

# Origo™ Mig 4004i/5004i

## Origo™ Feed 3004/4804, MA23/MA24

### Origo™ Mig 4004i, A44

#### Lightweight multi process inverter equipment

**The Origo™ Mig 4004i/5004i are electronic controlled MIG/MAG/MMA lightweight inverter based welding equipment, designed for high productivity welding applications.**

When compared to a conventional equipment the floor space is reduced by 70% with the minimal footprint of the new Origo™ power sources. This new compact design has also seen a 80% decrease in weight making them truly transportable.

On demand cooling systems increase the welding time of the equipment and keeps the torch cooler to give greater comfort to the welder. The cooling fan and water cooling system automatically turn off after 6.5 minutes inactivity, significantly reducing the idle time energy consumption.

This 4th generation inverter offers considerable improved efficiency and power factor is approximately 1. This gives you minimized energy consumption and will offer significant reductions in your energy cost with the same welding conditions.

Technology	Weight	Efficiency
Step controlled	>140 kg	<70%
Chopper	>140 kg	<70%
Inverter (Origo™ Mig)	<50 kg	>85%



#### Applications

- **Highly productive MIG/MAG welding**
- **Advanced MMA welding without feeder**
- **Typical market segments:**
  - General Industrial Fabrication
  - Energy Generation
  - Windmills
  - Trucks Busses and Trailers
  - Trains & Railway Cars
  - Earthmoving and Mining Equipment
  - Mobile Machinery
  - Steel Sections
  - Shipbuilding/Offshore

- High Duty Cycle – suitable for long runs
- Wide mains input tolerance: 380 - 440 V +/- 10%
- Generator compatible – for on site use
- Standby Function – energy saving system
- 35 Synergic lines – preset welding parameters (MA24)
- QSet™ – Intelligent welding system (MA24)
- Creep-start™ for a more controlled start (MA24)
- Integrated cooling with ELP (ESAB Logic Pump), on demand system
- Sturdy trolley with 4 lifting eyes – fully transportable

**QSet™ - The intelligence welding system which simplifies welding**

QSet™ monitors the welding arc and optimizes welding parameters in dip transfer, just weld and the arc condition will be optimized within a few seconds. Then simply adjust the wire feed speed to suit the application and let QSet™ do the rest.

A robust fully enclosed design protects the welding wire from moisture, dust and other airborne contaminants.

The Origo™ Feed 3004/4804 is available with a choice of two control panels which both have a simple, logical layout to make it easy to operate and are easily interchangeable. A remote control socket allows a remote control to be used or with an RA23 adaptor a PSF RS3 welding torch can be used to allow welding schedules to be changed at the torch.

Either standard spools or MarathonPac™ wire can be used and cable wear is minimized with strain relief fitted to the rear of the feeder.

**Synergic lines**

Synergic lines is a tool to quickly find an acceptable arc length. From this point, you will have a good opportunity to fine tune for best results in your typical welding cases.

A synergy line also helps the operator to more and quickly, avoid the global regions between short arc and spray arc. The synergic line also chooses the best Arc control type\* for the given gas and wire combination.

\*=dynamic regulation



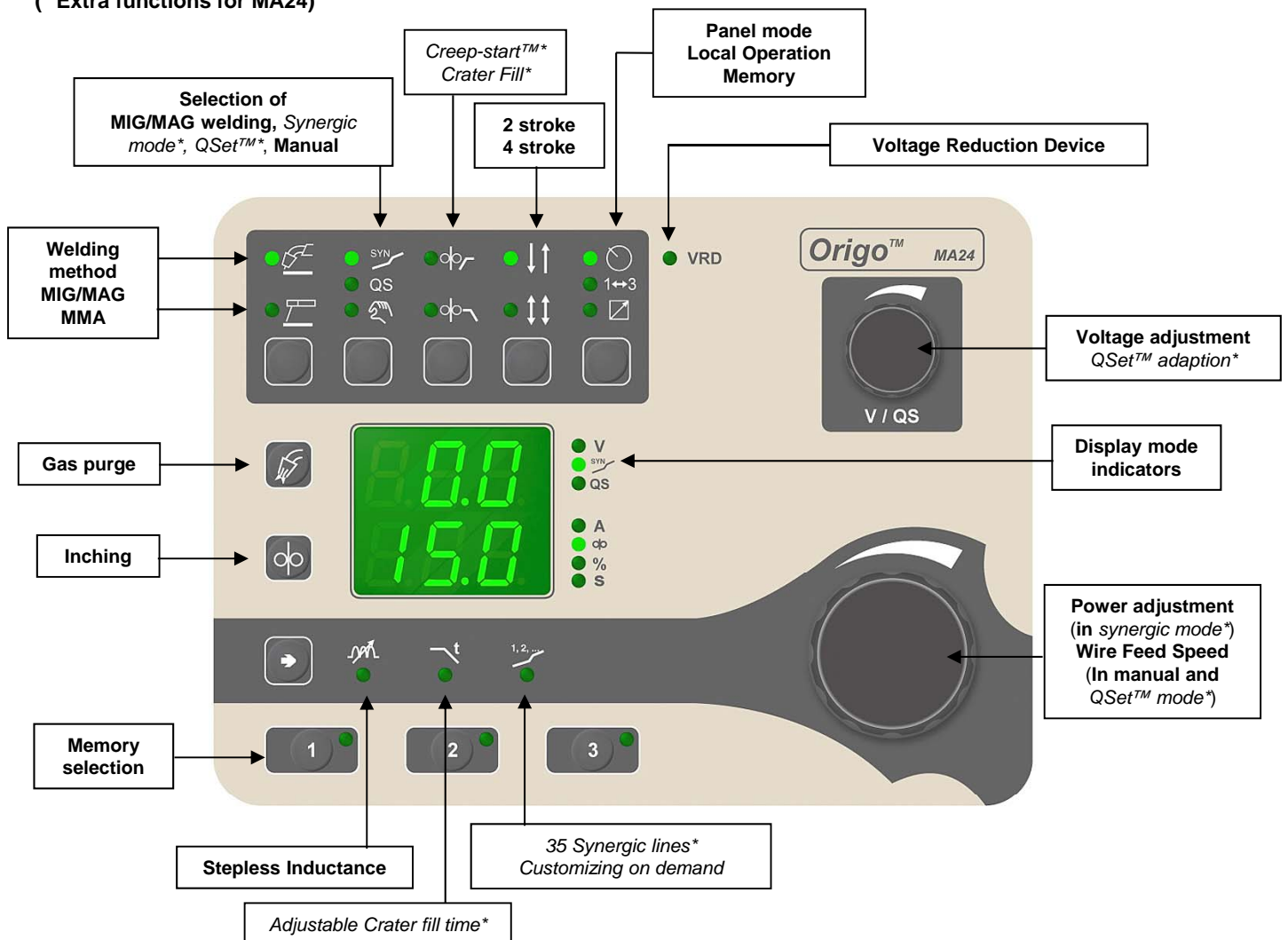
Origo™ Feed 3004



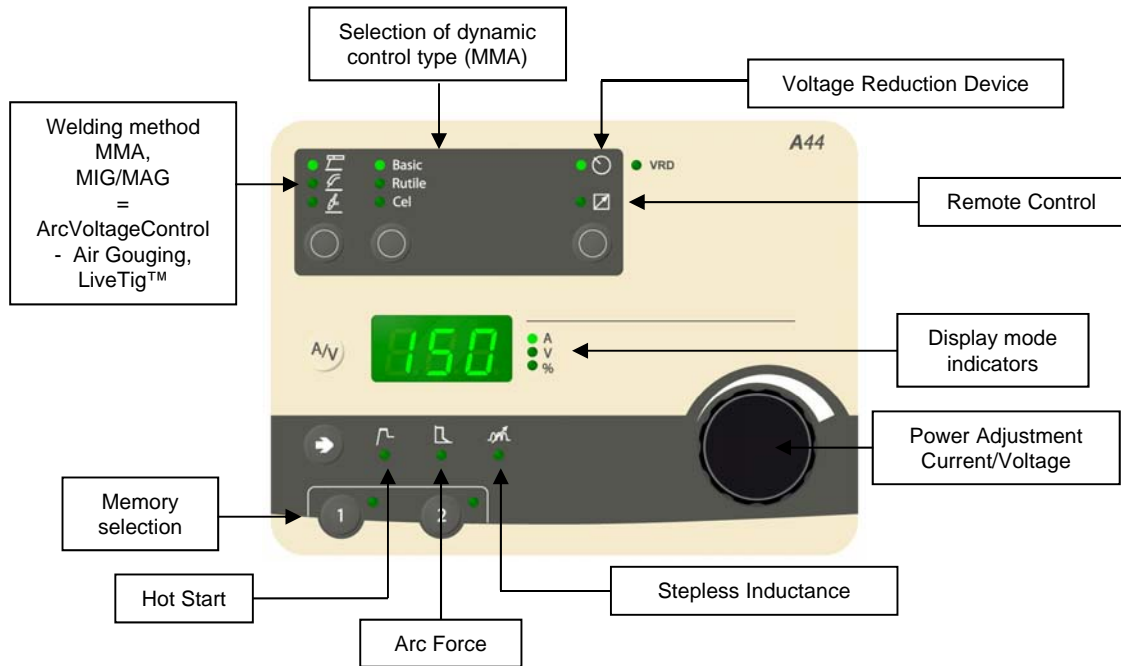
Origo™ Feed 4804

**MA23/MA24**

(\* Extra functions for MA24)



## A44



### LiveTig™

A44 gives you LiveTig™ start that electronically controls the start current. You can weld mild steel or stainless steel with or without filler material. The starting procedure can be compared to Lift Arc™, meaning you don't need to scratch the work piece with the electrode.

### Air gouging

By choosing the MIG/MAG Arc Voltage Control setting you will achieve the best performance and avoiding arc out.



Origo™ Mig 4004i, A44



COOL 1

### Technical data Origo™ Mig

	4004i A44	4004i	5004i
<b>Mains Supply</b>			
Single Voltage 3 ph 50/60 Hz, V	380 - 440 ± 10%	380 - 440 ± 10%	380 - 440 ± 10%
Mains cable, Ø mm²	4 x 6	4 x 6	4 x 6
Fuse, slow A,	25	25	35
<b>Permissible load at MIG/MAG</b>			
100% duty cycle A/V, 3ph	300/32	350/31.5	350/31.5
80% duty cycle A/V, 3ph	-	400/36	400/36
60% duty cycle A/V, 3ph	400/36	-	500/40
<b>Setting range A</b>			
MIG/MAG	20 - 400	20 - 400	20 - 500
MMA	16 - 400	16 - 400	16 - 500
TIG	4 - 400	4 - 400	4 - 500
Open circuit voltage, V	55	55	55
Open circuit voltage VRD, V	< 35	< 35	< 35
Idle Power, W	40	40	40
Efficiency at max. current %	87	89	89
Power factor at max current	0.95	0.95	0.95
<b>Dimensions LxWxH mm</b>			
with cooling unit LxWxH, mm	----- 610 x 256 x 445 -----		
<b>Weight, kg</b>			
with cooling unit excl coolant, kg	46	46	46
Operating Temperature, °C	-50	-50	-50
Enclosure class	IP23	IP23	IP23
Application class	S	S	S
Insulation class	H	H	H
<b>Certification</b>	CE	CE	CE

### Technical data, Water cooler COOL 1

Power supply, from power source, VDC	24
Coolant flow capacity, l/min	2.0
Coolant quantity, l	4.5
Cooling power, kW	1.3
Max pressure, bar	4.5
Max pressure height to torch, m	8.5
Weight / incl. coolant, kg	12 / 16.5
Dimensions incl. filler tube LxWxH, mm	610x256x256

### Technical data, Origo™ Feed 3004/4804

Power supply, AC	42
Wire spool capacity, kg	18 / 18 (30**)
Max. spool diameter, mm	300 / 300 (440**)
Wire feed speed, m/min	0.8-25.0
Dimension (LxWxH), mm	690x275x420
Weight, kg	15 / 19
<b>Wire dimensions:</b>	
Steel	0.6-1.6 / 0.6-2.4
Stainless steel	0.6-1.6 / 0.6-2.4
Aluminium	1.0-1.6 / 1.0-2.4
Cored wire	0.8-1.6 / 0.8-2.4

This welding equipment complies to IEC-EN974-1, IEC-EN974-2, IEC-EN974-5, IEC-EN974-10

## Ordering information, Power sources

Product	P/N
Origo™ Mig 4004i, A44	0465 152 880
Origo™ Mig 4004i	0465 154 880
Origo™ Mig 5004i	0465 155 880

## Ordering information, Origo™ Feed

Product	Air-cooled	Water-cooled
Origo™ Feed 3004, MA23 Encl. 10 pole	0460 526 887	0460 526 897
Origo™ Feed 4804, MA23 Encl. 10 pole		0460 526 997
Origo™ Feed 3004, MA24 Encl. 10 pole	0460 526 889	0460 526 899
Origo™ Feed 4804, MA24 Encl. 10 pole		0460 526 999

## Ordering information, Interconnection cables

70 mm <sup>2</sup>	Air-cooled	Water-cooled
1.7 m, 10 pole	0459 528 780	0459 528 790
5.0 m, 10 pole	0459 528 781	0459 528 791
10.0 m, 10 pole	0459 528 782	0459 528 792
15.0 m, 10 pole	0459 528 783	0459 528 793
25.0 m, 10 pole	0459 528 784	0459 528 794
35.0 m, 10 pole	0459 528 785	0459 528 795
95 mm <sup>2</sup>	Air-cooled	Water-cooled
1.7 m, 10 pole	0459 528 980	0459 528 990

## Ordering information, options

Product	P/N
Wheel kit for feeder	0458 707 880
Strain relief for welding torch	0457 341 881
Strain relief for interconnection cables	0459 234 880
Lifting eye	0458 706 880
Quick connector MarathonPac™	F102 440 880
Adapter for 5 kg spool	0455 410 001
Spool cover	0458 674 880
Spool cover, steel	0459 431 880
Adapter for spool diameter 440 mm	0459 233 880**)
Remote control MTA1 CAN	0459 491 880
Remote control MT1 10Prog CAN	0459 491 882
Remote interconn. Cable MTA1 and M1 10Prog, 5 m	0459 960 880
Remote adapter kit Miggytrac/Railtrac	0459 681 880
Remote adapter kit MXH™ PP and PSF™ RS3	0459 681 881
MXH™ 300/400w PP connection kit	0459 020 883
Water Cooler, COOL 1	0462 300 880
Flow Guard, COOL 1	0456 855 881
Origo™ Mig 4004i/5004i 4-wheel trolley	0462 151 880
Trolley bracket (without COOL 1)	0463 125 880
Trolley 2-w for YardFeed applications	0460 564 880
Trolley 4-w for counter balance applications	0460 565 880
Brackets to fit 2/4-w trolleys above	0461 310 880
Stabilizer kit Counter balance for 4-w trolley	0460 946 880
Counter balance	0458 705 880

## Synergic lines

Syn. No.	Material	ESAB designation	Wire dim (mm)	Shielding gas
1	Fe ER70S-6	OK AristoRod 12.50/12.51	0.8	CO2
2	Fe ER70S-6	OK AristoRod 12.50/12.51	1.0	CO2
3	Fe ER70S-6	OK AristoRod 12.50/12.51	1.2	CO2
4	Fe ER70S-6	OK AristoRod 12.50/12.51	0.8	82%Ar+18%CO2
5	Fe ER70S-6	OK AristoRod 12.50/12.51	1.0	82%Ar+18%CO2
6	Fe ER70S-6	OK AristoRod 12.50/12.51	1.2	82%Ar+18%CO2
7	Fe ER70S-6	OK AristoRod 12.50/12.51	0.8	75%Ar+25%CO2
8	Fe ER70S-6	OK AristoRod 12.50/12.51	1.0	75%Ar+25%CO2
9	Fe ER70S-6	OK AristoRod 12.50/12.51	1.2	75%Ar+25%CO2
10	Fe ER70S-6	OK AristoRod 12.50/12.51*	0.9	82-90% Ar 10-18% CO2
11	ER 308LSi	OK Autrod 308LSi	0.8	98% Ar 2%CO2
12	ER 308LSi	OK Autrod 308LSi	0.9	98% Ar 2%CO2
13	ER 316LSi	OK Autrod 316LSi	1.0	98%Ar+2%CO2
14	ER 316LSi	OK Autrod 316LSi	1.2	98%Ar+2%CO2
15	ER 308LSi	OK Autrod 308LSi*	0.9	90% He 7.5% Ar 2.5% CO2
16	ER 308LSi	OK Autrod 308LSi*	1.2	90% He 7.5% Ar 2.5% CO2
17	Al 5356	OK Autrod 5356	1.0	100%Ar
18	Al 5356	OK Autrod 5356	1.2	100%Ar
19	Al 5356	OK Autrod 5356	1.6	100%Ar
20	Al 4043	OK Autrod 4043	1.0	100%Ar
21	Al 4043	OK Autrod 4043	1.2	100%Ar
22	Al 4043	OK Autrod 4043	1.6	100%Ar
23	Fe MCW E70C-6M	OK Tubrod 14.12	1.2	82%Ar+18%CO2
24	Fe MCW E70C-6M	OK Tubrod 14.12	1.4	82%Ar+18%CO2
25	Fe MCW E70C-6M	OK Tubrod 14.12	1.6	82%Ar+18%CO2
26	Fe MCW E70C-6M	Coreweld C6*	1.2	92%Ar+8%CO2
27	Fe MCW E70C-6M	Coreweld C6*	1.6	92%Ar+8%CO2
28	Fe RCW E71T-1M	OK Tubrod 15.14	1.2	82%Ar+18%CO2
29	Fe RCW E71T-1M	OK Tubrod 15.14	1.4	82%Ar+18%CO2
30	Fe RCW E71T-1M	OK Tubrod 15.14	1.6	82%Ar+18%CO2
31	Fe RCW E71T-1	Dual Shield all-position*	1.2	75%Ar+25%CO2
32	Fe RCW E71T-1	Dual Shield all-position*	1.4	75%Ar+25%CO2
33	Fe RCW E71T-1	Dual Shield all-position*	1.6	75%Ar+25%CO2
34	Fe BCW E71T-5	OK Tubrod 15.00	1.2	82%Ar+18%CO2
35	Fe RCW E71T-1	Dual Shield 7100 LH*	1.2	CO2
		*=US		

