



**E24**

49.65.61.02.02  
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8. Additional information (where applicable): *See appendix*
9. Technical service responsible for carrying out the tests: *Nemko Spa  
Via del Carroccio, 4 – 20853 Biassono (MB),  
Italy*
10. Date of test report: *17.11.2016*
11. Number of test report: *317970-1TRFEMC*
12. Remarks (if any): *See Appendix*
13. Place: *Dublin*
14. Date: *17<sup>th</sup> February, 2017.*
15. Signature: 
16. The index to the information package lodged with the approval authority, which may be obtained on request is attached.





**NSAI**  
Certification

Approval No: E24 10R-052150

Extension No: *N/A*

### Appendix

To type-approval communication concerning the type approval  
of an electrical/electronic sub-assembly under Regulation No.10.

1. Additional information
  - 1.1. Electrical system rated voltage: *12 V DC, negative to ground*
  - 1.2. This ESA can be used on any vehicle type with the following restrictions: *See manufacturer's specifications.*
    - 1.2.1 Installation conditions, if any: *See manufacturer's specifications.*
  - 1.3. This ESA can only be used on the following vehicle types: *N/A*
    - 1.3.1 Installation conditions, if any: *N/A*
  - 1.4. The specific test method(s) used and the frequency ranges covered to determine immunity were:  
*Bulk current injection method  
Frequency range: 20 -80 MHz  
Free field substitution method  
Frequency range: 80 - 2000 MHz*
  - 1.5. Laboratory accredited to ISO 17025 and recognized by the Approval Authority responsible for carrying out the tests: *Nemko Spa*
2. Remarks: *N/A*

Appendix to type-approval communication concerning the  
type approval of a vehicle under Regulation No.10.

1. Additional information
2. Special devices for the purpose of Annex 4 to this Regulation: *N/A*
3. Electrical system rated voltage: *N/A*
4. Type of bodywork: *N/A*
5. List of electronic systems installed in the tested vehicle(s)  
not limited to the items in the information document: *N/A*
  - 5.1 Vehicle equipped with 24 GHz short-range radar equipment (yes/no): *N/A*
6. Laboratory accredited to ISO 17025 and recognized by the Approval Authority responsible for carrying out the tests: *N/A*
7. Remarks: *N/A*

## **Index to the Information Package**

Date of issue: *17<sup>th</sup> February, 2017.*

Date of latest amendment: *N/A*

Reason for extension/revision: *N/A*

1. Additional conditions, and advisory notes on legal alternatives.

2. Test report(s)

- numbers(s): *317970-1TRFEMC*

- date of issue: *17.11.2016*

- date of latest amendment: *N/A*

3. Information document

- number(s): *model 190 RT-C -rev0-feb2017*

- date of issue: *February 2017*

- date of latest amendment: *N/A*

Documentation: *48 pages*



Appendix: **Additional conditions, and advisory notes on legal alternatives**

A: Additional conditions:

1. The attached technical report, with any of its attachments, forms part of this Type Approval certificate.
2. Each type from series production shall be to the measurements specified in the attached drawings, and shall be manufactured only from the materials specified in the Approval documents.
3. Changes in the type are permitted only with the explicit permission of NSAI. Breaches of this requirement will lead to a withdrawal of the Type Approval, and in addition may be subject to criminal prosecution.
4. At regular intervals, any tests or associated checks prescribed by the applicable legislation to verify continued conformity with the approved type shall be carried out. The manufacturer shall demonstrate compliance with this by submitting to NSAI evidence of adequate arrangements and documented control plans for each type approved.
5. Any set of samples or test pieces showing evidence of non-conformity shall give rise to further sampling and testing and all steps shall be taken to restore conformity of production.
6. This Type Approval will expire when it is surrendered by the holder, or withdrawn by NSAI, or when the approved type no longer conforms to legal requirements. The recall of the Type Approval can be issued by NSAI when the conditions required for the issuing or continuation of the Type Approval are no longer current, or when the Approval holder is in breach of the duties attached to the Type Approval, or when it is established that the approved type no longer meets the requirements of traffic safety.
7. Changes in the company name, address or manufacturing site, as well as in any of the sales or other agents specified in the issuing of the approval must immediately be notified to NSAI.
8. The duties imposed by the issuing of this certificate are not transferable. The legal protection of third parties is not affected by this certificate.
9. When the manufacture or sale of the system, component or separate technical unit has not been started within one year of the date of issue of this certificate, then NSAI is to be informed. This requirement also applies when the manufacture or sale has been halted for more than one year, or when it ought to have been halted for more than one year. The initial commencement of manufacture or sale, or the resumption of manufacture or sale, shall then be notified to NSAI within one month of commencement or resumption.

B: Legal Options:


Any objection to the requirements set out in this certificate shall be made within one month of the date of issue. The objection shall be made, in writing, to NSAI in Dublin.

## TEST REPORT

### REGULATION 10

Concerning the adoption of uniform technical prescriptions for wheeled vehicles, equipment and parts which can be fitted and/or be used on wheeled vehicles and the conditions for reciprocal recognition of approvals granted on the basis of these prescriptions

**Report Reference No.** ..... : 317970-1TRFEMC

Tested by  
(name, function and signature) .. : D. Guarnone (project handler) 

Approved by  
(name, function and signature) .. : R. Giampaglia (verifier) 

Date of issue ..... : 2016-11-17

**Testing Laboratory** ..... : **Nemko Spa**

Address ..... : Via del Carroccio, 4 – 20853 Biassono (MB) – Italy

Testing location ..... : Nemko Spa

Address ..... : Via del Carroccio, 4 – 20853 Biassono (MB) – Italy

**Applicant's name** ..... : **Webasto Thermo & Comfort Italy Srl**

Address ..... : Via Efrem Nobili 2 - C.P. 69 40062 Molinella BO - Italy

#### Test specification:

Standard ..... : REGULATION 10 Revision 5

Full application of the regulation ☒

Partial application of the regulation ☐

Test procedure ..... : Nemko WM L0077, WM L0177 and WM L1002

**Test Report Form No.** ..... : REG10TRFEMC


TRF Originator ..... : Nemko Spa

Master TRF ..... : 2013-03

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**Test item description** ..... : **Roof Air Conditioning System**

Trade Mark ..... :   
Feel the Drive

Manufacturer ..... : Webasto Thermo & Comfort Italy Srl

Address of manufacturer ..... : Via Efrem Nobili 2 - C.P. 69 40062 Molinella BO - Italy

Model ..... : 190 RT-C x WITH AUTO CONTROL HVAC y

Ratings ..... : 12 V, 100 A

*This test report may not be partially reproduced, except with the prior written permission of Nemko Spa*

*The test report merely corresponds to the tested sample.*


*The phase of sampling / collection of equipment under test is carried out by the customer.*

This Test Report, when bearing the Nemko name and logo is only valid when issued by a Nemko laboratory, or by a laboratory having special agreement with Nemko.



**Test Report No. : 317970-1TRFEMC**
**2016-11-17**

Date of issue

Short description of the EuT	Copy of marking plate
The E.U.T. is a Roof Air Conditioning System for Bus Composed by control unit, four blowers and three fans	
Number of tested samples: 1 Serial number: 1/1 (number assigned by Nemko Spa) Equipment classification: M, N Device type: Vehicular Type of ground: <input type="checkbox"/> Positive to ground <input checked="" type="checkbox"/> Negative to ground ESAs: With immunity related functions Accessories and detachable parts included: The E.U.T. is composed by a single unit Other options included: --	
<b>Testing</b> Date of receipt of test sample: 2016-11-14 Testing commenced on: 2016-11-14 Testing concluded on: 2016-11-17	
<b>Possible test case verdicts:</b> test case does not apply to the test object: N (Not applicable) test object does meet the requirement: P (Pass) test object does not meet the requirement: F (Fail)	
<b>Symbols used in this test report</b> <input checked="" type="checkbox"/> The crossed square indicates that the listed condition or equipment is applicable for this report. <input type="checkbox"/> The empty square indicates that the listed condition or equipment is not applicable for this report.	
The results contained in this report reflect the results for this particular model and serial number. It is the responsibility of the manufacturer to ensure that all production models meet the intent of the requirements detailed within this report.	

**Verdict** according to the standards listed at page 5:

**Pass**

PROJECT HISTORY		
Report number	Modification to the report / comments	Date
317970-1TRFEMC	First release	2016-11-17
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REMARKS		

Products family						
Variant model	Difference against the main model					Additional test performed
	Electronic control	Evaporator fans	Condenser fans	Water pump	Water valve	
220 RT-C x WITH AUTO CONTROL HVAC y	x	4	3	1	1	None
190 RT-C x WITH AUTO CONTROL HVAC y	x	4	3	1	1	All
160 RT-C x WITH AUTO CONTROL HVAC y	x	4	2	1	1	None
140 RT-C x WITH AUTO CONTROL HVAC y	x	2	2	1	1	None
110 RT-C x WITH AUTO CONTROL HVAC y	x	2	2	0	0	None
220 RT-C x WITH AUTO CONTROL y	x	4	3	0	0	None
190 RT-C x WITH AUTO CONTROL y	x	4	3	0	0	None
160 RT-C x WITH AUTO CONTROL y	x	4	2	0	0	None
140 RT-C x WITH AUTO CONTROL y	x	2	2	0	0	None
110 RT-C x WITH AUTO CONTROL y	x	2	2	0	0	None
220 RT-C x W-O AUTO CONTROL HVAC y		4	3	1	1	None
190 RT-C x W-O AUTO CONTROL HVAC y		4	3	1	1	None
160 RT-C x W-O AUTO CONTROL HVAC y		4	2	1	1	None
140 RT-C x W-O AUTO CONTROL HVAC y		2	2	1	1	None
110 RT-C x W-O AUTO CONTROL HVAC y		2	2	0	0	None
220 RT-C x W-O AUTO CONTROL y		4	3	0	0	None
190 RT-C x W-O AUTO CONTROL y		4	3	0	0	None
160 RT-C x W-O AUTO CONTROL y		4	2	0	0	None
140 RT-C x W-O AUTO CONTROL y		2	2	0	0	None
110 RT-C x W-O AUTO CONTROL y		2	2	0	0	None
REMARKS						
The configuration 190 RT-C x WITH AUTO CONTROL HVAC y is the most representative of the family. The models can have alphanumeric codes and / or a description to identify no substantial business customizations for electromagnetic compatibility whose position has been generally indicated by "x" and "y".						