

VARIO MIG 4003 AC/DC DV 36

MIG / MAG AC machine

**AC-brazing with
minimum
energy input**

Modular design for a wide range of applications

The innovative, modular design of the VARIO line offers a wide range of applications in manual and automated welding to the user in trade and industry. With great ease of operation and always first class welding quality in MIG / MAG welding, MIG / MAG pulse welding and MIG brazing with AC or DC.

New dimensions also in the variety of materials to be processed: High-strength steels, construction and stainless steels of all kinds, aluminum, copper, magnesium, brass, titanium, nickel and their alloys, highly heat sensitive alloys and galvanized sheets.

Thanks to the VM-control technology the VARIO MIG is the flexible response to the professional challenges of today and tomorrow.

- AC welding
- MIG / MAG
Pulse arc welding
Splatter free drop transition
High-quality seam qualities in
Aluminum and stainless steels
- MIG/MAG High speed welding
Maximum efficient combination of
wire feed speed and inert gas type

Characteristics VARIO MIG AC/DC DV 36

Standard equipment

- High control rate due to welding process control *Virtual Machine* (VM)
- Highest reproducibility and setting accuracy
- Excellent welding and brazing quality
- Optimal arc power control ensures the automatic correction of the arc length
- Large amount of wire electrode melting
- High welding speed
- Excellent gap bridging even at the thinnest aluminum sheet by MIG AC process
- Low energy consumption
- Low-spatter welding ensures maximum efficiency by saving additional costs of welding
- Insensitive to supply voltage fluctuations
- Automatic compensation of welding cable lengths, thus stable parameters of voltage maintenance even for different lengths of hose packages

USB interface

- Backup of internally generated welding programs
- As standard data transfer by USB stick
- Complete backup by pushing a button
- Cloning of machine data (= Transferring the virtual part of the welding machine to another topline machine)



Technical data

| | |
|-----------------------------------|---|
| General | Welding power steplessly variable Power elements protected against overload by thermal protector Three-phase power supply |
| Mains connection | |
| Supply voltage: | 3 x 400 V 50 Hz |
| Maximum power consumption: | 13,7 kVA |
| Maximum power output: | 19,8 / 28,6 A |
| Fuse: | 25 A (slow-blow) |
| Connecting cable: | 4 x 4 mm ² Cu |
| Power factor cos φ: | 0,95 |
| Welding performance | |
| Setting range from: | 10 A / 10 V infinitely variable to 400 A / 34 V |
| Open circuit voltage: | 80 V |
| Duty cycle: | HSB 60% ED: 400 A / 34 V DB 100% ED: 315 A / 30 V |
| Construction | |
| Dimensions L x W x H: | 1030 x 530 x 1250 mm |
| Wire feed unit L x W x H: | 700 x 400 x 340 mm (700 mm over all with ZA and media connections) |
| Weight: | 205 kg / 34 kg |
| Protection: | IP 23 |
| Insulation class: | H |
| Cooling: | AF |
| Certification: | S-mark, CE-mark VDE 0544-1, VDE 0544-10 EN 60974-1, EN 60974-10 |
| Noise emission acc. to DIN 45635: | 55 dB idle running / 73 dB conventional load max. |

Further characteristics and features

- Highest process safety through the ELMATECH static / dynamic control with process control „Virtual Machine“
- The control automatically assigns to each welding program an ignition (PZ), welding (PS) and crater fill program (PK) and ensures targeted arcing
- Reproducible and transferable static and dynamic properties
- Applicable for manual and mechanized welding
- Solves critical welding tasks in constrained positions by guided process control
- Pointed wire electrode after welding end for perfect reignition
- Optimum combination of parameters with regard to the special welding task ensures maximum production output
- Joining galvanized sheets by MIG brazing
- Free programmable AC / DC welding parameters
- Custom machine interfaces



Optimal wire feeding in automated applications through the compact wire feeder DV 38 - ROB



Resource-saving by the always lowest energy input in each case!

TECHNOLOGY CONCEPT ELMA ARC VISION

Cold processes by welding operation control *Virtual Machine* (VM)

- Exact, targeted heat input into the component by means of MIG AC brazing
- Excellent process characteristics of MIG AC welding for steel materials with high strength steels
- Lowest heat input into the base material with optimum penetration by MIG AC process in comparison with all processes available on the market (Proved by research institutions)