



## CM CLASS LOCOMOTIVE

### General

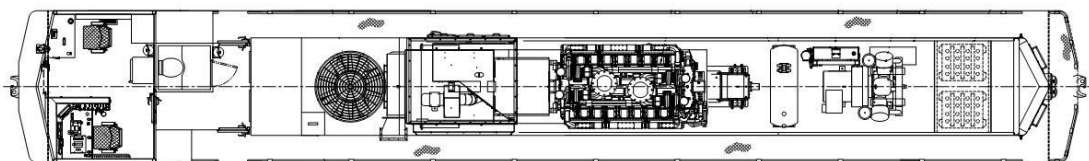
|                           |             |                            |              |
|---------------------------|-------------|----------------------------|--------------|
| <b>Class</b>              | CM          | <b>Manufacturer</b>        | Motive Power |
| <b>Locomotive Numbers</b> | 3301 - 3310 | <b>Year of Manufacture</b> | 2012 - 13    |
| <b>Quantity</b>           | 10          |                            |              |

### Operating

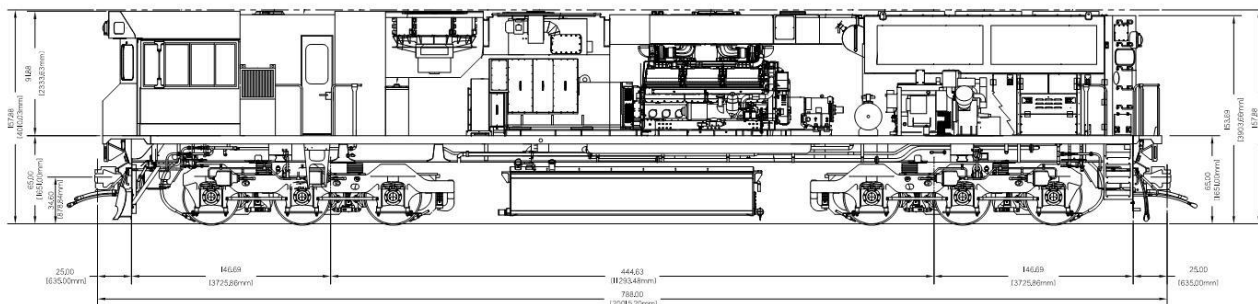
|                             |                            |                            |   |
|-----------------------------|----------------------------|----------------------------|---|
| <b>Load Category</b>        | L3                         | <b>Live Weight</b>         | 132.0T  |
| <b>Speed Category</b>       | TBA                        | <b>Dead Weight</b>         | 145.2T  |
| <b>Drawbar Capacity</b>     | 1.80MN                     | <b>Axle Load</b>           | 22.0T   |
| <b>Maximum Speed</b>        | 110km/h                    | <b>Track Gauge Options</b> | <input checked="" type="checkbox"/> Broad 1600mm    |
| <b>Fuel Capacity</b>        | 10,000L                    |                            | <input checked="" type="checkbox"/> Standard 1435mm |
| <b>Length Over Couplers</b> | 22.01m                     |                            | <input checked="" type="checkbox"/> Narrow 1067mm   |
| <b>Operating Station</b>    | Single – Short end leading |                            |   |

### Technical

|                                   |                    |                          |                        |
|-----------------------------------|--------------------|--------------------------|------------------------|
| <b>Locomotive Model</b>           | MP33C              | <b>Wheel Arrangement</b> | Co-Co                  |
| <b>Engine</b>                     | Cummins QSK78      | <b>Wheel Diameter</b>    | 1067mm                 |
| <b>Maximum Gross Power</b>        | 2460kW/3300hp      | <b>Alternator</b>        | Kato                   |
| <b>Engine rpm</b>                 | 1800               | <b>Traction Motors</b>   | D87BTR                 |
| <b>Lube Oil Capacity</b>          | 492L (TBC)         | <b>Control System</b>    | Q-Tron - QESIII        |
| <b>Cooling Water Capacity</b>     | 496L               | <b>Air Brake</b>         | Wabtec Fastbrake       |
| <b>Continuous Tractive Effort</b> | 363kN @ 16.0km/h*  | <b>Dynamic Brake</b>     | 3 stage extended range |
| <b>System Cont. TE Capability</b> | 414kN @ 16.0km/h** | <b>Air Conditioning</b>  | Fitted                 |
| <b>Adhesion</b>                   | 28%*               | <b>Toilet</b>            | Fitted                 |
| <b>Gear Ratio</b>                 | 69:18              |                          |                        |



General arrangement for illustrative purposes only



\* All weather adhesion testing required for confirmation \*\* Maximum system capability, limited by traction motors.