

LIMITLESS CLOSED LOOP CONTROL REPAIR AND MODERNIZATION



Door Operator Drive Technical Data

Input Voltage

120 VAC, 50/60Hz, Single Phase

Output Voltage

3 Phase, 30 VAC, 9A (26A Peak)

Power Requirement

300 VA

Controller Type

Closed Loop, Distance Feedback
and Velocity Feedback, Limitless

Door Motor Technical Data

Three phase synchronous brushless motor with permanent magnet excitation and built-in digital encoder.

Motor

0.564 HP, 3 Phase AC, 8 pole,
30 Volt, 9A (26A Peak), 0-2000 RPM, 0-133Hz.

Encoder

640 PPR (Pulses Per Revolution)

Elevator Control Interface Data

Input Signals

Door Open
Door Close
Nudging
Heavy Door

Input Signal Level

Dry Contact

Output Signals

Door Open Limit
Door Close Limit
Limit 1
Limit 2

Output Signal Level

N.O./N.C Contact, 10Amp

Modernizing Door Operators with Limitless Closed Loop Control

MCE's SmarTRAQ Closed Loop Control compensates for variation that can cause other door operators to operate inconsistently. SmarTRAQ is self-correcting, so wind and temperature changes or even minor debris won't hamper door operation.

SmarTRAQ is smart enough to recognize that doors may have varied weights. It uses the force necessary to maintain a pre-set motion profile, so the heaviest doors will open and close as efficiently and as smoothly as the lightest. You'll see the same great operation with every set of doors – heavy, bronze-clad or lightweight doors.

Cruise Control for Your Door Operator

Closed loop control constantly monitors the speed and position of the doors, and compares this data to predefined opening and closing profiles. Constant monitoring of both position and velocity is "closing the loop." It works like a car's cruise control – you set a particular speed and it constantly adjusts the throttle to ensure your car travels at the desired speed.

Motion Profile

SmarTRAQ's closed loop control system controls more than just the speed of the doors; it controls the entire motion profile – everything the doors must do to open, close, or nudge. The control system determines what force is necessary to make the door operator conform to the motion profile and then controls motor current accordingly.

Cost Effective

SmarTRAQ's closed loop control is an economical way to modernize door operation. You can retain durable and reliable equipment. There is no need to replace the entire door operator – just the existing motor and control

Limitless Operation

SmarTRAQ's "limitless" design can dramatically reduce installation time, reoccurring maintenance, and troublesome mechanical problems associated with existing electromechanical limit switch adjustment.

Code Compliant

SmarTRAQ's closed loop control has standard opening and closing profile settings so doors operate consistently within code limits. Yet the system may be adjusted to meet performance criteria within those limits.

Improved Reliability

SmarTRAQ's closed loop control varies force as needed to operate doors. Minor debris in the track, wind or other changing atmospheric conditions won't cause doors to stop or slow down.

