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**TIG IS GETTING MORE COMPACT**  
**INVERTIG.PRO COMPACT**



## The efficiency package

A collage of industrial and aviation images. At the top, a white commercial airplane is shown in flight against a blue sky. Below it, a large industrial machine with a yellow and orange component is visible. In the foreground, a worker in a yellow jacket and red pants is working on a piece of machinery. The background is filled with various industrial components, pipes, and machinery, all set against a blue and white color scheme.

### **INVERTIG.PRO COMPACT** Flexibility with integrated water cooling

The water-cooled INVERTIG.PRO COMPACT series is the right solution for a wide range of tasks. The compact combination units offer the user complete flexibility, whilst at the same time meeting the highest standards of performance and consistent quality levels.

# COMPACT

## Compact and as flexible as possible

The INVERTIG.PRO COMPACT combines the finest welding technology with being easy to use. A unique synergy of the best Bi-Power inverters with precise, digital welding process control, giving welding properties never before achieved until now.

### Whether you

- Are working on steel, stainless steel, nickel and nickel alloys, titanium, copper or aluminium (AC / DC)
- Thin or thick materials,
- Use standard or special gases

The precise match of high performance components guarantees superb ignition and welding properties, giving reproducible quality at any time.

### The all-rounder for different industries

- Plant, container and steel construction
- Machinery, tool and dies
- Chemical, pharmaceutical and food industry equipment
- Industrial plant and pipeline construction
- Aviation and space industry
- Shipbuilding and offshore
- Vehicle construction and railway vehicle manufacturing
- Repair and Installation

## INVERTIG.PRO COMPACT – the evolution

### Surprisingly simple and amazingly safe to use

Clear and self-explanatory: usage and operation are - typical for REHM - uncompromisingly simple and fast. Even when wearing gloves. In both the classic and digital versions.

- Rapid and professional welding results.
- A perfect arc is achieved up to 80% faster than with comparable equipment.

### Highest possible duty cycle

No limits: 100% duty cycle

### Perfect arc stability

The fast and precise welding process control keeps the arc stable in any position. Perfectly safe ignition – thanks to innovative ignition management. Where others give up, the INVERTIG.PRO COMPACT still ignites perfectly.

### *iSYSTEM*

The CAN-networked multi-processor architecture is linked to intelligent expansion modules, opening up a wide range of possibilities. Simply Plug & Play.

## The Rehm operating concepts



### Maximum ease of use – even with gloves

The large, clear control panel is self-explanatory. The area that most matters to the user, the welding parameters, can be accessed quickly and safely using the centrally positioned push and turn knob, the R-pilot. Via the QUICK CHOICE shortcut keys P1 and P2, two current settings for a welding job can be saved and retrieved quickly and easily.

- |   |  |   |  |
|---|--|---|--|
| <p><b>1</b> Welding process</p> <ul style="list-style-type: none"> <li>• TIG</li> <li>• Electrode welding</li> </ul> <p><b>2</b> Electrode welding settings</p> <ul style="list-style-type: none"> <li>• Welding current</li> <li>• Arc Force</li> <li>• Hot Start</li> </ul> <p><b>3</b> Programs</p> <ul style="list-style-type: none"> <li>• Load</li> <li>• Save</li> </ul> <p><b>4</b> QUICK CHOICE buttons</p> <ul style="list-style-type: none"> <li>• P1</li> <li>• P2</li> </ul> | <p><b>5</b> Indicator lamps</p> <ul style="list-style-type: none"> <li>• Remote control active</li> <li>• Operation</li> <li>• Temperature</li> </ul> <p><b>6</b> 4-step</p> <ul style="list-style-type: none"> <li>• 2-step</li> </ul> <p><b>7</b> High-frequency ignition (HF)</p> <ul style="list-style-type: none"> <li>• HF on</li> <li>• HF off</li> </ul> <p><b>8</b> Pulses off</p> <ul style="list-style-type: none"> <li>• conventional Pulses (0.1 to 5.0 sec)</li> <li>• Hyperpulse (10 to 3000 Hz)</li> </ul> | <p><b>9</b> Polarity <sup>1)</sup></p> <ul style="list-style-type: none"> <li>• DC negative terminal (DC)</li> <li>• AC <sup>1)</sup></li> <li>• DC positive terminal <sup>1)</sup></li> <li>• DUAL WAVE <sup>1)</sup></li> </ul> <p><b>10</b> Display LEDs for</p> <ul style="list-style-type: none"> <li>• Ampere (A)</li> <li>• Seconds (S)</li> <li>• Frequency (Hz)</li> <li>• Balance (%)</li> </ul> <p><b>11</b> Digital display</p> | <p><b>12</b> R-PILOT for setting</p> <ul style="list-style-type: none"> <li>• Gas pre-flow time</li> <li>• Ignition energy <math>I_Z</math></li> <li>• Starting current <math>I_S</math></li> <li>• Upslope time <math>t_U</math></li> <li>• Welding current <math>I_1</math></li> <li>• <math>I_1</math> Pulse time <math>t_1</math></li> <li>• Welding current <math>I_2</math></li> <li>• <math>I_2</math> Pulse time <math>t_2</math></li> <li>• Downslope time <math>t_D</math></li> <li>• End crater time <math>I_e</math></li> <li>• Gas post-flow time</li> <li>• AC-Frequency Hz <sup>1)</sup></li> <li>• AC-Balance % <sup>1)</sup></li> </ul> |
|---|--|---|--|

<sup>1)</sup> Functions for all AC / DC welding machines available

# INVERTIG.PRO COMPACT



## INVERTIG.PRO *digital*

In a unique REHM functionality, the revolutionary operating concept offers the easiest ways to access the power pack with its proven Bi-Power-Inverter.

- Central, high-resolution graphics screen
- Four applications
- R-Pilot press and turn knob – for one-handed operation even with gloves
- Four multi-function soft keys for quick and easy navigation
- Two QUICK CHOICE short-cut keys

- 1 QUICK CHOICE buttons
- 2 R-Pilot
- 3 Multifunctional selection keys
- 4 Select Classic application
- 5 Select Program Manager application
- 6 Select Assist application
- 7 Select System application
- 8 High-resolution graphics screen

### Classic



### Everything in view, everything under control

Your benefits:

- Simple to operate through the intuitive, dynamic graphics display
- All device settings at a glance

### Assist

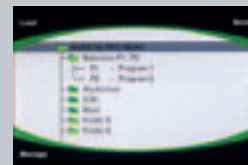


### An experienced assistant for every situation

Your benefits:

- Whether beginner or professional – set up a welding job easily and start welding
- Extensive expertise for every welding job. Available right there at the workplace

### Programm Manager



### The right program for everyone

Your benefits:

- 100% repeatability and consistent quality at the highest level
- The clear structure of the program ensures quick access to the programs you need

### Application System



### Configuration is a child's play

Your benefits:

- High level of flexibility through tailored solutions – the welder can be customized to suit the user's needs

## Perform a wide range of tasks with one unit



**Technology that thinks!**  
Perform a wide range  
of tasks with one unit



### The easy way to zero-defects

#### ■ Spot and interval welding <sup>2)</sup>

The spot and interval programs allow welding times from 0.01 seconds upwards.

##### **You benefit from:**

The welding current can be significantly increased by dosing accurately when tacking. This results in less component distortion, less discoloration and a consistent quality in all tack welds. Thereby reducing rework and costs.

#### ■ Dual Wave:

##### **Aluminum welding made easy and reliable <sup>1)</sup>**

Dual Wave reduces the excess AC component in the arc to the level required for optimal welding results minimum. The controllability of the weld pool is significantly improved due to reduced heat input. The longer outgassing time reduces pores in the melt.

##### **You benefit from:**

Safer production with higher quality.

#### ■ AC waveforms and automatic AC waveforms <sup>1) 2)</sup>

The right AC waveform for your welding job – choose from sine, triangle or rectangle.

##### **You benefit from:**

For every application, the perfectly modulated AC arc. For AC digital devices in the INVERTIG.PRO range, the waveform that matches the welding job is set automatically by the welder using the **REHM AC-Matic**.

#### ■ AC frequency automatic <sup>1)</sup>

The patented Automatic Frequency feature from REHM automatically matches the AC frequency to the welding job that has been set up. This offers invaluable benefits, especially when working with remote foot controls.

#### ■ Hyperpuls® – TIG pulses up to 15,000 Hz <sup>2)</sup>

The precise, highly focused arc offers a higher and more uniform penetration combined with reduced heat affected zone alongside its high power density.

#### ■ Energy Efficiency

The REHM Bi-Power Inverter offers optimum energy efficiency alongside its high power density with low weight. It works exceptionally effectively with very few losses. By the intelligent power management means that almost all the power supplied is converted into the arc.

##### **You benefit from:**

Energy savings in stand-by mode of up to 80%. The demand-oriented use of pump and fan raises service life by up to 100%.

#### ■ Ignition management ICS (Ignition Command System)

The optimum ignition energy settings, selected to the welding job, quickly and reliably leads to a stable arc. And that is independent of the tungsten electrode in use. At the same, this protects the workpiece and the tungsten electrode. If required, the ignition energy can be adjusted individually.

<sup>1)</sup> Only AC units

<sup>2)</sup> Only INVERTIG.PRO Digital COMPACT

# INVERTIG.PRO COMPACT



## iSYSTEM – Intelligent System

All *iSYSTEM* components are perfectly matched to the INVERTIG.PRO and provide the highest level of efficiency and comfort. They are automatically detected and configured by the INVERTIG.PRO – simply Plug & Play, so plug in and go!

### iSYSTEM-Komponenten sind:

- R-TIG torch Up/Down *iSYSTEM*
- Foot remot control P1 *iSYSTEM*
- Automation interface

## Options and Accessories

### Premium sets (R-TIG Torch *iSYSTEM* 8 m, pressure reducer, 4 m earth cable)

- R-TIG 200/35                      Order no. 1485200
- R-TIG 200/50                     Order no. 1485205
- R-TIG 260W/35                  Order no. 1485210
- R-TIG 260W/50                  Order no. 1485215
- R-TIG 450W/70                  Order no. 1485220
- R-TIG 450 WSC/95               Order no. 1485225

A wide range of welding accessories can be found in REHM accessories catalogue.

### TECHNISCHE DATEN INVERTIG.PRO COMPACT

Type		240 DC 240 AC/DC	240 DC digital 240 AC/DC digital	280 DC 280 AC/DC	280 DC digital 280 AC/DC digital	350 DC 350 AC/DC	350 DC digital 350 AC/DC digital	450 DC 450 AC/DC	450 DC digital 450 AC/DC digital
Welding current at 100 % (ED)	TIG Electrode [A]		240 240		280 280		350 350		450 360
Duty cycle (DC) at I max (10 min/40 °C)	TIG Electrode [%]		100 100		100 60		100 100		100 100
Supply voltage	[V]	3 x 400 V 50 Hz		3 x 400 V 50 Hz		3 x 400 V 50 Hz		3 x 400 V 50 Hz	
Fuse	[A]	16		16		32		32	
Torch cooling		water		water		water		water	
Weight	DC AC/DC [kg]	76 78		76 78		81 82		81 82	
Dimensions L x W x H	[mm]	855 x 600 x 900		855 x 600 x 900		855 x 600 x 900		855 x 600 x 900	
Article number	DC AC/DC	1422420 1422825	1422430 1422835	1422820 1422825	1422830 1422835	1423520 1423525	1423530 1423535	1424520 1424525	1424530 1424535

Subject to technical changes. All units bear the CE and S marks and meet the EN 60 974 and EN 50199 standards.

# REHM welding technology - about us!

## The REHM performance program

- **REHM MIC/MAG protective gas welding units**  
SYNERGIC.PRO<sup>2®</sup> gas and water cooled up to 450 A  
SYNERGIC.PRO<sup>2®</sup> water cooled from 500 A to 600 A  
MEGA.ARC<sup>2®</sup> steplessly regulated up to 450 AA  
PANTHER 202 PULS impulse welding unit with 200 A  
MEGAPULS<sup>®</sup> pulse welding unit up to 500 A
- **REHM TIG protective gas welding units**  
TIGER<sup>®</sup>, single phase, 170 and 210 A  
INVERTIG.PRO<sup>®</sup>, three phase, 240 to 450 A  
INVERTIG.PRO<sup>®</sup> *digital*, three phase, 240 to 450 A  
INVERTIG.PRO<sup>®</sup> *COMPACT*, three phase, 240 to 450 A
- **REHM manual arc welding unit**  
BOOSTER.PRO 170 and 210, single phase  
BOOSTER.PRO 250 and 320, three phase
- **REHM AUTOMATION.SYSTEMS**
- **REHM plasma cutters**
- **Welding accessories and materials**
- **Welding fume extractors**
- **Technical advice on welding**
- **Torch repair**
- **Service**

Development, design and production - all under one roof - in our factory in Uchingen. This central organisation and our commitment to the future, the latest inventions are able to flow into production quickly. The wishes and needs of our customers are the basis of our advanced product development. Numerous patents and awards for the accuracy and quality of our products. Customer focus and expertise are the founding principles of our consulting, training and service.

WEEE-Reg.-Nr. DE 42214869

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Your dealer: