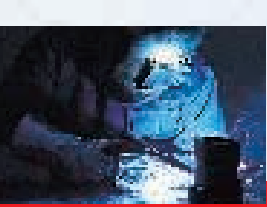


VARIO STAR

VARIO STAR 357/457
MIG/MAG



PERFECT WELDING



WHEN PROVEN TECHNOLOGY AND INNOVATION COME TOGETHER ...

GENERAL POINTS

ONCE A STAR, ALWAYS A STAR

The Vario Star machines have made quite a name for themselves over the last few years. And seem set to keep on doing so! Just recently, for example, the shining reputation of Vario Star was enhanced still further with the addition of new microprocessor technology. Like their predecessors, the Vario Stars 357/457 are step-controlled MIG/MAG machines, as sturdy and reliable as ever. The difference is that they now come with up to 500 A of power. Adding the optional MC 57 program module gives them even more pep and makes them virtually unbeatable. As well as lending them a certain aura of luxury, this also makes them very much easier to operate. A look at the cost/benefit ratio will make something else clear too: These machines may be stars, but they won't break your budget.

UTILISATION

AT HOME EVERYWHERE.

You won't find many as versatile as the Vario Star. It's at home in sheet metal-working, machinery and apparatus construction, and even in heavy structural steel work. It's happy welding aluminium, aluminium alloys and steel - unalloyed, low-alloy or high-alloy. In a word, ideal - for both industrial and trade users.



GETTING A BETTER "SLANT" ON WELDING

We've simplified matters at the user interface, too. The control panel is now slanted, making it much easier for you to see, read - and operate.

This new design also means that the user interface is much better protected. To keep your "star" safe from any unwelcome attacks!



HOLD ON TO WHAT'S GOOD - AND RE-USE IT

To start with, there's a "Hold" function in the user interface. This automatically records the actual values at the end of welding, so that you can replicate them at any time you like. A very helpful feature in welding-supervision and for monitoring parameters. Then there's also the optional MC program module.



The MC 57 has another special advantage: The material guideline value read-out also tells you which sheet thicknesses were welded at which switch positions. Welding is getting easier all the time!

A MANY-FACETED STAR

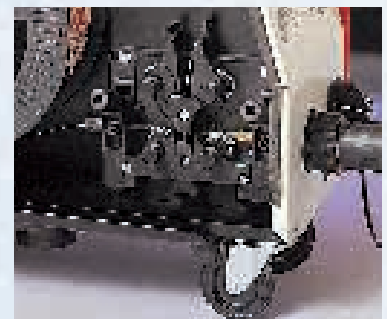
There can be up to 20 different welding programs for you to choose from. Simply select the wire diameter and the material on the respective dials. Change the switch step, and the correct power is set for you. Together with the correct wirefeed speed, of course.

WIREFEED - TAKE YOUR CHOICE

The Vario Star comes with either an integral wirefeeder or a stand-alone one. The VR 57 wirefeeder extends your radius of action enormously. True stars just have to be versatile. Whichever version you opt for, the wirefeeder has a great deal to offer. The motor speed is automatically monitored by the microprocessor, for example, meaning that the wire speed is kept constant and the welding results can be exactly replicated. What is more, the contact pressure of the rollers can be precisely adjusted to suit the type of wire being fed. Incidentally, the wirefeed is also available in a special version - as a "Quattro drive" with 4 rollers for better pressure distribution.



And in case you were afraid that stars were tricky to deal with - note that you don't need any tools to change the rollers!



LIVING WITH A STAR...

ECONOMY

... IS ACTUALLY SURPRISINGLY ECONOMICAL

Friends and acquaintances of the Vario Star never cease to be amazed by its excellent price/benefit ratio. This star is definitely not one for a spendthrift lifestyle. As you'll find for yourself, e.g. with the low power consumption made possible by its stand-by mode and automatic cooling-unit cut-out. Not to mention the savings that result from its sturdy design.

SAFETY

THIS "STAR" KEEPS YOU OUT OF HARM'S WAY...



With the Vario Star, you're not letting yourself in for anything risky. All our machines bear the [S] mark as standard - a safety seal for welding in confined spaces where there is increased electrical hazard. They also come with the CE mark, applicable both to EN 60 974-1 and to EN 50 199.

What is more, the fans in all these machines are thermostat-controlled ones, which means that a lot less dust accumulates. The electronics are physically separated from the fan system and so are particularly well protected from dust.

A unique feature of these Vario Stars is their short-circuit recognition and cut-out function, which protects the rectifier, the hosepack and the torch from overloading.

SERVICE

... IS HIGHLY "APPROACHABLE" ...

When it comes to servicing, the Vario Star couldn't be user-friendlier. All its wearing parts and replaceable parts are very easy to get at.



Vario Star 357 with integral wirefeeder

OPTIONS

... AND IS OPEN TO NEW IDEAS

If you want to equip your Vario Star with extra functions - then just go right ahead. Every Vario Star comes prepared for extensive add-ons. As standard. So you can use a smaller water-cooled torch instead of the gas-cooled one by ordering the FK 57 cooling unit, for example. See overleaf for all the other things that are possible with the Vario Star.

FOR A WELDER, WORKING WITH A STAR IS JUST GREAT ...

WELDING PROPERTIES

YOU KNOW WHAT YOU LIKE

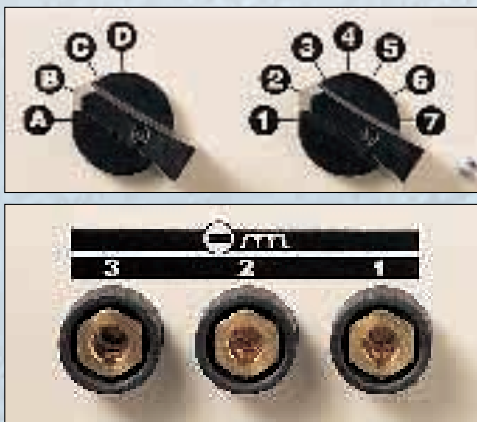
You know the importance of the arc and arc ignition. So do we. We also know that there's no fooling a true professional. Which is why when we were developing these new Vario Star machines, we listened hard to what users told us. The results are impressive. As you'll see when you strike your first arc, for example.

NEW: JERK-FREE IGNITION

An electronically programmed ignition sequence on the MC 57 gives you reliable, jerk-free ignition. This means that the wire emerges only very slowly, and is only accelerated to the required speed once the arc is burning. The result is trouble-free arc ignition, getting your welding off to a smooth, precise start. Just the way it should be when professionals have the last word.

YOU DECIDE HOW

Whatever the job that needs doing and however thick the sheet, you can be sure of getting the very best results. Choose from among a huge variety of coarse or fine gradations, each of them carefully co-ordinated with the respective inductance taps. And you can be welding in either the dip-transfer or the spray-arc range - it doesn't matter at all to the Vario Star. Refreshingly uncomplicated, don't you think?



CHECKLIST

2 step-, 4 step-, spot welding and intermittent welding
 Feeding in the wire without any current
 Gas pre-flow adjustable 0-3,0 s
 Gas post-flow adjustable 0-4,0 s
 Intermittent welding time adjustable 0,2 - 4,0 s
 Intermittent welding pause time adjustable 0,1 - 0,8 s
 Spot-welding time adjustable 0,2 - 4,0 s
 Wire-inch adjustable 1,5m/min-100% vD
 Burn-back time adjustable 0 - 0,4 s
 Thermostat-controlled fan
 Overcurrent protection
 Overtemperatur indicator
 Gastest button

MC 57 program operation:

Digital ammeter with command value and storable actual value (Hold-function)
 Digital voltmeter with command value and storable actual value (Hold-function)
 Digital read-out of material guideline value
 Digital read-out of wirefeed speed
 Digital inductance-tap read-out
 Automatic soft-start
 Automatic burn-back
 Error-code read-out
 20 welding workplace programs for solid and filler wires
 Transitional arc indicator

TECHNICAL DATA

Power source	Vario Star 357	Vario Star 457		
Mains Voltage clampable $\pm 15\%$ 50/60 Hz	3x230/400 V	3x230/400 V		
Mains fuse slow	35 A (230 V) 20 A (400 V)	63 A (230 V) 35 A (400 V)		
Primary continuous current (100% d.c.)	10,2 A (400 V)	15,9 A (400 V)		
Cos phi	0,93 (150 A)	0,90 (150 A)		
Efficiency	80% (100 A)	80% (200 A)		
Welding current range	30-370 A	35-500 A		
Welding current at	10 min/40°C	30% d.c.	—	500 A
	10 min/40°C	35% d.c.	370 A	—
	10 min/40°C	40% d.c.	350 A	450 A
	10 min/40°C	60% d.c.	280 A	360 A
	10 min/40°C	100% d.c.	220 A	280 A
Open-circuit voltage	43 V	54 V		
Operating voltage	15,5 - 32,5 V	15,8 - 39,0 V		
Welding-Program locations	3 x 7	4 x 7		
Protection class	IP 23	IP 23		
Type of cooling	AF	AF		
Insulation category	H	H		
Dimensions l/w/h (compact design)	895/465/860 mm	895/465/860 mm		
Dimensions l/w/h (power source)	895/465/750 mm	895/465/750 mm		
Weight (compact design)	138 kg	160 kg		
Weight (power source)	123 kg	146 kg		

ARTICLE NUMBERS

4.025.192	Vario Star 357 Compact design			
4.025.193	Vario Star 357-2 Power Source	4.035.104		
4.025.194	Vario Star 457 Compact design			
4.025.195	Vario Star 457-2 Power source	4.035.062		
4.045.813	Cooling unit FK 57 50 Hz			
4.045.821	Cooling unit FK 57 50/60 Hz			
4.100.164	Automatic cooling-unit cut-off	43.0004.0161	Earth cable 50 mm ²	
	Wirefeeder VR 57 with	43.0004.0163	Earth cable 70 mm ²	
4.045.812	2 wheel drive system	43.0011.0009	Gas pressure regulator	
4.045.819	4 wheel drive system	4.100.161	Program module MC 57	
4.100.080	4 wheel drive system conversion kit	4.001.553	Lifting eyes	
	Interconnecting cable:	4.100.131	Gas preheating socket	
4.047.223	1.2 m gascooled	42.0300.2342	Rubber mat	
4.047.224	5.0 m gascooled	4.100.166	Dial-feed for VR 57	
4.047.225	10.0 m gascooled	4.001.552	Weldmobile "Caddie"	
4.047.226	15.0 m gascooled	BE 2.0200.9049	Mounting for hose pack	
4.047.227	1.2 m watercooled			
4.047.228	5.0 m watercooled			
4.047.229	10.0 m watercooled			
4.047.230	15.0 m watercooled			

Recommended torches:
 AW 352-Z watercooled (VST 357)
 AW 502-Z watercooled (VST 457)

Cooling unit	FK 57
Mains voltage	230 V 50 Hz 230 V 60 Hz
Cooling capacity	+20°C 1200 W +40°C 750 W
Throughput	2,0 l
Discharge head	35 m
Pump pressure max.	4,5 bar
Coolant volume	5,2 l
Protection class	IP 23
Dimensions l/w/h	215/240/480mm
Weight without coolant	8,5 kg

Wirefeeder	VR 57
Feed motor	42V/DC
Motor output	164 Watt
Gear ratio	24:1
Wire diameter	0,8 - 1,6 mm
Wire-feed speed	0-18 m/min
Protection class	IP 23
Dimensions l/w/h	595/228/450 mm
Weight	17 kg



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