



**Sensors**



**Switches**



**Controls**

## Application notes



**Application Note : March 2018**

**Market involved : Plastic & Rubber**

**Product : RGC1A60D32KKE**

**Customer : OEM**

**Subject : Switching of heaters in plastic injection machines**

### CUSTOMER ISSUE :

In order to have a neater panel layout and ease of mounting, some OEMs are switching over from hockey pucks to solid state contactors. The main objective is to reduce panel size.

In plastic injection machines, the SSRs are used to switch heaters in the barrel and the mould. For the barrel the load current is typically 24 AAC, whilst the mould heaters are rated maximum 16 AAC.

One SSR model is needed for both barrel and mould heaters and the customer would like to use MCBs for SSR short circuit protection.

### OUR SOLUTION :

The RG series with a minimum product width of just 17.8mm is the ideal solution for space saving.

The RGs can be mounted with 0mm spacing between each unit.

The RGC..32 and RGH..15 are the most compact solutions that satisfy the need for 16 AAC with 0mm spacing.

However, due to the barrel requirement of 24 AAC, the only possible and most compact solution is the RGC..32, which meets the requirement with 5mm spacing between each unit.

With the 18000 A<sup>2</sup>s of the RGC..32 it is possible to use B-type MCBs for protection of the SSR without the need to increase cable lengths.

### BENEFITS :

- Panel space savings with the RGC..32, which is the most compact solution with the best performance
- Inventory reduction with one model for all uses
- Time savings in mounting of solid state contactors vs. hockey pucks
- System cost savings with the use of compact SSRs and MCB short circuit protection