

# SILENT CHALLENGER SERIES

New Generation Diesel Engine Driven Silent Welding Sets  
Conforming to Latest CPCB Norms



- Conforming to latest CPCB norms for noise & exhaust emission level
- Versatile applications, including cross country, inplant pipe and tube welding.
- Ideal for heavy fabrication & site applications
- Highly reliable even in hostile site conditions
- Big savings in fuel and longer runs before next refueling
- Specially proven with Cellulosic (6010, 7010 G & 8010G types) and other special types of electrodes.
- Excellent Pre and Post Sales Services.
- Super Silent Operations



WELDERS TO THE NATION SINCE 1951  
**ADOR WELDING LIMITED**

(Formerly Known as Advani-Oerlikon Ltd.)

[www.adorwelding.com](http://www.adorwelding.com)



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CC/CV

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**TECHNICAL SPECIFICATIONS :**

PARAMETER	UNIT	SPECIFICATIONS					
MODEL	NAME	SILENT CHALLENGER 301	SILENT CHALLENGER 401	SILENT CHALLENGER 501	SILENT CHALLENGER MULTI 2X301		
CPCB Compliance requirement		Meets CPCB compliance for Exhaust Emission and Noise within 75 dB at 1mtr as per CPCB norms					
Welding Generator type/description	Type	Brushless type, High Frequency Generator, Specially designed for constant current (CC), welding application, with winding-less, commutator-less, Magnet-less, Slipring less and Rotating diode-less Rotor construction for maintenance free and reliable operation.			Brushless type, Induction Generator, Fitted with High frequency Secondary Inverter to get Ripple free Constant current(CC) & Constant Voltage (CV) Welding Output. With winding-less, commutator-less, magnet-less, Slipring less and Rotating diode-less Rotor construction for maintenance free & reliable operation		
Welding process	Type	Manual (CC)	Manual (CC)	Manual (CC)	Semi Auto (CV)	Manual (CC)	Manual (CC)
Operator		Single	Single	Single	Double	Double	Single
Welding current range	Amps (DC)	40-300	50-400	50-500	15-300	15-300	30-600
OCV (max/min)	Volts (DC)	100/45	100/45	100/45	92	92	92
Max. hand welding current @ 40% Duty cycle	Amps (DC)	NA	NA	NA	2 X 300	2 X 300	600
Max. hand welding current @ 60% Duty cycle	Amps (DC)	300	400	500	2 X 250	2 X 250	500
Max. hand welding current @ 100% Duty cycle	Amps (DC)	230	310	400	2 X 200	2 X 200	400
Insulation Class	Type	H	H	H	H	H	H
Dia. Of electrode / FCAW wire	mm	2.5-6.3	2.5-6.3	2.5-6.3	1.2-2.4	2.5-6.3	2.5-6.3
Generally Conforms to BIS Standard	No	2635	2635	2635	2635	2635	2635
Welding Current adjustments/ settings provided on the set	Type	Stepless welding current adjustment through knob provided on front panel and Remote Control Unit			Single range, stepless welding current adjustment from panel & remote control unit		
<b>ENGINE</b>							
Make		Simpson	Simpson	Simpson	Simpson		
Type	model	S217	S433	S433	S433		
Cylinder	Nos	2	4	4	4		
Rated Engine Speed	RPM	1800	1800	1800	1800		
Engine Cooling	Type	Water Cooled	Water Cooled	Water Cooled	Water Cooled		
Engine Rating	BHP	23 at 1800 rpm	45 at 1800 rpm	45 at 1800 rpm	45 at 1800 rpm		
Conforms to	Is Std	IS: 10002/81	IS: 10002/81	IS: 10002/81	IS: 10002/81		
Starting	Type	Electric start (Battery 12V, 75AH)					
Fuel consumption @ 100% Duty cycle current	Lit/Hr	3.3	4.5	4.8	4.8 @ 40% Duty cycle current		
Fuel tank capacity	Liters	60	75	75	75		
Meters / Gauges / Indicators provided on set	Type/ Details	i) Lube Oil Pressure gauge, ii) Engine Coolant Temperature gauge, iii) Battery charge ammeter and warning lamp, iv) Hour meter to indicate Hours run, v) Fuel level Indicator gauge					
Engine safety protections Optional at Extra Price	Type	Optionally provided with Auto shut off device for low lube oil pressure & high coolant temperature.					
<b>AUXILIARY POWER SOURCES (BULIT IN) (*Indicates rating with simultaneous welding load)</b>							
Voltage	Volts	415/240	415/240	415/240	415/240		
Rating (3 phase)	KVA	10	10	10	18 (8KVA max with 100% welding load)		
Rating (1 phase)	KVA	3	3	3	6 (3KVA max with 100% welding load)		
Phase	Nos	3/1	3/1	3/1	3/1		
Output Sockets	Nos	2	2	2	4		
<b>GENERAL (Dimension &amp; Weight)</b>							
L X W X H (Skid)	mm	2000X820X1375	2500X820X1460	2500X820X1460	2500X820X1460		
Weight (net approx.) (Skid Mounted)	kgs	960	1130	1145	1160		
L X W X H (2 Wheel)	mm	2910X1455X1908	3410X1455X1990	3410X1455X1990	3410X1455X1990		
Weight (net approx.) (2 Wheel Mounted)	kgs	1100	1270	1285	1300		
L X W X H (4 Wheel)	mm	2910X1555X1908	3410X1555X1990	3410X1555X1990	3410X1555X1990		
Weight (net approx.) (4 Wheel Mounted)	kgs	1200	1370	1385	1400		
<b>ORDERING INFORMATION</b>		<b>PRODUCT CODE</b>	<b>PRODUCT CODE</b>	<b>PRODUCT CODE</b>	<b>PRODUCT CODE</b>		
Standard Power Source-Skid mounted set		F10.33.103.0004	F10.33.103.0002	F10.33.103.0018	F10.33.103.0026		
Standard Power Source-2 Wheel mounted set		F10.33.103.0001	F10.33.103.0003	F10.33.103.0019	F10.33.103.0027		
Standard Power Source-4 Wheel mounted set		NA	F10.33.103.0035	F10.33.103.0042	F10.33.103.0028		
<b>OPTIONAL ACCESSORIES</b>							
1000 Hours Engine maintenance kit		S10.64.101.0005	S10.64.101.0004	S10.64.101.0004	S10.64.101.0004		
Welding Accessories		S10.64.001.0014	S10.64.001.0014	S10.64.001.0015	S10.64.001.0014		
Amp/Volt meter box		S10.64.001.0021	S10.64.001.0021	S10.64.001.0021	S10.64.001.0051		
Spark Arrester		S10.64.101.0021	S10.64.101.0021	S10.64.101.0021	S10.64.101.0021		
Wire Feeder (WF40 MULTI)		NA	NA	NA	F10.33.103.0040		
Torch - 3/4.5 Mtrs. (SUPER SSPW 350)		NA	NA	NA	F10.33.103.0041		

- **Warranty:** One year from the date of purchase. ADOR WELDING LIMITED warrants that all new equipment sold from Plant/Area Offices / Authorised Distributors are free from defects in materials and workmanship and will perform in full accordance with applicable specifications.
- In view of continuous development, ADOR WELDING LIMITED reserves the right to modify/change the design and /or the specifications without any prior notice.
- Backed by dedicated customer care package.



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