Origo™ Tig 4300iw AC/DC, TA24 AC/DC

For demanding TIG welding applications

Designed for high quality TIG-welding

Origo™ Tig 4300iw AC/DC welding power source provide excellent arc strike and consistent, stable arc in both DC and AC modes. Typical materials for AC welding include aluminium, aluminium alloys and magnesium alloys. With stainless steel, mild steel and copper alloys being typical for DC.

AC welding with QWave™

One of the most important tasks of a TIG welding power source is to provide a stable arc. Origo™ Tig 4300iw AC/DC with the QWave™ function, which optimises the AC wave form to give a smooth arc and at the same time the lowest possible noise without compromising the weld result.

True AC rating continually monitors the actual current and automatically adjusts the output to maintain the preset current irrespective of variations in the welding circuit layout.

Easy to use

Origo™ TA24 AC/DC's offer the necessary functions for TIG AC/DC and MMA AC/DC welding in an easy to understand MMC panel.

AC Balance is the setting to control arc cleaning and penetration and AC Frequency setting is to control arc width.

It also has a setting to control Electrode preheating with a possibility to have different shapes of the electrode and at the same time provide better starts with an extended life time of the electrode.

Applications

- **Repair and maintenance**
- **Pipe and tube manufacturing**
- **General fabrication and civil construction**
- **Automotive**
- **Process industry**
- **Shipbuilding and offshore**
- **Transport and mobile machinery**

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TIG torches and Accessories

Origo™ Tig 4300iw AC/DC offer a complete range of TXH™ TIG torches, foot control, separate remote controls and TXH™ r with integrated remote.

- **Designed for quality TIG-welding in all types of material.**
- **QWave™- enables AC welding with high arc stability and low noise.**
- **AC Frequency and Balance control- Optimises weld pool**
- **Electrode preheating – excellent start and extended electrode life time**
- **DC Pulsed TIG welding- easy control of heat input and the weld pool.**
- **DC Micro Pulse – minimize heat effected zone especially on thin sheets**
- **ESAB LogicPump – ELP, automatic start of the cooling unit by connection of a liquid-cooled torch**
- **Energy save mode – fan and pump on demand**
- **ESAB 2-program function -possibility to pre-program and change program during actual welding.**
- **User-friendly TA24 AC/DC panel - All welding parameters presented in an easy to understand panel.**
- **Min/max current setting at TA24 AC/DC when using T1 Foot CAN**
- **True MMA welding characteristics in AC and DC mode - Hot start, Arc force, and polarity switch (DC).**
- **VRD – Voltage Reduction Device – a safety function when welding in MMA mode.**

Origo™ Tig 4300iw with 4 wheel trolley

Ordering information

Origo™ Tig 4300iw AC/DC, TA24 AC/DC	0460 100 880
Trolley 4 wheel	0458 530 881
Multi Voltage unit, (3x208/230/400/460/475/575V, 50/60 Hz)	0459 145 880
Handle incl mounting screws for separate installation (Complete set = 2)	0459 307 881
Remote control AT 1 CAN	0459 491 883
Remote control AT 1 CoarseFine CAN	0459 491 884
T1 Foot CAN incl 5 m cable	0460 315 880
Remote interconnection cables:	
5 m CAN	0459 554 880
10 m CAN	0459 554 881
15 m CAN	0459 554 882
25 m CAN	0459 554 883
TIG torches:	
TXH™ 401w 4m	0700 300 565
TXH™ 401w 8m	0700 300 567
TXH™ 401w HD 4m	0700 300 566
TXH™ 401w HD 8m	0700 300 568
TXH™ 401wr HD 4m	0700 300 637
TXH™ 401wr HD 8m	0700 300 639
Remote adapter kit incl holder and 0.25m interconnection cable for remote versions	0459 491 912

For additional torches, see separate fact sheet

Delivery content: 5 m mains cable incl plug, 2 m gas hose incl. 2 hose clamps and return cable 5 m incl earth clamp.

Technical data

	Tig 4300iw
Setting range TIG AC/DC	4 - 430
Setting range MMA	16 - 430
Mains supply, V/Ph	400/3
Fuse type C MCB, A	25
Mains cable, Ø mm^2	4 x 4
Maximum output DC/AC	
at 40% duty cycle, TIG , A/V	430/27.2
at 60% duty cycle, TIG, A/V	400/26
at 100% duty cycle, TIG, A/V	315/22.6
Slope up, sec	0-10
Slope down, sec	0-10
Gas post-flow, sec	0-25
Pulse frequency DC, sec	0.01-2.5
Frequency AC, Hz	10-152
AC balance, %	50-98
Open circuit voltage, U_0 max, V	
Without VRD function 1)	83
MMA VRD function deactivated 2)	60
VRD function activated 2)	<35
Energy save mode, W	75
Power factor at 100% , at TIG mode	0.89
Operating temperature, C	-10 to +40
Continual sound pressure at no load, db (A)	< 70
Efficiency at 100%, at TIG mode, %	76
Enclosure class	IP 23
Insulation class (Main trafo.)	H
Standards:	IEC/EN 60974-1,-2,-3,-10
External dimensions mm, lxwxh	625x394x776
Weight, kg incl. cooling unit	95
Water cooling unit:	**Integrated**
Cooling capacity, kW, l/min at 40 C	2.0/1.0
Coolant volume, l	5.5
Max flow, l/min	2.0
Max pressure, 50/60 Hz bar	3.4
Weight, kg	-
External dimension, mm l x w x h	

1) Valid for power sources without VRD specifications on the rating plate.
2) Valid for power sources with VRD specifications on the rating plate. The VRD function is explained in the instructions manual for the control panel if the panel has that function.

Quality accessories for the quality welder

ESAB offers a wide range of accessories. The complete range, along with product information, is available at our local web-sites, look at www.esab.com or contact your local ESAB dealer.

Unrivalled service and support

Our commitment and ability to deliver the expected service and support starts immediately after the order is confirmed. We endeavour to offer our customers an After Sales service, which is second to non. A strong and skilful service organisation is prepared to offer service and maintenance, calibration, validation and upgrading of equipment and software.

The service organisation will offer standardised solutions for the reconditioning or modification of existing products.

Spare and wear parts are manufactured according to ESAB's quality plan. Exchange Printed Circuit Board (PCB), exchange modules and components are available for all our products in order to reduce downtime to an absolute minimum. ESAB is continuously upgrading authorised service partners for local service support. Customers who have their own service and maintenance personnel will always be offered a service-training package as part of a total ESAB offering. However, product and process training for end-users will form an additional part of the ESAB offering. Always ask your ESAB sales representative or distributor for a complete ESAB solution.

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