

TIG PRIMARY INVERTER **TIGER 170/210 DC + AC/DC**

REHM – Setting the pace in welding and cutting today



TIGER 170/210 DC + AC/DC

The compact yet power-packed TIGER



TIGER 170/210 DC + AC/DC

World champion in its class



For all tough jobs on site or in the workshop, the new TIG primary inverter "TIGER" is the optimum power-packing unit. With a weight of max. 8.4 kg and ergonomically designed plastic housing, the TIGER combines elegance and power in a very small space. Extreme flexibility and high performance are assured.

With this professional unit, steel, CrNi, aluminium, copper or nickel materials with sheet thicknesses from 0.2 mm to 6 mm can be welded using DC or AC.

What's in the REHM TIGER:

- Welding current of 210 A (50 % duty cycle) or 170 A (50 % duty cycle) at 230 V (50/60 Hz, fuse 16 A) thanks to a **primary inverter technology** developed especially for the TIGER. The selection of high-grade and high-power components permits great performance from a small-sized and low-weight unit.
- Work near sensitive electrical equipment, e.g. for repair welding, is possible using the **HF ignition (disconnectable)**. During welding, HF is not active, so there is no electromagnetic radiation (important for AC/DC units).
- Connectable at any 230 V socket.

- **All settings made with a single button**
Anyone can work with the TIGER right away. The operator controls are in an extremely ergonomical arrangement. All settings are made with a single button. Each parameter setting can be made very quickly and precisely. The new operating concept permits the storing of up to **99 programmes**. This saves on setting time, so work with the TIGER is faster and welding results are achieved and can be reproduced at any time. This new and power-packed unit is only half the size of comparable units, but twice as powerful.
- The **ignition energy is freely settable** for particularly tricky jobs.
- Blowing of the mains fuse is now a thing of the past. The **Fuse-Hold function** prevents the mains fuse from blowing by continuous monitoring of the mains current input and adjustment of the output current. It reaches a maximum current of 160 A or 140 A with a duty cycle of 100 % or 60 % respectively.
- There's no need to fear welding misfires any longer. With the **REHM ELSA System** (Electronic Stabilised Arc), welding in electrode mode is guaranteed to be uninterrupted even when mains supply cables with a length of 100 m (mains cables with 1,5 mm² cross-section) are used.



The TIGER accessories: RAMBO.KIT, TIGER SET complete in case, TIGER CART trolley for easy movement of the unit, gas cylinder and water cooler RWK 1000.

Optimum welding results even with thin sheets

With the INTIG Energy (Intelligent Ignition Energy) feature, the TIGER has mastered the intelligent way of ignition energy control for TIG and electrode welding.

The highly developed processor control system ensures optimum setting of the ignition energy as a function of the welding current selected both with HF and with lift-arc ignition. So you can be sure that when welding thin plates the ignition process will not cause any damage at the start of the weld. The ignition process is monitored and controlled by the processor control, taking into account the selected welding method. This leads to a stable arc quickly and easily, and helps preserve both the workpiece and the electrodes.

Connection of remote control units

The connection of remote control units is no problem at the torch button socket provided as standard. Together with the remote-controlled REHM TIG torch R-SR 17/ 26 with highly flexible hose assembly, leather neck and potentiometer, the TIGER can cope with the toughest demands even at construction sites.

New special mode DUAL WAVE

Aluminium welding made easy

With DUAL WAVE, you can achieve outstanding control over the weld pool, which results in a marked quality improvement (TIGER AC/DC) particularly in constrained positions.

Electrode welding

Electrode current of 170 A or 150 A with a duty cycle of 90 % or 55 % respectively is available to you with the BOOSTER function during pure electrode welding.

Anti-Stick function

If there is a permanent short-circuit during electrode welding, the Anti-Stick function comes into action after about 1.3 seconds and limits the current to about 35 A. This prevents the electrode from burning out, and the permanent short circuit can be easily interrupted by removing the electrode from the workpiece.

Water cooler RWK 1000 for TIGER 170/210 DC and AC/DC

- Processor control
- Demand-oriented pump and fan operation
- Welding current detection using socket current
- Practical tank filler connection and watertight closure (unit can be transported flat)

Technical Data:

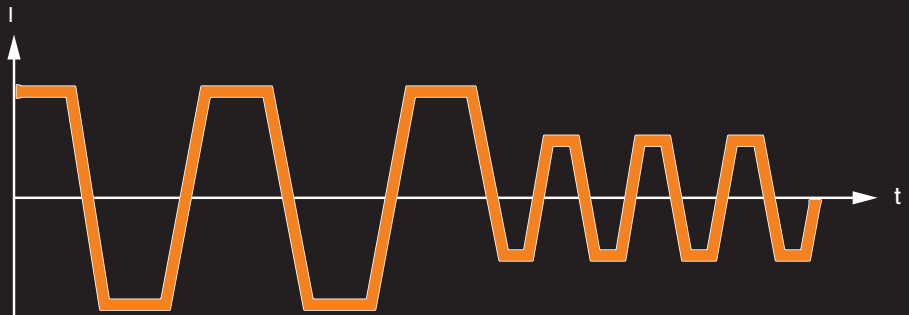
Dimensions:	380 x 300 x 900 mm
Weight:	15 kg (20 kg with 5 l coolant)
Tank capacity:	5 liters
Power:	1000 W at 20 °C, 1.4 l/min
Flow:	1.4 l/min with torch
Article No.:	753 2300

TIGER 170/210 DC + AC/DC

TIGERtechnology

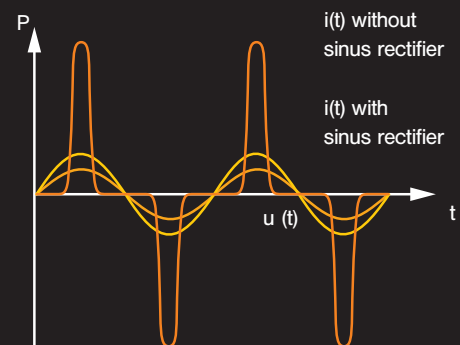
REHM Automatic Frequency

This process has been patented by REHM (Patent No.: 4006203). The frequency is automatically adjusted to the current intensity during AC welding. As a result, the tungsten electrode is subjected to the lowest possible load. A long service life and optimum efficiency are the result. For particularly tricky jobs, manual adjustment of the frequency is possible. This offers advantages when working with the foot-operated remote control unit.



REHM sinus rectifier

The use of a sinus rectifier, also called a PFC (Power factor corrector) guarantees an adjusted sinusoidal current input. This permits, with TIGER 210 DC and TIGER 210 AC/DC, a maximum welding current of 210 A at 230 V mains voltage.



Top welding results thanks to the latest technology functions

The REHM sinus rectifier (PFC), the REHM Automatic Frequency feature and INTIG Energy all ensure top welding results in a very short time.

Optimum welding results every time are achieved with the individually adjustable current up-slope and down-slope times, gas pre-flow and post-flow times, and adjustable ignition energy.

Optimum controllability of the weld pool thanks to the pulse function even for otherwise highly critical welding jobs, such as thin plates, aluminium, uphill welding etc.

Narrow and stable arc for high-frequency pulsing

Pulse frequencies of 50 Hz to 500 Hz result in a narrower arc thanks to pulsing with short times and a deeper penetration.

TECHNICAL DATA TIGER

Type		TIGER 170 DC	TIGER 170 AC/DC	TIGER 210 DC	TIGER 210 AC/DC
Setting range	TIG operation [A]	3-170	3-170	3-210	3-210
	BOOSTER operation [A]	3-150	3-150	3-170	3-170
	Fuse-Hold operation [A]	3-140	3-140	3-160	3-160
Duty cycle at 20 °C (40 °C) at I max.	TIG operation [%]	50 (30)	50 (30)	50 (30)	50 (30)
	BOOSTER operation [%]	55 (30)	55 (30)	90 (30)	90 (30)
	Fuse-Hold operation [%]	60 (35)	60 (35)	90 (35)	90 (35)
Welding current at duty cycle 100 %, 20 °C (40 °C)	TIG operation [A]	135 (100)	135 (100)	175 (140)	175 (140)
	BOOSTER and Fuse-Hold operation [A]	120 (100)	120 (100)	160 (120)	160 (120)
Input voltage at 50/60 Hz	[V]	1 x 230	1 x 230	1 x 230	1 x 230
Fuse protection	[A]	16	16	16	16
Power factor	[cos phi]	0,7	0,7	0,99	0,99
Torch cooling		Gas	Gas	Gas	Gas
Degree of protection		IP 23	IP 23	IP 23	IP 23
Weight	[kg]	5,4	7,8	6,5	8,4
Dimensions	[mm]	290x150x215	340x150x275	340x150x215	340x150x275
Order no.	TIGER	150 3310	150 3320	150 3350	150 3360
	TIGER SET	150 3311	150 3321	150 3351	150 3361

We reserve the right to alter the technical specification without notice. Additional equipment for the units shown are available at extra charge. All systems have the CE and S symbols and conform to the standard EN 60 974-1.

REHM welding technology – all about us!

THE REHM PERFORMANCE PROGRAM

- **REHM MIG/MAG inert gas welding equipment**
SYNERGIC.PRO² gas- and water-cooled to 450 A
SYNERGIC.PRO² water-cooled to 500-600 A
MEGA.ARC stepless regulation to 450 A
RP REHM Professional to 560 A
PANTHER 200 PULS impulse welding equipment with 200 A
MEGAPULS impulse welding equipment to 500 A
- **REHM TIG Tungsten Inert Gas welding equipment**
TIGER, portable 100 KHz inverter
INVERTIG.PRO TIG welding equipment
- **REHM MMA Electrode technology**
TIGER and BOOSTER 100 KHz inverters
- **REHM plasma cutting equipment**
- **Welding accessories and additional materials**
- **Welding smoke extraction fans**
- **Welding rotary table**
- **Technical welding consultation**
- **Torch repair**
- **Service**

Design, development and production – all under one roof – in our Uhingen works. Thanks to this central organisation and our commitment to the future new discoveries can flow quickly into production. The wishes and requirements of our customers are still the basis for our advanced product development. Numerous patents and awards demonstrate the precision and quality of our products. Closeness to our customers and competence are the principles on which we place priority in consultancy, training and service.

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