



Series LogiTIG

The portable professional AC/DC units!



Series LogiTIG

THE POWERFUL PROFESSIONAL UNITS



Steel / stainless steel welding in DC



Aluminium welding in AC mode
(LiteTIG 190 and 210 AC/DC)



The welding units series LogiTIG are based on inverter technology and guarantee high-performance welding characteristics combined with a high degree of flexibility.

The handy, portable systems can be used for aluminum welding in AC operation and for steel and stainless steel with direct current (DC) as well as for MMA / stick electrode welding.

Only a few control buttons on the front allow easy handling of the system. Nevertheless, a variety of functions and parameters for the demanding user are available in „expert mode“.

- State-of-the-art inverter technology
- Adjustable parameters: start/end current, upslope/downslope, gas pre/post flow
- High frequency (HF) ignition and LiftTIG ignition
- Digital display for welding current, time and frequency with pre-display and hold function
- Jobs: saving and loading of complete parameter settings
- 2 welding currents can be activated through the welding torch
- High frequency TIG-DC-pulse up to 12 kHz
- Connection for hand or foot remote control
- Approved for welding in confined areas, S-symbol approved



MMA / stick electrode welding

FUNCTIONALITY AND EASY OPERATION

- Professional power in a compact format: ideal for all quick welding jobs
- Modern inverter technology ensures optimal welding performance
- Continuous welding current adjustment
- Small, light, handy and porta
- MERKLE Quality at an amazingly low price

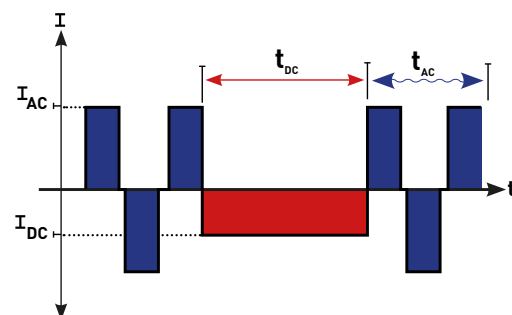
CONCENTRATED, NARROW MERKLE HIGH FREQUEN



MixedTIG: for special aluminum application

The MixedTIG method combines the alternating current (AC) with the direct current (DC).

Applications are found for example in corner welds or joints of thick to thin work pieces.



WELDING ARC CY DC PULSE

HIGH FREQUENCY DC PULSE

The machines series LogiTIG come as a standard with the high frequency DC pulse. The arc can be pulsed with a frequency of up to 16 kHz.

The arc characteristics provide outstanding opportunities in TIG DC welding that are not available in the normal TIG arc:

FEATURES

- Extreme arc constriction
- Arc similar to plasma welding
- Less heat input
- Higher welding speed
- Extremely stable arc
- Perfect for edge welding



High frequency pulse TIG-DC-weld



Standard TIG weld



High frequency pulse perfect for edge welding



- Easy operation through rotary switch and digital display
- Operation modes: Basic, standard or expert
- Different languages selectable
- Lock through PIN security number



- Stable plastic cover for panel protection (LogiTIG 221)



- TCG torch connector
- Negative socket for connection of TIG torch and electrode cable
- Exchange of the torch without tools
- Low weight and small size



CURRENT CONTROL AND JOB-RECALL DIRECTLY AT THE TORCH (UP-DOWN)

- **Current control**
Easy and precise current control through the double button switch on the handle of the TIG torch.
- **Recalling of pre-programmed jobs**
By using the torch switch the operator can select programmable parameters (jobs) from the torch.

TROLLEY AND WATER COOLING UNITS

TROLLEY TW 112:

The trolley TW 112 is designed for easy transportation of the welding unit in the workshop or on site.

- Extra large wheels (200 mm)
- Gas bottle holder for a 10 or 20 l cylinder (if machine is fixed to the trolley)
- Drawer for tools, accessories, spare parts and consumables (option)
- Suspension possibilities for cables and torches
- Torch holders for various welding torches on left and right side



Water cooling units WK 210/230/300 as option

Water cooling units WK 210/230/300:

The water cooling units can be mounted as an option to the welding units LogiTIG. Welding machine and water cooling unit then form one compact unit, easy to transport.

Different applications are possible: welding with a water cooled torch in the workshop or using a gas cooled torch on site. Easy mounting and dismounting in a few seconds, via one pluggable electrical connection (option) placed on the rear panel of the unit.



	LogiTIG 221 AC/DC	LogiTIG 240 AC/DC	LogiTIG 300 AC/DC
Power supply	1 x 230 V (50/60 Hz)	1 x 230 V/3 x 400 V (50/60 Hz)	3 x 400 V (50/60 Hz)
Continuous power	2.8 kVA	3.7 kVA	10.4 kVA
Continuous current	12 A	16 A	15 A
TIG operation mode:			
No load voltage	80 V	100 V	70 V
Working voltage	10 - 18.8 V	10 - 17.2 V / 19.6 V***	10 - 22 V
Welding current (TIG) DC	3 - 220 A	3 - 180 A / 240 A***	5 - 300 A
Welding current (TIG) AC	5 - 220 A	5 - 180 A / 240 A***	5 - 300 A
Duty cycle 25% (10 min.)	220 A* (40 °C)	-	-
Duty cycle 35% (10 min.)	-	240 A* (20 °C)	-
Duty cycle 40% (10 min.)	220 A** (20 °C)	-	-
Duty cycle 50% (10 min.)	-	-	300 A (40 °C)
Duty cycle 60% (10 min.)	190 A** (20 °C) 150 A (40 °C)	160 A (40 °C)	280 A (40 °C)
Duty cycle 100%	170 A (20 °C) 130 A (40 °C)	130 A (40 °C)	250 A (40 °C)
MMA/stick electrode mode:			
Electrode diameter	1.5 - 3.25 mm	1.5 - 4 mm	1.5 - 4 mm
Power source	inverter	inverter	inverter
Welding voltage	20 - 27 V	20 - 26.4 V / 28 V***	20 - 32 V
Protection class	IP 23		
Ignition	HF-/LiftTIG		
Adjustments	Current 1, current 2; time 1, time 2; gas pre flow / post flow; start / final current, ignition impulse time, hotstart time / current, arc force		
LED display	current, voltage, time, frequency with pre-display and hold function		
Job programs	yes		
Operation modes	2 stroke / 4 stroke / 4 stroke with current 2		
TIG Pulse	0.2 Hz - 12 kHz		
MMA/stick electrode welding	Hotstart, anti stick, arc force		
Remote control	10 pol. socket		
Torch connection	MERKLE TCG with 5-pol. plug		
Sockets	50 mm²		
Norm	EN 60974-1 „S“ /CE		
Weight	17 kg	24.5 kg	39.2 kg
Dimensions l x w x h	495 x 210 x 450 mm	535 x 230 x 465 mm	600 x 300 x 575 mm

Technical details are subject to change *Slow-blow fuse 16 A **Slow-blow fuse min. 20 A *** BiPower operation

BiPOWER for LogiTIG 240 AC/DC



MERKLE BiPower is the system for the extra bit of welding power. Due to clever technology, we now offer the option of operation from 230 V Schuko and 400 V three-phase sockets.

- **Welding up to 180 A:** A maximum welding current of 180 A can be achieved when operating the unit at a 16 A fuse
- **Welding up to 240 A:** Increase the maximum output current up to 240 A by operating the machine at a 32 A 3-phase socket



CREATE YOUR FUTURE SUCCESSFULLY.

With MERKLE. Your specialist for welding units, welding machines, torches and intelligent automation systems.

With own subsidiaries and MERKLE dealers in Germany, Europe and many other countries throughout the world.

Welcome to MERKLE.

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PRODUCT RANGE

- MIG/MAG Welding Units
- Synergic Pulse Welding Units
- TIG Welding Units
- MMA / Stick Electrode Welding Units
- Plasma Welding Units
- Welding and Cutting Torches
- Turntables and Roller Drive Units
- Automation Components and Solutions
- Complete Solutions and Robotics
- Specialized Machinery Construction
- MERKLE WeldFACTORY - Industry 4.0



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