



# PRO-S

INVERTER STUD WELDING UNIT FOR DRAWN ARC AND SHORT CYCLE STUD WELDING  
SINGLE-PHASE POWER SUPPLY (230 V OR 115 V)



STUD WELDING TECHNOLOGY BY



STUD WELDING

MODERN INVERTER TECHNOLOGY ENSURES VERY PRECISE CONTROL AND HIGH REPRODUCIBILITY OF THE WELDING PROCESS

EASY OPERATION BY ROBUST ROTATING PRESSURE SWITCH

VERY HIGH ARC STABILITY! ALSO IN CASES OF SHORT WELDING TIMES AND LOW WELDING CURRENTS

WELDING CURRENT AND TIME CONTINUOUSLY ADJUSTABLE

SINGLE-PHASE POWER SUPPLY (230 V OR 115 V)

ALL FUNCTIONS AND PARAMETERS ARE SHOWN ON A BIG DISPLAY

IDEALLY SUITED FOR MOBILE USE - CONSIDERABLY LOWER WEIGHT THAN CONVENTIONAL STUD WELDING UNITS

ROBUST CONSTRUCTION FOR THE USE IN HARSH ENVIRONMENTS

UNAFFECTED BY FLUCTUATIONS IN THE MAINS VOLTAGE



CONTROLLING AND MONITORING OF ALL FUNCTIONS AND PARAMETERS BY FAST AND HIGH-PERFORMANCE MICROPROCESSOR

POWERFUL

HIGH EFFICIENCY!  
LOW POWER CONSUMPTION!

INTEGRATED WELDING PARAMETER MONITORING (OPTIONAL: WELDING PARAMETER MEMORY)

FAST WELDING SEQUENCES

59 USER-SPECIFIC WELDING PROGRAMMES STORABLE

LIBRARY WITH PRE-INSTALLED WELDING PROGRAMMES (SELECTABLE VIA STUD DIAMETER AND TYPE)

# HIGHLIGHTS AND SPECIAL EQUIPMENT



## WELDING PARAMETER MONITORING AND DOCUMENTATION

The welding parameter monitoring, integrated as standard in the PRO-S stud welding unit, enables a quality control of the finished welds.

Features:

- » recording of welding current, welding time and arc voltage for each weld
- » recording of stud travel (lift, piston runtime and immersion depth) for each weld (only when a welding gun resp. an automatic welding head with travel measuring system is used)
- » comparison of the recorded welding parameters (actual values) to the parameters of a reference weld (set values) (tolerances adjustable)
- » in case of variances to the reference weld a warning is displayed or the unit is locked for further welds until the release by the operator (functionality can be switched off)
- » storage of the last ten welding parameter sets
- » optional (also retrofitable): welding parameter memory for the storage of 24500 welding parameter sets (storage with date and time) with USB-interface for data transmission (welding parameter sets) to a PC



## AUTOMATIC STUD FEEDING

- » An automatic module enables the connection of the automatic stud feeder VBZ and an automatic welding gun.



## ADAPTER BOX PRO-SPLIT

- » available as accessory
- » enables the operation of up to four stud welding guns with different adjustment values for welding current and time on one unit
- » automatic detection of used gun
- » weld counter for each gun connection
- » with up to four shielding gas modules



### SHIELDING GAS MODULE FOR STUD WELDING WITH SHIELDING GAS

- » optionally available
- » enables stud welding with shielding gas for weld pool backing
- » shielding gas pre- and post-flow time continuously adjustable



### SINGLE-PHASE POWER SUPPLY

- » power connection 230 V or 115 V
- » unaffected by fluctuations in the mains voltage

## TECHNICAL DATA AND CHARACTERISTICS

	PRO-S 600	PRO-S 600
<b>Welding method</b>		
Drawn arc (ceramic ferrule)	x	
Short cycle	x	
Drawn arc (shielding gas)	o	
<b>Max. welding diameter (mm)</b>		
Drawn arc (ceramic ferrule)	6	
Short cycle	6	
Drawn arc (shielding gas)	6	
<b>Welding current (A)</b>	100-400	
<b>Welding time (mS)</b>	1-115	
<b>Welding parameter monitoring</b>		
Welding parameter monitoring	x	
Welding parameter memory <small>with USB-interface for data transmission to a PC</small>	o	
<b>Utilisable with adapter box PRO-SPLIT</b>	x	
<b>Operation</b>		
Microprocessor control	x	
Welding programme library	x	
Welding programme storage	x	
Device lock with PIN code	x	
Authorization concept <small>(device lock, basic settings, menu structure)</small>	x	
Weld counter (resettable)	x	
Lift test	x	
Repeat cycle lock	x	
Electronic function control	x	
Self diagnosis system	x	
Automatic function test	x	
<b>Shielding gas module</b>	o	
<b>Automatic stud feeding</b>	o	
<b>Error diagnosis systems</b>		
Excess temperature	x	
Damage on welding/control cable	x	
Damage on solenoid	x	
<b>Interfaces</b>		
CAN-BUS		o
USB		o
<b>Thermic controlled ventilator</b>		x
<b>Robust, powder-coated metal housing</b>		x
<b>Dimensions</b>		
Width (mm)		195
Height (mm)		260
Length (mm)		400
Weight (kg)		13
<b>Electric connection</b>		
Mains supply (V) at 50/60 Hz		230 (115)
Mains fuse external		≥ 10 AT
Protection		IP 23
<b>Control cable socket for welding guns</b>		7-pin
<b>Suitable welding guns</b>		
PHM-10		x
PHM-12		x
PHA-500		o
PHA-500-6		o

x – Standard, o – Option



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