

INTERNATIONAL



UNION OF RAILWAYS

U I C CODE

Leaflet to be classified in Volumes :

V - TRANSPORT STOCK

VI - TRACTION

554-1
OR

3rd edition, 1-1-79

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**POWER SUPPLY TO ELECTRICAL EQUIPMENT
ON STATIONARY RAILWAY VEHICLES FROM A
LOCAL MAINS SYSTEM OR ANOTHER
SOURCE OF ENERGY AT 220 V or 380 V, 50 Hz**

SAFETY MEASURES AND ELECTRIC CABLING (1)

(1) Obligatory provisions are preceded by an asterisk : *

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- 2 -

Leaflet 554-1, 3rd edition, 1-1-79

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NOTE

This leaflet forms part of a series which also includes :

- Leaflet 533 : Protection by the earthing of metal parts of vehicles ;
 - Leaflet 550 : Installations for the supply of electrical energy to passenger rolling stock ;
 - Leaflet 552 : Electric power supply for trains taken from the train cable ;
 - Leaflet 554-2 : Power supply to mechanically-refrigerated wagons running in rafts ;
 - Leaflet 555 : Electric lighting of passenger stock ;
 - Leaflet 600 : Electric traction with aerial contact line.
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554-1
OR

- 4 -

CONTENTS

0 - GENERAL

1 - PROTECTION MEASURES

2 - FITTING OF EQUIPMENT TO VEHICLES

3 - OTHER ENERGY SOURCES

4 - SUPPLY TO ONE OR MORE VEHICLES

5 - COUPLING DEVICES

6 - SOCKETS ON REFRIGERATOR WAGONS

O - GENERAL

0.1 - The regulations in this leaflet apply to railway vehicles where electrical equipment is supplied, either completely or partly, with electrical power, from a local mains system or from another energy source with a nominal voltage of 220 V or 380 V, 50 Hz, single-phase or multi-phase, with the exception of mechanically-refrigerated wagons, if the latter are built in accordance with Leaflet 554-2.

0.2 - The regulations in this leaflet shall not apply to railway vehicles supplied by traction current through the contact line or through the train cable.

1 - PROTECTION MEASURES

***1.1** - As a measure of protection for staff on the vehicles, it is necessary to adopt an installation which makes it possible to take into account all practicable arrangements and, to this end, it must be based on the use of the protective conductor shown in Plate I, variant 1.

***1.2** - In junction cables the protective conductor must be insulated and enclosed in the same sheath as the power conductors.

***1.3** - If the measures laid down in 1.1 cannot be applied, an isolating transformer must be used. This transformer must form part of the local protection measures (Plate I, variant 2).