



**Sensors**



**Switches**



**Controls**

## Application notes



**Application Note : March 2020**

**Market involved : Transportation**

**Product : RM1D060D50**

**Customer : OEM, Panel builder**

**Subject : Switching of DC valves on railways**

### CUSTOMER ISSUE :

Products used on railways (or any other moving vehicle) are subject to vibrations.

It is necessary to provide a solution to control the switching of a DC valve used to control the water pump for the toilets on the train.

The mechanical relays have a short lifetime and contact issues since they are subject to vibrations during operation.

### OUR SOLUTION :

The RM1D series is a fully solid state solution and does not involve any moving parts.

The RM1D060D50 is rated with a max. 60V 50ADC and can be controlled with voltage in the range of 4-32 VDC.

Integrated transil protection on the output protects the output mosfets from damage due to over-voltages.

### BENEFITS :

- Long lifetime: a solid state solution can last for many more switching cycles than a mechanical relay
- Reliability: no issues with contact arcing or contacts not making contact
- Immune to vibrations
- Easy to mount directly it on the chassis of panel