

TÜRASAS ESKİŞEHİR REGIONAL DIRECTORATE	TECHNICAL DATA	T.B.6767			
		REVISION	B		
		DATE	29.04.2025		
		SIGNATURE			
SUBJECT1000 Watt 110VDC/24VDC Converter					
REFERENCEE5000 Locomotive					

1.Scope

This document includes the technical information of the converter from 110 VDC to 24VDC with 1000 Watt power to be used in railway vehicles.

2.Technical Specifications

General			
Definition		Value	
Input Voltage(Vi)		110 VDC	
Input Voltage Ripple		%15 max.	
Minimum Working Voltage		66-70 VDCi	
Weight		3000 gr. max	
Operating Temp(Full Load)		-25°C ...+55°C	
Definition		Value	
Output Voltage(Vo)		24 VDC	
Output Voltage Ripple		50-100 mVpp	
Overvoltage Protection		33 VDC min.	
Efficiency		%92 min.	
Storage Temperature		-40°C ...+85°C	
Standards			
Electromagnetic Comp.		EN 50121-3-2, EN 61000-6-4, EN 61000-6-2	
Safety		EN 50155, EN 45545-2, EN 61373	
Function/Capability			
Overcurrent Protection		Overvoltage Protection	Undervoltage Shutdown
Fault/Alarm Output			
Dimensions			
Width: 230 ±3 mm		Length(Depth): 240 ±3 mm	Heigth: 55 ±3 mm
Assembly: Mounting feet that can increase the width by maximum 40mm should be used. (M4-M6)			
Scope of Delivery			
110 VDC to 24VDC Converter with male and female power and communication connectors, 2D Drawings, 3D Data and type/routine test reports, conformity documents of requested standards above			

- Dimensions and mounting interface of the product will be as shown in the figure.

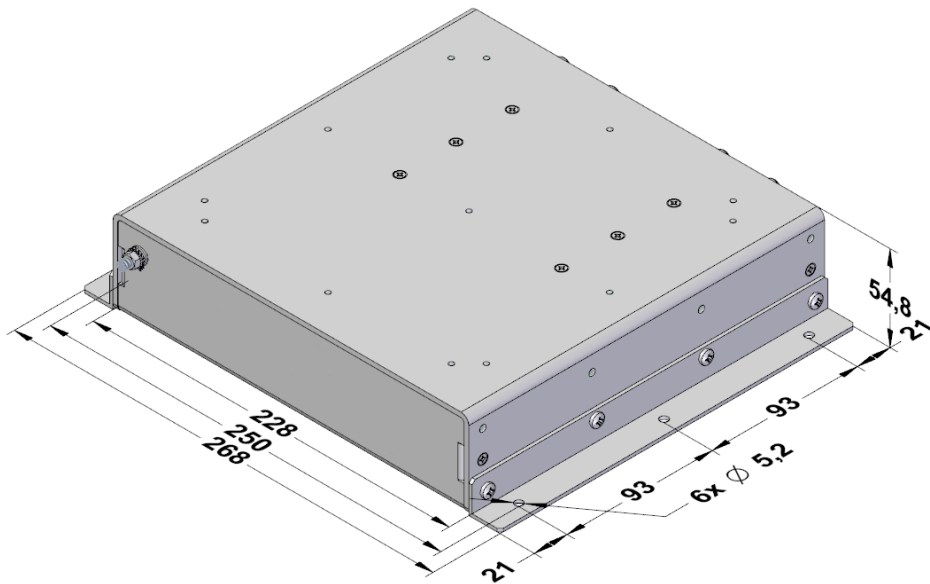


Figure 1 Dimensions and mounting interface

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- The electrical interface of the input and output power connections of the converter shall be provided through connectors for cables up to 16 mm2. - The protective earth (PE) interface shall be an M5 threaded stud. - Pin assignment for signal connector connections shall be as in the table below. <table border="1"> <tr> <td>1</td> <td>+ Inhibit</td> </tr> <tr> <td>2</td> <td>- Inhibit</td> </tr> <tr> <td>3</td> <td>- Remote sense</td> </tr> <tr> <td>4</td> <td>+Remote sense</td> </tr> <tr> <td>5</td> <td>Alarm relay NC (closed when alarm)</td> </tr> <tr> <td>6</td> <td>Alarm relay Common</td> </tr> <tr> <td>7</td> <td>Alarm relay NO (open when alarm)</td> </tr> </table> - The contractor will share the MTBF (Mean time between failures) value, LCC (Life cycle cost) value and MTTR (Mean time to repair) value of the products. 3.Guarantee and Delivery Products will be guaranteed for 2 years from the date of delivery.						1	+ Inhibit	2	- Inhibit	3	- Remote sense	4	+Remote sense	5	Alarm relay NC (closed when alarm)	6	Alarm relay Common	7	Alarm relay NO (open when alarm)
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