

GeniusACS

The GeniusACS mains frequency welding controller is our latest addition to the Genius system, utilizing the full modularity of the Genius system hardware and software and expanding it with a 50/60Hz variant. It is available as a 1-phase and 3-phase version (GeniusACS1 and GeniusACS3). The GeniusAC control unit is available in versions for spot welding, projection welding and compacting and will replace the Ratia control unit in the long term.

Operating concepts

Central operation of up to 40 control units with the XPegasus operating software via Ethernet (not included in the scope of delivery). Decentralized operation of one control unit with Xcomand(not included in the scope of delivery).

Maschinen- und Roboteranbindung

Communication with the machine or robot controller is carried out via the 24 V I/O and fieldbus connection as standard. You can choose from our fieldbus variants.

See: Genius product range - Machine and robot connections

Standard function scope

- 256 Programs
- 3 main current times (pre-heating, main, post-heating time)
- Digital 24 V I/O
- Constant current regulation (KSR)
- Proportional valve output 0-10 V
- Electrode management
- Current increase, current decrease
- Regulation range limit
- Secondary current measurement
- voltage measurement
- Mains load limitation control
- ProfiNet-Slave

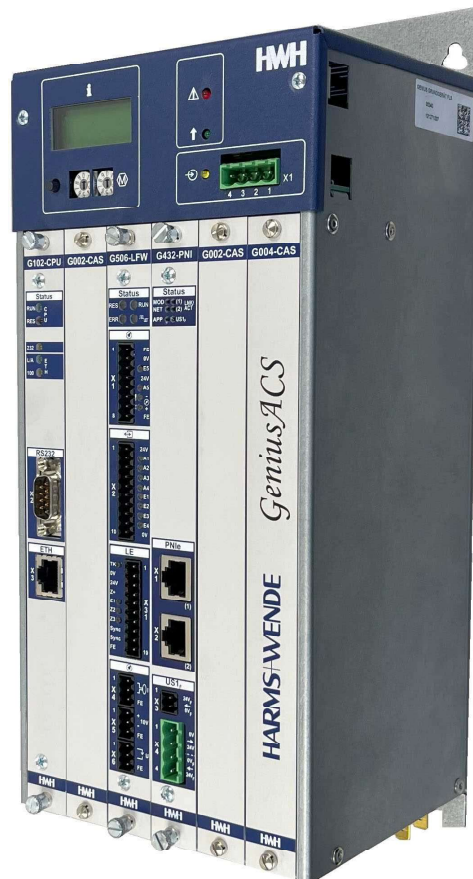


Fig. 10-1 GeniusACS-unit

Function Scope PRJ (Projection)

The GeniusACS offers you a high level of functionality for projection welding. The "Projection" version is the perfect control unit for your standard machines and is equipped with 24 V I/O and an analog output for the proportional valve as standard. Constant current control, I-Inspector (current) and S-Inspector (travel) are part of the Projection equipment, as is proportional valve control. The control unit is equipped with an EtherNet interface as standard, which you can use to network all devices. Further functional scopes are possible.

Monitoring / Inspectors

I-Inspector (Current)

- Limit value
- Mean envelope value
- Reference envelope value

H-Inspector (stroke)

- Limit value
- Mean envelope value
- Reference envelope value

S-Inspector (distance)

- Component control
- Sink-in distance
- Final dimension

F-Inspector (Force)

- Limit value
- Mean envelope value
- Reference envelope value