MEILLER Upgrades Its Product Line With The Siemens Sidoor AT 40 Door Drive Unit

MEILLER Product Information
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Many Innovations for Greater Comfort in Operations and Diagnosis:

As of March 2011, Siemens' newly developed Sidoor AT40 comfort elevator door drive will replace the almost legendary AT25 door drive system as the new series drive system for MEILLER elevator doors.Adding the AT40 to MEILLER's product line represents a considerable increase in value compared to its predecessor.

•IP 54 Motor Protection Rating as Standard.

This door drive system operates MEILLER car doors weighing up to 200kg or 400kg in the usual and reliable manner, both motors are supplied as standard with IP54 protection rating. This results in an additional protection of the encoder and an additionally optimized strain relief system for the connecting lines. The principle of automatic motor detection during startup of the door drive system is also applied here and enables the operation of all AT18 motors. The use of other connector types prevents a confusion with the AT15/25 system.

•Special Operating Profiles for MEILLER Doors.

The lack of adjustment potentiometers represents an important innovation in the AT40 over the AT25. Instead, six operating profiles were programmed for all types of skates. These can be activated by actuating a key combination or an integrated terminal module. The parameter sets 1 to 3 were matched to the TA6 standard skate and the parameter sets 4 to 6 to the TA7/TA9 comfort skates especially for MEILLER doors.

•Integrated Terminal Module for Simple Adjustment and Diagnosis. In addition to that, 26 controllable profile parameters are able to create not only a completely new and individual operating profile with the aid of the integrated terminal module (keyword: modernization of third-party doors), but also offer a

better diagnostics capability with the aid of an event and statistics memory. Even the closing forces and counterweight compensation can be adjusted by means of a key combination or the terminal module.

- Automated Functions for Greater Safety.

The integrated friction and door weight recognition module automatically reduces the travel speed in the direction of closing in order to not to exceed the permissible 10-joule limit of the kinetic energy as per EN 81. If a mechanical blockage is recognized, the point of impact is stored and the door speed is decreased to inch-travel speed shortly before the door starts to move toward this point again. After the obstacle is eliminated, the doors start to move again using the originally selected operating curve.

- Simple Software Changes and Operating Curve Display

The AT40 is not only equipped as standard with an integrated relay board, by means of which both end positions and a mechanical reversing are signalled to the elevator control system, but also with the RS485 communication interface.

The optional "Service Tool HT18/40" can be connected via this interface for adjusting the door's parameters and auxiliary functions or via the Siemens "AT USB adapter" of a laptop. Software changes can be implemented at any time on site in connection with the "Sidoor User Software".

This software includes an "operating curve editor“ with which all 26 parameters can be loaded, adjusted and saved using the software's menu. Displaying the operating curve on the monitor and the oscilloscope function enable the presentation of the door speed and the path travelled.

The CAN module, which is available as an alternative to the relay board, facilitates communication with CANopen-compliant elevator components.

- Integrated Supply of Optoelectronic Safety Systems

The short-circuit-resistant 24V DC auxiliary voltage output designed to withstand up to 400mA can supply existing optoelectronic safety systems, e.g. light curtains or barriers.

- Easy to Understand Quick Reference Guide for Fast Startup

Startup can be implemented on site in no time at all thanks to the quick reference guide which focuses on essential tasks. All control inputs and relay outputs are clearly recognizable as a result of the LEDs.

- Innovative Housing Concept

Compared to the AT25, the size of the housing was decreased by 50%. The plastic housing can now be opened without requiring a tool, thus preventing the possibility of losing screws.

- Optional Emergency Power Supply

The optional "EPM24 emergency power supply module" ensures operation is not interrupted in the event of a power outage with the aid of an external 24V battery. At the same time, the initial speed is changed in order to reduce the battery's discharge.

- Added Value at No Additional Cost

The MEILLER series drive concept will comprise the AT40 controller, two motor variations for door panels weighing up to 200kg and 400kg and a matching toroidal power transformer as power supply.

This concept replaces both the AT18 / 200kg door drive system and the AT25 / 400kg door drive system without additional costs for MEILLER customers.

- Advanced Version Available as Option

In addition, a more advanced version "AT40 XL" will also be available for heavier door panels or for offering shorter door opening times. In this case, the toroidal power transformer is replaced by the "Sidoor N40" switching power supply.

- Standard Energy Saving Mode

All MEILLER elevator sliding doors are already equipped as standard with the "Eco" energy saving mode in conjunction with Siemens' door drives and driving element units without zone locking system at no additional costs for customers.

This system allows for deactivating the door close signal in case of long-term break in operation with door closed. In such case, the motor is no longer supplied with electricity and the power consumption of the door drive system is reduced by approx. 10W.

A possible opening of the door skate and hook lock contact is prevented by using integrated magnets. In the event there is a car signal or landing signal, the door close signal is actuated again and the elevator can move away without delay.

With the aid of the optional MEILLER "Eco plus" system, the door controller can also be de-energized completely when the door is fully closed and there is extended break in operation. In such case, power consumption is decreased additionally by approx. 6W.

The magnetic switch integrated in the door transom indicates the closed position of the door to the AT40 controller and opens the door again immediately at normal speed when the mains power supply is restored. Thus, a slow initialization operation is no longer necessary.

- Increased Benefit for Investors and Operators

Thanks to the standard implementation of Siemens' new AT40 comfort elevator door drive system, MEILLER's high-quality elevator doors that have proven themselves a million times over have experienced once again a significant upgrade.

The use of these optimized door systems, both in new structures and as part of modernization projects, offers investors and facility operators sustainable cost advantages thanks to the constant energy savings in standby mode and in the shortened startup time period.