

CG APPLICATIONS

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Application Note : 17 July 2006

Market involved : Agriculture

Product : RSHR MIDI

Customer : Meko

Subject : Starting of Milk Cooling Units

CUSTOMER ISSUE :

To reduce the peak energy demand when starting up milk cooling units.

On remote dairy farms the available power supply can be limited. Sometimes alternative energy is used.

Milk is cooled and then transferred to large storage tanks. Scroll compressors in the cooling systems can have start currents that go up to 6 x FLC (full load current).

OUR SOLUTION:

The RSHR MIDI is a compact soft-starter that can help reduce the starting current and hence the peak energy demand.

The ramp up time can be adjusted to less than 1s as required for a typical scroll compressor.

The voltage supplied to the load is gradually increased by the device to ensure a smoother start.

ACHIEVED BENEFITS:

- Starting currents required by the milk cooling units is reduced by around 40%
- The farm supply is not interrupted due to voltage dips during compressor starts.
- There is no adverse effect on other farm equipment.
- Lighting flicker is avoided.
- It is not necessary to increase the energy supply to the farm.
- Supply cables do not need to be enlarged.
- Protection devices do not trip unnecessarily.

