



Control unit DA-800M



Application Area

With its modern dialogue operator guidance and its compact and robust design, the **DA-800M** represents the entry-level class in drawn-arc and short-cycle stud-welding.

A **multifunctional four-inch display** and the modern processor control enable a reliable and reliable operation. Its compact dimensions make it particularly suitable for rough mounting conditions on construction sites.

Effective air guidance with thermostatically controlled fan guarantees high welding sequences and duty cycle.

The DA-800M can be operated with our welding guns DA-10 / DA-10M and DA-12 / DA-12M.

Technical characteristics

- monitoring of all functions in the welding circuit by high-performance microprocessor;
- Compact design;
- STOP function for all error messages (device-internal or process-related);
- state-of-the-art HMI: simple dialog operation through menu structure and one-button operation as well;
- Digital distance measuring system enables comfortable adjustment of stud overlap and lift adjustment;
- If the pre-set minimum values for stud overload, lift and meltdown (immersion) are not reached, automatic indication by coloring the respective parameter that the limit value has been exceeded;
- Library function: Fixed welding times for RD, PS and IS-studs / pins and additional variable, user-defined welding times can be stored;
- Thermostatically controlled fan

Optional:

- Intelligent multi-station technology: this means operation of up to four manual and / or automatic welding guns in connection with our new switchbox DA - 4 possible;
- In multi-position mode, automatic detection of the respective welding gun by contact message and automatic switching to the respective setting menu on the inverter (parameter can be stored user-defined);
- Automatic module for using automatic welding gun ATP-8



Control unit DAI-800M

Technical data

Welding area (max. welding diameter)	M3 – M16 (RD), Ø2mm – 13mm, expandable with parallel connection up to Ø25mm / RD M30
Weldable material	carbon and stainless steel, aluminium-alloy
Welding application	Drawn-Arc (with ceramics or protective gas), Short-cycle
Welding current I(A)	800A, unregulated
Welding time t(ms)	5 – 500ms, infinitely variable
Welding guns connections	1x controlled separately of 4x welding guns connected while using the Switchbox DA-4
Applicable welding guns	DA-10, DA-10M ^{*1} , DA-12, DA-12M ^{*1} , ATP-8 ^{*2} ^{*1} Welding guns with way measuring system ^{*2} : Automatic gun only only in combination with automatic module
fault diagnosis	Phase failure Over temperature Defective solenoid and / or control cable
Power supply U (V)	3 x 400V – 50/60Hz – 32AT
Power connector	CEE 32A
Type of cooling	F (thermostatically controlled fan)
Protection class	I (basic insulation)
Degree of protection	IP 23
Dimensions (L x B x H, über alles incl. Anschlüsse)	465mm x 300mm x 271mm
Weight	40 kg



Control unit DA-800M

Technical data usable welding guns

The following are all hand-held welding guns that can be used with the **DA-800M** in its performance class. The **DA-800M** can also be operated with our **new welding guns with integrated way measuring system**. These guns allow the easy **adjustment and correction of the stud overlap, lifting adjustment, depth of immersion and piston speed** by simple reading on the display. These parameters are immediately displayed when the M-gun is connected.

Type of welding gun	DA-10 / DA-10M* ¹	DA-12 / DA-12M* ¹
Welding process	Short-cycle welding process (with or without protection gas)	Drawn arc process with ceramic or gas
Welding area	M3 - M10(Ø11mm* ²)	M3 - M12(Ø10mm* ²)
Piston guide	Slide bearing guide (optional: linear ball guide)	Linear ball guide
Position measuring system	Only DA-10M	Only DA-12M
Lift adjustment	Constant lift 1,5mm	Constant lift 2,0mm
Vertical positioning	Manually	
Length compensation	Ball carrier system	
Piston damper	./.	
Welding cable	5m, 35mm ²	
Weight (without cable)	0,85kg	

*1: Welding-guns with integrated measurement system (Indication „M“)

*2: Maximum welding-diameter (according standard DIN EN 13918); Material, group of material and class of mechanical strength of usable welding elements and allowed welding-joints of studs und ground material see DVS-Roule 0902 "Drawn arc welding" and DVS-Roule 0967 „Calculation of welding joints“