

**Denyo**

DIESEL ENGINE-DRIVEN DC WELDER/AC GENERATOR

# ***DCW Series CC/CV***

**HIGH PERFORMANCE & Multi-APPLICATION**



**DCW-450S**

***All-in-one***

**Stik, Tig, Mig, Flux-cored, Gouging—  
One Unit for All Your Welding on demands!**



**DCW-400ES**

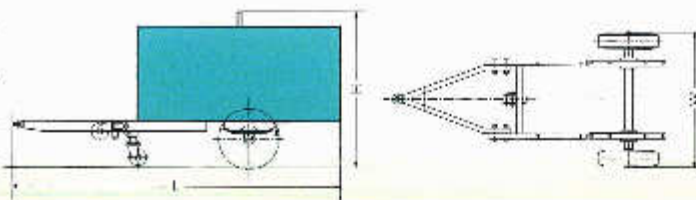
**WELDER**

# on integration in one location.

## TRAILER (OPTIONS)

	2-Wheel Trailer		4-Wheel Trailer
	DCW-450S	DCW-400ES	DCW-450S
Length(mm)	3050	2340	3050
Width(mm)	1300	1220	1400
Height(mm)	1435	1340	1415
Dry weight(kg)	770	615	870
Tire size	5.00 12-8PR	145R-10 6PR	5.00 12-8PR

Dimensions and weight include welding set



# DCW-400ES

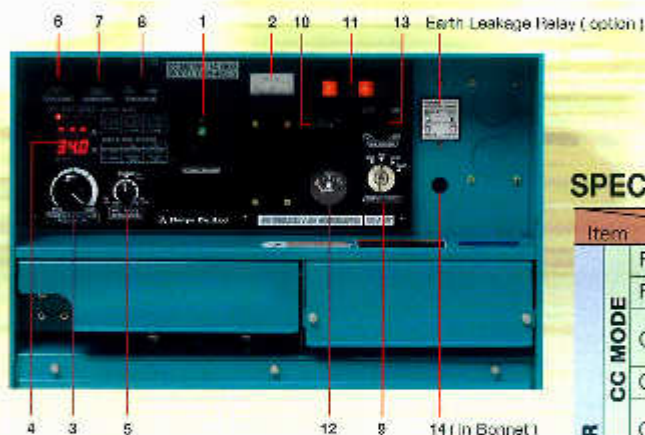
## Soundproof Type DCW-400ES

### E-mode Function Reduces Fuel Consumption and Noise Level

With e-mode operation ( idling speed ), the unit controls welding current up to 240A, reducing fuel consumption noise level.



DCW-400ES



### CONTROL PANEL

- 1.AC Circuit Breaker
- 2.AC Voltmeter
- 3.Current/Voltage Regulator
- 4.Digital Panel  
DC Voltage / DC Ammeter / VRD Lamp
- 5.Arc Force Regulator
- 6.Welding Mode Selector Switch(CC/CV)
- 7.Welding Range Selector Switch(High/Low)
- 8.e-mode Switch
- 9.Starter Switch
- 10.Hour Meter
- 11.Warning Lamp Unit  
Oil Press / Water Temp / Charging / Preheat
- 12.Fuel Meter
- 13.Idle Control Switch
- 14.Voltage Regulator

### OPTIONS

- OPTION 1**  
Oil Pressure Gauge  
Water Temperature Gauge
- OPTION 2**  
Remote Control Receptacle  
Remote Control Switch
- OPTION 3**  
AC Ammeter  
Frequency Meter
- OPTION 4**  
Earth Leakage Relay  
Ground Terminal ( For ELR )

## SPECIFICATION

Item	Model	DCW-400ES	e-mode	
<b>WELDER</b>	<b>CC MODE</b>	Rated output	11.0kW/11.9kW	7.10kW
		Rated current,Voltage,Duty	330A/350A,33.2V/34.0V,60%	240A,29.6V,100%
		Current range	High range 60-380A/400A Low range 30-190A/200A	60-240A 30-190A/200A
		Current selector	2 steps	2 steps
		Current at 100% duty cycle	High range 250A/270A Low range 125A/135A	240A/240A 120A/120A
	<b>CV MODE</b>	Rated speed	3000min <sup>-1</sup> /3600min <sup>-1</sup>	2200min <sup>-1</sup> /2200min <sup>-1</sup>
		Rated output	10.1kW/11.0kW	4.80kW
		Rated current,Voltage,Duty	330A/350A,30.5V/31.5V,60%	240A,20.0V,100%
		Welding voltage range	High range 14-34V/36V Low range 14-34V/36V	14-20V 14-30V
		Current at 100% duty cycle	High range 250A/270A Low range 125A/135A	240A/240A 120A/120A
<b>GENERATOR</b>	Rated speed	3000min <sup>-1</sup> /3600min <sup>-1</sup>	2200min <sup>-1</sup> /2200min <sup>-1</sup>	
	Number of phasos	3-phases,4-wire		
	Rated output	15kVA at 50Hz 15kVA at 60Hz		
	Rated voltage	380V(or 400V or 415V)		
	Frequency	50Hz/60Hz		
<b>ENGINE</b>	Model	kubota V1305		
	Type	4-cycle,water-cooled diesel engine		
	Rated output	21.2kW at 3000min <sup>-1</sup> 23.5kW at 3600min <sup>-1</sup>		
	Rated speed	3000min <sup>-1</sup> for 50Hz 3600min <sup>-1</sup> for 60Hz		
	Displacement	1.335L		
	Fuel	ASTM No. 2 diesel fuel or equivalent		
	Fuel consumption*1	3.52L/h / 4.03L/h		
<b>UNIT</b>	Buttery×Quantity	12V-65Ah×1 (80D26R)	3.1L/h	
	Dimensions (L×W×H)	1540×720×885mm		
	Dry weight	495kg		
<b>SOUND LEVEL</b>		67dB(A)/70dB(A) **	59dB(A) **	

\*1 Filter: welding load or rated duty cycle. \*2 The average rated load sound is limited within 87dB(A)/70dB(A) at a distance of 7m. \*3 The average e-mode sound is limited within 59dB(A) at a distance of 7m.

# Easy-to-use controls and operation

## Features

The unit can perform high-quality welding on pipelines and other welding methods. (Types of welding: Stick, Tig, Mig, Flux-cored, Gouging, etc.)

### High-Capacity High-Performance Generator

The unit can also be used as a high-capacity generator. With a voltage regulation of within  $\pm 1.0\%$ . High-quality AC power can be used while welding is being performed.

### Special Design Facilitates Use in Virtually Any Location

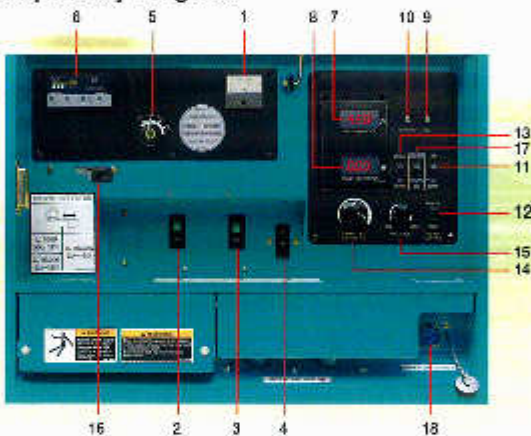
The unit has been designed to operate in virtually all locations, from very hot to cold climates. It is ideal for high-quality welding and as a dependable source of power.

## Specific Features

### Bonnet Type DCW-450S

#### Low Fuel Consumption and Long Life

The unit incorporates a low rpm ( $1,500/1,800 \text{ min}^{-1}$ ) high-output diesel engine featuring low fuel consumption. Operation at low speed is easy on the engine, facilitating especially long life.



#### CONTROL PANEL

- 1.AC Voltmeter
- 2.Circuit Breaker (3-phase output)
- 3.Circuit Breaker (Welding output)
- 4.Circuit Breaker (Remote output)
- 5.Starter Switch
- 6.Engine Monitor  
Warning Lamp Unit/Hour Meter/Fuel Meter
- 7.Digital Amps Output Meter
- 8.Digital Volt Output Meter
- 9.VRD Lamp
- 10.Warning Lamp (For Overload)
- 11.Welding Mode Selector (CC/CV)
- 12.Output Control Selector (Remote/Local)
- 13.Meter Selector (Actual/Set)
- 14.Welding Regulator (CC/CV)
- 15.Arc Force Regulator
- 16.Output Range Selector
- 17.OCV Selector (Continue/Synchro)
- 18.Remote Socket



#### OPTIONS

##### OPTION 1

Frequency Meter  
AC Ammeter

##### OPTION 2

Earth Leakage Relay  
Ground Terminal (For ELR)

##### OPTION 3

Oil Pressure Gauge  
Water Temperature Gauge

##### OPTION 4

Remote Control Unit



DCW-450S

#### SPECIFICATION

Item		Model	DCW-450S
WELDER	CC MODE	Rated output	14.4kW
		Rated current, Voltage, Duty	400A, 36V, 60%
		Current range	30-350A/450A
	CV MODE	Current selector	2 steps
		Current at 100% duty cycle	310A
		Rated speed	1500min <sup>-1</sup> /1800min <sup>-1</sup>
GENERATOR	CC MODE	Rated output	13.6kW
		Rated current, Voltage, Duty	400A, 34V, 60%
		Welding voltage range	14-31.5V/14-36V
	CV MODE	Current at 100% duty cycle	310A
		Rated speed	1500min <sup>-1</sup> /1800min <sup>-1</sup>
		Aux. power for feeder	115V
ENGINE	Number of phases	3-phases, 4-wire	
	Rated output	20kVA at 50Hz 25kVA at 60Hz	
	Rated voltage	380V (or 400V or 415V)	
	Frequency	50Hz/60Hz	
UNIT	Model	kubota V2203	
	Type	4-cycle, water-cooled diesel engine	
	Rated output	18.4kW at 1500min <sup>-1</sup> 23.7kW at 1800min <sup>-1</sup>	
	Rated speed	1500min <sup>-1</sup> for 50Hz 1800min <sup>-1</sup> for 60Hz	
	Displacement	2.197L	
	Fuel	ASTM No. 2 diesel fuel or equivalent	
Fuel consumption*1	4.27L/h		
Battery x Quantity	12V-85Ah x 1 (80D28R)		
SOUND LEVEL	Dimensions (L x W x H)	1900 x 720 x 990mm	
	Dry weight	670kg	
SOUND LEVEL		71dB(A) **	

\*1 Rated welding load at rated duty cycle.

\*2 The average rated load sound is limited within 71dB(A) at a distance of 7m.



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

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