

OSCAR

agrotechnology & industrial solutions



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P.IVA / EORI CODE 00627530983

Reg.Impr.Brescia n.29-30417

Cap. Soc. Eur 500.000,00 I.V.

APPLICATION FOR APPROVAL OF ESA PURSUANT TO THE ECE REGULATION R10.06

UNIFORM PROVISIONS CONCERNING THE APPROVAL OF MOTOR VEHICLES WITH REGARDS TO ELECTROMAGNETIC COMPATIBILITY

TYPE OF ESA: ES2

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Confirmation

We declare hereby that the specimen submitted for this approval test have been manufactured and assembled in conditions of ordinary mass production and that they are compatible with the enclosed documentation.

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ANNEX 2B to ECE Regulation n. 10.06

INFORMATION DOCUMENT

No. ES2_ID Rev.0 dated 15.12.2023

For type approval of an electric/electronic sub-assembly with respect to electromagnetic compatibility

1. Make (trade name of manufacturer): **OSCAR srl**

Trade marks: **OSCAR**

2. Type: **ES2**

0.2.1 Variants/Versions: **ES2, TUBE, ELS, EKS, ETS, EFS (all variants can be equipped with "8IO" expansion board)**

0.2.2 Commercial name of the ESA: **PowerCAN ISOBUS**

3. Means of identification of type, if marked on the component / ~~separate technical unit~~: **printed on self-adhesive label**

3.1. Location of that marking: **on top, front side, placed on PCB support**

4. Name and address of manufacturer: **OSCAR S.r.l.**

Via Cornali, 2 25013 Carpenedolo (BS) Italy

5. In the case of components and separate technical units, location and method of affixing of the approval mark: **indelible label placed on PCB support, top part, front side**

6. Address(es) of assembly plant(s): **OSCAR S.r.l. , Via Cornali, 2 25013 Carpenedolo (BS) Italy**

7. This ESA shall be approved as a **component**

8. Any restrictions of use and conditions for fitting: **See user manual.**

9. Electrical system rated voltage: **9-18V DC**

Appendix 1:

Description of the ESA chosen to represent the type (electronic block diagram and list of main component constituting the ESA (e.g. make and type of microprocessor, crystal, etc.).



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Appendix 1. Technical documentation

Description:

The Electronic Control Unit PowerCAN ISOBUS (type ES2) is responsible for control, management and movement of agricultural machineries and equipment. ES2 is a steering system for trailers and semitrailers with very heavy loads, which simplify and help their use and optimizes their maneuverability.

Variants

- **ES2:** management of 3 steering axles through the processing of trigonometric calculations during the maneuvering and working phases of an agricultural equipment which involves the reading of 4 analogue inputs and 2 digital inputs with the simultaneous control of no.8 12V solenoid valves. This is the most complex configuration in terms of HW and SW (SW Version: ES2_V2.xx.xx)
- **TUBE:** Drip Tape Layer management which involves the reading of 7 digital inputs and the simultaneous control of no.5 12V outputs (SW Version: TUBE_V2.xx.xx)
- **ELS:** suspensions management of agricultural equipment which involves the reading of 3 digital inputs and 1 analogue input with simultaneous control of no.5 12V solenoid valves (SW Version: ELS_V2.xx.xx)
- **EKS:** movements management of agricultural equipment which involves the reading of 3 digital inputs and 1 analogue input with the simultaneous control of no. 5 12V outputs (SW Version: EKS_V2.xx.xx)
- **ETS:** commands management of the of a hydraulically driven agricultural trailer which involves the simultaneous control of no. 3 12V solenoid valves (SW Version: ETS_V2.xx.xx)
- **EFS:** commands management of organic or chemical fertilizer spreader which involves the reading of 3 digital inputs and 1 analogue input with the simultaneous control of 5 12V outputs (SW Version: EFS_V2.xx.xx)

All variants above can be equipped with “8IO” expansion board for managing 8 generic 12V IOs (SW Version: 8IO_V2.xx.xx).

All variants described above use the same PCB HW: PCB0100/2.xx (where xx identify minor differences not relevant for EMC testing). SW version is identified by “variant”_V2.xx.xx (where xx identify minor differences not relevant for EMC testing)

Block/wiring diagram:

See attachment “IMPIANTO STERZATURA ES2 4 ASSI”

Drawings and functional data:

See attachment “User manual and fitting instruction”



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