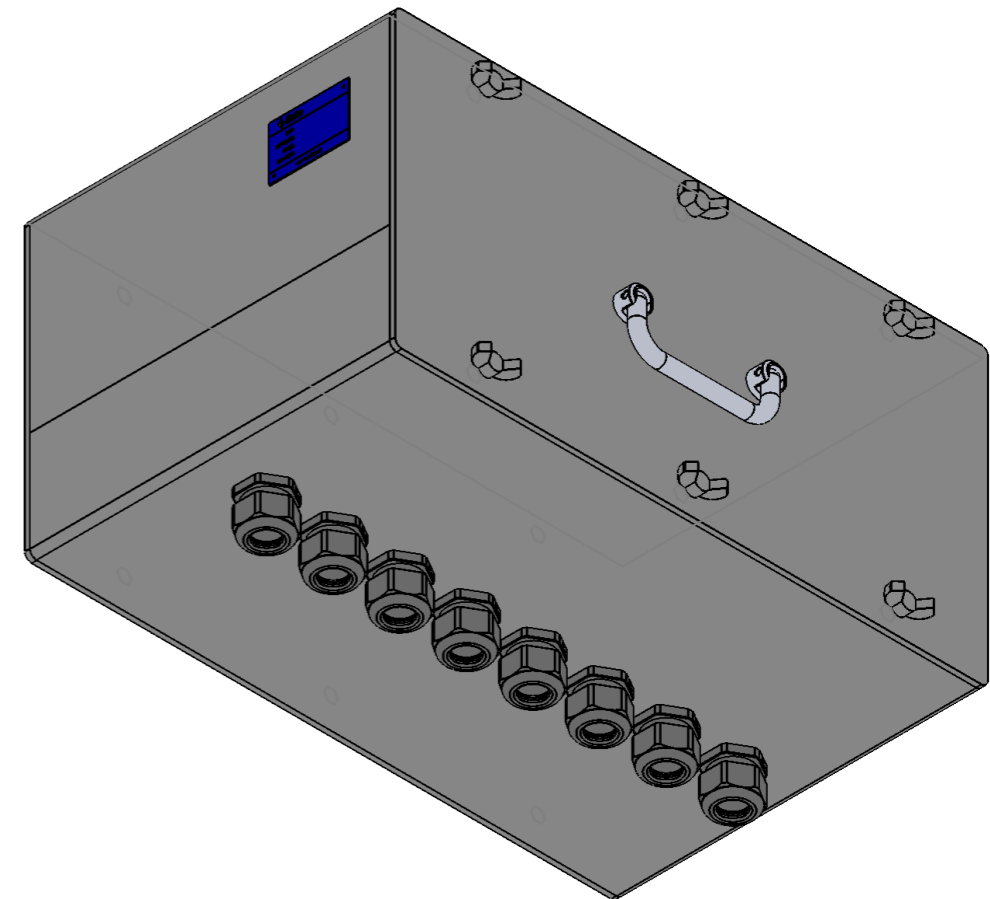# ENI-PLC/DBC Locomotive controller with software

APPLICATION

The ENI-PLC/DBC controller is used to control the drive system and auxiliary circuits of a diesel locomotive. The controller is the central element of the locomotive and connects the individual subassemblies. Using CAN communication and digital inputs/outputs, it controls the operation of the internal combustion engine and monitors its operation. It controls the excitation of the main generator supplying the traction motors. It is responsible for the configuration of the contactors that switch on the voltage from the generator to the motors. It also supervises the operation of auxiliary inverters used to power the locomotive compressor and fans cooling the traction motors. All information collected from individual subassemblies is sent via CAN communication to desktop displays installed in the locomotive cabin.

Product Data Sheet

SPECIFICATION

TYP	ENI-PLC/DBC
Rated input voltage	24 V$_{DC}$ *
	12÷32 V$_{DC}$
Communication interfaces	Communication interfaces
Digital inputs	56 inputs (modules: 3 x 16 DI 1 x 8 DI)
Digital outputs	24 relay outputs 4 A
	(modules: 1 x 16 DO 1 x 8 DO)
Analog intputs	16 analog inputs (modules: 2 x 8 AI2AO)
Analog outputs	4 analog outputs 0-10 V
	(modules: 2 x 8 AI2AO)
PWM outputs	PWM 1 x PWM OC