



LLOYD'S REGISTER TYPE APPROVAL – DESIGN APPRAISAL DOCUMENT

Issue by: Americas Technical Support Office

Issued to: Kobelt Manufacturing Co. Ltd.

For: Kobelt Digital Steering System

The undernoted documents have been reviewed for compliance with the requirements of the Lloyd's Register Type Approval System Procedure TA14 Version 04 (September 2020) and this Design Appraisal Document forms part of the Certificate.

APPROVAL DOCUMENTATION

Type Approval Application Checklist	09 October 2023
Production Quality Assessment Report for Manufacturing Plant in Surrey, BC Canada	11 January 2024
SPC-006, Functional Design Specification – Kobelt Steering System, Rev. A	13 October 2023
SOP-26, Control of Programmable Electronic Systems, Rev. 2	17 January 2022
PDS-6300-0100, Datasheet; Digital Steering Controller, Rev. C	October 2023
PDS-6300-0200, Datasheet; Digital Steering Station, Rev. C	January 2024
PDS-6301-0100, Datasheet; Electronic Helm, Rev. C	October 2023
SS0185-BD, Block diagram; Mighty Helmsman Steering System, Rev. A	20 November 2023
6300-0101-ES, NGSS Controller Block Diagram, Rev. C	20 October 2023
6300-0201-ES, NGSS Head Top Board Block Diagram, Rev. B	14 November 2023
6300-0202-ES, NGSS Head Bottom Board Block Diagram, Rev. C	20 October 2023
RPT-001, System and Software test report, Rev. C	27 July 2022
MNL-002 Kobelt Steering System 6300-0100 Controller & 6300-0200 Station Owner's Operation, Installation & Maintenance Manual, Rev. B	October 2023
RD-8250-1, TFD Steering Unit, Rev. D	02 February 2021

TEST REPORTS

30.00.21599-1, Test Report - LabTest - 30.00.21599-1, Rev. 0	22 March 2023
E10996-2109, E10996-2109_Kobelt_Voyager Steering & Controller System, Rev.1	10 February 2022
30.00.21114-1, Test Report - LabTest - 30.00.21114-1_Rev.0 - Vibration Test Report, Rev.0	29 September 2022
30.00.21010-2, Test Report - LabTest - 30.00.21010-2_Rev.0_Kobelt – IEC, Rev. 0	18 April 2022
E10996-2105, Test Report - QAI - E10996-2105 IP56 Report, Rev. 1	14 March 2022
E10996-2303, E10996-2303_Kobelt_NGSS - Controller and head, Rev. 1	20 October 2023
EMS16-0008, RD-8223-5 Electrical Environment Qual Test Data, Elite ETR 1504028-01	15 March 2016
TC006366, Certificate of Testing of Sinusoidal Vibration, Rev. 2	11 March 2016
TC006364, Certificate of Testing of Damp Heat Cycle, Rev. 2	10 March 2016
TC006368, Certificate of Testing of Dry Heat, Rev.2	15 March 2016
TC006373, Certificate of Testing of Storage Temp – Cold, Rev. 2	24 March 2016
ENB020269P, Cyclic and Continuous Salt Mist Exposures	
TC006391, Certificate of Testing of Settling Dust	06 May 2016
E10996-2401, Kobelt NGSS Controller, Wheel, Head and IO Expander, Rev 1.0	18 March 2024



E10966-2402, High Voltage Test and Insulation Resistance Test for Lord Helm Wheel and Control Head	13 March 2024
E10996-2403, Vibration and Resonance	19 April 2024
E10996-2403, Environmental Test Report	03 May 2024
E10996-2404, QAI Report- IPX6	25 May 2024

Yongchang Cai
Senior Specialist, Electrical & Control
Americas Technical Support Office
Lloyd's Register Canada Ltd.

Supplementary Type Approval Terms and Conditions

Type Approval certifies that a representative sample of the product(s) referred to herein has/have been found to meet the applicable design criteria for the use specified herein. It does not mean or imply approval for any other use, nor approval of any product(s) designed or manufactured otherwise than in strict conformity with the said representative sample.

Type Approval is based on the understanding that the manufacturer's recommendations and instructions and any relevant requirements of the Rules and Regulations are complied with.

Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.

Lloyd's Register Canada Limited reserves the right to cancel or withdraw this Type Approval Certificate in accordance with the Lloyd's Register Type Approval System Procedure.