



Sensors



Switches



Controls



Fieldbuses

Application notes



Application Note : May 2017

Market involved : Lifts and Escalators

Product : RSGD 45mm

Customer : Panel builders

Subject : Hydraulic lifts

CUSTOMER ISSUE :

In the market of hydraulic lifts, customers need to reduce the starting current of the hydraulic pump so as not to affect the electrical network.

The hydraulic pump needs a very fast start – typically in less than 1 second, to reduce the delay between the start of the pump and the time the lift door starts to close.

Hydraulic lifts are normally used in low-rise buildings up to a maximum of 6 floors.

The required starts per hour could reach 40 to 60.

In some cases our customers need to retrofit the electrical panel, replacing mechanical contactors and/or star-delta starters with soft starters.

OUR SOLUTION :

The RSGD 45mm series is a very compact soft starter that is just 45mm wide, with an operational current of up to 45A_{rms}.

The ramp-up time can be adjusted to only 1second to suit applications such as hydraulic lifts.

The RSGD algorithm works on a self-learning current limit to reduce starting current and enable more pump starts to be performed. This ensures ideal starts under different loading conditions.

We also provide starts/hr tables to correctly size the soft starter depending on the number of starts required.

Ramp-down time can also be set to 0, thereby allowing the pump to coast to a stop (no ramp-down).

BENEFITS :

- Extremely easy to use – only 3 adjustments required
- Self-learning current limit algorithm reduces voltage network disturbances
- The electronic overload ensures maximum pump protection under anomalous conditions
- Alarms can also follow an auto-recovery process, resulting in the reduction of downtime and fewer maintenance costs
- The QR code on the front can be used for quick fault finding in case of alarms