



PROCEDURA DI PROVE E COLLAUDI

TECHNICAL CABINET FIRE TEST PROCEDURE

LOCOMOTIVA E401

CODICE: B.20.92.010.00

EDIZIONE: A

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Concetto: PROVE DI TIPO COMPONENTI

CONTROLLO EDIZIONE

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A	Edizione	30-05-2017

DISTRIBUZIONE

Direzione del progetto	(A. URRIZA)
Responsabile per il progetto tecnico	(A. BALDA)
Responsabile della Qualità	(M. BUCCARELLA)
Ingegnere Area Sistemi	(A. FAGET)
Responsabile produzione	(J.C. GONZÁLEZ)
Responsabile prove dei treni	(A. CARDINALE)

Eseguito da:

Nome: E.CORTABARRIA

Firma:

Data: 30-05-2017

Verificato da:

Nome: E.CORTABARRIA

Firma:

Data: 30-05-2017

Approvato da:

Nome: A. BALDA

Firma:

Data: 30-05-2017



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1. OBJECTIVE

The objective of the test is to demonstrate a 15 minute integrity and heat insulation rating (EI15) of the technical cabinet front surface in accordance with the EN1363-1 standard per section 4.2.7.2.3.3. of the HS TSI:2008.

2. TEST FACILITY

The test will be carried out in a well known laboratory located in Spain close to the CAF main facilities.

TECNALIA Research and Innovation

Área Anardi nº5, Apdo. 134

20730 Azpeitia

Guipúzcoa

Spain

3. TEST SPECIMEN

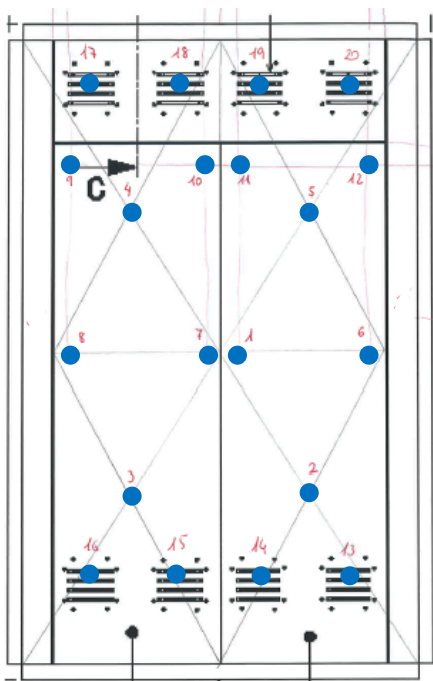
The test specimen is represented by the drawing B.20.00.142. The test specimen is representative of the modification implemented in the the HV technical cabinets. The test is performed vertically at full scale.

4. TEST METHOD

The test specimen will be placed vertically on the oven closing its front part, supported by a metal frame which allows the placement.

The exposed surface will be interior surface of the technical cabinet and the non-exposed surface will be the surface which faces the corridor.

There will be installed several thermocouples on the non-exposed surface of the specimen for temperature measurement. The approximate location of the thermocouples is shown in the image below:



The type and number of the thermocouples will be in accordance with that established in EN1363:2012 standard. The test report will include a drawing showing the location of the thermocouples during the test.

The temperature of the oven will rise following the standard temperature/time curve given by the EN1363 standard in section 5.1 during 15 minutes.

During the 15 minutes test period the Integrity and Insulation criteria will be monitored.

5. TEST RESULTS

The unexposed surface of the test specimen will be monitored for integrity and insulation criteria and the acceptance criteria according to the sections 11.2 and 11.3 of the EN1363 will be applied:

- Integrity: The ability of the test specimen not to cause the ignition of a cotton pad, permit the penetration of a gap gauge or allow a sustained flame
- Insulation: The temperature in the unexposed surface shall not increase more 140°C in average or show an increase of more than 180°C in a single point

Once the test is finished, the test laboratory will issue a Test Report with the results of the test.

The test result will be indicated as the time in minutes of compliance with each criterion.