

Class 87 Electric Locomotive

| 1 | BACKGROUND | .2 |
|---|--|----|
| | 1.1 Class 87 Overview | 2 |
| | 1.2 Class 87 Origins | 2 |
| | 1.3 Technical Specification | 2 |
| 2 | THE CLASS 87 INTERCITY EXECUTIVE | .3 |
| | 2.1 Class 87 in Intercity Executive livery | 3 |
| 3 | ROLLING STOCK | .3 |
| | 3.1 Intercity Mk3 First | 3 |
| | 3.2 Intercity Mk3 Second | 4 |
| | 3.3 Intercity Mk3 RFB | 4 |
| 4 | CAB CONTROLS | .5 |
| 5 | SCENARIOS | .6 |
| | 5.1 Opening the Taps | 6 |
| | 5.2 AC from GC | 6 |
| | 5.3 Evening Rescue | 6 |
| 6 | LOCOMOTIVE NUMBERING | .7 |
| 7 | CREDITC | _ |

1 Background

1.1 Class 87 Overview

The British Rail Class 87 is a type of electric locomotive built from 1973-75 by British Rail Engineering Limited. 36 of these locomotives were built to work passenger services over the West Coast Main Line and they were the flagships of British Rail's electric locomotive fleet until the late 1980s when the Class 90s started to roll off the production line. The privatisation of British Rail saw all but one of the fleet transferred to Virgin Trains where they continued their duties until the advent of the new Pendolino trains. The 87s were then transferred to other operators or withdrawn.

1.2 Class 87 Origins

A requirement for more electric locomotives came about after the electrification of the WCML was extended from Weaver Junction north of Crewe to Preston, Carlisle and Glasgow. Initially, three Class 86 locomotives were used as test-beds to trial equipment (mainly electrical equipment and suspension) that would be used in the new locomotives; effectively, these locomotives were Class 87s in everything but appearance.

The external design of the Class 87 was clearly derived from that of the Class 86; the only major detail differences were two front cab windows on the 87 instead of the three of the 86, and also the lack of headcode indicator boxes. The 87s were also fitted with multiple working equipment which enabled locomotives to work with other members of the class (and some Class 86s) while controlled by one driver. Power output was also increased to 5000 hp in order to deal with the more demanding gradients on the northern half of the WCML such as Shap Fell and Beattock Summit.

1.3 Technical Specification

TOPS Number Class 87
Wheel Arrangement Bo-Bo
Weight 84 tonnes

Height 12ft 2¼in (3.77m) with pantograph down

 Length
 58ft 6in (17.83m)

 Width
 8ft 8in (2.68m)

Electrical System 25kV AC Overhead Pantograph

Power Output5,000hp (3,730kW)Maximum Tractive Effort58,000lb (258kN)

Brake Type Air Axle load class RA 6

2 The Class 87 Intercity Executive

2.1 Class 87 in Intercity Executive livery



3 Rolling Stock

3.1 Intercity Mk3 First



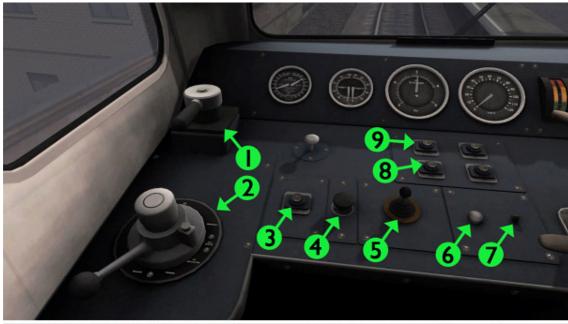
3.2 Intercity Mk3 Second



3.3 Intercity Mk3 RFB



4 Cab controls





- 1. Loco brake
- 2. Train brake
- 3. Anti-slip button
- 4. Wipers
- 5. Horn
- 6. AWS reset
- 7. Headlight switch
- 8. Pantograph
- 9. Fault Reset

- 10. Reverser
- 11. Tap Changer12. Instrument Lights

5 Scenarios

5.1 Opening the Taps

Learn the controls of the Class 87 locomotive and take some empty coaching stock on the short run from Polmadie Depot to Glasgow Central.

Rating: Easy

Duration: 15 minutesScenario Type: Standard

5.2 AC from GC

Following on from what you have learned in scenario 1, you are now able to take charge of a passenger service.

Rating: Medium

Duration: 35 minutesScenario Type: Standard

5.3 Evening Rescue

Following the earlier failure of an electric locomotive that was hauling a Glasgow bound express at Carlisle, you have been sent from Carlisle Yard to collect the coaching stock and continue the service.

· Rating: Hard

• Duration: 95 minutes

Scenario Type: Standard and Career

6 Locomotive Numbering

Provided with the Class 87 Electric Locomotive Add-on is a selection of Nameplates

These nameplates are accessed via the numbering system provided with Train Simulator 2013. To change the number, open the Scenario Editor. Double Click on the Class 87 locomotive and open its property window on the right hand side.

| Number | Nameplate | Numbering System |
|--------|-------------------|------------------|
| 87001 | Royal Scot | a87001 |
| 87003 | Patriot | b87003 |
| 87004 | Britannia | c87004 |
| 87010 | King Arthur | d87010 |
| 87013 | John o'Gaunt | e87013 |
| 87016 | Sir Francis Drake | f87016 |
| 87017 | Iron Duke | g87017 |
| 87018 | Lord Nelson | h87018 |
| 87020 | North Briton | i87020 |
| 87022 | Cock 'o the North | j87022 |
| 87023 | Velocity | k87023 |
| 87025 | Borderer | 187025 |
| 87026 | Redgauntlet | m87026 |
| 87031 | Hal o' the Wynd | n87031 |
| 87032 | Kenilworth | o87032 |

7 Credits

The team at Railsimulator.com would like to thank the following:

Darren Porter

All our dedicated Beta Testers