

# VarioStar 1500 / 2500 / 3100

MIG/MAG welding



## No workshop is complete without one

## **GENERAL REMARKS**

#### Utterly reliable, from the ground up

There are some items of basic equipment that every workshop simply has to have. The sort of trusty products that do a good job of work, whatever you put them to, without making a fuss. The VarioStar is just such a product: versatile, sturdy, easy to handle and use.

The VarioStar is a step-switched MIG/MAG welding machine, so it always delivers highly reliable welding results, of impeccable quality. Particularly when used on light-gauge sheets, these machines stand out for the exceptionally good welding results that they achieve. Three different amperages are available: 150 A, 250 A and 310 A. Optimally harmonised for both mixed gas and CO<sub>2</sub>.

Whichever way you look at it, the VarioStar 1500 / 2500 / 3100 is a worthwhile investment that quickly pays for itself.

## UTILISATION

#### All-rounders always come in handy

You really can use a power source like the VarioStar just about anywhere. It does equally sterling service in small craft enterprises as it does in big industrial firms, e.g. for repair work. In the maintenance field and in automobile workshops, too, a VarioStar is an indispensable item of basic equipment. Particularly when it comes to lightgauge sheet work, however, a VarioStar is an absolute "must".

## ECONOMY

#### Long live eternity!

VarioStar machines are just about everlasting. Extremely robustly built, with a compact housing and using only first-class materials, they just go on, and on, and on. They are highly efficient, and there is hardly any spatter, which has a positive impact when it comes to post-weld machining. Anything else? Oh yes, you'll be pleasantly surprised at the low ongoing running costs, as the entire system is perfectly thought through and co-ordinated, from the ground up.





### **WELDING PROPERTIES**

#### **Simply better**

Being probably the easiest type of machine to operate, step-controlled MIG/MAG machines are generally very popular. The VarioStar machines are set to be more popular still, as unlike most such machines they do not have just one inductance tap, but two or three. Which makes it even easier to adapt the arc to the job needing to be done. It is fair to say that having the right number of switching steps and inductance taps greatly improves the welding properties. And this is just what we have done with the VarioStar.

There has also been a change in the ignition. This has become even more reliable, and absolutely jerk-free: To begin with, the wire is fed very slowly; only when the arc has been ignited does the wirefeed speed increase to the speed needed for welding. Completely automatically. The end of welding is very easy to define, with an adjustable wire burn-back.

## HANDLING AND SAFETY

#### Ease of operation and safety, hand-in-hand

The nicest thing about the VarioStar power sources has to be just how easy they are to use. In fact, it couldn't be any easier than this. You only need to make three settings: the switching steps, the inductance taps and the wirefeed speed. And even here, there's an integral settings assistant to make it even easier for you to choose the right settings. Other convenient features: Because it is not permanently mounted, the torch can be changed very quickly; the transport wheels are generously sized; a 2-roller drive ensures that the wire is fed smoothly.

On top of all these convenient features, the machines also offer the very highest safety standards in the business, meaning those for industrial applications: S mark, CE mark, IP 21. As well as a thermostat-controlled overload cut-out.



With the integral settings assistant, the machine is "child's play" to operate

2-roller drive ensures excellent wirefeeding

The specially tuned inductance makes it possible: Optimum welding with CO<sub>2</sub> and mixed gas

## **TECHNICAL DATA**

|  | VST 1500                | VST 2500                | VST 3100                |
|--|-------------------------|-------------------------|-------------------------|
| Mains voltage, reconnectable, +/- 10 % | 3 x 230 V               | 3 x 230 V / 400 V       | 3 x 230 V / 400 V       |
| Mains frequency                        | 50 / 60 Hz              | 50 / 60 Hz              | 50 / 60 Hz              |
| Mains fuse protection, slow-blow       | 16 A                    | 16 A                    | 20 A                    |
| Primary continuous current (100 % d.c) | 9.6 A (400 V)           | 5.3 A (400 V)           | 6.9 A (400 V)           |
| Cos phi                                | 0.99 (140 A)            | 0.99 (250 A)            | 0.99 (310 A)            |
| Efficiency                             | 74 % (70 A)             | 75 % (130 A)            | 78 % (310 A)            |
| Welding current range                  | 30 – 140 A              | 25 – 250 A              | 20 – 310 A              |
| Welding current at: 10 min/40° C       | 20 % d.c. 140 A         | 27 % d.c. 250 A         | 30 % d.c. 310 A         |
|  | 60 % d.c. 90 A          | 60 % d.c. 160 A         | 60 % d.c. 220 A         |
|  | 100 % d.c. 70 A         | 100 % d.c. 130 A        | 100 % d.c. 160 A        |
| Open-circuit voltage                   | 34 V                    | 38 V                    | 46 V                    |
| Operating voltage                      | 15.5 – 21.0 V           | 15.3 – 26.5 V           | 15 – 29.5 V             |
| N° of switching steps                  | 6                       | 10                      | 15                      |
| Degree of protection                   | IP 21                   | IP 21                   | IP 21                   |
| Type of cooling                        | AF                      | AF                      | AF                      |
| Insulation class                       | F                       | F                       | Free Free States        |
| Dimensions, L x W x H                  | 800 x 380 x 680 mm      | 800 x 380 x 680 mm      | 800 x 380 x 680 mm      |
|  | 31.52 x 14.98 x 26.80 " | 31.52 x 14.98 x 26.80 " | 31.52 x 14.98 x 26.80 " |
| Weight                                 | 60.5 kg / 133.1 lb      | 74 kg / 162.8 lb        | 92 kg / 202.4 lb        |

CES

## CHECKLIST

#### 2-roller drive

Basket-type spool insulator (optional) Extra-wide gas cylinder holder (optional) Gas pre-heating socket (optional) Gasless & currentless feeder inching Inrush current limiter (optional) Overtemperature indicator Overtemperature sensor switch Polarity reverser (optional) Thermostat controlled fan (optional) Transport handle (optional)

#### **Operating modes** 2-step mode 4-step mode Spot welding Stitch welding

#### Adjustable parameters Burn-back time

Gas pre-flow time Spot welding time Stitch welding time Welding power



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