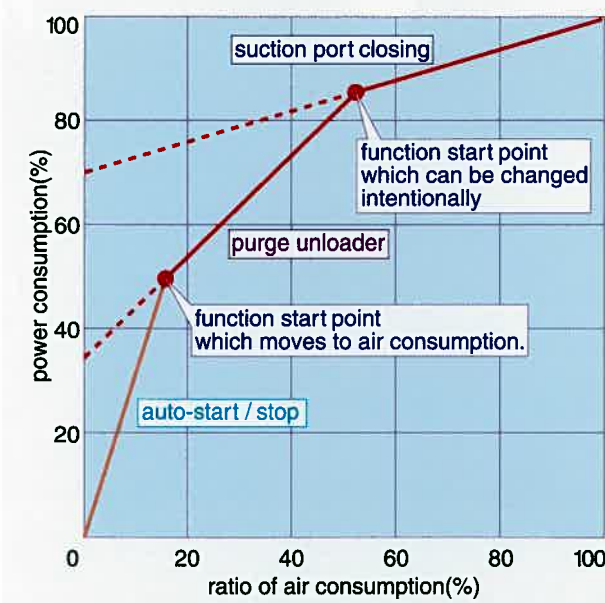
- SAS/SWS-S series standard type
- SAS/SWS-U series save energy same as inverter control
- SAS-V series..... inverter control
- SMSseries..... all weather-proof (can be installed outdoors)
- SAD/SWD series Oil - Free type

ECO-friendly! USER-friendly!

SAS/SWS-S SERIES

SAVE ENERGY

- Suction port closing type (15~150kW)
Suction air volume is automatically regulated steplessly from 0 to 100%.
- Purge unloader
When air consumption decreases, purge operation (compressed air release) starts to reduce power.
- Auto-start/stop device
When air consumption drops to about 20%*, compressor automatically stops.
※This depends upon the equipment which compressed air is supplied to.



Purge operation and auto-start/stop operation can be selected and released. Selection of suitable operation for each application enables you to operate effectively.



Fully-Equipped

- Costly devices such as selector switch board and pressure switch are not required.
- Remote control
Signals for remote control starting and stopping and also trouble can be easily available.
- Dryer built-in unit (3.7~100kW)
Air dryer is so built-in unit that it can remove moisture from compressed air and supply clean air.
- Dryer advance operation (3.7~100kW)
First dryer starts, and then compressor automatically starts 3 minutes later.
- Instantaneous stop-restarting function (11~150kW)
It automatically restarts if time of power failure is within 2 seconds.



Specifications

MODEL	AIR-COOLED										
	SAS4SD-5A/6A	SAS6SD-5A/6A	SAS8SD-5A/6A	SAS11SD-5A/6A	SAS15SD-57/67	SAS22SD-58/68	SAS37SD-58/68	SAS55SD-58/68	SAS75SD-58/68	SAS100SD-57/67	
●Compressor											
Type		Rotary twin screw single-stage oil-cooled									
Free air delivery(FAD)※1	m³/min	0.44	0.72	1.1	1.6	2.4	3.7	6.1	9.1	12.4	17.2
Working pressure	MPa	0.83[8.5kgf/cm²]				0.69[7kgf/cm²]			0.7[7.1kgf/cm²]		
Volumetric control system		A.C.C.S. + purge unloader + auto-start / stop device				Suction port closing + purge unloader + auto- start/stop device					
Suction conditions		Atmospheric pressure・2-40℃									
Lubrication oil capacity※2	L	2.5	3.5	5.0	8.0	11	13.5	24	44	48	80
Discharge pipe dia.	A	10(3/8B)	20(3/4B)		25(1B)			40(1 1/2B)	50(2B)		
●Motor											
Type		Totally-enclosed cage motor 3 phase									
Output	kW	3.7	5.5	7.5	11	15	22	37	55	75	100
Frequency	Hz	50/60									
Voltage	V	200/200・220									
No. of poles	P	2		4					2		
Starting method		Direct-starting					Star-delta(3 contactors)				
●Dimensions and weight											
Width※4	mm	760	900	950	1160	1110	1380	1620	2280(1780)	2555(2055)	2930
Depth	mm	510	580	630	670	680	720	880	1120	1120	1440
Height	mm	750	900	1050	1200	1270	1350	1450	1500	1500	1780
Weight※3	kg	145	220	265	360(325)	430(395)	670(630)	960(900)	1510(1350)	1780(1570)	2600(2400)
Noise level※4	dB(A)	53	53	53	55	55	56	62	66	69	75
●Dryer											
Input	kW	0.2/0.2-0.21	0.33/0.31-0.34	0.34/0.32-0.35	0.51/0.6-0.6	0.49/0.57	1.15/1.43	1.4/1.8	2.2/2.6	2.9/3.6	3.4/4.2
Dew point at outlets※5	℃	10(under pressure)									

Specifications

MODEL		WATER-COOLED						
		SWS22SD-58/68	SWS37SD-58/68	SWS55SD-58/68	SWS75SD-58/68	SWS100SD-57/67	SWS125S-57/67	SWS150S-57/67
●Compressor								
Type		Rotary twin screw single-stage oil-cooled						
Free air delivery(FAD)※1	m³/min	3.7	6.1	9.1	12.4	17.2	20.8	24.3
Working pressure	MPa	0.69[7kgf/cm²]		0.7[7.1kgf/cm²]				
Volumetric control system		Suction port closing + purge unloader + auto- start / stop device						
Suction conditions		Atmospheric pressure・2-40℃					Atmospheric pressure・0-40℃	
Lubrication oil capacity※2	L	13.5	24	44	48	80	85	
Discharge pipe dia.	A	25(1B)	40(1 1/2B)	50(2B)			65(2 1/2B)	
●Motor								
Type		Totally-enclosed cage motor 3 phase						
Output	kW	22	37	55	75	100	125	150
Frequency	Hz	50/60						
Voltage	V	200/200・220					400/400・440	
No. of poles	P	4				2		
Starting method		Star-delta(3 contactors)						
●Dimensions and weight								
Width※4	mm	1380	1620	2280(1780)	2555(2055)	2930		
Depth	mm	720	880	1120		1440		
Height	mm	1350	1450	1500		1780		
Weight※3	kg	670(630)	960(900)	1500(1340)	1700(1510)	2600(2400)	2450	2550
Noise level※4	dB(A)	56	60	64	67	75		
●Dryer								
Input	kW	1.15/1.43	1.4/1.8	2.2/2.6	2.9/3.6	3.5/4.3	—	
Dew point at outlets※5	℃	10(under pressure)					—	

※1 FAD is the value converted at the suction conditions of atmospheric pressure and at 30℃.
As for guaranteed FAD, please ask us if necessary.
※2 Do not fail to use our genuine compressor oil "AIRMAN LONGLIFE".
※3 Figures in bracket show those of the unit without dryer.
※4 Noise level is measured at front 1.5m and 1.2m high from machine.
※5 Dew point at outlet is at ambient temperature of 30℃.
※ Other voltages than above standard ones are available upon request.
※ The specifications are subject to change without prior notice.

ECO-friendly! USER-friendly!

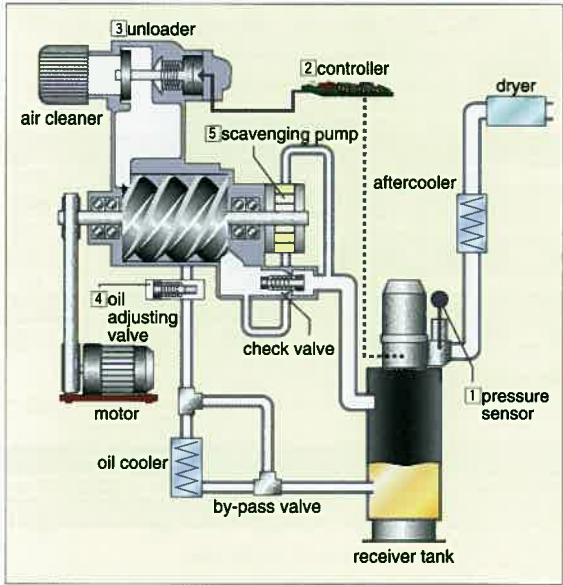
SAS/SWS-U SERIES

SAVE ENERGY

•PATENTED AIRMAN UNLOADER

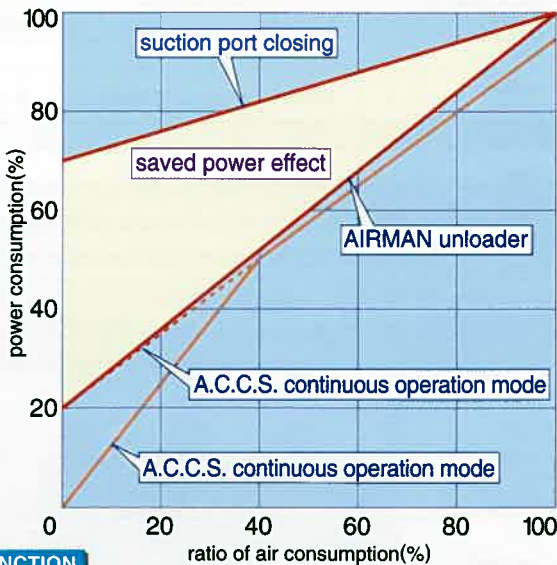
AIRMAN unloader is a ultra power saving system to economize on power consumed at unloaded operation to about 20%.

■SYSTEM OF AIRMAN UNLOADER



ORDER OF FUNCTION

- 1 Pressure sensor detects pressure rise.
- 2 Microprocessor signals unloading.
- 3 Shut out suction air.
- 4 It reduces oil supply to screw rotors
(No cooling oil is required as compression is not performed.)
- 5 It removes discharge pressure by scavenging pump.
Back pressure from tank is shut out by check valve.



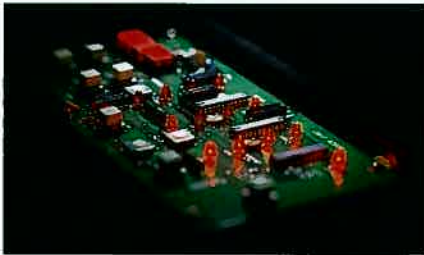
•A.C.C.S.

AIRMAN Computer Control System

This control system is to reduce full load power by about 5%.

•Auto-Start / Stop Operation

When air consumption decreases, compressor automatically stops.



Fully-Equipped

•Remote control

Start / stop signals, and trouble signals are easily available.

•Equipped with a built-in dryer

It has a built-in dryer which removes moisture from compressed air and supplies dried air.

•Dryer first starting operation

Push starter button. At first the dryer starts, and then three minutes later the compressor automatically starts.

•Instantaneously restarting function after power failure is recovered within two seconds

When power failure is recovered within two seconds, it automatically starts again.

Specifications

MODEL	Air-cooled					Water-cooled					
	SAS22UD-58/68	SAS37UD-58/68	SAS55UD-58/68	SAS75UD-58/68	SAS100UD-57/67	SWS55UD-58/68	SWS75UD-58/68	SWS100UD-57/67	SWS125U-57/67	SWS150U-57/67	
●Compressor											
Type		Rotary twin-screw single-stage oil-cooled					Rotary twin-screw single-stage oil-cooled				
Free air delivery(FAD) ※1	m³/min	3.7	6.1	9.1	12.4	17.2	9.1	12.4	17.2	20.8	24.3
Working pressure	MPa	0.69~0.59[7~6kgf/cm²]		0.7~0.6[7.1~6.1kgf/cm²]		0.7	0.7~0.6[7.1~6.1kgf/cm²]		0.7		
Volumetric control system		AIRMAN Unloader + A.C.C.S.					AIRMAN Unloader + A.C.C.S.				
Suction conditions		Atmospheric pressure・2~40℃					Atmospheric pressure・2~40℃				
Lubrication oil capacity※2	L	13.5	24	44	48	80	44	48	80	85	
Discharge pipe dia.	A	25(1B)	40(1 1/2B)	50(2B)			50(2B)		65(2 1/2B)		
●Motor											
Type		Totally-enclosed cage motor 3 phase					Totally-enclosed cage motor 3 phase				
Output	kW	22	37	55	75	100	55	75	100	125	150
Frequency	Hz	50/60					50/60				
Voltage	V	200/200-220					200/200-220		400/440		
No. of poles	P	4			2		4	2			
Starting method		Star-delta(3 contactors)					Star-delta(3 contactors)				
●Dimensions and weight											
Overall width	mm	1380	1620	2280(1780) ※3	2555(2055) ※3	2930	2280(1780) ※3	2555(2055) ※3	2930		
Overall depth	mm	720	880	1120	1120	1440	1120	1120	1440		
Overall height	mm	1350	1450	1500	1500	1780	1500	1500	1780		
Weight※3	kg	670(630)	960(900)	1510(1350)	1760(1570)	2660(2480)	1500(1340)	1700(1570)	2680(2480)	2530	2630
Noise level※4	dB(A)	56	60	66	69	75	64	67	75		
●Dryer											
Input	kW	1.15/1.43	1.4/1.8	2.2/2.6	2.9/3.6	3.4/4.2	2.2/2.6	2.9/3.6	3.4/4.2	—	
Dew point at outlets※5	℃	10(under pressure)					10(under pressure)		—		

- ※1 FAD is converted at suction conditions at atmospheric pressure and 30℃. As for guaranteed value, please ask us if necessary.
 ※2 Do not fail to use our genuine compressor oil "AIRMAN LONGLIFE".
 ※3 Figures in bracket show those of the unit without dryer.
 ※4 Noise level is measured at the distance of 1.5m (front) and 1.2 high from unit at full load.
 ※5 Dew point at outlet is the one at ambient temperature of 30℃.
- ※ Other voltages than above standard ones are available upon request.
 ※ Above SAS55/75 & SWS55/75 can be supplied without AIRMAN unloader as option.

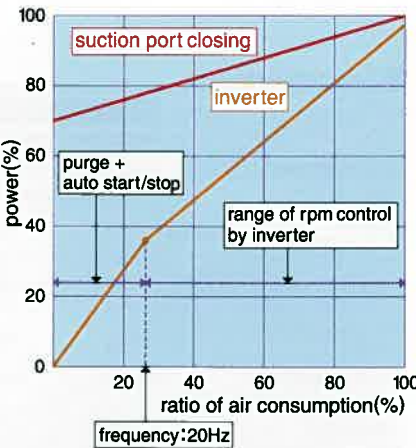


ECO-friendly! USER-friendly!

SAS-V SERIES (INVERTER CONTROL)

SAVE ENERGY

- SAVE ENERGY 1 Maximized use of motor output
FAD increased to the utmost... Service air volume is increased by lowering pressure.
Lowering pressure by 1MPa allows power reduction by about 8%.
- SAVE ENERGY 2 Corresponding with change of FAD without loss
It changes revolution speed of compressor according to air consumption and accordingly reduces power cost ideally. When air consumption drops by 30% or more, it purges compressed air so as to reduce power and to stop the unit by Auto-start/stop system.
- SAVE ENERGY 3 Constant Control of pressure
As it is possible to control precision pressure within pressure fluctuation range within ±0.01MPa, it is possible to operate at the lowest required pressure and not to waste it.



Fully-Equipped

- Remote control •Provided with a built-in dryer
- Dryer first starting operation
- Instantaneously restarting after power failure is recovered within 2 seconds

Specifications

MODEL		Air-cooled						Water-cooled
		SAS11VD-8	SAS15VD-8	SAS22PVD-8	SAS37VD-8	SAS55VD-8	SAS75VD-8	SWS75VD-8
●Compressor								
Type		Rotary twin-screw single-stage oil cooled						
Free air delivery(FAD)*1	m³/min	1.9~1.5	2.6~2.0	3.9~3.1	6.7~5.5	10.4~9.1	14.0~12.4	
Working pressure*2	MPa	0.4~0.83 [4.1~8.5kgf/cm²]				0.5~0.7 [5.1~7.1kgf/cm²]		
Compression control		Control of constant pressure (set pressure±0.01MPa(0.1kgf/cm²)) by inverter						
Volumetric regulation		Inverter+purge unloader+auto-start / stop, controlled frequency range 20~66Hz						
Suction conditions		Atmospheric pressure·2~40℃						
Primary filling oil capacity*3	L	10	11	13.5	24	44	48	
Discharge pipe dia.	A	25(1B)	25(1B)	25(1B)	40(1 1/2B)	50(2B)	50(2B)	
●Motor								
Type		Totally-enclosed cage motor 3 phase				Totally-enclosed permanent-magnet synchronized moter 3 phase		
Output	kW	11	15	22	37	55	75	
Frequency	Hz	50/60						
Voltage	V	200/200-220						
No. of poles	P	4				6		
Starting system		Inverter						
●Dimensions and weight								
Width	mm	1110	1110	1380	1880	2280(1780)*4	2555(2055)*4	
Depth	mm	680	680	720	880	1120	1120	
Height	mm	1270	1270	1350	1460	1500	1500	
Weight*4	kg	420(385)	450(415)	690(650)	1030(970)	1510(1350)	1790(1580)	
Noise level	dB(A)	58	58	58	62	66	69	
●Dryer								
Input	kW	0.49/0.57	0.49/0.57	1.15/1.43	1.4/1.8	2.2/2.6	2.9/3.6	
Dew point at outlets*5	℃	10(under pressure)						

*1 FAD is converted at suction conditions of atmospheric pressure and temperature of 30℃. As for guaranteed value, please ask us if necessary.
*2 Within this range the maximum frequency of inverter changes to keep compressor power constant *3 Do not fail to use our genuine compressor oil "AIRMAN LONGLIFE".
*4 Figures in bracket show those of the unit without dryer. *5 Dew point at outlet is the value at the ambient temperature of 30℃.
* Other voltages than above standard ones are available upon request.

ECO-friendly! USER-friendly!

ALL WEATHER-PROOF

SMS SERIES CAN BE INSTALLED OUTDOORS

SAVE ENERGY

- Purge Unloader
When unit is at unloaded conditions, this device purges compressed air in the receiver tank, thus reducing power.
- AUTO-START / STOP
This device is provided to automatically stop and re-start unit, according to air consumption.



Fully-Equipped

- Remote Control Operation •Dryer built-in type
- Dryer first starting operation
- Aftercooler is provided as standard equipment

Specifications

MODEL		SMS4ED-5A/6A		SMS8ED-5A/6A		SMS11ED-5A/6A		SMS15SD-56/66		SMS22SD-58/68		SMS37SD-58/68		SMS55SD-58/68		SMS75SD-58/68	
●Compressor																	
Type		Rotary twin screw single-stage oil-cooled															
Free air delivery(FAD)*1	m³/min	0.44	1.1	1.6	2.0	3.7	6.1	9.1	12.4								
Working pressure	MPa	0.83[8.5kgf/cm²]						0.69[7kgf/cm²]				0.7[7.1kgf/cm²]					
Volumetric control system		A.C.C.S. + purge unloader + auto-start / stop				Suction port closing+purge unloader+auto-start / stop											
Suction conditions		Atmospheric pressure・2~40℃															
Lubrication oil capacity*2	L	2.5	5	8	11	18	27	44	48								
Discharge pipe dia.	A	10(3/8B)	20(3/4B)	25(1B)				40(1 1/2B)		50(2B)							
●Motor																	
Type		Totally-enclosed cage motor 3 phase															
Output	kW	3.7	7.5	11	15	22	37	55	75								
Frequency	Hz	50/60															
Voltage	V	200/200-220															
No. of poles	P	4														2	
Starting method		Direct starting						Star-delta starting(3 contactors)									
●Dimensions and weight																	
Width*3	mm	860	1070	1320	1555(1475)	1860	2080	2390	2665								
Depth	mm	560	670	700	810	840	980	1150	1150								
Height	mm	780	1130	1240	1100	1200	1380	1640	1640								
Weight*3	kg	165	290	400	510(475)	765(725)	1060(995)	1635(1560)	1930(1825)								
Noise level*4	dB(A)	53	53	55	58	58	60	66	69								
●Dryer																	
Input	kW	0.2/0.2-0.21	0.34/0.32-0.35	0.51/0.6	0.49/0.57	1.15/1.43	1.4/1.8	2.2/2.6	2.9/3.6								
Dew point at outlets*5	℃	10(under pressure)															

*1 FAD is converted at suction conditions at atmospheric temperature of 30℃. As for guaranteed value, please ask us if necessary.
*2 Do not fail to use our genuine compressor oil "AIRMAN LONGLIFE". *3 Figures in bracket shows that of unit without dryer.
*4 Noise level is measured at distance of front 1.5m and 1.2m high from unit at full load in no-resonant room.
*5 Dew point at outlet is the value at ambient temperature of 30℃.
* Other voltages than above standard ones are available upon request.

ECO-friendly! USER-friendly!

SAD/SWD SERIES

OIL-FREE

- Serving entirely oil-free clean-air
- Specially surface treated/coated proper rotors are mounted.

Fully-Equipped

- Totally enclosed motor (except for air-cooled 55kW)
- Remote control (except for air-cooled 55kW)
- Scheduled operation (except for air-cooled 55kW)
- Multi-unit control operation (except for air-cooled 55kW)

Specifications

MODEL		air-cooled		water-cooled								
		SAD37PD-52/62	SAD55P-50/60	SWD37P-52/62	SWD55PD-52/62	SWD75PD-52/62	SWD90PD-52/62	SWD100PD-52/62	SWD125PD-52/62	SWD140P-51/61	SWD160P-51/61	
●Compressor												
Type		Rotary twin-screw oil-free double-stage	Rotary twin-screw oil-free single-stage			Rotary twin-screw oil-free double-stage						
Free air delivery(FAD)*1	m³/min	5.3	6.3	5.3	8.7	12.8	10.2	12.7	16.8	16.7	22.5	26.0
Working pressure	MPa	0.7 [7.1kgf/cm²]	0.69[7kgf/cm²]	0.7[7.1kgf/cm²]			0.95 [9.7kgf/cm²]	0.95[9.7kgf/cm²]	0.7[7.1kgf/cm²]	0.95[9.7kgf/cm²]	0.69[7kgf/cm²]	
Volumetric regulator		2point-ON/OFF control+A.C.C.S.	Suction port closing	2point-ON/OFF control+A.C.C.S.								
Suction conditions		Atmospheric pressure 2~40℃	Atmospheric pressure 0~40℃	Atmospheric pressure・2~40℃							Atmospheric pressure・0~40℃	
Lubrication oil capacity	L	15	24	15	28						48	
Discharge pipe dia	A	40(1 1/2B)			50(2B)						65(2 1/2B)	
●Motor												
Type		Totally-enclosed squirrel cage 3 phase motor	Open drip-proof squirrel cage 3 phase induction motor	Totally-enclosed squirrel cage 3 phase motor								
Output	kW	37	55	37	55	75	90	100	125	140	160	
Frequency	Hz	50/60										
Voltage	V	200/200・220									3000/3300	
No. of poles	P	2	4	2	4	2						
Starting System		Star-delta starting (3 contactors)	Star-delta starting	Star-delta starting (3 contactors)							Reactor starting	
●Dimensions and weight												
Width	mm	2020	1990	2020	2360	2525					2850	
Depth	mm	980	1100	980	1220	1220					1630	
Height	mm	1500	1610	1500	1500	1500					1700	
Weight	kg	1160(1100)	1830	1190(1140)	1930(1810)	2070(1940)	2200(2070)	2340(2180)	2370(2210)	3500	3550	
Noise level*2	dB(A)	66	72	66	64	66	68			75		

*1 FAD is converted at suction conditions. *2 The noise level is measured at the distance of front 1.5m, 1.2m high from unitat fullload conditons, in no-resonantroom.

* Other voltages than above standard ones are available upon request.



AIRMAN High-Efficiency Profile Rotor



Factory use engine-Driven stationary Air Compressor for installation in factory

SDS SERIES

Purpose of this compressor

This compressor can replace your existing motor-driven compressor in your factory by helping you save the basic power cost and electrical charges, thus bringing forth much profit to you. This compressor is more excellent in its energy efficiency than motor-driven compressor and it can help you attain a large cost reduction by your small investment.

Fully-Equipped

- Ample powered engine mounted
- An aftercooler provided as a standard equipment.
- Auto-slowdown function provided as a standard equipment
- Emergency stop device provided as a standard one

Specifications

MODEL		Diesel Engine driven stationary	
		SDS850S-501	
●Compressor			
Type		Rotary twin screw single-stage oil-cooled	
Free air delivery(FAD)*1	m³/min	24.0	
Working pressure	MPa	0.69[7kgf/cm²]	
Lubrication oil capacity	L	125	
Discharge Pipe	A	80	
●Engine			
Model		Hino K13D-TA	
Type		Water-cooled, 6 cylinder direct-injection turbo-charged	
Rated output	kW	165.5[225PS]	
Rated RPM	min⁻¹	1650	
Unloaded RPM	min⁻¹	950	
Fuel		Diesel fuel oil	
●Dimensions & Weight			
Overall length	mm	4300	
Overall width	mm	1720	
Overall height	mm	2530	
Dry (operating) weight	kg	3950[4250]	
Noise Level	dB(A)	71※2	

*1 Above FAD value is the value converted at the conditions of atmospheric pressure and ambient temperature of 30°C.

*2 The average value is measured at the 7.5m distance from the machine.

