

# Minarc Evo 180

EXTREMELY COMPACT

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Kemppi K5 Welding equipment





## LITTLE GIANT OF STICK WELDING (MMA) FOR WHEREVER WORK TAKES YOU

Minarc Evo 180 is the latest MMA model from the popular Minarc Evo family. It has all the great qualities of its predecessor, and then some. Upgraded, improved, and more powerful, it serves the agile welder better than ever with greater welding capacity. The delivery package includes both MMA welding lead and earth return lead and clamp. Every element of the Minarc Evo 180 is designed to meet the needs of professional welders on the move. Where size, weight, and welding quality are concerned, there is no equal.

## **KEY BENEFITS**



LIGHTWEIGHT

Easy to carry wherever work takes you



ANNUAL SAVINGS Benefit from the increased welding time and range

## **KEY APPLICATIONS**



OPEN CIRCUIT VOLTAGE Benefits due to increased weld pool control



CONSTRUCTION



AGRICULTURE



REPAIR AND MAINTENANCE





## BENEFITS

- Can be powered from the mains or generator power supply, even via extra long supply cables, thus ideal for on-site use.
- Easy to carry, so you can carry everything you need in one journey.
- Excellent arc stability in all welding positions and for a wide range of electrode types up to 4 mm electrodes, with large voltage reserves and automatic arc force control
- The capability to use with mains or portable power generators ensures that you always have power supply options
- Built for the welder on the move. The power source is housed in an impact resistant plastic casing
- Safe to use in damp or humid welding environments thanks to reduced Open Circuit Voltage (35 volts or lower)
- Save time by welding for longer, due to the reduced need for machine cooling breaks
- Reliable arc ignition reduces wasted time and increases welding quality
- A single machine covers a wide range of welding applications
- Easy to transport and carry onsite with a fast one man setup



#### KEEP ON WELDING FOR LONGER

Increased welding time due to reduced machine cooling breaks keeps you welding for longer—maximizing your available working time. 30 € per hour labor cost x 20 minutes per project = 10 € x 48 welding projects per annum = Value benefit - Save 480 € per annum



#### MAXIMIZE WELDING TIME

8.2 V reserve at 170 A ensures that the Minarc EVO 180 can achieve its maximum welding power for longer than its competitors at distance. This means increased working time and range, and reduces equipment movement on site—a total winner! -->  $30 \in$  labor costs per working hour, divided by 60 minutes =  $0.5 \in$  per minute × 30 minutes per day moving equipment due to short welding and primary cable sets =  $15 \in$  per day × 30 site work visits per annum = Value benefit 450  $\in$  per annum



### LESS REWORK, MORE PURE WELDING

With Minarc Evo 180 you will minimize any rework caused by poor welds thanks to the power setting with accuracy. You can easily select the correct current level for any electrode size. This makes it extra easy to follow Welding Procedure Specifications (WPS). Stop wasting time grinding and simply weld more.

Example calculation: If hourly labor cost is 30 €, every 5 minutes spent on rework will cost 2.5 € + 5 € for grinding process cycle cost (Time/Machine/Power/Grinding wheel stock/PPE/Noise), adding up to 7.50 € per every rework. This multiplied by 30 reworks per annum means you save 225 €/year.



#### BETTER CONTROL OVER THE WELD POOL

Provides welding current adjustment at the workstation when working at distance or height - increases weld pool control and welding accuracy during welding - reduces time wastage moving between the weld site and the machine - increases work time output reduces costs -->  $30 \in$  per hour labor costs × 30 seconds resetting time =  $0.25 \in$  per reset × 4 resets per job =  $1 \in × 30$  jobs =  $30 \in$ . (Plus welding restart/rework prep costs listed) =  $30 \in +225 \in =255 \in$ 



#### TRANSPORTATION MADE EASY

Easy to transport and carry to site - Fast single man setup --> 30 € labor costs per working hour, divided by 60 minutes = 0.5 € per minute × 20 minutes per site job additional man hours 'lift and assist' = 10 € per job × 30 site work visits per annum = Value benefit 300 € per annum when compared to alternatives



## TECHNICAL SPECIFICATIONS

Minarc Evo 180	
Product code	61002180 - Minarc Evo 180 61002180AU - Minarc Evo 180 AU 61002180DK - Minarc Evo 180 (Denmark) 61002180VRD - Minarc Evo 180 VRD 61002140AU - Minarc Evo 140 AU
Connection voltage 1~ 50/60 Hz	230 V ±15 % (AU 240 V ± 15 %)
Fuse (delayed)	16 A
Output (40 oC) TIG	35 % ED, 180 A / 17.2 V
Welding range (TIG)	10 A/10 V - 180 A/30 V
Welding range (MMA)	10 A/15 V - 170 A/32 V
Open circuit voltage	90 V (VRD 30 V; AU VRD 12 V)
Minimum generator power	5.5 kVA
Standards	IEC 60974-1 IEC 60974-10 IEC 61000-3-12
Operating temperature range	–20+40 °C
Degree of protection	IP23S
Stick electrode sizes	1.54.0 mm
External dimensions LxWxH	361 x 139 x 267 mm
Weight (no accessories)	5.4 kg
Power factor at 100 % ED	0.99
Efficiency at 100 % ED (MMA)	84 %
Weight (with connection cable)	5.85 kg
EMC class	A
Norms	IEC 60974-1, -10, IEC 61000-3-12
Output (TIG) 35% ED	180 A/17.2 V
Output (TIG) 60% ED	150 A / 15 V
Output (TIG) 100% ED	130 A/15.2 V
Output (MMA) 30% ED	170 A/26.8 V (140AU: 28% ED 140 A/25.6 V)
Rated power at max. current 30% ED MMA	170 A / 5.7 kVA
Rated power at max. current 35% ED TIG	180 A / 4.0 kVA
Output (MMA) 60% ED	140 A / 25.6 V
Output (MMA) 100% ED	115 A/24.6 V (140AU: 80 A/23.2 V)

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**Kemppi** is the pioneering company within the welding industry. It is our role to develop solutions that make you win business. Headquartered in Lahti, Finland, Kemppi employs over 600 welding experts in 17 countries and has a revenue of more than 110 MEUR. Our offering includes welding solutions - intelligent equipment, welding management software and expert services - for both demanding industrial applications and ready-to-weld needs. Local expertise is available via our global partner network covering over 60 countries.

