

# SOFTRONIC

Craiova, Romania



## TransMontana

Bi-system Electric Locomotive





# SOFRONIC

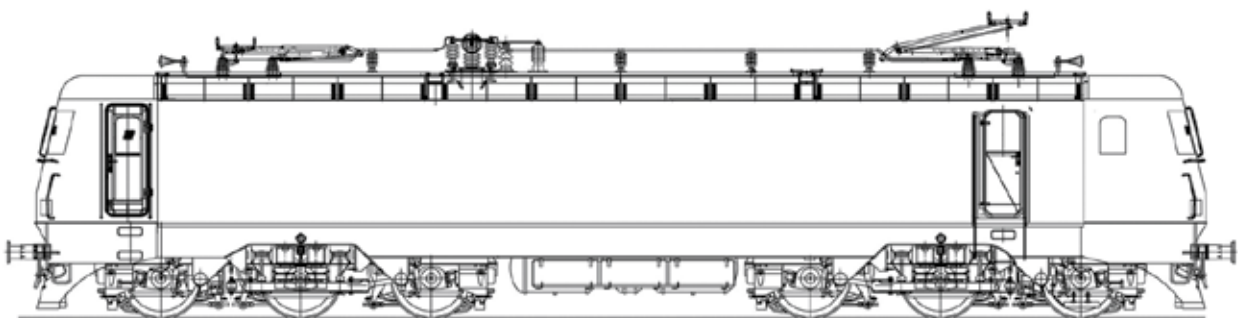
**Transmontana** represents the first loco with asynchronous traction motors, successor of a series of locomotives manufactured by Sofronic. This new locomotive combines Sofronic's experience in modernization and manufacture of locomotives with innovations systematically oriented to customers benefit and cost effective.

Co'-Co' wheel arrangement, equipped with an advanced power system working with both 25 kV 50 Hz and 15 kV 16.7 Hz, is powered by six asynchronous motors developing a total power of **6000 kW** capable of providing speeds of up to 200 km/h.

**Transmontana** is the most advanced electric locomotive made in Eastern Europe owning approval certificates by the Romanian Railway Authority and by the National Transport Authority from Hungary and is registered at the 2014 ERA (European Railway Agency).

The locomotive uses new developments adapted to new requirements: a new body, special asynchronous traction motors, regenerative braking, electronic power converters with IGBT, unit converter, electronic equipment for command and control, LED lights and many others.

**Transmontana type locomotives** can be seen on the railways from Romania and Hungary specifically adapted for heavy freight trains.



New Design



Dr  
to





Driver desk according UIC 651 standard.

• axle formula	• Co'-Co'
• supply power voltage	• 25kV 50 Hz / 15kV 16.7 Hz
• length over buffers	• 20 700 mm
• width	• 3 000 mm
• pantograph working height from the upper surface of the tracks	• 4 850 ÷ 6 700 mm
• distance between the centers of the bogies	• 10 300 mm
• distance between the extreme axles of a bogie	• 4 350 mm
• wheel diameter in new state	• 1 250 mm
• wheel diameter in semi-used state	• 1 210 mm
• maximum speed	• 160 Km/h
• total load without ballast	• 120 t ±2%
• axle load with balast	• 21.5 t ±0.5 t
• nominal power	• 6 000 kW
• unioral power	• 6 600 kW
• traction effort at start-up	• 435 kN
• nominal power of traction transformer	• 8 100 kVA (continuous)
• rail gauge	• 1 435 mm
• minimum radius curves of depots	• 90 m



Driver Desk UIC 651 approved  
made by Softronic



Bi-system ABB Transformer  
(Switzerland)



Stemmann Technik  
Pantograph (Germany)



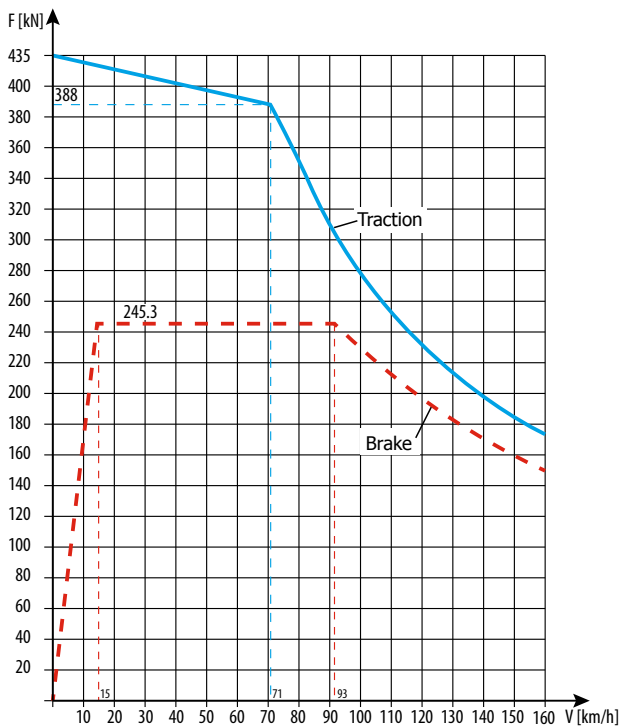
Crash puffer  
Est Eisenbach (Germany)



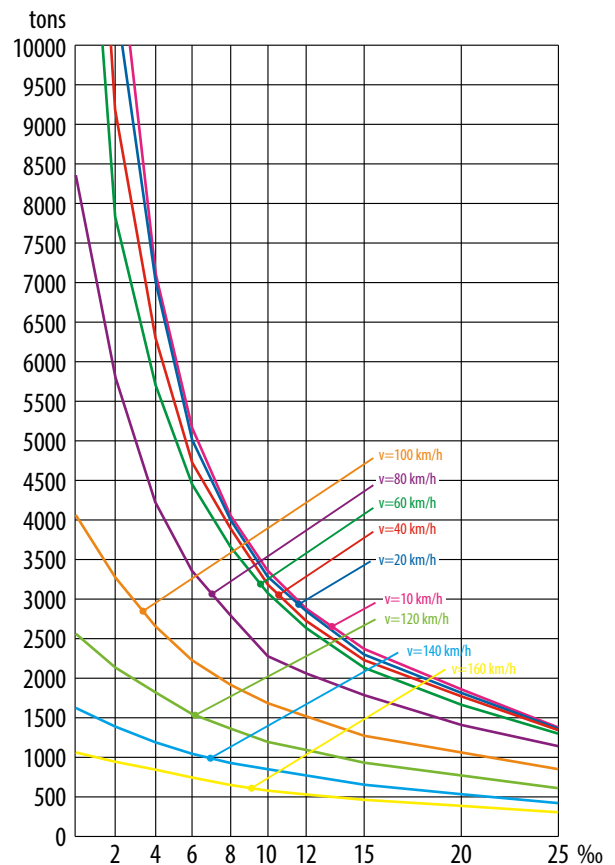
Knorr Bremse braking  
System (Germany)



Traction effort and dynamic brake characteristics



Train loads as function of different gradient and operating speed



## SOFTRONIC SRL

40 Calea Severinului Street,  
Craiova, 200609, Dolj county, Romania  
Phone: +40 351 40 91 51; 40 91 52; 40 91 53; 40 91 55  
Fax: +40 351 17 89 48; 17 89 49  
www.softronic.ro  
E-mail: softronic@softronic.ro

