



ENGINE DRIVEN WELDER TS 275 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
- Welding control panel "EVO CONTROL"
- A.C. generator, single-phase and three-phase also available while welding
- Engine control digital module
- Bundled base
- Base plate with forklift pockets
- Canopy with large opening to allow easy maintenance (replacement of air, oil, fuel filters)
- Large fuel tank
- Fuel level sensor
- External plugs for oil and water drainage
- Emergency stop button
- Central lifting eye
- Wide access for easy maintenance
- Meets EC/UE directives



water 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

ENGINE 3000 RPM

4 STROKE, NATURAL ASPIRATED

Model	KOHLER KDW702
Stand-By net power	10.3 kW (14 hp)
PRP net power	9.3 kW (12.6 hp)
COP net power	/
Cylinders / Displacement	2 / 686 cm ³ (0.686 lt.)
Bore / Stroke	75 / 77,6 (mm)
Compression ratio	22.8 : 1
BMEP (Brake Mean Effective Pressure : LTP - PRP)	/
Speed governor type	Mechanical
FUEL CONSUMPTION	
110 % (Stand-by power)	3.8 lt./h
100 % to PRP	3.4 lt./h
75 % to PRP	2.6 lt./h
50 % to PRP	1.9 lt./h
COOLING SYSTEM	
Total system cap. - only engine	lt - 1.1 lt
Fan air flow	72 m ³ /min.
LUBRICATION SYSTEM	
Total oil system capacity	/
Oil capacity in sump	1.6 lt
Oil consumption at full load	/

EXHAUST SYSTEM	
Maximum exhaust gas flow	2.2 m ³ /min.
Max. exhaust gas temp.	540 °C
Maximum back pressure	60 kPa (0.6 bar)
External diameter exhaust pipe	/
ELECTRICAL SYSTEM	
12 Vdc	12 Vdc
Starter motor power	1.6 kW
Battery charging alternator cap.	40 A
Cold start	- 10 °C
With cold start aid	/
AIR FILTER	
Air filter type	Dry
Combustion air flow	1.02 m ³ /min.
HEAT REJECTED AT FULL LOAD	
To exhaust system	/
To water and oil	/
Radiated to room	/
To charge cooler	/



WELDING AND GENERATION

C.C. WELDING

CONSTANT CURRENT SMAW COATED ELECTRODE (STICK)	
Current range	20A / 20.8V ÷ 270A / 21V
Type of regulation	Continue 20A ÷ 270A
Duty cycle	200A / 28V @ 100% 230A / 29.2V @ 60%
Open circuit voltage	66 Vcc (68 Vcc to peak)
Reduced open circuit voltage with VRD	< 13 Vcc / Vdc
Arc force control	Yes

C.C. WELDING

CONSTANT CURRENT GTAW TUNGSTEN ELECTRODE (TIG)	
Current range	20A / 10.8V ÷ 270A / 20.8V
Type of regulation	Continue 20A ÷ 270A
Duty cycle	200A / 18V @ 100% 230A / 19.2V @ 60% 270A / 20.8V @ 35%
Open circuit voltage	66 Vcc (68 Vcc to peak)
Reduced open circuit voltage with VRD	< 13 Vcc / Vdc

SIMULTANEOUS LOAD CHARACTERISTIC

WELDING CURRENT	≥ 130A	100A	75A	50A	0A
POW. IN THREE PHASE 400V	0 kW	1.2 kW	3.5 kW	5 kW	8 kW
POW. IN SINGLE PHASE 230V	0 kW	1 kW	2.5 kW	3 kW	5 kW
POW. IN SINGLE PHASE 110V	0 kW	1 kW	2 kW	2.5 kW	2.5 kW

ALTERNATOR

Fuel tank capacity	38 l
Starter battery	12 Vdc -37Ah / 330A CCA(EN)
Fuel consumption (welding 60%)	2.5 l/h
Running time (welding 60%)	15 h
IP protection degree	IP 23

Guaranteed acoustic power LwA (pressure LpA)	95 dB(A) (70 dB(A) @ 7 m)
Measured acoustic power LwA (pressure LpA)	94 dB(A) (69 dB(A) @ 7 m)
Max. ambient temperature	40 °C

A.C. GENERATION

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

Insulation class	H
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AUXILIARY GENERATION

OUTPUT 1	
Type of source	3-phase
Frequency	50Hz
Power kVA (Power kW) Max	8 kVA (6.4kW)
Cos φ	0.8
Voltage	400V
Current	11.5 A

OUTPUT 2	
Type of source	1-phase
Frequency	50Hz
Power kVA (Power kW) Max	5kVA kVA/kW
Cos φ	0.8/1
Voltage	230V
Current	21.7A

OUTPUT 3	
Type of source	1-phase
Frequency	50Hz
Power kVA (Power kW) Max	2.5 kVA/kW
Cos φ	0.8/1
Voltage	110V CTE
Current	22.7A

OUTPUT 4	
Type of source	1-phase
Frequency	50Hz
Power kVA (Power kW) Max	5 kVA/kW
Cos φ	1
Voltage	48V
Current	104A

CONTROL PANEL

ENGINE

- Controller RGK420SA
- Engine protector thermal circuit breaker: 1x30A
- Engine protector thermal circuit breaker: 1x5A
- Siren
- Emergency stop button



FEATURES CONTROLLER RGK420SA	
Operating Mode	<ul style="list-style-type: none"> • MAN - REMOTE
Display	<ul style="list-style-type: none"> • Graphic back-light LCD display • Buttons: START ▼ - ▲ • Key
Measures generator	<ul style="list-style-type: none"> • Voltage L1-L2 / L2-L3 / L3-L1 - N-L1/N-L2/N-L3 • Frequency Hz
Measures engine	<ul style="list-style-type: none"> • Fuel level • rpm meter • Hours meter • Battery voltage
Protections generator	<ul style="list-style-type: none"> • Overvoltage • Undervoltage • Overfrequency • Underfrequency
Protections engine	<ul style="list-style-type: none"> • Overspeed • Underspeed • High temperature shutdown • Low oil pressure shutdown • Low fuel level warning • Low fuel level shutdown • Battery voltage • Battery flat • Battery charge alternator failure • Arresto d'emergenza / Emergency stop • Mancato avviamento / Start failure • Mancato arresto / Stop failure • Manutenzione / Maintenance
Features	<ul style="list-style-type: none"> • Operator interface via symbols, codes and texts • Setpoints adjustable via controller buttons or PC • Remote Start and Stop • Configurable inputs and outputs • Operation temperature : -30°C -+70°C • NFC interface for wireless programming

GENERATION (VERS. AUS)

- ELCB-GFI (Ground Fault Interruptor) (400V/230V)
- Circuit breaker for 230V sockets
- Output sockets : 1x 400V 32A 3P+N+T IP67 AUS
 - 1x 230V 32A 2P+T IP67 AUS
 - 1x 230V 15A 2P+T IP67 AUS
- Earth terminal (PE)

WELDING

- **EVO CONTROL:**
 - Continuous control of the welding current
 - Welding range switch
 - Continuous control of the arc force
 - Connection of remote control with automatic "local / remote" switch at the insertion of the plug
 - Welding output sockets:
 - 1x Welding (+) 400A
 - 1x Welding (-) 400A



- **EVO INSTRUMENT:**
 - Continuous control of the welding current
 - Welding range switch
 - Continuous control of the arc force
 - Connection of remote control with automatic "local / remote" switch at the insertion of the plug
 - Welding output sockets:
 - 1x Welding (+) 400A
 - 1x Welding (-) 400A
 - 2x Display - 4 Digit
 - Set the welding current
 - Current and voltage Measurement during the welding process
 - VRD ON/OFF switch (only with EVO Instrument panel)
 - Connector for connection to Box PL400



GENERATION (VERS. 400V / 230V / 48V)

- ELCB-GFI (Ground Fault Interruptor) (400V/230V)
- Circuit breaker for 230V sockets
- Thermal circuit breakers for sockets: 1x 16A for socket 230V 16A 2P+T CEE
- Output sockets : 1x 400V 32A 3P+N+T CEE
 - 1x 230V 32A 2P+T CEE
 - 1x 230V 16A 2P+T CEE
 - N°2 output terminals 200A (for 48V)
- Earth terminal (PE)

GENERATION (VERS. 400V/230V/110V CTE)

- ELCB-GFI (Ground Fault Interruptor) (400V/230V)
- Circuit breaker for 230V sockets
- Circuit breaker for 110V sockets
- Thermal circuit breakers for sockets: 1x 16A for socket 110V 16A 2P+T CEE
- Output sockets : 1x 400V 32A 3P+N+T CEE
 - 1x 230V 32A 2P+T CEE
 - 1x 110V 32A 2P+T CEE
 - 1x 110V 16A 2P+T CEE
- Earth terminal (PE)

WEIGHT - DIMENSIONS ACCESSORIES

TS 275 EVO

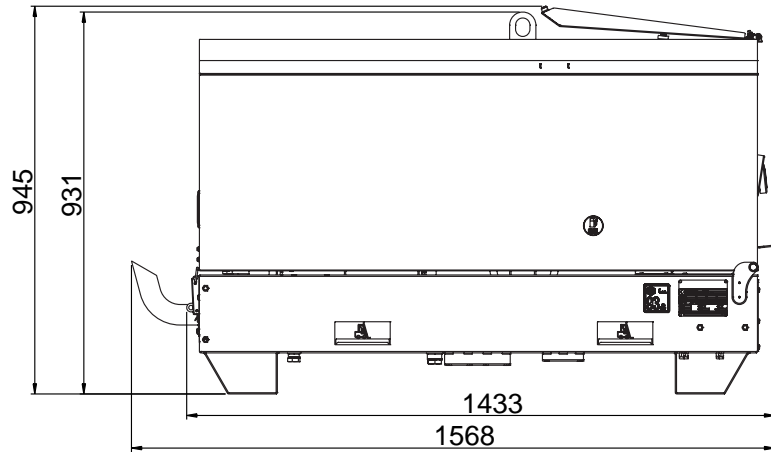
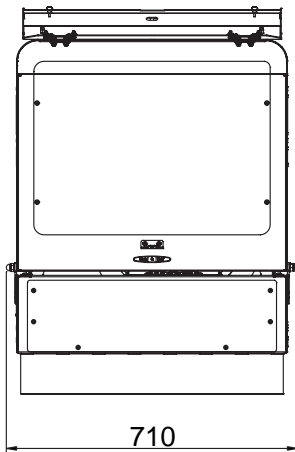


DRY WEIGHT:
• 390 Kg

The welding machine pictured may include optional accessories.



DIMENSION PICTURE



⊕ OPTIONS ON REQUEST

- Remote control RC2
- Remote control RCE PL - (Remote control for polarity change)
- Remote control extension cord (30m)
- Box PL 400 - External polarity change - max. 400A (only with EVO INSTRUMENT panel)
- Welding cables K500 (20+15 m, 50 mm²)
- Welding kit (mask gloves, etc.)
- Trolley CTM255
- Site tow CTL255
- Road tow running gear CTV4
- Earthing kit

⊙ AVAILABLE VERSION

C1SS0020	TS 275 EVO 400/230/110 - EVO CONTROL
C1SS0060	TS 275 EVO 400/230/48 - EVO CONTROL
C1SS0020BKP	TS 275 EVO 400/230/110 - EVO INSTRUMENT <ul style="list-style-type: none"> • Gauges - water temperature and oil pressure • Oil pressure Indicator • Main battery switch
C1SS0060BKP	TS 275 EVO 400/230/48 - EVO INSTRUMENT <ul style="list-style-type: none"> • Gauges - water temperature and oil pressure • Oil pressure Indicator • Main battery switch
C1SS0040BKP	TS 275 EVO 400/230 - EVO INSTRUMENT (AUSTRALIA) <ul style="list-style-type: none"> • Gauges - water temperature and oil pressure • Oil pressure Indicator • Main battery switch

GENERAL INFORMATIONS

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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