#### SPECIFICATION TABLE

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Item	Model	DAW-180SS	DAW-300LS	TLW-230LS	DLW-300LS	DLW-300LSW2	DLW-400LSW
DC Welding Power							
Rated Output	(kW)	4.5	8.7	5.6	7.90/8.74	Single 7.90/8.74 Dual 3.28×2/3.58×2	Single 12.9/13.9 Dual 5.07×2/5.42×2
Rated Current	(A)	170	280	200	260/280	Single 260/280 Dual 130/140	Single 370/390 Dual 185/195
Rated Voltage	(V)	26.8	31.2	28	30.4/31.2	Single 30.4/31.2 Dual 25.2/25.6	Single 34.8/35.6 Dual 27.4/27.8
Welding Current F	Range (A)	30 -180	30 - 300 (2200 - 3000min <sup>-1</sup> )	50 - 230	30 - 280/30 - 300	Single 60-280/60-300 Dual 30-150/30-160	Single 60 - 380/60 - 400 Dual 30 - 190/30 - 200
Rated duty cyc	le (%)		50			100	
Applicable electr	ode (mm)	2.0-4.0	2.0 - 6.0	2.6 - 5.0	2.0 - 6.0	Single 2.0 - 6.0 Dual 2.0 - 3.2	Single 2.0 - 8.0 Dual 2.0 - 4.0
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#### AC Power Source

Frequency	(Hz)	50/60				
Rated Output	(kVA)	3.0	5.0/5.5	10.4/11.4 15.		
Rated Voltage	(V)	100/110/120/200/220/230/240 200/220/230/240 or 380/440				
No.of Phase	Phase 1-Phase, 2wire 3-Phase ,4wire					
Power Factor		1.0		0.8 (Lagging )		

#### Diesel Engine

Model	Kubota Z402	Kubota D722-K3A	Kubota Z482-K3A	Yanmar 3-3TNM68G	Kubota D902-K3A	Kubota D1105-K3B
Туре	4-cycle,vertical,water cooled with radiator					
Rated Output (kW)	7.28	11.7	9.6	12.5/15.0	14.9/17.8	17.8/20.7
Rated Speed (rpm)	3600	3000	3600	3000/3600		
Displacement (L)	0.4	0.719	0.479	0.784	0.898	1.123
Fuel	ASTM No.2 diesel fuel or equivalent					
Fuel consumption*1 (L/h)	1.31	2.1	1.6	1.96/2.34	2.14/2.49	3.14/3.69
Fuel Tank Capacity (L)	15	19		36		42
Battery x Quantity	36B20L×1	55B24L×1	36B20L×1	55B24L×1		

Dimensions/W	eight						
Length× Width× H	eight (mm)	990×590×750	1270×680×740	1220×610×720	1410×560×770	1410×560×770	1520×700×770
Dry Weight	(kg)	181	300	285	379	375	471
Noise							
7mdB (A)*2		65	64	60/63	63/65	66/68	64/67

- \*\*1 The fuel consumptions herein are measured under the condition that welding load is a rated value and the duty cycle is fixed at 50%.
  \*\*2 The noise levels herein stated are the averaged value of the measured values of four directions of 7 meters length under non-loaded condition.
- \* When a welding machine and a generator are used simultaneously, please use them according to the instructions stipulated in the Operation Manual



ISO 9001 : 2015 ISO 14001 : 2015 Certified

The specifications, appearance and/or coloring of the products may be subject to change without notice.

Due to printing conditions of this brochure, coloring of the products may not be same as printed herein.

Storage, transportation and usage of the products shall, at any time, be carried out in accordance with the Operation Manual.



The Denyo trademark is widely recognized as a brand , and is a registered trademark in 90 countries around the world.

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





# DIESEL ENGINE-DRIVEN DC WELDER/AC GENERATOR SOUND PROOF TYPE

# DLW SERIES DAW/TLW SERIES



Denyo Co., Ltd.



The improved diesel engine welder achieves low fuel consumption and low noise in newly developed e-mode operations. High-quality AC power can be used while welding is being performed.

## Two people can perform welding simultaneously.



# **DLW-300LS**





DENYO's DLW series welders are

equipped with Weldir Mode Selector Switch which enables

the welding workers

to change the working mode between the drooping characteristics mode and the constant current characteristic



Constant current characteristic mode Even when the arc length becomes long and thus the voltage rises, the current remains same



Drooping characteristic mode When the arc length becomes long and thus the voltage rises, the current decreases



# **DLW-300LSW2**





**Arc Force Regulator** 

The conditions of welding work can be

freely adjusted from "Hard" to "Soft" at

the discretion of a welding worker by

On the other hand, when "Hard" is

down to 15V for non-working

conditions and thus it is

possible to prevent electric

shocks of welding workers

altitude and a high humidity.

and allowance-rich engines.

**Duty Cycle 100% is realized** 

Denyo's welders realized duty cycle 100%

by adopting high-performance generators

even at a place of a high

selected, start of arc becomes much

**Voltage Reducing** 

**Function is equipped** 

Arc Force Regulator

When "Soft" is selected

the current for welding

work becomes stable

and welding of pipes

and upward welding

become easier to do

smoother



# **DLW-400LSW**



**Variable Engine Speed Control Device "e-mode"** DLW-Series are able to control in a Constant protection against welding variable fashion the number of

rotations in compliance with the load to be applied and a lower noise level and lower fuel consumption are attained with an excellent job performance. Operator may select the optimum

mode or e-mode from the 3 positions of control. This realizes a lower consumption of fuel.

#### Variable /Low Speed Mode

When the welding work starts, the rotation of equipped engine works under non-step and DENYO's engine-driven welders is capable to reduce the welding open circuit voltage



#### High/Low Speed Mode

When the welding work is performed by the machine or the welder is connected to alternate current (AC) power, the machine works at high speed mode, and when the machine is under no load of current, it works at low speed mode.

#### High Speed Mode

The welder works at high speed mode regard less non-load conditions or loaded conditions.

#### **Constant protection** against welding output short-circuits

output short-circuits is a function that significantly reduces the current supplied to a short-circuit between the welding rod and the base metal for a certain time after a failed arc start in order to prevent the welding rod from sticking (a function that allows easy removal of the welding rod).

This function demonstrates its value with unskilled operators and welding in small spaces.



### Explanation of a mark



The maximum welding current and the maximum application welding rod at the time of single welding.



The maximum welding current and The maximum application welding rod of welding for two people



AC power output 1- Phase 100/110/120/200/220/230/240V



AC power output 3- Phase 200/220/230/240 or 380 - 440V



Single or two people usage can be chosen with selector

VOLTAGE



GBT chopper control system with Welding mode selector switch or Arc Force Regulator



Thyristor electronic control and arc drive control.



AC Power can be used while welding is being performed.



AVR, inverter load, thyristor load and computer load makes a quality exchange power supply with little waveform distortion to an electronic circuit



Waveform correction circuit is included in quality exchange power supply with little waveformdistortion can



379 Dry Weight



Lightweight and compact design with watercooled 2-cylinder diesel engine.



DAW-180SS



















# DAW-300LS



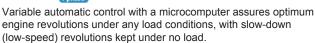












The fuel cost can thus be reduced, ultra-low fuel consumption achieved, and ultralow noise level maintained under any working

The best arc-welding character istics

The e-AVC300's microcomputer-aided welding control assures quiet, optimum operation that will accommodate any kind of welding rod.



TLW-230LS







# All the products listed in this brochure are provided with the following functions.

#### Clean Engine

The engine equipped with the Closed Breathing System which keeps the blow-by gas in the machine, and the alminum radiator which does not cause lead pollution is categoried as a construction machine that satisfies the emission gas regulation stage 3 (DAW-300LS/DLW-300LS/DLW-300LSW2/DLW-400LSW/TLW-230LS), enforced by the Ministry of Land, Infrastructure, Transport and Tourism. (except for DAW-180SS)

#### IDLE CONTROL reduces noises and fuel cost

The Idle ControL unit automatically lowers engine speed during no-load, reducing noise and increasing fuel efficiency. (DAW-180SS,TLW-230LS)



#### Easy Daily Inspection & Maintenance

Daily inspection and maintenance can be carried out one side of the machine. In addition, the radiater can be cleaned easily by removing the front cover.



#### Switch key operation restarts the engine with air vented automatically

The machine is equipped with an automatic airventing unit that eliminates air by turning a switch key when restarting the engine after fueling.

#### Alternator requires maintenace free

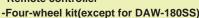
The use of brushes or slip rings in the alternator eliminates the need for maintenance.

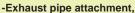
#### Various protective systems assuring safety

- DAW/DLW Series Welders can automatically cut the power off when over-loading DC output. (except for TLW-230LS)
- Protect over-loading AC output by shutting down its circuit breaker.
- Automatically stop the engine with the warning indicators, at low lubrication oil pressure, high water temperature, and insufficient charging of the battery.

# Options:

-Remote controller





-Mesures against salt damage -Earth Leakage Relay







Earth Leakage Relay

Four-wheel kit