ECE TYPE-APPROVAL CERTIFICATE

Communication Concerning: Approval granted
Approval extended
Approval refused
Approval withdrawn
Production definitively discontinued

Of a type of electrical/electronic sub-assembly with regard to Regulation No.10.

Approval No: E24*10R05/01*2401*02

Reason for extension:
- Modification of information document with enclosures
- New Variants (Mainboards X90CP174.48-S1 and X90CP174.24-S1)

1. Make (trade name of manufacturer):
   B&R

2. Type and general commercial description:
   X90 Mobile System
   Control unit

   Variant(s):
   Mainboards -
   X90CP174.48-S1, X90CP174.24-S1,
   X90CP174.48-00, X90CP174.24-00,
   X90CP172.48-00, X90CP172.24-00
   Option boards -
   X90DI110.10-00, X90AT910.08-00,
   X90PO210.08-00, X90AO410.08-00,
   X90AO410.04-00, X90CM480.04-00,
   X90IF720.04-00, X90IF730.04-00

3. Means of identification of type, if marked on the component:
   Refer to variants

3.1 Location of that marking:
   On the housing of the mainboard

4. Category of vehicle:
   N/A

5. Name and address of manufacturer:
   B&R Industrial Automation GmbH
   B&R Straße 1 AT-5142 Eggelsberg
   Germany

6. In the case of components and separate technical units, location and method of affixing of the ECE approval mark:
   Laser label on the housing of the mainboard

7. Address(es) of assembly plant(s):
   Refer to point 5
8. Additional information (where applicable):

9. Technical service responsible for carrying out the tests:

   SGS-TÜV Saar GmbH,
   Am TÜV 1,
   D-66280 Sulzbach,
   Germany

   Up to 18.12.2019

10. Date of test report:

11. Number of test report:

   M2AJ0004 up to -02

12. Remarks (if any):

   See Appendix

13. Place:

   Dublin

14. Date:

   11th February, 2020

15. Signature:

16. The index to the information package lodged with the approval authority, which may be obtained on request is attached.
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: 12/24V DC, negative 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: (20 - 400MHz)

   Absorber Chamber Test:
   Frequency: (200 – 2000MHz)

1.5. Laboratory accredited to ISO 17025 and recognized by the Approval Authority responsible for carrying out the tests: SGS-TÜV Saar GmbH

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