

ENGINE DRIVEN WELDER

TS 600 EVO

The images are for reference

WELDING PROCESS



SMAW Shielded Metal Arc welding (STICK)



Gas Tungsten Arc Welding (TIG)



FEATURES

- D.C. Arc welding source
- Electronic regulation of welding current and arc force
- Double welding range
- Welding control panel "EVO CONTROL"
- Arc Gouging socket
- A.C. generator, single-phase and three-phase also available while welding
- Engine control digital module
- VRD - Voltage reduction device (standard only with EVO INSTRUMENT panel)
- Bunded base
- Base plate with forklift pockets
- Central lifting eye
- Stackable machine frame (max 2 units)
- Wide access for easy maintenance
- Meets EC directives



air cooled



diesel



electric starter

DEFINITIONS

EVO CONTROL



Welding current regulation
Welding arc regulation
Welding scale selection

EVO INSTRUMENT



Welding current regulation
Welding arc regulation
Welding scale selection
Digital ammeter - welding current
Digital voltmeter - welding voltage
VRD Indicator

ENGINE 1500 (50Hz) 1800 (60Hz) RPM

4 STROKE, DIRECT INJECTION		
	50 Hz	60 Hz
Model	DEUTZ F4L2011	
* Stand-by net power	29 kW (39.4 hp)	34.5 kW (47 hp)
* PRP net power	27.7 kW (37.7 hp)	32.8kW (44.6 hp)
* COP net power	/	
Cylinder / Dislacement	4/ 3100 cm ³	
Bore / Stroke	94 / 112 (mm)	
Compression ratio	17.5 : 1	
BMEP (Brake Mean Effective Pressure : LTP - PRP)	/	
Speed governor type	Mechanical	
FUEL CONSUMPTION		
110 % (Stand-by power)	7.7 lit./h	9.5 lit./h
100 % of PRP	7.3 lit./h	9 lit./h
75 % of PRP	5.4 lit./h	6.5 lit./h
50 % of PRP	3.7 lit./h	4.2 lit./h
25% of PRP	2.2 lit./h	2.7 lit./h
COOLING SYSTEM		
Total system cap. - only engine	/	
Fan air flow	24.83 m ³ /min	29.83 m ³ /min
LUBRICATION SYSTEM		
Total oil system capacity	/	
Oil capacity in sump	10.5l	
Oil consumption at full load	/	

EXHAUST SYSTEM		
Maximum exhaust gas flow	337 m³/h	400 m³/h
Max. exhaust gas temp.	510 °C	540°C
Maximum back pressure	7.5 kPa (0,075 bar)	
External diameter exhaust pipe	/	
ELECTRICAL SYSTEM		
	12 Vdc	
Starter motor power	2.6 kW	
Battery charging alternator cap.	60 A	
Cold start	- 15 °C	
AIR FILTER		
	Dry	
Combustion air flow	2 m³/min.	2.3 m³/min.
HEAT REJECTED AT FULL LOAD		
To exhaust system	/	
To water and oil	/	
Radiated to room	5,0 kWh	
To charge cooler	/	

* Maximum output (not overloadable) according to ISO 3046-1



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WELDING

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C.C. WELDING

CONSTANT CURRENT		
	50 Hz	60 Hz
Welding Process	SMAW (STIK - Shielded Metal Arc welding) GTAW (with SCRATCH start)	
Current range	20A ÷ 550A	20A ÷ 600A
Type of regulation	Continue on 2 Step : 20A ÷ 275A / 20A ÷ 550A	Continue on 2 Step : 20A ÷ 300A / 20A ÷ 600A
Duty cycle	500A - 60% / 400A - 100%	550A - 60% / 450A - 100%
Open circuit voltage	72 Vcc (77.5 Vdc peak)	75 Vcc (80 Vdc peak)
Arc force control	Yes	

SIMULTANEOUS LOAD CHARACTERISTIC 50Hz

WELDING CURRENT	≥ 230A	175A	125A	75A	0A
POW. IN THREE PHASE 400V	0 kVA	4.5 kVA	7.5 kVA	13 kVA	18 kVA
POW. IN SINGLE PHASE 230V	0 kVA	4.5 kVA	7.5 kVA	13 kVA	18 kVA
POW. IN SINGLE PHASE 115V	0 kVA	3 kVA	4 kVA	5 kVA	5 kVA

SIMULTANEOUS LOAD CHARACTERISTIC 60Hz

WELDING CURRENT	≥ 275A	200A	150A	100A	0A
POW. IN THREE PHASE 400V	0 kVA	7,5 kVA	12 kVA	18 kVA	20 kVA
POW. IN SINGLE PHASE 230V	0 kVA	5 kVA	8 kVA	10 kVA	10 kVA
POW. IN SINGLE PHASE 115V	0 kVA	3 kVA	4,5 kVA	5 kVA	5 kVA

GENERAL SPECIFICATIONS

	50 Hz	60 Hz
Fuel tank capacity	60 l	
Starter battery	12V - 80Ah - CCA 670A	
Fuel consumption (welding 60%)	4.5 l/h	5.7 l/h
Running time (welding 60%)	13 h	10.5 h

IP protection degree	IP 23	
Acoustic power LwA (pressure LpA)	/	98 dB(A) (73 dB(A) @ 7 m)
Guaranteed acoustic power LwA (pressure LpA)	96 dB(A) (71 dB(A) @ 7 m)	/
Measured acoustic power LwA (pressure LpA)	95 dB(A) (70 dB(A) @ 7 m)	/
Max. ambient temperature	40 °C	

GENERATION

A.C. GENERATION

ALTERNATOR ASYNCHRONOUS THREE-PHASE, SELF-EXCITED, SELF-REGULATED, BRUSHLESS

Insulation class	H	
Frequency	50 Hz	60 Hz

AUXILIARY GENERATION

OUTPUT 1		
Type of source	3-phase	
Frequency	50Hz	60Hz
Power kVA (Power kW) Max	18kVA (14.4 kW)	20kVA (16kW)
Cos ϕ	0.8	
Voltage	400V	
Current	26A	28.9A

OUTPUT 3		
Type of source	1-phase	
Frequency	50Hz	60Hz
Power kVA (Power kW) Max	5kVA (5kW)	
Cos ϕ	0.8	
Voltage	115V	
Current	43.5	

OUTPUT 2		
Type of source	1-phase	
Frequency	50Hz	60Hz
Power kVA (Power kW) Max	10kVA (8kW)	
Cos ϕ	0.8	
Voltage	230V	
Current	43.5	

OUTPUT 4	
Type of source	/
Frequency	/
Power kVA (Power kW) Max	/
Cos ϕ	/
Voltage	/
Current	/

CONTROL PANEL

- Controller RGK420SA
- Emergency stop button
- Ground fault interruptor
- Output sockets CEE: 1x 400V 32A 3P+N+T CEE
1x230V 32A 2P+T CEE
1x115V 32A 2P+T CEE
1x115V 16A 2P+T CEE
- Siren
- Socket thermal switch
- Welding current regulator
- Welding arc regulator
- Double welding range commutator
- Remote control connector
- GOUGING socket
- VRD

CONTROLLER CHARACTERISTICS RGK420SA

Operating mode	• OFF - ON - REMOTO
Display	• Graphic back-light LCD display 52x35 mm
Buttons / controls	• Key 3 positions • START button • N° 2 buttons for controller programming
Generator Measures	• Voltage : L1-L2-L3-N • Current : I1 • Powers : kVA • Frequency

Engine Measures	• Engine temperature (optional) • Oil pressure (optional) • Fuel level • Rpm meter • Battery voltage • Maintenance • Hours meter
Protections Generator	• Short circuit • Over-Undervoltage • Over-Underfrequency • Phase sequence • Asymmetry • Overpowering
Engine Protections	• High engine temperature warning • Low oil pressure warning • Low fuel level warning • High / Under battery voltage • Battery charge alternator failure • Start failure • Stop failure • Emergency stop
Features 5 languages display: GB - I - F - E - D	• Remote Start and Stop • Pre-heating • Fully programmable from the panel, PC, WI-FI or NFC • Manual operation with remote start (REM) • IP 40 protection • Operation temperature: -30°C / +70°C
Communication	• Setup USB port • CAN BUS interface (J1939 only)

WEIGHT - DIMENSIONS ACCESSORIES

TS 600 EVO

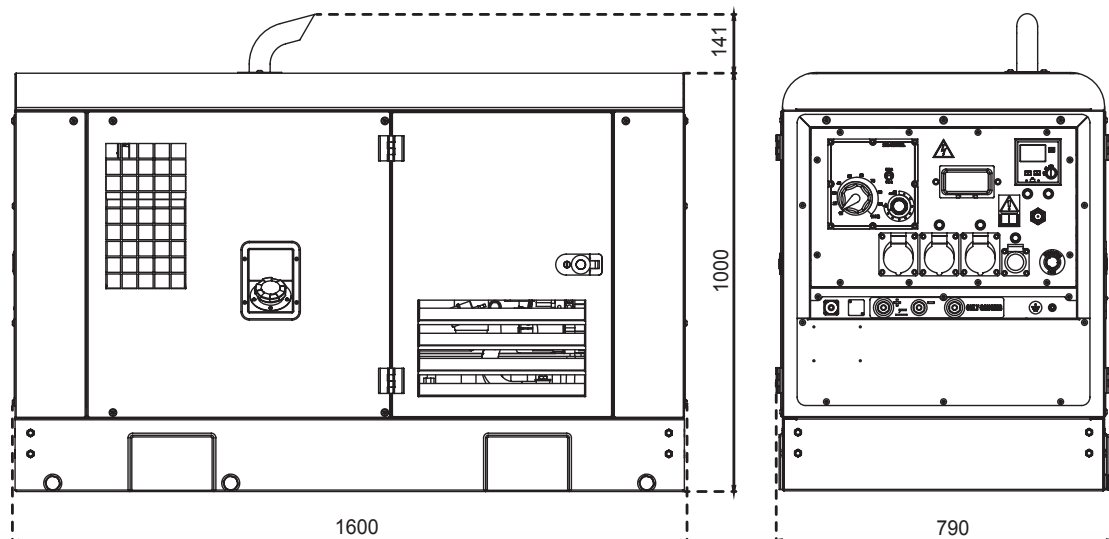


DRY WEIGHT:
• 870 Kg

The welding machine pictured may include optional accessories.



DIMENSION PICTURE



OPTIONS ON REQUEST

- Remote control: RC2
- Welding kit (mask, gloves, etc.)
- Earthing kit
- Site tow 2 wheels
- Site tow 4 wheels, 2 steering
- Road trolley CTV4



VERSION ON REQUEST

• /



FACTORY INSTALLATION OPTIONS

- Spark arrestor
- Digital Ammeter/voltmeter welding (EVO INSTRUMENT)

GENERAL INFORMATION

EC Directives and Standards Compliance
2006/42 / EC (Machinery Directive)
2014/35 / EU (Low Voltage Directive)
2014/30 / EU (EMC Directive)
2000/14 / EC (Directive Acoustic Emission for machines for use outdoors)
ISO 8528 (Reciprocating internal combustion engine driven alternating current generating sets)



ISO 9001:2015 - Cert. 0192

WARRANTY

All devices are covered by the manufacturer's warranty.

Specifications subject to change without notice. For further information please contact the sales department.

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