

Denyo

DIS Series

SOUNDPROOF ENGINE-DRIVEN COMPRESSORS



DIS-685ESS



DIS-130ES

Denyo Co., Ltd.

DENOYO

Series Portable Screw Compressors

Low noise level

These small, lightweight compressors are equipped with a unique soundproofing system. The average value of noise at a distance of 7m in any direction is 64-76dB(A) at rated operation.

Transportation made easy

These lightweight and compact compressors feature a one-point lifting eye that makes moving the unit at the work site quick and easy. All compressors, including trailer types, are equipped with a lifting eye.

Parking brake is standard equipment

All 4-wheel trailer type units are equipped with parking brakes.

High Pressure Type

The energy produced by this high-pressure compressor is applicable to innovative technologies and new machines.

This type of screw compressors display full performance in a down-the-hole process and a large-diameter boring process and can be applied to ground-improving machines, pneumatic lifts, and concrete-blowing machines. The discharge pressure ranges from 1.03 MPa to 2.4 MPa.

The DIS-1070XS is also equipped with a two-stage discharge pressure selector to meet a wide range of application requirements.

After Cooler Type

Denyo's high-performance after cooler prevents freezing by extracting moisture from the discharging air, while also eliminating the rust and grime build-up of splattering water. This also keeps the breaker from being overheated by the after cooler.

The compressor's after cooler and oil temperature regulator make it possible to maintain a constant discharge air temperature of no more than 15°C above ambient temperature. When the atmospheric temperature is below 0°C, a discharge pipe-selecting valve in the unit routes warmer air around the after cooler, preventing freezing.

A drain separator eliminates humidity generated in the after cooler by more than 70%, while a pressure-retaining valve guarantees stable elimination of moisture.

Dry Air Type

These compressors have built-in after-coolers/warmers, and so they can deliver high-temperature and dry air even if it rains.

They are recommended for use in various work situations such as sand blasting and other operations that require a moisture-free work environment. These compressors are designed to supply high-temperature, dry compressed air, owing to a built-in oil separator, after cooler, drain separator and after-warmer.

One-touch switching will allow the operator to select low-temperature, dry air, or high-temperature, dry air.

ESSURE TYPE



DIS-1070XS



DIS-1300UB

AFTER COOLER TYPE



DIS-90AC2



DIS-180AC

DRY AIR TYPE



DIS-390ES-D



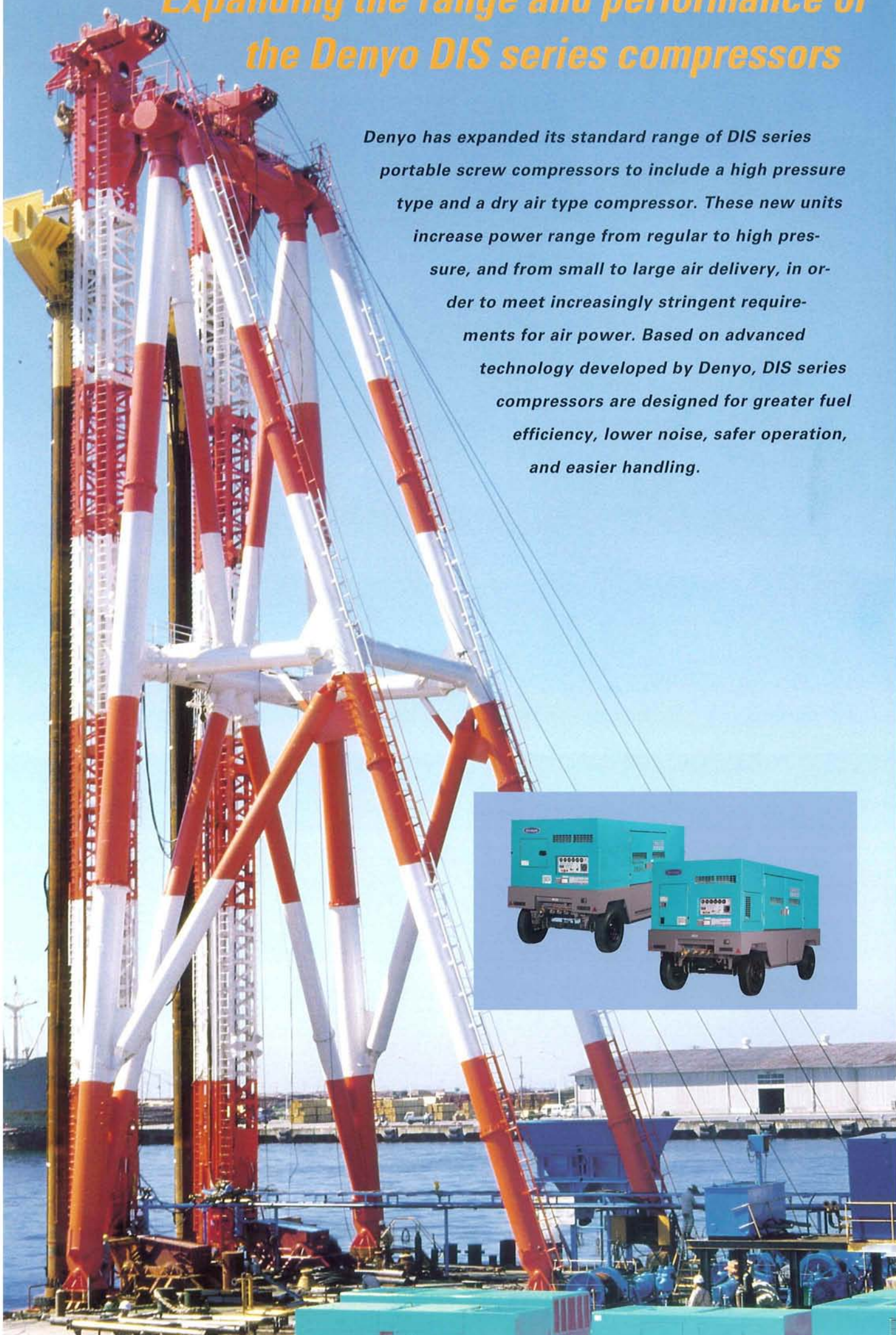
DIS-685ESS-D

	TYPE	HIGH PRESSURE TYPE				AFTER COOLER TYPE					DRY AIR TYPE	
		TRAILER TYPE		BOX TYPE		BOX TYPE					BOX TYPE	TRAILER TYPE
	MODEL	DIS-600EHS	DIS-765US	DIS-1070XS	DIS-1300UB	DIS-70AC	DIS-90AC2	DIS-130ES-C	DIS-180AC	DIS-390ES-C	DIS-390ES-D	DIS-685ESS-D
COMPRESSOR												
Type	Rotary screw, single-stage compression, oil cooled (DIS-1070XS: two-stage compression)											
Rated Pressure	MPa (psi)	1.03 (150)	1.27 (185)	2.40(350)/1.27(185)	1.27 (185)	0.69 (100)		0.7 (102)	0.69 (100)	0.7 (102)	0.7 (102)	
Air Delivery	m ³ /min (cfm)	17 (600)	21.7 (765)	30.3 (1070)	36.8 (1300)	2.0	2.5	3.7	5.1	11.0	11.0	19.4
Lube Oil Capacity	L	95	75	210	220	10	12	15	19	50	50	105
Air Tank Capacity	m ³	0.186	0.26	0.33	0.52	0.020	0.025	0.030	0.039	0.10	0.10	0.192
Service Cock	Size x Q'ty	20Ax3, 50Ax1	20Ax2, 50Ax1	20Ax1, 50Ax1	80Ax1	20Ax2			20Ax2, 40Ax1	20Ax3, 50Ax1, 15Ax1*	20Ax3, 50Ax1, 15Ax1*	20Ax3, 50Ax1
ENGINE (4-cycle, water-cooled diesel engine)												
Model		Hino J08C-UT	Hino K13C-TJ	Mitsubishi S6B3-PTA	Komatsu SA6D140-1	Kubota D905-KA	Kubota D1005-KA	Yanmar3TNV88-F	Isuzu AA-4LE2	Isuzu DD4BG1T	Isuzu DD4BG1T	Hino J08C-UT
Type		Direct injected, turbocharged				Swirl chambered		Direct injected		Direct injected, turbocharged		
No. of Cylinders — Bore x Stroke	mm	6 — 114x118	6 — 135x150	6 — 135x170	6 — 140x165	3 — 72x73.6	3 — 76x73.6	3 — 88x90	4 — 85x96	4 — 105x125	4 — 105x125	6 — 114x130
Displacement	L	7.961	12.882	14.600	15.240	0.898	1.001	1.642	2.179	4.329	4.329	7.961
Rated Output	kW (PS)	138 (188)	220 (300)	342 (465)	327 (445)	16.2 (22)	19.1 (26)	25.8 (35)	36.6 (50)	80.9 (110)	80.9 (110)	134.5 (183)
Rated Revolution	min ⁻¹	1900	2000	1800	1800	3600		3000	2600	2400	2400	1800
Fuel		Diesel fuel (ASTM No. 2 or equivalent)										
Fuel Tank Capacity	L	280	400	680	660	28	32	70	90	180	180	280
Fuel Consumption	L/h	21.4/25.8	27.5/35.5	2.40MPa: 50.0/61.0 1.27MPa: 44.2/56.0	53.0/62.2	2.7/3.6	3.3/4.4	3.7/4.8	4.2/6.1	10.2/14.1	10.2/14.1	19.0/23.4
Lube Oil Capacity	L	25.5	67	85	80	5.1		6.7	8.1	13	13	25.5
Coolant Capacity	L	25	50	75	142	4.5	6	5.6	7.2	12	12	25
Battery x Quantity		145F51x2	145G51x2	245H52x2		95D31Rx1		80D26Rx1	95D31Rx1	80D26x2	80D26x2	145F51x2
DIMENSIONS, WEIGHT, TRAILER & SOUND LEVEL												
Length x Width x Height	mm	3830x1600x2035	4300x1855x2125	5160x2200x2370	4510x1870x2210	1600x755x865	1600x755x895	1700x875x1050	1820x1030x1060	2600x1300x1360 <3010x1520x1760>	2740x1300x1360 <3010x1520x1760>	3950x1600x2035
Dry Weight	kg	3130	4460	6600	7480	450	470	615	820	1570 <1830>	1630 <1890>	3300
Trailer: No. of Tires x Tire Size		4x F: 6.00-13-8PR R: 6.50-14-8PR	4x F: 6.50-14-8PR R: 7.00-15-12PR	4x F: 7.50-16-12PR R: 7.50-16-8PR	—	—			—	<4x F: 5.00-12-8PR> <R: 6.00-13-8PR>	<4x F: 5.00-12-8PR> <R: 6.00-13-8PR>	4x F: 6.00-13-8PR R: 6.50-14-8PR
Sound Level	7mdB (A)	70	75	76	—	64	—	67	—	70		69

ion. 5. Maximum towing speed for trailer type units is 25 km/h.

Expanding the range and performance of the Denyo DIS series compressors

Denyo has expanded its standard range of DIS series portable screw compressors to include a high pressure type and a dry air type compressor. These new units increase power range from regular to high pressure, and from small to large air delivery, in order to meet increasingly stringent requirements for air power. Based on advanced technology developed by Denyo, DIS series compressors are designed for greater fuel efficiency, lower noise, safer operation, and easier handling.



Emergency shut-off device standard equipment

If a malfunction occurs, or the oil level in the engine drops too low (DIS-1300UB and 1850SB), the emergency shut-off device will automatically illuminate a warning light and stop the engine.

Automatic air bleeder

The DIS series compressors no longer require air bleeding, thanks to the development of an automatic air bleeder and emergency shut-off device.

User-friendly operational panel

The control panel on the DIS series compressors has been placed on one end of the unit for easy operation.

Easy inspection and maintenance

Compressors are equipped with a large-sized door and single-side access for daily inspection and easy maintenance. Also, the hood is designed for easy disassembly for maintenance and cleaning of the engine radiator, compressor oil cooler, and fuel tank replacement.

Malfunction		DIS-55~90	DIS-130~1850
Compressor	High discharged air temperature	○	○
	High water temperature	○	○
Engine	Low lube oil pressure	○	○
	Discharge battery	○	○
	Low engine speed	—	○
	Low residual tank pressure	—	○

○: Shut-off device —: No device

DIS Series coped with air bleeding	
Models equipped with automatic air bleeders	DIS-130, 180, 390, 600, 685, 800
Models not requiring air bleeders	DIS-55, 70, 90
Models equipped with emergency shut-off devices	DIS-275*, 765*, 1070, 1300, 1850

Note: Automatic air bleeder units are available for models marked with (*).



DIS - 130ES



DIS - 130ES



DIS - 685ESS

OPTIONAL EQUIPMENT

Innovative Hose Reel

Denyo has developed a sturdy, lightweight and easily attachable one-touch hose reel which can be mounted on top of compressors. With slight modifications, a single storage reel can be mounted on DIS-55~90 series models, while DIS-130~180 units can accommodate two hose reels. The units can also be stacked for effective storage.



Caster and 2-Wheel Trailers

DIS-55~180 compressors can be easily moved around work sites.

Remote Control

DIS-685 and larger compressors can be started and stopped by remote control.

Fuel Line Switching Device (3-Way Valve)

On DIS-390 and larger units, this device makes it possible to switch from the compressor's built-in tank to a line for an auxiliary tank for long operation, without refueling. Models DIS-600EHS, 685ESS/ESS-D, 800ESS and 1850SB are equipped with this device as standard equipment.



ISO 9001 Certified

The specifications given herein are subject to change without notice.

Direct inquiries to the nearest Denyo distributor or to Denyo Co., Ltd.

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