

**OUR HEAD OFFICE AND PLANT ARE CERTIFIED  
TO BOTH ISO 9001 AND ISO 14001.**

**Niigata plant:**

Shimo Aozu, Tsubame-city, Niigata-prefecture, Japan.



**ISO9001 : JQA-0581**

**ISO14001 : JQA-EM4670**



## **SAFETY**

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

# **AIRMAN®**

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DISTRIBUTOR :

**Engine Compressor**

**For GBⅢ/Tier3/JPN Stage 3**

# **AIRMAN®**

# **ENGINE COMPRESSOR PDS series**

**Portable Diesel Screw**



PDS100LC



PDS600S/F550S

## **HOKUETSU INDUSTRIES CO., LTD.**

# CHALLENGE TO THE NEW ERA

Engine Compressor **PDS** Series



Discharged air pressure

- Standard Pressure PDS**

Standard AIRMANN engine compressor. Highly durable with excellent fuel efficiency.
- High Pressure PDSF/G/H/J/K**

AIRMANN high-pressure series, providing powerful air pressure.
- Variable Pressure PDS-VR/DP**

AIRMANN variable pressure series performs many roles, providing for both standard and high pressure needs.



Air Quality

- Standard PDS**

Standard AIRMANN engine compressor. Oil is separated in consideration of the environment.
- After-Cooler PDS-C**

Compressed air is cooled to remove moisture. Discharged air only contains a very small amount of moisture.
- Dry-Air PDS-D**

Provides dry air with low humidity. It is safe even during rainy and humid days.



Bonnet

- Box**

Box-shaped and stackable, taking up very little storage space.
- Leak-Guard**

When fuel or oil leaks, the oil fence prevents leakage to the outside as much as possible.
- Trailer**

With a trailer, the device is easy to move.



## MODEL LINEUP

We have a wide range of compressor models that you can choose from to suit your needs.

		Model[Free air delivery(CFM)]									
Standard Pressure	Air Quality	Bonnet	65	80	100	130	140	185	265	390	670
	Standard Pressure	Box									
		Leak-Guard									
		Trailer									
	After Cooler	Box									
		Leak-Guard									
		Trailer									
	Dry-Air	Box									
		Trailer									

			Model[Free air delivery(CFM)]												
High pressure- Variable pressure specifications	Air Quality	Bonnet	F100	F140	F210	F315	F550	F1000	G750	G900	G1400	H800	J850	J1550	K900
	Standard Pressure	Box													
		Leak-Guard													
		Trailer													
	After Cooler	Box													
		Trailer													
		Trailer													
	Dry-Air	Trailer													



Eco-friendly  
integrated oil fence.  
「Leak-Guard」

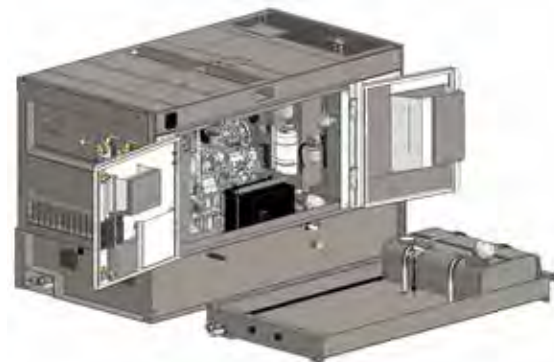
Oil fences are incorporated for the first time in the industry.  
Equipped with high-efficiency AS rotors that achieve increased  
air volume and low fuel consumption.

Applicable models

PDS65L	PDS80L	PDS100L	PDS140L	PDS185S	Variable pressure specifications PDSG1400LDP
After-Cooler PDS65LC	After-Cooler PDS80LC	After-Cooler PDS100LC	After-Cooler PDS140LC	After-Cooler PDS185SC	Variable pressure specifications PDSG1400LVR

**PDS 100 L C - 5 C5**  
① ② ③ ④ ⑤ ⑥

- ① Portable Diesel Screw
- ② Free air delivery(CFM) 1m<sup>3</sup>/min=35CFM
- ③ Bonnet type L: Leak-Guard
- ④ Pressure control  
S : Single pressure DP : 2 stage pressure switching VR : Continuous variable control  
※PDS185S/SC-7C5 only
- ⑤ Special specification  
C : After-Cooler
- ⑥ Class number  
5 : BOX 7 : Oil fence  
※PDS185S/SC-7C5 only



Oil fence

In case fuel, oil or cooling water leaks on the frame, the  
oil fence prevents the leakage from flowing outside.

※It does not guarantee to prevent all oil leaks.

Eco-friendly functions and easy maintenance

A built-in drain tank (After-Cooler)

(PDS80LC/PDS100LC/PDS140LC)

A built-in After-cooler  
drain tank that does  
not discharge to the  
outside. The tank is  
easily detachable for  
easy disposal of drain  
water.



PDS100LC

Hoses to discharge oil

(PDS185S/185SC)

A hose is equipped to make  
it easy to discharge engine  
oil.



ECO mode / AUTO ECO mode

(PDS100L/100LC)

Equipped with [ECO] and [ECO AUTO] switches.  
Changes unload rpm dependent on application, saving  
on fuel consumption.

A structure without central pillars

(PDS80L/80LC/100L/100LC/PDS140L/PDS140LC)

No interior, central  
pillar for easier  
access to  
maintenance items.



Leak-Guard PDS series



			PDS65L-5C5	PDS65LC-5C5 After-Cooler	PDS80L-5C5	PDS80LC-5C5 After-Cooler	PDS100L-5C5	PDS100LC-5C5 After-Cooler
COMPRESSOR	Type		Rotary Twin Screw, Single-Stage, Oil-cooled					
	Free air delivery	m <sup>3</sup> /min	1.84	1.84	2.3	2.3	2.8	2.8
	Rated operating pressure	MPa[kgf/cm <sup>2</sup> ][psi]	0.7[7.14][102]	0.7[7.14][102]	0.7[7.14][102]	0.7[7.14][102]	0.7[7.14][102]	0.7[7.14][102]
	Compressor capacity	L	7.0	7.0	8.0	8.0	9.0	9.0
	Air outlet valve		3/4"×1 Air Chuck 3/8"×1	3/4"×1 Air Chuck 3/8"×1	3/4"×2	3/4"×2	3/4"×2	3/4"×2
ENGINE	Make/Model		KUBOTA D722-K3A	KUBOTA D722-K3A	KUBOTA D902-K3A	KUBOTA D902-K3A	KUBOTA D1105-K3B	KUBOTA D1105-K3B
	Type		Swirl Chamber	Swirl Chamber	Swirl Chamber	Swirl Chamber	Swirl Chamber	Swirl Chamber
	Rated output	PS(kW) /min <sup>-1</sup>	19.2(14.1) /3,600	19.2(14.1) /3,600	23.1(17.0) /3,600	23.1(17.0) /3,600	26.1(19.2) /3,400	26.1(19.2) /3,400
	Engine oil capacity	L	3.8	3.8	3.7	3.7	4.5	4.5
	Fuel tank capacity	L	18	18	33	33	33	33
DIMENSION & WEIGHT	Battery		55B24R×1	55B24R×1	55B24R×1	55B24R×1	80D26R×1	80D26R×1
	L×W×H	mm	1,250×700×800	1,250×700×800	1,395×770×880	1,395×770×880	1,505×800×905	1,505×800×905
	Dry (Operating) weight	kg	310(340)	315(345)	420(460)	430(470)	515(555)	525(565)
	Sound power level in decibels	dB	93	93	93	93	93	95
	Sound pressure level	dB[A]	67	67	66	67	67	67
	Designated emissions regulation		JPN Stage 3	JPN Stage 3	JPN Stage 3	JPN Stage 3	JPN Stage 3	JPN Stage 3



			PDS140L-5C5	PDS140LC-5C5 After-Cooler	PDS185S-7C5	PDS185SC-7C5 After-Cooler	PDSG1400LDP-5C5 High Pressure	PDSG1400LVR-5C5 High Pressure
COMPRESSOR	Type		Rotary Twin Screw, Single-Stage, Oil-cooled					
	Free air delivery	m <sup>3</sup> /min	4.0	4.0	5.2	5.2	39.7	42.5~39.7
	Rated operating pressure	MPa [kgf/cm <sup>2</sup> ][psi]	0.7[7.14][102]	0.7[7.14][102]	0.7[7.14][102]	0.7[7.14][102]	1.03[10.5][149] / 1.4[14.3][203]	0.65[6.63][94]~ 1.4[14.3][203]
	Compressor capacity	L	14.0	14.0	15.0	15.0	200	200
	Air outlet valve		3/4"×2 Air Chuck 3/8"×1	3/4"×2 Air Chuck 3/8"×1	3/4"×3	3/4"×3	3/4"×1, 3"×1	3/4"×1, 3"×1
ENGINE	Make/Model		YANMAR EDM-3TNV88	YANMAR EDM-3TNV88	YANMAR 4TNV88-BXDHKSR	YANMAR 4TNV88-BXDHKSR	KOMATSU SAA6D140E-5-B	KOMATSU SAA6D140E-5-B
	Type		Direct-Injection	Direct-Injection	Direct-Injection	Direct-Injection	Direct-Injection, Turbo-Charged, Intercooled	Direct-Injection, Turbo-Charged, Intercooled
	Rated output	PS(kW) /min <sup>-1</sup>	36.5(26.9) /3,000	36.5(26.9) /3,000	47.5(34.9) /3,000	47.5(34.9) /3,000	568(418) /2,000	568(418) /2,000
	Engine oil capacity	L	6.7	6.7	7.4	7.4	61	61
	Fuel tank capacity	L	69	69	92	92	780	780
DIMENSION & WEIGHT	Battery		85D26R×1	85D26R×1	80D26R×1	80D26R×1	225H52×2	225H52×2
	L×W×H	mm	1,580×890×1,130	1,580×890×1,130	1,850×950×1,300	1,850×950×1,300	4,750×1,950×2,050	4,750×1,950×2,050
	Dry (Operating) weight	kg	690(770)	700(780)	825(925)	835(935)	6,610(7,530)	6,610(7,530)
	Sound power level in decibels	dB	94	94	94	94	104	104
	Sound pressure level	dB[A]	66	66	68	68	78.6	78.6
	Designated emissions regulation		JPN Stage 3	JPN Stage 3	JPN Stage 3	JPN Stage 3	JPN Stage 3	JPN Stage 3

● Specifications are subject to change without notice.





# 01

## High-efficiency gears achieve large air volume

AS rotors (highly-efficient gears) enable the device to efficiently produce high-level volumes of air.

# 04

## Large wheels

We selected the most suitable wheel dimensions for effortless movement on-site.



# 05

## Highly durable compressor oil

The series employs high-performance compressor oil originating from AIRMAN's independent research.

## AIRMAN PDS series

AIRMAN PDS series is the most popular compressor at construction sites. You can choose from a wide range of models from small to very large types to suits your needs.

The series features a sound-proof structure that is certified as a low-noise device, including ease of operation, monitor screens, and an emergency stop function. Also, the high-performance compressor has been field-proven to be durable and fuel efficient.

# 06

## The lineup of eco-friendly equipped oil fences 「Leak-Guard」

Eco-friendly type with an integrated oil fence

In case fuel, oil or cooling water leaks on the frame, the oil fence prevents the leakage from flowing outside. It does not guarantee to prevent all oil leaks.

A built-in aftercooler drain tank that does not discharge to the outside. The tank is easily detachable for easy disposal of drain water.

「Leak-Guard」Applicable models  
Posted on P4

PDS65L

After-Cooler

PDS65LC

PDS80L

After-Cooler

PDS80LC

PDS100L

After-Cooler

PDS100LC

PDS140L

After-Cooler

PDS140LC

PDS185S

After-Cooler

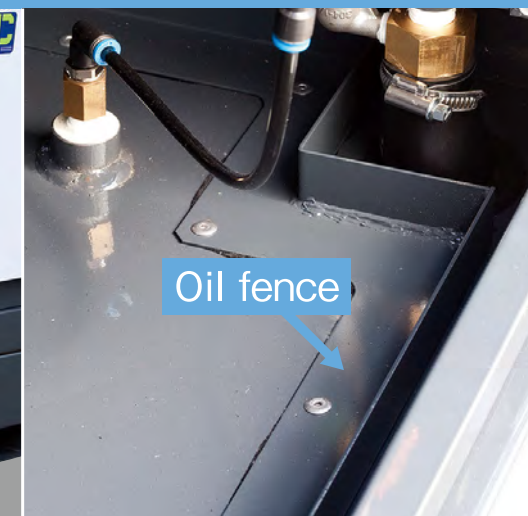
PDS185SC

Variable pressure specifications

PDSG1400LDP

Variable pressure specifications

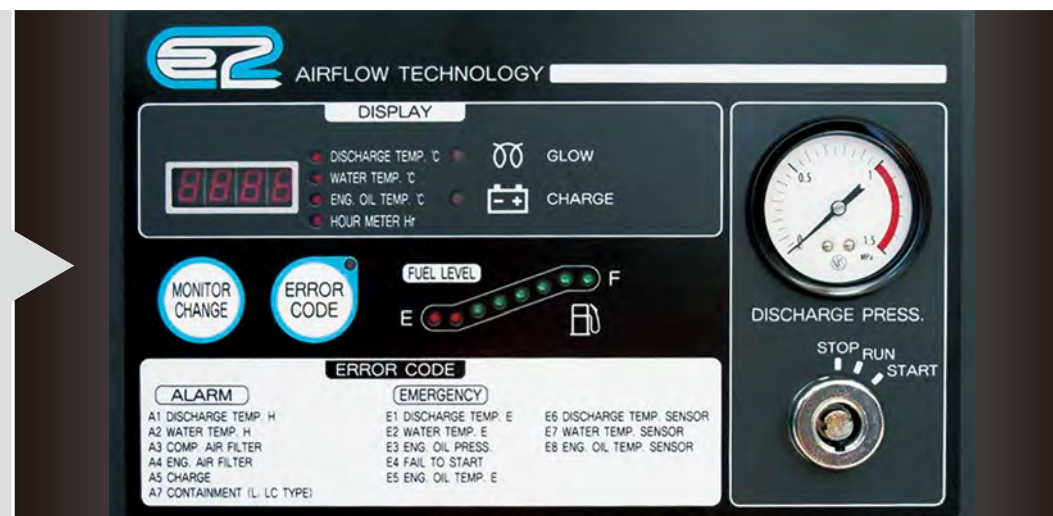
PDSG1400LVR



# 02

## Excellent operability

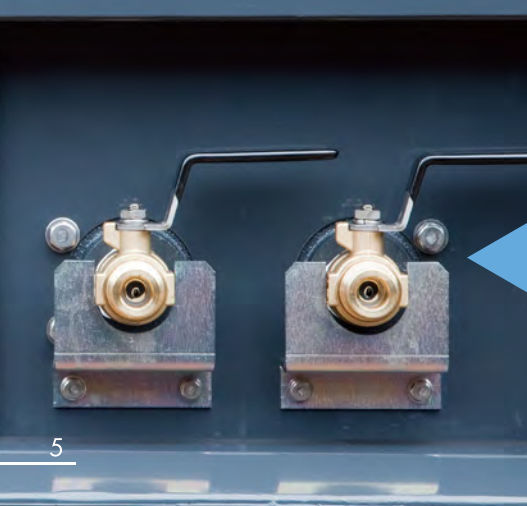
Digital monitor panels are provided for visibility, while the pressure gauge is equipped with an analog meter that is easy to understand.



# 03

## A rotation stopper is equipped in the service valve

Rotation stoppers are equipped on the service valves to prevent loosening from the daily attaching and reattaching of air tools.



# 07

## Variable pressure

Meeting the needs of a wide variety of applications.



# 08

## Abundant options

Many useful options such as lightweight and rigid hoses, hose drums made from special resins, and casters are available.





Standard PDS series



PDS80S



PDS100S



PDS130S

			PDS80S-5C5 Box	PDS100S-5C5 Box	PDS130S-5C3 Box
COMPRESSOR	Type		Rotary Twin Screw, Single-Stage, Oil-cooled		
	Free air delivery	m <sup>3</sup> /min	2.3	2.8	3.7
	Rated operating pressure	MPa[kgf/cm <sup>2</sup> ][psi]	0.7[7.14][102]	0.7[7.14][102]	0.69[7.0][100]
	Compressor capacity	L	8	9	15
	Air outlet valve		3/4"×2	3/4"×2	3/4"×2
ENGINE	Make/Model		KUBOTA D902-K3A	KUBOTA D1105-K3B	YANMAR 3TNV88-BDHK
	Type		Swirl Chamber	Swirl Chamber	Direct-Injection
	Rated output	PS (kW) /min <sup>-1</sup>	23.1 (17.0) /3600	26.1 (19.2) /3400	36.5 (26.9) /3000
	Engine oil capacity	L	3.7	4.5	6.7
	Fuel tank capacity	L	25	28	70
	Battery		55B24R×1	80D26R×1	85D26R×1
DIMENSION & WEIGHT	L×W×H	mm	1375×770×865	1,460×770×900	1,580×890×1,080
	Dry (Operating) weight	kg	400 (435)	460 (500)	640 (720)
	Tire Size		—	—	—
	Sound power level in decibels	dB	93<93>	93<95>	94
	Sound pressure level	dB[A]	66<67>	67<67>	66
	Designated emissions regulation		JPN Stage 3	JPN Stage 3	JPN Stage 3



PDS185S



PDS265S

			PDS185S-6C2 Trailer	PDS265S-4C3 Trailer
COMPRESSOR	Type		Rotary Twin Screw, Single-Stage, Oil-cooled	
	Free air delivery	m <sup>3</sup> /min	5.2	7.5
	Rated operating pressure	MPa[kgf/cm <sup>2</sup> ][psi]	0.69[7.0][100]	0.69[7.0][100]
	Compressor capacity	L	15	30
	Air outlet valve		3/4"×2	3/4"×4, 2"×1(OP)
ENGINE	Make/Model		YANMAR 4TNV88-BXDHKS	YANMAR KDP-4TNV98T
	Type		Direct-Injection	Direct-Injection, Turbo-Charged
	Rated output	PS (kW) /min <sup>-1</sup>	49.5 (36.4) /3000	83.2 (61.2) /2500
	Engine oil capacity	L	7.4	11
	Fuel tank capacity	L	90	115
	Battery		80D26R×1	95D31R×1
DIMENSION & WEIGHT	L×W×H	mm	2960×1650×1510	2400×1570×1650
	Dry (Operating) weight	kg	860 (960)	1350 (1490)
	Tire Size		175R13-8PR×2W	145R12 8PR×2W
	Sound power level in decibels	dB	98	98
	Sound pressure level	dB[A]	69	70
	Designated emissions regulation		US Tier 3	JPN Stage 3



PDS185S



PDS265S



PDS390S

			PDS185S-5C5 Box	PDS265S-5C3 Box	PDS390S-5C1 Box
COMPRESSOR	Type		Rotary Twin Screw, Single-Stage, Oil-cooled		
	Free air delivery	m <sup>3</sup> /min	5.2	7.5	11.0
	Rated operating pressure	MPa[kgf/cm <sup>2</sup> ][psi]	0.7[7.14][102]	0.69[7.0][100]	0.69[7.0][100]
	Compressor capacity	L	15	30	50
	Air outlet valve		3/4"×3	3/4"×4, 2"×1(OP)	3/4"×4, 2"×1
ENGINE	Make/Model		YANMAR 4TNV88-BXDHKSR	YANMAR KDP-4TNV98T	ISUZU CI-4JJ1X
	Type		Direct-Injection	Direct-Injection, Turbo-Charged	Direct-Injection, Turbo-Charged, Intercooled
	Rated output	PS (kW) /min <sup>-1</sup>	47.5 (34.9) /3000	83.2 (61.2) /2500	114.8 (84.4) /2200
	Engine oil capacity	L	7.4	10.5	15
	Fuel tank capacity	L	90	115	180
	Battery		80D26R×1	95D31R×1	80D26R×2
DIMENSION & WEIGHT	L×W×H	mm	1850×950×1080	2050×1200×1250	2680×1300×1400
	Dry (Operating) weight	kg	755 (850)	1150 (1290)	1660 (1870)
	Tire Size		—	—	—
	Sound power level in decibels	dB	95	98	99
	Sound pressure level	dB[A]	68	70	70
	Designated emissions regulation		JPN Stage 3	JPN Stage 3	JPN Stage 3



PDS390S



PDS670S

			PDS390S-4C1 Trailer	PDS670S-4C5 Trailer
COMPRESSOR	Type		Rotary Twin Screw, Single-Stage, Oil-cooled	
	Free air delivery	m <sup>3</sup> /min	11.0	19.0
	Rated operating pressure	MPa[kgf/cm <sup>2</sup> ][psi]	0.7[7.14][102]	0.7[7.14][102]
	Compressor capacity	L	50	97
	Air outlet valve		3/4"×4, 2"×1	3/4"×2, 2"×1
ENGINE	Make/Model		ISUZU CI-4JJ1X	ISUZU AI-4HK1X
	Type		Direct-Injection, Turbo-Charged, Intercooled	Direct-Injection, Turbo-Charged, Intercooled
	Rated output	PS (kW) /min <sup>-1</sup>	114.8 (84.4) /2200	161 (118.6) /2000
	Engine oil capacity	L	15	20.5
	Fuel tank capacity	L	180	310
	Battery		80D26R×2	130F51×2
DIMENSION & WEIGHT	L×W×H	mm	3065×1415×1870	3690×1680×2145
	Dry (Operating) weight	kg	1965 (2175)	2940 (3310)
	Tire Size		175R13 8PR×4W	175R13 8PR×4W
	Sound power level in decibels	dB	98	102
	Sound pressure level	dB[A]	70	76
	Designated emissions regulation		JPN Stage 3	JPN Stage 3

● Specifications are subject to change without notice.

# After-Cooler PDS-C SERIES

Adiabatic expansion within a high-load device such as a concrete breaker, rapidly cools compressed air, resulting in water droplets that can scatter from the breaker's exhaust or can freeze in some areas during winter. But since the integrated After-Cooler cools, condenses and eliminates moisture in the compressed air, the discharged air from PDS-C contains only a small amount of water. This functionality proves its true value in chipping and sandblasting operations.

**PDS 185 S C - 5 C5**

- 1

2

3

4
- 1 Portable Diesel Screw

2 Air volume (CFM) 1m<sup>3</sup>/min=35CFM

3 Control S : Single pressure

4 Type 3 : Skid  
4 : Trailer  
5 : Box

## Do you have the following experiences?



Dirty due to water splash



Too hot to hold



Rust damages the air tools



Air bubbles in the paint



Frozen and unable to move

All are caused by moisture within the compressed air!

As the After-cooler cools and condenses the moisture in the compressed air, the discharged air contains only a small amount of water

### Quantity of water generated from the discharged air

If the breaker is being used for four hours:

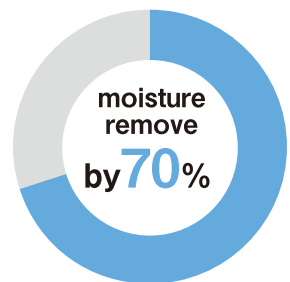


1.8L x 3 bottles

### Eliminate moisture from the discharged air

#### moisture from the discharged air

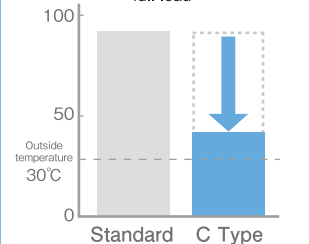
Atmospheric pressure, 30°C, 70%RH  
100 for a standard device



### Reduce the temperature of discharged air

#### discharged air temperature

Atmospheric pressure, 30°C, 70%RH, full load



Discharged air temp descend by 50°C

## After-Cooler PDS series



PDS80SC



PDS100SC



PDS185SC

		PDS65LC-5C5 Leak guard/Box	PDS80SC-5C5 <PDS80LC-5C5> <Leak guard/Box>	PDS100SC-5C5 <PDS100LC-5C5> <Leak guard/Box>	PDS140LC-5C5 Leak guard/Box	PDS185SC-5C5 Box
COMPRESSOR	Type	Rotary Twin Screw, Single-Stage, Oil-cooled				
	Free air delivery	m <sup>3</sup> /min	1.8	2.3	2.8	4.0
	Rated operating pressure	MPa[kgf/cm <sup>2</sup> ][psi]	0.7[7.14][102]	0.7[7.14][102]	0.7[7.14][102]	0.7[7.14][102]
	Compressor capacity	L	7	8	9	14
	Discharge Air Temperature	°C	—	Atmospheric Temperature+20	Atmospheric Temperature+20	—
	Air outlet valve		3/4"×1 Air Chuck 3/8"×1	3/4"×2	3/4"×2	3/4"×2 Air Chuck 3/8"×1
ENGINE	Make/Model		KUBOTA D722-K3A	KUBOTA D902-K3A	KUBOTA D1105-K3B	YANMAR EDM-3TNV88
	Type		Swirl Chamber	Swirl Chamber	Swirl Chamber	Direct-Injection
	Rated output	PS (kW) /min <sup>-1</sup>	19.2 (14.1) /3600	23.1 (17.0) /3600	26.1 (19.2) /3400	36.5 (26.9) /3000
	Engine oil capacity	L	3.8	3.7	4.5	6.7
	Fuel tank capacity	L	18	25<33>	28<33>	69
	Battery		55B24R×1	55B24R×1	80D26R×1	85D26R×1
DIMENSION & WEIGHT	L×W×H	mm	1250×700×800	1375×770×865 <1395×770×880>	1460×770×900 <1505×800×905>	1580×890×1130
	Dry (Operating) weight	kg	315 (345)	405 (440) <430 (470) >	470 (510) <525 (565) >	700 (780)
	Tire Size		—	—	—	—
	Sound power level in decibels	dB	93	93<93>	93<95>	94
	Sound pressure level	dB[A]	67	66<67>	67<67>	66
	Designated emissions regulation		JPN Stage 3	JPN Stage 3	JPN Stage 3	JPN Stage 3



PDS265SC



PDS265SC



PDS390SC



PDS390SC

		PDS265SC-4C3 Trailer	PDS265SC-5C3 Box	PDS390SC-4C1 Trailer	PDS390SC-5C1 Box
COMPRESSOR	Type	Rotary Twin Screw, Single-Stage, Oil-cooled			
	Free air delivery	m <sup>3</sup> /min	7.5	7.5	11.0
	Rated operating pressure	MPa[kgf/cm <sup>2</sup> ][psi]	0.69[7.0][100]	0.69[7.0][100]	0.69[7.0][100]
	Compressor capacity	L	30	30	50
	Discharge Air Temperature	°C	Atmospheric Temperature+20	Atmospheric Temperature+20	Atmospheric Temperature+20
	Air outlet valve		3/4"×4, 2"×1(OP)	3/4"×4, 2"×1(OP)	3/4"×4, 2"×1
ENGINE	Make/Model		YANMAR KDP-4TNV98T	YANMAR KDP-4TNV98T	ISUZU CI-4JJ1X
	Type		Direct-Injection, Turbo-Charged	Direct-Injection, Turbo-Charged	Direct-Injection, Turbo-Charged, Intercooled
	Rated output	PS (kW) /min <sup>-1</sup>	83.2 (61.2) /2500	83.2 (61.2) /2500	114.8 (84.4) /2200
	Engine oil capacity	L	11	11	15
	Fuel tank capacity	L	115	115	180
	Battery		95D31R×1	95D31R×1	80D26R×2
DIMENSION & WEIGHT	L×W×H	mm	2400×1570×1650	2050×1200×1250	3065×1415×1870
	Dry (Operating) weight	kg	1370 (1510)	1170 (1310)	2005 (2215)
	Tire Size		145R12 8PR×2W	—	175R13 8PR×4W
	Sound power level in decibels	dB	98	98	99
	Sound pressure level	dB[A]	70	70	70
	Designated emissions regulation		JPN Stage 3	JPN Stage 3	JPN Stage 3

● Specifications are subject to change without notice.



# Dry-Air PDS-D SERIES

AIRMAN PDS-D is a series of compressors that supplies dry air with low humidity. It supplies dry service air at atmospheric temperature +40°C and contains numerous devices such as an aftercooler to cool the compressed air, an auto drain to discharge collected water, and an afterwarmer to lower the humidity of the compressed air. Because the machine frees compressed air from water in humid conditions like a rainy day or even a rainy season, this series is particularly suitable for duct recover, painting, sandblasting, and factory air. \*Does not supply oil-free air.

**PDS 670 S D - 4 C5**

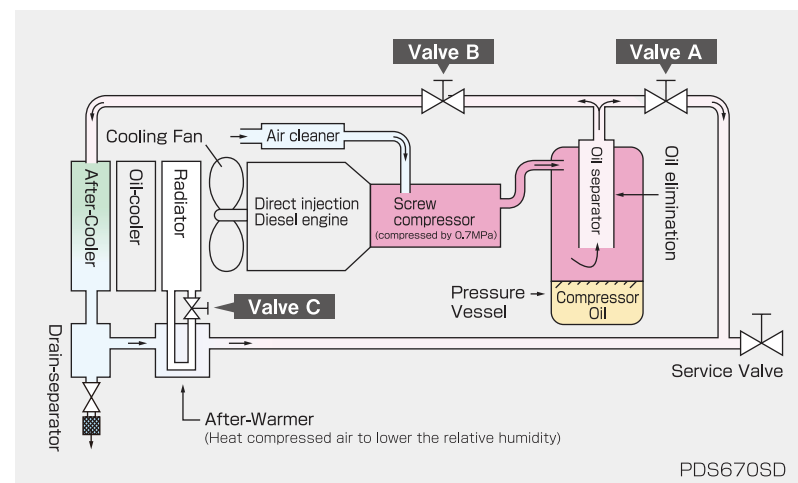
- ① Portable Diesel Screw
- ② Air volume (CFM) 1m<sup>3</sup>/min=35CFM
- ③ Control S : Single pressure
- ④ Type 4 : Trailer  
5 : Box

## The following is how dry air is born

After the removal of oil by the oil separator, the compressed air is cooled significantly by the aftercooler.

As the compressed air is cooled, a saturated vapor (vapor that cannot be absorbed in the compressed air) is changed into small water drops and then drained.

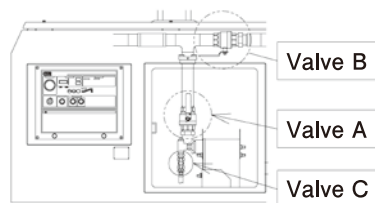
The dehydrated compressed air is heated by the afterwarmer, reusing the hot water from the engine. The heat makes the compressed air less humid, transforming it into dry air.



PDS670SD

## Switchable between dry air (high temperature), after-cooled air (low temperature) and normal air

You can switch valves to obtain 3 types of air: dry air, after-cooled air, and normal air depending on application.



※After-cooler air of applications: intake air to separated dryer

PDS670SD

## Dry-Air PDS series



PDS265SD



PDS265SD



PDS390SD



PDS390SD

		PDS265SD-4C3 Trailer	PDS265SD-5C3 Box	PDS390SD-4C1 Trailer	PDS390SD-5C1 Box
COMPRESSOR	Type	Rotary Twin Screw, Single-Stage, Oil-cooled			
	Free air delivery	m <sup>3</sup> /min	7.5	7.5	11.0
	Rated operating pressure	MPa[kgf/cm <sup>2</sup> ][psi]	0.69[7.0][100]	0.69[7.0][100]	0.69[7.0][100]
	Compressor capacity	L	30	30	50
	Discharge Air Temperature	°C	Atmospheric Temperature+40	Atmospheric Temperature+40	Atmospheric Temperature+40
	Air outlet valve		3/4"×4, 2"×1(OP)	3/4"×4, 2"×1(OP)	3/4"×4, 2"×1
ENGINE	Make/Model		YANMAR KDP-4TNV98T	YANMAR KDP-4TNV98T	ISUZU CI-4JJ1X
	Type		Direct-Injection, Turbo-Charged	Direct-Injection, Turbo-Charged	Direct-Injection, Turbo-Charged, Intercooled
	Rated output	PS(kW) /min <sup>-1</sup>	83.2(61.2) /2500	83.2(61.2) /2500	114.8(84.4) /2200
	Engine oil capacity	L	11	11	15
	Fuel tank capacity	L	115	115	180
	Battery		95D31R×1	95D31R×1	80D26R×2
DIMENSION & WEIGHT	L×W×H	mm	2400×1570×1650	2175×1200×1250	3065×1415×1870
	Dry (Operating) weight	kg	1410(1550)	1210(1350)	2075(2285)
	Tire Size		145R12 8PR×2W	—	175R13 8PR×4W
	Sound power level in decibels	dB	98	98	99
	Sound pressure level	dB[A]	70	70	70
	Designated emissions regulation		JPN Stage 3	JPN Stage 3	JPN Stage 3



PDS670SD



PDS600SD/F550SD



PDSG750VRSD

		PDS670SD-4C5 Trailer	PDS600SD/F550SD-4C5 Dual Pressure / Trailer	PDSG750VRSD-4C5 Variable pressure / Trailer
COMPRESSOR	Type	Rotary Twin Screw, Single-Stage, Oil-cooled		
	Free air delivery	m <sup>3</sup> /min	19.0	17.0/15.6
	Rated operating pressure	MPa[kgf/cm <sup>2</sup> ][psi]	0.7[7.14][102]	1.03[10.5][149]/0.7[7.14][102]
	Compressor capacity	L	97	97
	Discharge Air Temperature	°C	Atmospheric Temperature+40	Atmospheric Temperature+40
	Air outlet valve		3/4"×2, 2"×1, 3/8"×1	3/4"×2, 2"×1, 3/8"×1
ENGINE	Make/Model		ISUZU AI-4HK1X	ISUZU AI-4HK1X
	Type		Direct-Injection, Turbo-Charged, Intercooled	Direct-Injection, Turbo-Charged, Intercooled
	Rated output	PS(kW) /min <sup>-1</sup>	161(118.6) /2000	161(118.6) /2000
	Engine oil capacity	L	20.5	20.5
	Fuel tank capacity	L	310	310
	Battery		130F51×2	130F51×2
DIMENSION & WEIGHT	L×W×H	mm	3690×1680×2145	3690×1680×2145
	Dry (Operating) weight	kg	3050(3430)	3090(3470)
	Tire Size		175R13-8PR×4W	175R13-8PR×4W
	Sound power level in decibels	dB	102	101
	Sound pressure level	dB[A]	76	72
	Designated emissions regulation		JPN Stage 3	JPN Stage 3

● Specifications are subject to change without notice.

High Pressure

**PDSF/K** SERIES

Variable Pressure

**PDS-DP/VR** SERIES

**DP**
**Dual Pressure**  
[2 stage pressure switching]

**VR**
**Variable Ratings**  
[Continuous variable control]

AIRMAN high-pressure compressors and variable pressure compressors are the foundation of urban development. The core of the compressors, the screw rotors, are all developed in-house allowing us to achieve both incomparable power and variety in our products. This series is particularly effective for urban development projects including foundation work using down-the-hole or large-diameter boring techniques and spraying work to ensure the safety of slopes around a mountain road. Just a single one of our variable pressure compressors can handle multiple roles in a project, adjusting easily to the various pressure and air volume needs of your projects.

**PDS G 1400 L VR -5 C5**
**1** Portable Diesel Screw

**2** Pressure specification symbol

Blank: 0.7 MPa H: 1.7 MPa  
F: 1.03 MPa J: 2.0 MPa  
G: 1.4 MPa K: 2.5 MPa

**3** Air volume (CFM) 1 m<sup>3</sup>/min=35 CFM

**4** Bonnet type

Blank: Standard  
L: Leak-Guard

**5** Control

S: Single pressure  
DP: 2 stage pressure switching  
VR(S): Continuous variable control

**6** Special specification

Blank: Standard  
C: After-Cooler  
D: Dry-Air

**7** Type

4: Trailer  
5: Box

High Pressure

**Full lineup of the high-pressure series**

A wide range of discharge pressure ratings from 1.03 to 2.41 MPa are available depending on usage.

Variable Pressure [DP]

**Play a dual role**

Pressure Switch is available for switching between low pressure or high pressure depending on usage.

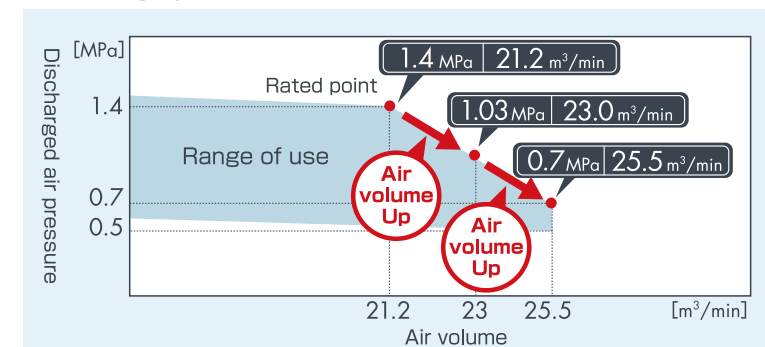
Model	Discharged air pressure (MPa)	Air volume (m <sup>3</sup> /min)
PDS600S/F550S	0.7 / 1.03	17.0 / 15.6
PDSF1000DP	0.7 / 1.03	27.5
PDSG900DP	1.03 / 1.4	24.4
PDSG1400LDP	1.03 / 1.4	39.7
PDSH800DP	1.4 / 1.7	22.1
PDSJ850DP	1.7 / 2.0	24.1
PDSJ1550DP	1.7 / 2.0	42.5

Variable Pressure [VR(S)]

**Pressure setting that fits each site**

You can freely choose any pressure within the range from 0.5 MPa to 1.4 MPa. Also, it has an integrated air boosting to automatically raise the engine rotation speed if the pressure drops.

Wide-range pressure control (VRS)



PDSG750VRS

Variable Pressure [VR(S)]

**Pressure selector switch**

An operator is able to change pressure value in 0.01 MPa increments on the display.



Range setting	Low	Middle	High
Initial setting [MPa]	0.7	1.03	1.4
Range setting [MPa]	0.65~0.75	0.76~1.08	1.09~1.4

※Setting can be adjustable by 0.01 MPa

PDSG1400LVR

Leak-Guard

Standard

After-Cooler

Dry-Air

High Pressure

14



High Pressure PDSF/K series



PDSF100S



PDSF140S

			PDSF100S-5C3 Box	PDSF140S-5C3 Box	PDSF210S-5C3 Box
COMPRESSOR	Type		Rotary Twin Screw, Single-Stage, Oil-cooled		
	Free air delivery	m <sup>3</sup> /min	2.8	4.0	6.0
	Rated operating pressure	MPa[kgf/cm <sup>2</sup> ][psi]	1.03[10.5][149]	1.03[10.5][149]	1.03[10.5][149]
	Compressor capacity	L	15	15	30
	Air outlet valve		3/4"×2	3/4"×3	3/4"×4, 2"×1
ENGINE	Make/Model		YANMAR 3TNV88-BDHK	YANMAR 4TNV88-BDHKS	YANMAR KDP-4TNV98T
	Type		Direct-Injection	Direct-Injection,	Direct-Injection,
	Rated output	PS (kW) /min <sup>-1</sup>	36.6 (26.9) /3000	49.6 (34.9) /3000	83.2 (61.2) /2500
	Engine oil capacity	L	6.7	7.4	11
	Fuel tank capacity	L	70	90	115
	Battery		80D26R×1	80D26R×1	95D31R×1
DIMENSION & WEIGHT	L×W×H	mm	1580×890×1080	1850×950×1080	2050×1200×1310
	Dry (Operating) weight	kg	640 (720)	750 (850)	1170 (1300)
	Tire Size		—	—	—
	Sound power level in decibels	dB	94	94	98
	Sound pressure level	dB[A]	65	65	69
	Designated emissions regulation		JPN Stage 3	JPN Stage 3	JPN Stage 3



PDSF315S



PDSF315S



PDSK900S

			PDSF315S-4C1 Trailer	PDSF315S-5C1 Box	PDSK900S-402 Trailer
COMPRESSOR	Type		Rotary Twin Screw, Single-Stage, Oil-cooled		Rotary Twin Screw, Two-Stage, Oil-cooled
	Free air delivery	m <sup>3</sup> /min	8.9	8.9	25.5
	Rated operating pressure	MPa[kgf/cm <sup>2</sup> ][psi]	1.03[10.5][149]	1.03[10.5][149]	2.41[24.6][350]
	Compressor capacity	L	50	50	120
	Air outlet valve		3/4"×4, 2"×1	3/4"×4, 2"×1	3/4"×1, 2"×1
ENGINE	Make/Model		ISUZU CI-4JJ1X	ISUZU CI-4JJ1X	MTSUBISHI S6B3-PTA
	Type		Direct-Injection, Turbo-Charged, Intercooled	Direct-Injection, Turbo-Charged, Intercooled	Direct-Injection, Turbo-Charged, Intercooled
	Rated output	PS (kW) /min <sup>-1</sup>	114.8 (84.4) /2200	114.8 (84.4) /2200	445 (327.3) /1,800
	Engine oil capacity	L	15	15	85
	Fuel tank capacity	L	180	180	710
	Battery		80D26R×2	80D26R×2	195G51×2
DIMENSION & WEIGHT	L×W×H	mm	3065×1415×1870	2680×1300×1400	4,670×2,100×2,315
	Dry (Operating) weight	kg	2005(2215)	1700(1910)	6,470 (7,300)
	Tire Size		175R13 8PR×4W	175R13 8PR×4W	7.50-16 12PR×4W
	Sound power level in decibels	dB	99	99	—
	Sound pressure level	dB[A]	70	70	—
	Designated emissions regulation		JPN Stage 3	JPN Stage 3	—

● Specifications are subject to change without notice.

High Pressure PDSF series After-Cooler



PDSF100SC



PDSF140SC

			PDSF100SC-5C3 Box	PDSF140SC-5C3 Box	PDSF210SC-5C3 Box
COMPRESSOR	Type		Rotary Twin Screw, Single-Stage, Oil-cooled		
	Free air delivery	m <sup>3</sup> /min	2.8	4.0	6.0
	Rated operating pressure	MPa[kgf/cm <sup>2</sup> ][psi]	1.03[10.5][149]	1.03[10.5][149]	1.03[10.5][149]
	Compressor capacity	L	15	15	30
	Air outlet valve		3/4"×2	3/4"×3	3/4"×4, 2"×1
ENGINE	Make/Model		YANMAR 3TNV88-BDHK	YANMAR 4TNV88-BDHKS	YANMAR KDP-4TNV98T
	Type		Direct-Injection	Direct-Injection	Direct-Injection, Turbo-Charged
	Rated output	PS (kW) /min <sup>-1</sup>	36.5 (26.9) /3000	49.6 (34.9) /3000	83.2 (61.2) /2500
	Engine oil capacity	L	6.7	7.4	11
	Fuel tank capacity	L	70	90	115
	Battery		85D26R×1	85D26R×1	95D31R×1
DIMENSION & WEIGHT	L×W×H	mm	1580×890×1080	1850×950×1080	2050×1200×1310
	Dry (Operating) weight	kg	650 (730)	750 (850)	1170 (1300)
	Tire Size		—	—	—
	Sound power level in decibels	dB	94	94	—
	Sound pressure level	dB[A]	65	65	—
	Designated emissions regulation		JPN Stage 3	JPN Stage 3	JPN Stage 3



PDSF315SC



PDSF315SC

			PDSF315SC-4C1 Trailer	PDSF315SC-5C1 Box
COMPRESSOR	Type		Rotary Twin Screw, Single-Stage, Oil-cooled	
	Free air delivery	m <sup>3</sup> /min	8.9	8.9
	Rated operating pressure	MPa[kgf/cm <sup>2</sup> ][psi]	1.03[10.5][149]	1.03[10.5][149]
	Compressor capacity	L	50	50
	Discharge Air Temperature		Atmospheric Temperature+20	Atmospheric Temperature+20
ENGINE	Air outlet valve		3/4"×4, 2"×1	3/4"×4, 2"×1
	Make/Model		ISUZU CI-4JJ1X	ISUZU CI-4JJ1X
	Type		Direct-Injection, Turbo-Charged, Intercooled	Direct-Injection, Turbo-Charged, Intercooled
	Rated output	PS (kW) /min <sup>-1</sup>	114.8 (84.4) /2200	114.8 (84.4) /2200
	Engine oil capacity	L	15	15
	Fuel tank capacity	L	180	180
DIMENSION & WEIGHT	Battery		80D26R×2	80D26R×2
	L×W×H	mm	3065×1415×1870	2680×1300×1400
	Dry (Operating) weight	kg	2045 (2255)	1740 (1950)
	Tire Size		175R13 8PR×4W	175R13 8PR×4W
	Sound power level in decibels	dB	99	99
	Sound pressure level	dB[A]	70	70
	Designated emissions regulation		JPN Stage 3	JPN Stage 3

Leak-Guard

Standard

After-Cooler

Dry-Air

High Pressure

Variable Pressure PDS-DP series



PDS600S/F550S



PDSG900DP



PDSG1400LDP

			PDS600S/F550S-4C5 Dual Pressure / Trailer	PDSF1000DP-4C5 Dual Pressure / Trailer	PDSG900DP-4C5 Dual Pressure / Trailer	PDSG1400LDP-5C5 Dual Pressure / Box
COMPRESSOR	Type		Rotary Twin Screw, Single-Stage, Oil-cooled			
	Free air delivery	m <sup>3</sup> /min	17.0/15.6	27.5	24.4	40.3/39.7
	Rated operating pressure	MPa[kgf/cm <sup>2</sup> ][psi]	0.7[7.14][102]/ 1.03[10.5][149]	0.7[7.14][102]/ 1.03[10.5][149]	1.03[10.5][149]/ 1.4[14.3][203]	1.03[10.5][149]/ 1.5[15.3][220]
	Compressor capacity	L	97	110	95	200
	Air outlet valve		3/4"×2, 2"×1, 3/8"×1	3/4"×1, 2"×3	3/4"×1, 2 1/2"×1	3/4"×1, 3"×1
ENGINE	Make/Model		ISUZU AI-4HK1X	KOMATSU SAA6D 125E-5-A	KOMATSU SAA6D 125E-5-A	KOMATSU SAA6D140E-5-B
	Type		Direct-Injection, Turbo-Charged, Intercooled	Direct-Injection, Turbo-Charged, Intercooled	Direct-Injection, Turbo-Charged, Intercooled	Direct-Injection, Turbo-Charged, Intercooled
	Rated output	PS (kW) /min <sup>-1</sup>	161 (118.6) /2000	356.9 (262.5) /2200	356.9 (262.5) /1900	568 (418) /2000
	Engine oil capacity	L	20.5	41	41	61
	Fuel tank capacity	L	310	600	600	780
	Battery		130F51×2	170F51×2	170F51×2	170F51×2
DIMENSION & WEIGHT	L×W×H	mm	3690×1680×2145	4370×2000×2290	4370×2000×2290	4750×1950×2050
	Dry (Operating) weight	kg	2980 (3350)	4990 (5680)	4950 (5620)	6610 (7530)
	Tire Size		175R13 8PR×4W	7.50-16 14PR×4W	7.50-16 14PR×4W	—
	Sound power level in decibels	dB	—	105	103	104
	Sound pressure level	dB[A]	—	75.8	75.5/73.4	78.6
	Designated emissions regulation		JPN Stage 3	JPN Stage 3	JPN Stage 3	JPN Stage 3



PDSH800DP



PDSJ850DP



PDSJ1550DP

			PDSH800DP-4C5 Dual Pressure / Trailer	PDSJ850DP-4C5 Dual Pressure / Trailer	PDSJ1550DP-4C6 Dual Pressure / Trailer
COMPRESSOR	Type		Rotary Twin Screw, Single-Stage, Oil-cooled		
	Free air delivery	m <sup>3</sup> /min	22.1	24.1	43.9/42.5
	Rated operating pressure	MPa[kgf/cm <sup>2</sup> ][psi]	1.4[14.3][203]/1.7[17.4][250]	1.7[17.4][250]/2.0[20.4][290]	1.7[17.4][250]/2.0[20.4][290]
	Compressor capacity	L	100	98	150
	Air outlet valve		3/4"×2, 2"×1	3/4"×2, 2"×1	3/4"×1, 2"×1
ENGINE	Make/Model		KOMATSU SAA6D 125E-5-A	KOMATSU SAA6D 125E-5-A	KOMATSU SAA6D 140E-5-B
	Type		Direct-Injection, Turbo-Charged, Intercooled	Direct-Injection, Turbo-Charged, Intercooled	Direct-Injection, Turbo-Charged, Intercooled
	Rated output	PS (kW) /min <sup>-1</sup>	356.9 (262.5) /1900	356.9 (262.5) /1900	568 (418) /2000
	Engine oil capacity	L	41	41	61
	Fuel tank capacity	L	600	600	902
	Battery		170F51×2	170F51×2	225H52×2
DIMENSION & WEIGHT	L×W×H	mm	4370×2000×2290	4370×2000×2290	4900×2100×2500
	Dry (Operating) weight	kg	4955 (5630)	5270 (5940)	7510 (8500)
	Tire Size		7.50-16 14PR×4W	7.50-16 14PR×4W	7.00-15 12PR (i) ×4W
	Sound power level in decibels	dB	104	103	104
	Sound pressure level	dB[A]	74	73.5	75
	Designated emissions regulation		JPN Stage 3	JPN Stage 3	JPN Stage 3

Variable Pressure PDS-DP series After-Cooler/Dry-Air



PDS600SD/F550SD



PDSG900DPC



PDSJ850DPC

			PDS600SD/ F550SD-4C5 Dual Pressure / Trailer	PDSF1000DPC -4C5 Dual Pressure / Trailer	PDSG900DPC -4C5 Dual Pressure / Trailer	PDSH800DPC -4C5 Dual Pressure / Trailer	PDSJ850DPC -4C5 Dual Pressure / Trailer
COMPRESSOR	Type		Rotary Twin Screw, Single-Stage, Oil-cooled				Rotary Twin Screw, Two-Stage, Oil-cooled
	Free air delivery	m <sup>3</sup> /min	17.0/15.6	27.5	24.4	22.1	24.1
	Rated operating pressure	MPa[kgf/cm <sup>2</sup> ][psi]	0.7[7.14][102]/ 1.03[10.5][149]	0.7[7.14][102]/ 1.03[10.5][149]	1.03[10.5][149]/ 1.4[14.3][203]	1.4[14.3][203]/ 1.7[17.4][250]	1.7[17.4][250]/ 2.0[20.4][290]
	Compressor capacity	L	97	110	95	105	98
	Discharge Air Temperature	°C	Atmospheric Temperature+40	Atmospheric Temperature+20	Atmospheric Temperature+20	Atmospheric Temperature+20	Atmospheric Temperature+20
ENGINE	Air outlet valve		3/4"×2, 2"×1, 3/8"×1	3/4"×1, 2"×3	3/4"×1, 2 1/2"×1	3/4"×2, 2"×1	3/4"×1, 2"×1
	Make/Model		ISUZU AI-4HK1X	KOMATSU SAA6D 125E-5-A	KOMATSU SAA6D 125E-5-A	KOMATSU SAA6D 125E-5-A	KOMATSU SAA6D 125E-5-A
	Type		Direct-Injection, Turbo -Charged, Intercooled	Direct-Injection, Turbo -Charged, Intercooled	Direct-Injection, Turbo -Charged, Intercooled	Direct-Injection, Turbo -Charged, Intercooled	Direct-Injection, Turbo -Charged, Intercooled
	Rated output	PS (kW) /min <sup>-1</sup>	161 (118.6) /2000	356.9 (262.5) /2200	356.9 (262.5) /1900	356.9 (262.5) /1900	356.9 (262.5) /1900
	Engine oil capacity	L	20.5	41	41	41	41
	Fuel tank capacity	L	310	600	600	600	600
DIMENSION & WEIGHT	Battery		130F51×2	170F51×2	170F51×2	170F51×2	170F51×2
	L×W×H	mm	3690×1680×2145	4370×2000×2290	4370×2000×2290	4370×2000×2290	4370×2000×2290
	Dry (Operating) weight		3090 (3470)	5100 (5790)	5050 (5720)	5055 (5730)	5350 (6030)
	Tire Size	kg	175R13 8PR×4W	7.50-16 14PR×4W	7.50-16 14PR×4W	7.50-16 14PR×4W	7.50-16 14PR×4W
	Sound power level in decibels		—	105	103	104	103
	Sound pressure level	dB	—	75.8	73	74	73
	Designated emissions regulation	dB[A]	JPN Stage 3	JPN Stage 3	JPN Stage 3	JPN Stage 3	JPN Stage 3

Variable Pressure PDS-VR series



PDSG750VRS



PDSG750VRSD



PDSG1400LVR

			PDSG750VRS-4C5 Variable pressure / Trailer	PDSG750VRSD- 4C5 Variable pressure / Trailer	PDSG1400LVR- 5C5 Dual Pressure / Box
COMPRESSOR	Type		Rotary Twin Screw, Single-Stage, Oil-cooled		
	Free air delivery	m <sup>3</sup> /min	25.5~21.2	25.5~21.2	42.5~39.7
	Rated operating pressure	MPa[kgf/cm <sup>2</sup> ][psi]	0.5[5.1][73]~1.4[14.3][203]	0.5[5.1][73]~1.4[14.3][203]	0.65[6.63][94]~1.4[14.3][203]
	Compressor capacity	L	82	82	200
	Discharge Air Temperature	°C	—	Atmospheric Temperature+20	—
ENGINE	Air outlet valve		3/4"×2, 2"×1	3/4"×2, 2"×1	3/4"×1, 3"×1
	Make/Model		HINO J08E-UK	HINO J08E-UK	KOMATSU SAA6D140E-5-B
	Type		Direct-Injection, Turbo-Charged, Intercooled	Direct-Injection, Turbo-Charged, Intercooled	Direct-Injection, Turbo-Charged, Intercooled
	Rated output	PS (kW) /min <sup>-1</sup>	268 (197) /2100	268 (197) /2100	568 (418) /2000
	Engine oil capacity	L	28.5	28.5	61
	Fuel tank capacity	L	400	400	780
DIMENSION & WEIGHT	Battery		170F51×2	170F51×2	170F51×2
	L×W×H	mm	3820×1730×2325	3820×1730×2325	4750×1950×2050
	Dry (Operating) weight	kg	3410 (3870)	3580 (4040)	6610 (7530)
	Tire Size		185R14 8PR×4W	185R14 8PR×4W	—
	Sound power level in decibels	dB	102	102	104
	Sound pressure level	dB[A]	74	74	78.6
	Designated emissions regulation		JPN Stage 3	JPN Stage 3	JPN Stage 3

● Specifications are subject to change without notice.