SmarTRAQ is a closed-loop technology, limitless, door operator designed to replace older mechanical circuits, cams, and resistors with a digital control system providing precise door operation and reliable performance. Because SmarTRAQ is limitless, Door Open Limit and Door Closed Limit signals are generated electronically — DOL and DCL mechanical switches are not required. SmarTRAQ dramatically improves door operation regardless of lobby door mass and wind loading. SmarTRAQ is A17.1, CSA-B44.1 compliant.

SmarTRAQ provides flexibility:

- Choose to modernize an existing installation economically with a new brushless motor and microprocessor-based inverter drive (re-using existing mechanical equipment)
- Replace the complete operator with a new brushless motor, microprocessor-based inverter drive, and new center-parting or side-slide door operator package.
Product Specification

The SmarTRAQ limitless, closed-loop, door operator includes a permanent-magnet, brushless motor with a built-in encoder and a microprocessor-based inverter drive. The compact inverter drive enclosure mounts easily on the elevator car. The motor replaces the original motor when re-using existing operator packages or mounts to the new operator package when the complete door operator is being replaced or newly installed.

Table 1.1 SmarTRAQ Specifications, Interface Data, and Code Compliance

<table>
<thead>
<tr>
<th>Door Operator Drive Technical Data</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Input Voltage</strong></td>
<td>120VAC, 50/60Hz, Single-phase</td>
</tr>
<tr>
<td><strong>Output Voltage</strong></td>
<td>3-Phase, 30VAC, 9A (26A peak)</td>
</tr>
<tr>
<td><strong>Power Requirement</strong></td>
<td>300VA</td>
</tr>
<tr>
<td><strong>Controller Type</strong></td>
<td>Closed Loop, Distance and Velocity Feedback, Limitless</td>
</tr>
</tbody>
</table>

**Door Motor Technical Data**

<table>
<thead>
<tr>
<th>Type</th>
<th>Three-phase, synchronous, brushless motor with permanent magnet excitation and built-in digital encoder</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Motor</strong></td>
<td>0.564 HP, 3-Phase AC, 8-Pole, 30 Volt, 9A (26A peak), 0 — 2000 RPM, 0 — 133Hz</td>
</tr>
<tr>
<td><strong>Encoder</strong></td>
<td>640 PPR (Pulses Per Revolution)</td>
</tr>
</tbody>
</table>

Elevator Control Interface Data

<table>
<thead>
<tr>
<th>Input Signals</th>
<th>Door Open</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Door Close</td>
</tr>
<tr>
<td></td>
<td>Nudging</td>
</tr>
<tr>
<td></td>
<td>Heavy Door</td>
</tr>
<tr>
<td><strong>Input Signal Level</strong></td>
<td>Dry Contact</td>
</tr>
<tr>
<td>Output Signals</td>
<td>Door Open Limit</td>
</tr>
<tr>
<td></td>
<td>Door Close Limit</td>
</tr>
<tr>
<td></td>
<td>Limit 1</td>
</tr>
<tr>
<td></td>
<td>Limit 2</td>
</tr>
<tr>
<td><strong>Output Signal Level</strong></td>
<td>N.O./N.C. Contact, 10 Amp</td>
</tr>
</tbody>
</table>

Code Compliance

For ASME A17.1-1996 (Rule 210.15), ASME A17.1-2000/CSA B44-00 (Requirement 2.26.5), or CSA B44-94 (Requirement 3.12.1.5) compliance, mechanical Door Position Monitoring Switch must be provided.
Application

*SmarTRAQ* offers wide mechanical and electrical interface, providing a cost-effective solution for modernization of existing door operators or for new installations. *SmarTRAQ* models support:

- MCE
  - Center-Parting Door Operator Package
  - Two-Speed Center-Parting Door Operator Package
  - Single-Speed Side Slide Door Operator Package
  - Two-Speed Side Slide Door Operator Package
- Westinghouse
  - Model A Series
  - Model B Series
  - Model BB2
  - Model E Series
  - Model EZ
  - Model HY
  - Model MG
- Haughton
  - T
  - T1
  - TH
- Montgomery
  - MAC Series
- Dover
  - DC Series
  - HD Series
- Otis
  - 6970
  - 7300
  - 7782
- GAL
  - All Models
- Armor
  - C4
SmarTRAQ Specifications

SmarTRAQ Models
To support a wide selection of door operators, SmarTRAQ motor configurations include:

Figure 1.1 Motor Configurations

Model 4151-F
Otis 7300
Westinghouse A, B, and BB2

Model 4157-F
Otis 6970

Model 4152-B2
Haughton TH

Model 4151-B1
Armor C4
GAL (all models)
Haughton T and T1
Otis 7782
Westinghouse E and HY

Model 4150-B3
Dover DC and HD

Model 4150-B1
MAC
Westinghouse EZ