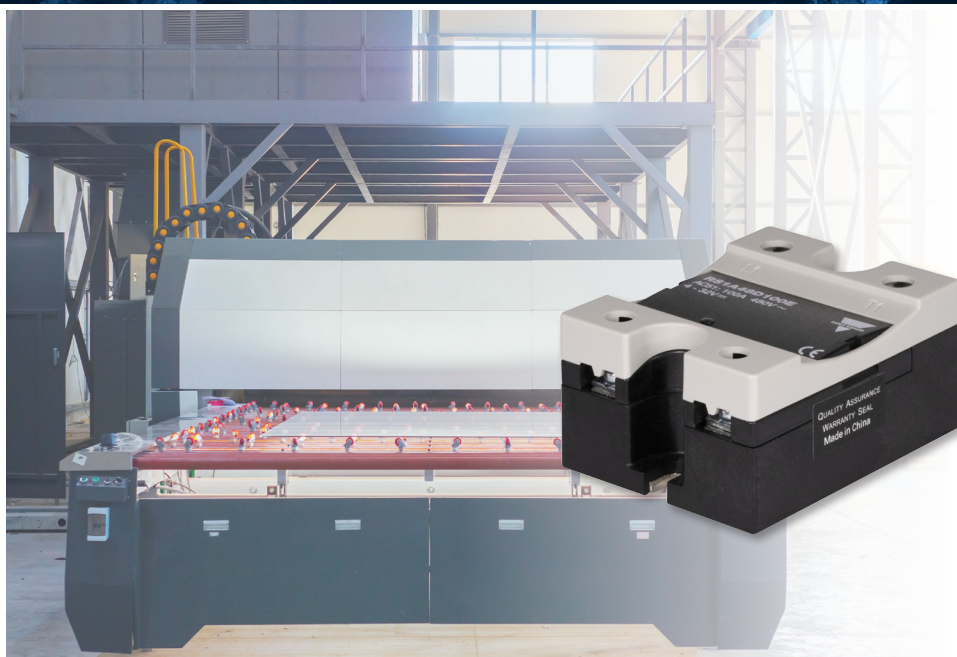


Application note



Subject:

Control of heater banks in glass tempering machines

Industry:

Manufacturing machinery

Product:

RS1A48D100E

Customer:

OEMs

CUSTOMER ISSUE

The OEM requires precise temperature control of heaters for the glass tempering process that can only be achieved through the fast switching provided by solid state relays (SSRs).

Due to different practices and cost challenges in certain geographical regions, OEMs need low-end SSR options that match the very basic needs of their temperature control processes.

OUR SOLUTION

Previously, the RS_E series was only available up to 40AAC and could not be offered as a solution in high-current applications.

With the extended range up to 100 AAC, Carlo Gavazzi now has a more complete cost-effective solution to accommodate OEMs looking for low-end SSRs.

The RS1A48D100E, maximum rated 528 VAC 100 AAC, is ideal for temperature control processes in glass tempering machines.

It offers a zero-cross switching solution with DC control input and integrated overvoltage protection at a competitive price.

BENEFITS

- **Stable temperature profile** with the use of solid state relays that are able to achieve very fast switching times
- **High isolation voltage to backplate/heatsink** through the use of a Direct Copper Bonding substrate
- **Increased lifetime:** SSRs have no moving parts and can perform millions of trouble-free switching cycles. The RS_E is not encapsulated with potting compound. This reduces mechanical and thermal stress on components leading to even longer lifetime vs. potted SSR solutions