

## Akzent-3000/MF Welding Controller

### Short-Form Catalogue

Your application: Medium frequency welding transformer for

- Single or serial spot welding
- Projection welding

The Welding conditions might be unstable (surface coating and quality, sheet thickness etc.) A constant current control therefore is mandatory. There should be an option for adaptive control mode. Your customer expects a complete process monitoring of welding current, voltage drop, or path control.

Your requirements:

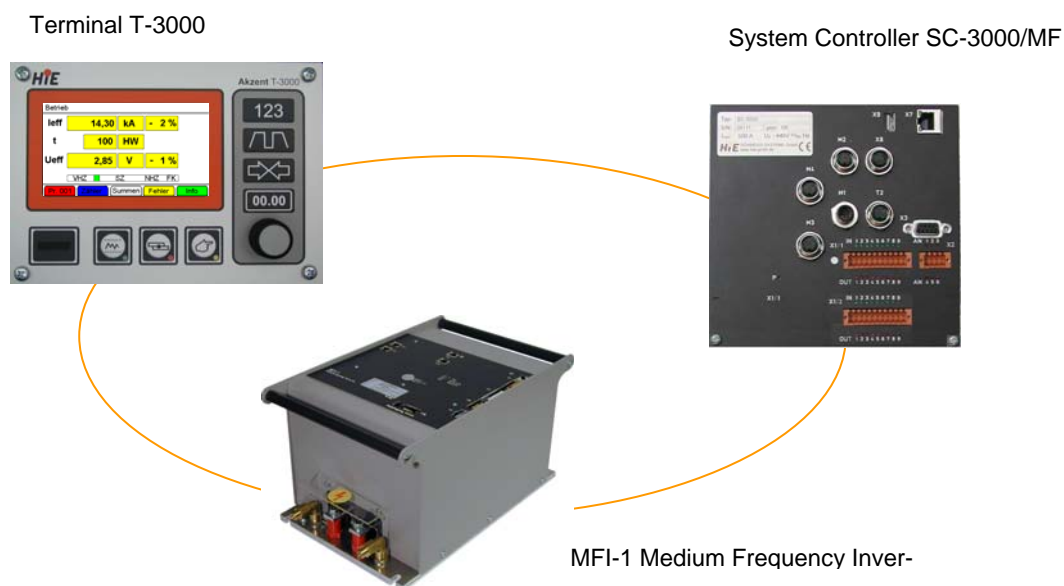
The operation of the welding controller must be simple and pleasant to use. Important information's about the parameter settings and the welding process should be visible at a glance. Changes of parameters only shall be possible with a corresponding right. There should be the possibility to make changes of parameter and configuration settings via PC.

The welding controller should guaranty a constant welding quality under reproducible conditions. Small disturbances should be compensated by the adaptive control mode. Deviations of process parameters should be signalized by an alarm. Defect parts should be detected and assorted before starting the welding current. The welding controller should have the opportunity to monitor the welding process including documentation of welding parameters.

On some manual welding stations you want to connect two welding guns to one control cabinet. The two workers should work likely simultaneously. Under normal conditions they don't take notice that they have to share the controller each other.

Our answer:

The welding controller Akzent 3000 sets new standards in the mid range class of welding controllers for resistance welding applications. The graphical display combines easy operation, with functionality orientated on practical requirements. The completely new developed hard- and software concept offers you a wide range of individual expansion possibilities. This means reliable investment costs for possibly increasing requirements in the future.

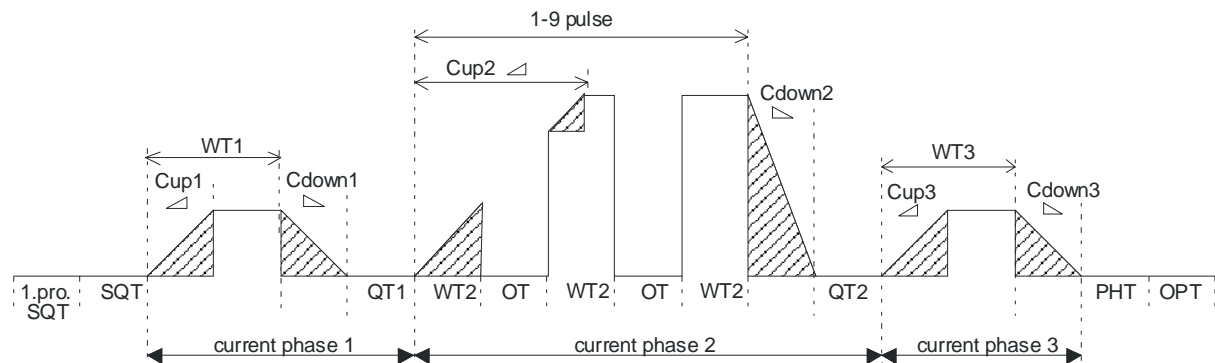


The extended version includes the possibility to run two guns likely simultaneously with one welding controller.

The way of operation is easy to understand and user friendly. Change of operation language is possible. The graphical display shows all important information's in full text form. All important functions can be reached by one keystroke. The electronic key assures that changes of welding parameters and monitoring settings can be made only by authorized operators.

The operating terminal T-3000 is connected by only one cable to the system controller SC-3000. These compact form offers a lot of possibilities of application. Intergrated mounting inside of the machine case is possible as well as a separat mounting of the operating terminal outside of the security fence or in the machine panel.

### Welding times



### Technical data

#### Operating terminal T-3000

Size (WxHxD) mm:	182 x129 x 45 (without connectors)
Display:	4,3" TFT color display with 480x274 pixel resolution
Operation:	Navigation via rotary knob or touch screen Change of settings via rotary knob Function keys for direct stroke of the most important functions Assignment of different access rights via digital key
Operating language:	German or English, other languages on demand

#### System controller SC-3000/MF

Solenoid valve:	2 SV outputs 24V DC, maximal switching capacity 25 VA
End of cycle:	free programmable
Locking contact:	free programmable
Welding programs:	128
Operating mode:	Single spot, serial spot, seam welding
Digital inputs:	up to 18 free programmable inputs for start, pressure contact, ready for operation, with/without current, program selection, ext. locking, etc

Digital outputs:	up to 18 free programmable outputs for solenoid valve, locking contact, end of cycle, monitoring alarms, end of counter, etc	
Analogue outputs:	2 analogue outputs (0-10V) for proportional valve control	
Measuring input channels:	1 analogue input channel for secondary current sensor 2 analogue input channels for voltage drop or primary current sensor 1 incremental input channel path sensor (10µm resolution)	
Welding times:	16 times, including 12 current times (look at picture of welding times)	
Control modes:	Constant current control selectable for primary or secondary current Dynamic current control mode Dynamic voltage control mode Adaptive control mode	
Monitoring:	Monitoring of sum values and envelope curves of current, voltage and path according to the configuration settings	
PC interface:	100 MB Ethernet	
Field bus interface:	optional on demand	
MF-Inverter:	400A – 2400A water cooled (air cooled on demand) ask for load diagram	Please
Size (WxHxD) mm:	290 x 166 x 150 (without connectors)	

### Medium Frequency Inverters MFI-1

The system controller SC-3000 works together with medium frequency inverters type MFI-1.

For more details please have a look at the short-form-catalogue for the medium frequency inverters.