



**Main line Locomotive AD43C**  
(Under Licence of Alstom)

## Description

The locomotive AD43C exists in three versions (called A,B and C) with specific characteristics for three different uses:

- Locomotive A = Passenger version 20.5 metric tones per axle,
- Locomotive B = Freight version 20.5 metric tones per axle,
- Locomotive C = Freight version 23 metric tones per axle,

The freight versions (Locomotives B and C) have a limited maximum speed of 110 km/h.

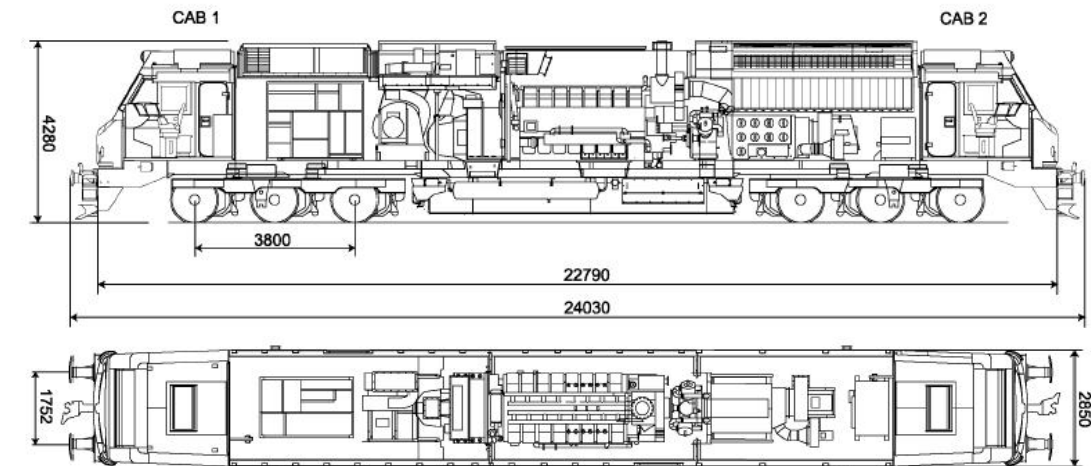
The passenger version (Locomotive A) has a limited maximum speed of 150 km/h.

During a Consortium between Wagon Pars and Alstom, titled the head of Consortium, 100 sets of AD43C type locomotives with 4300 Horse Power will be delivered to Islamic Republic of Iran Railway. 80 sets of these locomotives will be manufactured by Wagon Pars in PLB form.

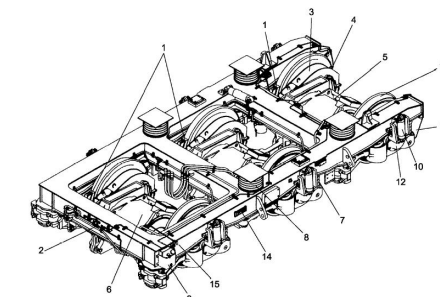
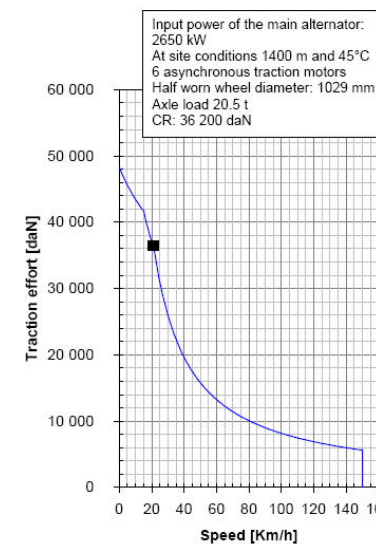
According to aforesaid consortium, hitherto, Alstom has delivered 20 sets of locomotives to RAI in CBU form and Wagon Pars has manufactured another 56 sets, under technical supervision of Alstom. The share of Wagon Pars Company in this consortium is steel structure and bogie manufacturing, final assembly, commissioning tests and delivering the locomotives to RAI.



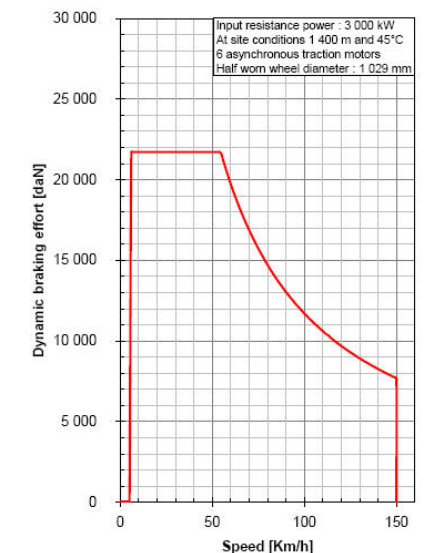
## Layout



AD 43 C Passenger locomotive 20.5 Tonnes



AD 43 C Passenger locomotive 20.5 Tonnes



## Technical parameter

- |                               |  |
|-------------------------------|--|
| ▪ Track gauge                 | 1435 mm                                    |
| ▪ Axle Arrangement            | CoCo                                       |
| ▪ Maximum speed               | 150/ 110 km/h (Passenger/ Freight)         |
| ▪ Number of driving cab       | 2  |
| ▪ Power Transmission Type     | AC – AC                                    |
| ▪ Diesel Engine Model         | 16 RK 215 (Ruston)                         |
| ▪ Diesel Engine Power         | 3160 kw                                    |
| ▪ Starting Tractive Effort    | 48250/ 54200 daN                           |
| ▪ Main Alternator             | Alstom type AT 14                          |
| ▪ Traction Inverter           | Alstom Onix 1500, IGBT, water cooled       |
| ▪ Traction Motor              | Alstom, Type 6FRA 4564, Forced ventilation |
| ▪ Dimensions                  | 24030/ 2850/ 4280 mm                       |
| ▪ Weight                      | 123 ton (with 5000 lit fuel+8×60 lit sand) |
| ▪ Maximum Permitted Axle Load | 23 ton (Full ballast loaded)               |
| ▪ Fuel Capacity               | 9200 lit                                   |