



Success Story Drive Engineering

DC motor: Customised motor solution for more power and longer life

There is no way of avoiding the access barrier at the supermarket. The swivel barriers require a powerful drive to ensure that they open and close reliably, even when there is a steady stream of customers. Gear motors integrated into the narrow tube of the barrier play an important part. Elektrosil has developed a clever motor solution, which was exactly matched to the system, for a customer in the vending sector.

► The challenge

A motor for 2 million cycles: The client was looking for an efficient and cost-friendly alternative for the access barrier drives for a guidance system. Elektrosil undertook the task of finding a suitable motor with the appropriate dimensions. The objective was a motor with suitable power rating, customised connecting cable and improved life.

► The solution

Thanks to in-depth knowledge of gear motors and extensive connections to manufacturers, the Elektrosil team found a suitable model with a technical specification which was agreed in close collaboration with customers and suppliers. The motor was just the ideal size and, with its cylindrical shape, fitted perfectly into the tubular frame of the barrier.

In order to achieve a longer service life, the technical team replaced highly stressed

components of the standard motor. They used a lower wearing type of carbon for the carbon brushes and replaced the bearings. The new motor solution confirmed its endurance in a sensory load test: the drive performed the opening and closing operations over the 2 million cycles required by the customer.

The technical team also used a specific cable and connector solution for making the connections. The contacts were attached to the side of the housing such that the whole drive, including connections, could be fitted into the tube, thus making servicing easy.

The whole project took approximately 6 months, during which the team was in continuous communication with the customer.

Project information

- Client: Manufacturer of innovative solutions in the purchasing and retail sector
- Sector: Vending/POS

Elektrosil's services

- Application advice, development supervision, design-in support
- Quality Assurance
- Engineering and production
- Completely customised applications





“A motor with optimised service life?
That’s when I called Elektrosil.”

► Advantages and benefits

With the optimised gear motor, the customer obtained a drive solution which was perfectly matched to his requirements. Elektrosil’s development not only replaces the previous model, but also exceeds it with regard to service life and maintenance characteristics. What is more, the modified gear motor falls within a clearly defined financial frame which differs substantially from the cost of a completely new development.

With the effective combination of drive expertise and experience in cable assemblies, Elektrosil has succeeded in producing a high-performance, customer-specific solution which provides additional added value to an existing system.

Do you want to upgrade your system and need advice? Then give us a call.



Customised motor solution for more power and longer life

+ Elektrosil’s strengths

With this customised development in the drive technology field, Elektrosil’s experts utilised their know-how in the modification of electric motors and their expertise in cable assemblies. The excellent relationships with the suppliers, who carried out the modifications specified by Elektrosil on a one-to-one basis, were brought to bear when implementing the necessary changes.

