

Spot Welding Cabinet

Part of the SpotPack offer



ABB offers a compact and flexible Spot Welding Cabinet that is ready to fulfill your most demanding requirements. The Spot Welding Cabinet is a member of the IRC5 controller family and an integrated part of ABB's robot system. Its design ensures high quality and high performance spot welding.

Adaptable for different demands

The Spot Welding Cabinet offers a modular design of components to meet your specific demands. "One unit fits all", as the Spot Welding Cabinet can be equipped with options for controlling electric servo welding guns, whether robot carried or stationary mounted.

The modularity supports options for MFDC welding with weld controllers delivered from Bosch.

Seamless integration with robot controller

The Spot Welding Cabinet was developed in parallel with the IRC5 robot controller, which ensure that the interface for control signal is well defined and tested before delivery.

Furthermore, the Spot Welding Cabinet has the same design and modular concept as all other IRC5 cabinets, enabling flexible planning and optimized shop floor layout.

Serviceability for High Uptime

The Spot Welding Cabinet is designed for rapid and efficient service and maintenance, giving you less downtime. High mean time between failure (MTBF) and a short mean time to repair (MTTR) gives you a high uptime.

In addition, standard spare parts are delivered within 24 hours via ABB's global distribution network.

Main Features

Tested and validated before delivery - Minimal customer engineering required and a condition for secure and prompt start of production.

Modularity - Its modular design allows for changes to the welding application or production layout late in the project.

Efficient workshop layout - Compact and uniform design minimize floor space usage.

Optimization of process time - The spot welding software with integrated diagnostics and statistics optimizes process time.

Common components - Fewer spare parts required as many components can be used in different spot welding applications.

Cabinet features

- IP Class IP54
- Max ambient temperature 45°C
- Modular design

Technical information

Weld timer type

Bosch PSI 61C0, MF inverter max 20kA, 400V to 480V, 50/60Hz, 1 kHz MF frequency 110A (rated), Air cooled

Power circuit

Breaker ABB XT1N 160 TMD 3p integrated thermal (70A-100A) and magnetic release (36kA at 415V). Standard delivery

Breaker ABB XT1H 125 TMF 3p fixed thermal (100A) and magnetic release (65kA at 480V). UL/CSA delivery

Control circuit

Power 24 V DC (and 115/230 V AC for option weld contactor)

Safety signals

ProfiNet field bus for weld timer communication

24 V Digital I/O for weld timer communication

Serial link cable
(for option Bosch MMI, teach pendant interface)

Shielded cables for process signals

Options (for details see Product Specification)

Bosch MMI (teach pendant programming interface)

Earth fault protection

Weld contactor

Forced air cooling

Water and Air unit interface

Robot or stationay weld gun interface

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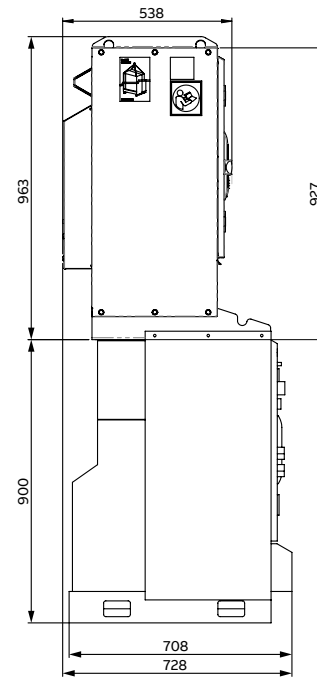
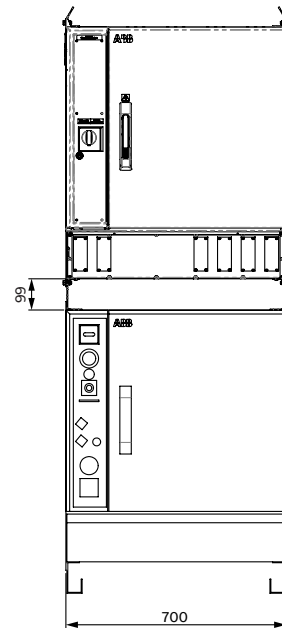


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