

# Tetrix 230 DC Smart 2.0 puls 5P TM

090-000242-00502



- Modular DC TIG inverter welding machine, gas- or water-cooled
- **TIG welding**
- Features characteristics for EWM activArc and EWM spotArc at no extra charge
- TIG welding with reproducible, electronic HF start
- TIG lift arc welding without HF
- TIG average value pulsing: the preset welding current is maintained at all times, so particularly suitable for welding as per welding procedure specification
- Adjustable pulse frequency and balance
- Non-latched/latched operation
- Clearly structured operating panel, operating elements streamlined to feature the main TIG functions
- Reduced secondary current accessible using torch trigger
- Spot welding/tack function (spotArc/spotmatic)
- spotmatic and spotArc with direct access
- Up-slope/down-slope adjustable
- Spotmatic – halves time required for tacking
- Adjustable gas pre-flows/post-flows
- **MMA welding**
- MMA average value pulsing
- Ideal for root welding
- Safe vertical-up welding with MMA pulse
- Adjustable hot start current and hot start time
- Antistick function
- **Highlights**
- Safe ignition also for long hose packages
- Gas-cooled or optionally water-cooled with cool 40 U31 cooling unit
- Excellent torch cooling, resulting in cost savings on consumables due to high-performance centrifugal pump and 4-litre water tank (cool 41U31 cooling unit)
- Energy-saving thanks to high efficiency and standby function
- Connection capability for remote control and function torch
- Trolley 35.2-2 trolley available for delivery
- Mains connection 230 V/16 A
- High mains voltage tolerance +15%/-40% and therefore fully generator-compatible
- 3.5 m mains lead with 16 A earthed plug
- **Overvoltage protection: No damage to machine caused if inadvertently connected to 400-V mains voltage**
- **Scope of supply includes welding machine only; other components such as trolley and cooling unit can be selected from accessories!**

	TIG		MMA	
Setting range for welding current	3 A - 230 A		5 A - 180 A	
Duty cycle at ambient t.e	40 °C	25 °C	40 °C	25 °C
40 %	230 A	–	180 A	–
45 %	–	230 A	–	180 A
60 %	200 A	210 A	150 A	160 A
100 %	170 A	190 A	120 A	140 A
Open circuit voltage	90 V			
Mains frequency	50 Hz / 60 Hz			
Mains fuses (slow-blow)	1 x 16 A			
Mains voltage (tolerances)	1 x 230 V (-40 % - +15 %)			
Max. connected load	5.5 kVA		6 kVA	

11.06.2018

Recommended generator power	7.4 kVA	8.1 kVA
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Efficiency	86 %	
Dimensions machine, LxWxH in mm	539 x 210 x 415	
Weight, machine	16.5 kg	
Torch connection	Decentral	

## Welding site equipment for TIG welding

### cool41 U31

090-008600-00502



- Cooling unit for water-cooled welding torches
- Modular design, tool-free assembly
- Cooling capacity 1 l/min: 800 W, max. flow rate: 5 l/min, max. output pressure: 3.5 bar, 4.0 l tank capacity
- Dimensions L x W x H in mm, 600 x 210 x 340. Weight: 18.4 kg

### TIG 200 GRIP GD 5P 4m

394-510981-00600



- Gas-cooled TIG welding torch
- Double push-button
- Ergonomic GRIP handle for a secure hold and ergonomic use
- Excellent HF safety
- **Equipment as delivered:**
- Electrode holder: Ø 2.4 mm
- Gas nozzle: Ø 11 mm, size 7
- Tungsten electrode E3 (purple): Ø 2.4 mm

### TIG 260 GRIP WD 5P 4m

394-510990-00600



- Water-cooled TIG welding torch
- Double push-button
- Ergonomic GRIP handle for a secure hold and ergonomic use
- Excellent HF safety
- **Equipment as delivered:**
- Electrode holder: Ø 2.4 mm
- Gas nozzle: Ø 10 mm, size 8
- Tungsten electrode E3 (purple): Ø 2.4 mm

### KF 23E-10, -10

094-000530-00000



- Coolant (-10 °C), 9.3 l

## Welding site equipment for TIG welding

### Trolly 35.2-2

090-008296-00000



- Transport cart
- Solid, stable design
- For transporting a power source, a cooling unit and a gas cylinder
- Can be lifted by crane (option ON CS Trolly 35.2-2 required)

### WK35mm<sup>2</sup> 290A/60% 4m/K

092-000008-00000



- Completely assembled workpiece lead with terminal

### DM 842 Ar/CO<sub>2</sub> 230bar 15l D

394-002910-00015



- Manufactured in accordance with ISO 2503
- Maximum primary pressure of 230 bar
- Single-stage
- Infinite and highly accurate adjustment
- Safety manometer with pressure meter or flow meter (bar/psi or litres per minute)
- With cut-off valve

### Gas hose

094-000010-00001



- Equipped with plastic nuts on both sides for tool-free assembly

## Accessories

### ON FILTER TIG 40

092-002551-00000



- Dirt filter for air inlet
- Reliably protects the machine from impurities under tough working conditions.

### ON Key Switch Tetrax

092-001828-00000



- Key switch

### ON PC PLUG

092-003074-00000



- Protective cap for plug
- Protects against force exerted from left, right or above

### cool40 U31

090-008593-00502



- Cooling unit for water-cooled welding torches
- Modular design, tool-free assembly
- Cooling capacity 1 l/min: 800 W, max. flow rate: 5 l/min, max. output pressure: 3.5 bar, 4.0 l tank capacity
- Dimensions L x W x H in mm, 600 x 210 x 340 Weight 14 kg

### SPOTARC TIG 26 G 5P 4m

094-500046-00000



- Spot welding torch, with welding nozzles for fillet welds, edge welds and flat welds incl. setting gauge
- Better surface formation in comparison to resistance welding
- Flatter spot formation in comparison to MAG spot welding
- Excellent seam quality due to minimal heat input
- Very low thermal stresses and little distortion due to short welding times
- Perfect for visible joints due to clean seam appearance
- Robust design
- Excellent HF safety
- **Equipment as delivered:**
- Collet body: Ø 2.4 mm

## Accessories

### SPOTARC TIG 18 W 5P 4m

094-500048-00000



- Spot welding torch, with welding nozzles for fillet welds, edge welds and flat welds incl. setting gauge
- Better surface formation in comparison to resistance welding
- Flatter spot formation in comparison to MAG spot welding
- Excellent seam quality due to minimal heat input
- Very low thermal stresses and little distortion due to short welding times
- Perfect for visible joints due to clean seam appearance
- Robust design
- Excellent HF safety
- **Equipment as delivered:**
- Collet body: Ø 2.4 mm

### TIG 200 GRIP GD 5P 4m

394-510981-00600



- Gas-cooled TIG welding torch
- Double push-button
- Ergonomic GRIP handle for a secure hold and ergonomic use
- Excellent HF safety
- **Equipment as delivered:**
- Electrode holder: Ø 2.4 mm
- Gas nozzle: Ø 11 mm, size 7
- Tungsten electrode E3 (purple): Ø 2.4 mm

### TIG 200 GRIP GD 5P HFL 4m

394-510981-10600



- Gas cooled TIG welding torch with a highly flexible hose package
- Double push-button
- Ergonomic GRIP handle for a secure hold and ergonomic use
- Excellent HF safety
- **Equipment as delivered:**
- Electrode holder: Ø 2.4 mm
- Gas nozzle: Ø 11 mm, size 7
- Tungsten electrode E3 (purple): Ø 2.4 mm

## Accessories

### TIG 260 GRIP WD 5P 4m

394-510990-00600



- Water-cooled TIG welding torch
- Double push-button
- Ergonomic GRIP handle for a secure hold and ergonomic use
- Excellent HF safety
- **Equipment as delivered:**
- Electrode holder: Ø 2.4 mm
- Gas nozzle: Ø 10 mm, size 8
- Tungsten electrode E3 (purple): Ø 2.4 mm

### TIG 260 GRIP WD 5P HFL 4m

394-510990-10600



- Water cooled TIG welding torch with a highly flexible hose package
- Double push-button
- Ergonomic GRIP handle for a secure hold and ergonomic use
- Excellent HF safety
- **Equipment as delivered:**
- Electrode holder: Ø 2.4 mm
- Gas nozzle: Ø 10 mm, size 8
- Tungsten electrode E3 (purple): Ø 2.4 mm

### TIG 260 WD GRIP 12P RETOX HFL 4m

394-510990-10700



- Water cooled TIG welding torch with a highly flexible hose package
- Setting and display of welding current and programs
- Ergonomic GRIP handle for a secure hold and ergonomic use
- For Tetrix DC, AC/DC Comfort and Synergic
- "ON 12-pole connection socket" option required
- Excellent HF safety
- **Equipment as delivered:**
- Electrode holder: Ø 2.4 mm
- Gas nozzle: Ø 10 mm, size 8
- Tungsten electrode E3 (purple): Ø 2.4 mm

## Accessories

### Trolley 35.2-2

090-008296-00000



- Transport cart
- Solid, stable design
- For transporting a power source, a cooling unit and a gas cylinder
- Can be lifted by crane (option ON CS Trolley 35.2-2 required)

### Trolley 38-2 E

090-008270-00000



- Transport cart
- For Tetrix 230, 270, 300, 300-2, 400-2 DC as well as Tetrix 230, 300 AC/DC
- Solid, stable design
- For transporting a power source, a cooling unit and a gas cylinder
- Dimensions L x W x H in mm, 818 x 533 x 1233 Weight 35 kg

### Trolley 55-5

090-008632-00000



- Transport cart
- Solid, stable design
- For transporting a power source, a cooling unit and a gas cylinder

### RTG1 19POL 5m

090-008106-00000



- Infinitely adjustable welding current (0% to 100%) depending on the main current preselected at the welding machine.
- With pre-fitted 5 or 10 m connection cable
- Operating point setting directly at the site of welding
- For Tetrix, Picotig 200 AC/DC and Stick machine series



## Accessories

### RT1 19POL

090-008097-00000



- Remote control, current
- Infinitely adjustable welding current (0% to 100%) depending on the main current preselected at the welding machine.
- Operating point setting directly at the site of welding
- Robust metal casing with rubber feet, retaining clip and holding magnet

### RTP1 19POL

090-008098-00000



- Remote control, pulse, spot and pause times are infinitely adjustable.
- Infinitely adjustable welding current (0% to 100%) depending on the main current preselected at the welding machine.
- Pulse/spot/normal
- Operating point setting directly at the site of welding
- Robust metal casing with rubber feet, retaining clip and holding magnet
- For Tetrix and Picotig 200 AC/DC machine series

### RTP2 19POL

090-008099-00000



- Infinitely adjustable welding current (0% to 100%) depending on the main current preselected at the welding machine.
- Pulse/spot/normal
- Frequency and spot times infinitely adjustable.
- Coarse adjustment of the cycle frequency.
- Pulse/pause ratio (balance) adjustable from 10% to 90%.
- Operating point setting directly at the site of welding
- Robust metal casing with rubber feet, retaining clip and holding magnet
- For Tetrix and Picotig 200 AC/DC machine series

### RTP3 spotArc 19POL

090-008211-00000



- Infinitely adjustable welding current (0% to 100%) depending on the main current preselected at the welding machine.
- Remote control, pulse / spotArc spot welding / normal
- Frequency and spot times infinitely adjustable.
- Coarse adjustment of the cycle frequency.
- Pulse/pause ratio (balance) adjustable from 10% to 90%.
- Operating point setting directly at the site of welding
- Robust metal casing with rubber feet, retaining clip and holding magnet
- For Tetrix and Picotig 200 AC/DC machine series

## Accessories

### RTF1 19POL 5 M

094-006680-00000



- Foot-operated remote control, start/stop
- Infinitely adjustable welding current (0% to 100%) depending on the main current preselected at the welding machine.
- Start/stop welding operation
- Operating point setting directly at the site of welding

### ON 12pol TIG Tetrix 190/230

092-002519-00000



- 12-pole torch connection socket

### ADAP SCHUKO/16CEE

092-000812-00000



- Earth contact coupling/CEE16A plug

### 5POLE/CEE/16A/M

094-000712-00000



- Mains plugs

### WK25mm<sup>2</sup> 230A/60% 4m FIX

398-000593-00000



- Completely assembled workpiece lead with original FIX clamp

### WK70mm<sup>2</sup> 450A/60% 4m/Z

092-000013-00000



- Completely assembled workpiece lead with clamp

## Accessories

### WK25mm<sup>2</sup> 230A/60% 4m/K

092-000016-00000



- Completely assembled workpiece lead with terminal

### EH 35qmm 4m

092-000052-00000



- Fully assembled electrode holder with cable

### ON AL D13/27

092-003282-00000



- Cap for load sockets

### Gas hose

094-000010-00011



- Equipped with plastic nuts on both sides for tool-free assembly

### ON TH XX5 R

092-002699-00000



- Torch holder, right

## Accessories

### L-BOXX 374

094-003899-00000



- Robuste Transportbox

### L-BOXX 102

094-003900-00000



- Robuste Transportbox