



158 158

C6 Overhaul & UAT Modification

South West Trains, East Midlands Trains, Arriva Trains Wales, Abellio ScotRail.

Due for completion: 2020



EAST MIDLANDS TRAINS











OVERVIEW

Train Door Solutions (TDS) have designed a new door control system for the Class 158 passenger door system. The project was sponsored by Porterbrook Leasing to integrate into the C6 overhauls for their 158 fleet. The system will also be available for Class 159. The new system is designed as a direct replacement for the existing system.

The TDS system provides direction and speed control, obstacle detection, speed locking, crew access and emergency egress. Door system safety has been maintained. TDS is also able to offer a full overhaul of the main door actuator.

Atkins Rail has independently reviewed the door system upgrade against mandatory requirements and have granted engineering acceptance.

The parts are provided with a full 12 month warranty.

COMPONENTS

- DOOR CONTROL MODULE
- AIR SUPPLY FILTER/REGULATOR MODULE
- ISOLATOR VALVE
- CREW VALVE
- EMERGENCY PUSH-BUTTON
- PRM MODIFICATIONS
 (PEOPLE WITH REDUCED MOBILITY)
- ALL NECESSARY FITTINGS AND TUBING















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TECHNICAL SPECIFICATION

DOOR CONTROL PLATE: Steel mounting plate supporting the following control components: Five station manifold block containing the door control valve, crew pilot valve, emergency pilot valve, obstacle detection valves and pressure switches. Timer relays for obstacle detection re-close and re-open.

ISOLATOR VALVE: 3 port plunger operated valve.

CREW VALVE: 3 port rotary valve complete with mechanical operator for cab end and intermediate crew access and egress.

EMERGENCY PUSH-BUTTON:

3 port push-button valve

FILTER/REGULATOR: Air supply filter and regulator complete with pressure gauge and locking adjuster knob on regulator. Filtration rating 5µm.

FITTINGS & TUBE: All pneumatic connections are push-in quick release type. All tubing is nylon in accordance with BS5409.

UAT MODIFICATIONS: Electrically operated telescopic mechanism and EDCU (Electrical Door Control Unit). Both UAT and adjoining vestibule door widened to meet PRM (People with Reduced Mobility) requirements.

CONTROL	ELECTRO-PNEUMATIC
INPUT VOLTAGE	24 VDC
VOLTAGE RANGE	+/- 30% OF INPUT VOLTAGE
TEMPERATURE RANGE	-10°C TO +65°C
OPERATING PRESSURE	7 BAR











