








ENGINE DRIVEN WELDER TS 275 EVO MULTI4

The images are for reference

WELDING PROCESS

-  SMAW Shielded Metal Arc welding (STICK)
-  Gas Tungsten Arc Welding (TIG)
-  GMAW Gas Metal Arc Welding (MIG)
-  FCAW Flux Cored Arc Welding (FLUX CORED)
-  Arc gouging SMAW (STICK)



CARATTERISTICHE

- Multi-process DC arc welder
- "EVO MULTI4" welding control panel
- Digital adjustment of the welding parameters
- Welding arc adjustment and multi-process parameters
- Ammeter and digital welding voltmeter with pre-setting of the welding parameters
- VRD function
- AC power generator three-phase and single-phase available during the welding phase
- Digital engine management and control module
- Bunded base
- Canopy with wide opening to allow easy maintenance (replacement of air, oil, fuel filters)
- Large capacity tank
- Fuel level sensor
- External plugs for oil and water drainage
- Emergency stop button
- Central lifting eye
- Compliant with EC / EU Directives



water cooled



diesel



electric starter

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	/
Cylinder / 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 % of PRP	3.4 lt./h
75 % of PRP	2.6 lt./h
50 % of PRP	1.9 lt./h
COOLING SYSTEM	
Total system cap. - only engine	lt - 1.1 lt
Fan air flow	72 m ³ /min.
LUBRIFICATION 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	
Starter motor power	1.6 kW
Battery charging alternator cap.	40 A
Cold start	- 10 °C
With cold start device	/
AIR FILTER	
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

C.C. WELDING

CONSTANT CURRENT - COATED ELECTRODE SMAW (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 peak)
Reduced no-load voltage with VRD	< 13 Vcc / Vdc
Arc force control	Yes

C.V. WELDING (CONSTANT VOLTAGE)

SMAW (MIG)	
Current range	40A / 16V ÷ 270A / 21V
Welding voltage	continue 15 V ÷ 45 V
Duty cycle	230A @ 25.5V / 60% 200A @ 24V / 100%

C.C. WELDING

CONSTANT CURRENT - TUNGSTEN ELECTRODE GTAW (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 peak)
Reduced no-load 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 115V	0 kW	1 kW	2 kW	2.5 kW	2.5 kW

GENERAL SPECIFICATIONS

Fuel tank capacity	38 l
Starter battery	12 Vdc -37Ah / 330A CCA(EN)
Fuel consumption (welding 60%)	/
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) (70 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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GENERATION AND CONTROL PANEL

TS 275 EVO MULTI4

AUXILIARY GENERATION

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

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

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

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

ENGINE CONTROL PANEL

- Controller RGK420SA
- Thermal circuit breaker for motor protection: 1x30A
- Thermal circuit breaker for motor protection: 1x5A
- Acoustic signal
- Emergency stop button



RGK420SA CONTROLLER FEATURES	
Operating modes	<ul style="list-style-type: none"> • MAN - REMOTE
Display	<ul style="list-style-type: none"> • Backlit display, LCD • Buttons: START ▼ - ▲ • Key
Generator measurements	<ul style="list-style-type: none"> • Voltage L1-L2 / L2-L3 / L3-L1 - N-L1/N-L2/N-L3 • Frequency Hz
Engine measurements	<ul style="list-style-type: none"> • Fuel level • Engine revs • Hour meter • Battery voltage
Generator protections	<ul style="list-style-type: none"> • Overvoltage • Under tension • Overfrequency • Underfrequency
Motor protections	<ul style="list-style-type: none"> • Overspeed • Low speed • High temperature • Low oil pressure • Low fuel pre-alarm • Low fuel level • Battery voltage • Inefficient battery • Battery charge alternator fault • Emergency stop • Failure to start • Failure to stop • Maintenance
Features	<ul style="list-style-type: none"> • Operator interface with symbols, codes and texts • Panel or PC programming • External start and stop • Programmable inputs and outputs • Operating temperature: -30 °C - + 70 °C • NFC interface for wireless programming

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

- Differential switch (400V / 230V)
- Magnetothermic switch for 230V sockets
- Thermal cut-offs for socket protection: 1x 16A for 230V 16A 2P + T CEE socket
- Output sockets: 1x 400V 32A 3P+N+T CEE
1x 230V 32A 2P+T CEE
1x 230V 16A 2P+T CEE
N ° 2 200A output terminals (for 48V)
- Earth terminal (PE)

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

- Differential switch (400V / 230V)
- Magnetothermic switch for 230V sockets
- Magnetothermic switch for 110V sockets
- Thermal cut-offs for protection 1x 16A sockets for 110V 16A 2P + T CEE socket
- 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)

GENERATION (VERS. AUS)

- Differential switch (400V / 230V)
- Magnetothermic switch 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)

CONTROL PANEL

WELDING

- Welding output sockets: 1x Welding (+) 400A
1x Welding (-) 400A
- Remote control connector. Automatic switching upon insertion of the connector.
- 14-pole connector for connecting the wire feeder or the PL 400 Box. External polarity inversion
- VRD ON / OFF switch

CONTROL PANEL MULTI4

MULTI4 CONTROLLER FEATURES	
Rotary switch for welding process	<ul style="list-style-type: none"> • Stick (SMAW) • Stick contact • Mig/Flux Cored (GMAW) • Mig/Flux Cored contact • Tig lift arc (GTAW) • Tig pulse
Encoder for current - voltage welding control	
Multifunctional encoder	<ul style="list-style-type: none"> • Arc force control (Stick) • Hot start voltage setting (Mig) • Turn-off time arc control (Tig scratch) • Switching frequency setting (Tig pulsed)
2x Display (4 Digit)	<ul style="list-style-type: none"> • Current and voltage during the welding process • DISPLAY 1: Set the welding current and the voltage • DISPLAY 2: Settings controlled by the multifunction encoder
LED VRD	• Show if VRD is enabled
LED AV	• Kind of value shown on display 1
LED % - s - Hz - V - A	• Kind of value shown on display 2
Button SET	• Shows and saves the program
BUTTON WS1 - WS2 - WS3	• Recall a welding program saved previously, up to 3 programs can be stored for each welding process
BUTTON WS3	• Access to the secondary parameters for welding
LED Button	• Signal for storing and program recall



WEIGHT - DIMENSIONS ACCESSORIES



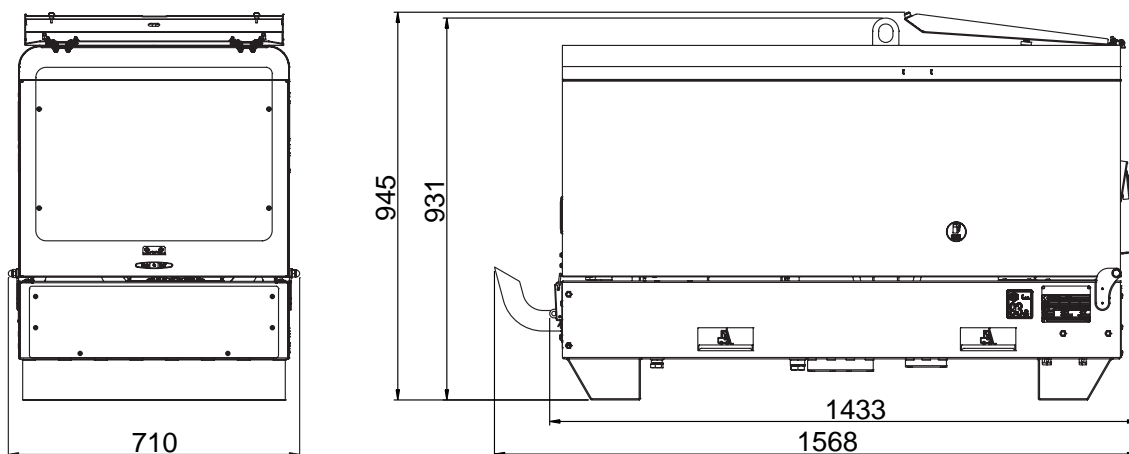
DRY WEIGHT:

- 390 Kg

The welding machine pictured may include optional accessories.



DIMENSION PICTURE (mm)



⊕ OPTIONS ON REQUEST

- Remote control: RCE
- Remote control RCE PL - (Remote control for polarity inversion)
- Remote control extension (30m)
- Wirefeeder WF4
- Box PL 400 - External Polarity Reversal - max. 400A
- Welding kit (mask, gloves, etc.)
- K500 welding cables (20 + 15 m, 50 mm²)
- Trolley CTM255
- Site tow wheels CTL255
- Road trailer CTV4
- Earthing kit

☀ AVAILABLE VERSION

- | | |
|------------|---|
| C1SS0021BP | 400/230/110 - EVO MULTI4 |
| | <ul style="list-style-type: none"> • Indicatore temperatura acqua • Indicatore pressione olio • Staccabatteria |
| C1SS0061BP | 400/230/48 - EVO MULTI4 |
| | <ul style="list-style-type: none"> • Indicatore temperatura acqua • Indicatore pressione olio • Staccabatteria |
| C1SS0041BP | 400/230 - EVO MULTI4 (AUSTRALIA) |
| | <ul style="list-style-type: none"> • Indicatore temperatura acqua • Indicatore pressione olio • Staccabatteria |

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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