



LLOYD'S REGISTER TYPE APPROVAL – DESIGN APPRAISAL DOCUMENT

Issue by: UKITSO SOUTHAMPTON

Issued to: NIDEC CONTROL TECHNIQUES Ltd

For: Unidrive-M range drives:- M600, M700, M701, M702 and F600.

Commander Drives:- C200, C300.

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

PRJ11100444372 Production Quality Assessment Form Nuevo Leon, Mexico	17 Jul 2024
PRJ11100444372 Production Quality Assessment Form Guangming District, Shenzhen	31 May 2024
Annex's 1 to 8 for Production Quality Assessment Report Guangming District, Shenzhen	31 May 2024
ISO9001:2015 Cert No 07622Q0348R0M-GD/001 China	02 Oct 2022
ISO9001:2015 Cert No FM739405 UK	26 Aug 2021
ISO13485:2016 Cert No FM572282 Valmark Industries Inc USA	22 Dec 2022

DATASHEETS

Nidec ABS certification Details Rev 00.01	07 May 2025
1-000-060-333 Unidrive M & Derivatives	Not dated
Ref: 1-000-043-315 -Commander C200 C300 Frame size 1 EMC data sheet	07 Jun 2019
Ref: 1-000-043-316 Commander C200 C300 Frame size 2 EMC data sheet	07 Jun 2019
Ref: 1-000-043-317 Commander C200 C300 frame size 3 EMC Data sheet	05 May 2021
Ref: 1-000-043-318 Commander C200 C300 frame size 4 EMC Data sheet	05 May 2021
Ref: 1-000-048-438 Commander C200 C300 frame size 5 EMC data sheet	02 Dec 2019
Ref: 1-000-048-439 Commander C200 C300 frame size 6 EMC data sheet	03 Dec 2019
Ref: 1-000-048-440 Commander C200 C300 frame size 7 EMC data sheet	02 Dec 2019
Ref: 1-000-048-441 Commander C200 C300 frame size 8 EMC data sheet	02 Dec 2019
Ref: 1-000-048-442 Commander C200 C300 frame size 9A EMC data sheet	02 Dec 2019
Ref: 1-000-016-881 Unidrive-M frame size 3 EMC data sheet	05 Feb 2018
Ref: 1-000-016-883 Unidrive-M frame size 4 EMC data sheet	05 Feb 2018
Ref: 1-000-016-883 Unidrive-M frame size 5 EMC data sheet	24 Oct 2019
Ref: 1-000-016-885 Unidrive-M frame size 6 EMC data sheet	03 Dec 2019
Ref: 1-000-016-887 Unidrive-M frame size 7 EMC data sheet2	24 Oct 2019
Ref: 1-000-016-888 Unidrive-M frame size 8 EMC data sheet2	24 Oct 2019
Ref: 1-000-016-889 Unidrive-M frame size 9 10 and 11 EMC data sheet	24 Oct 2019
Ref: 1-000-024-321 Unidrive-M frame size 9A EMC data sheet	24 Oct 2019
05 1-000-052-709 EMC Data Sheet for Marine Applications Unidrive-M, Commander& Pump Drives	27 Nov 2020
2-000-000-871 Safety Technical File Unidrive-M Frame Size 8	11 Jan 2024



3-000-004-146 Unidrive-M Model size 4 Safety Technical File Rev 28	28 Mar 2023
3-000-000-245 Safety Technical File Unidrive-M Frame Size 5 Rev 27	28 Mar 2023
1-000-005-061 Safety Technical File Unidrive-M Frame Size 6 Rev 00.24	08 Mar 2021
2-000-000-310 Safety Technical File Unidrive-M Frame Size 7 Rev 00.21	08 Mar 2021
2-000-001-327 Safety Technical File Unidrive-M Frame Size 9A Rev 00.16	08 Mar 2021
1-000-007-743 Safety Technical File Unidrive-M Frame Size 9 and 10 D E and T Rev 00.29	08 Mar 2021
1-000-021-498 Safety Technical File Unidrive-M Frame Size 11 Rev 00.24	09 Oct 2023

TEST REPORTS

1-000-057-846 Shock and vibration type test reports	Not dated
1-000-050-435 Frame 12 MOV_Surge_Suppression_test	11/11/19
1-000-008-653 Commander Large Frames 5-8 Damp Heat test report	23 Aug 2013
2-000-000-814 Commander Frame size 4 Damp heat test report	01 Jun 2020
2-000-000-820 Commander Frame size 1 Damp heat test report	25 Jan 2013
1-000-005-019 Unidrive-M FR3 Damp heat test report	08 Feb 2012
2-000-001-025 Unidrive-M FR8 Damp heat test report	21 Jun 2020
1-000-009-765 Unidrive-M FR6 Damp heat test report	09 Jun 2020
1-000-013-476 Unidrive-M FR5 Damp heat test report	25 Apr 2014
1-000-005-843 Commander Frame size 2 Damp heat test report	09 Jun 2020
1-000-006-042 Commander Frame size 3 Damp heat test report	09 Jun 2020
1-000-005-019 Unidrive-M Frame3 Damp heat test report	08 Feb 2012
2-000-001-343 Unidrive-M Commander Frame 9 and 10 Damp heat test report	17 Sept 2020
1-000-008-654 DNV Dry heat test report 2020-10-08	12 Oct 2020
1-000-050-418 EMC Test Report Frame 12-Cap-Discharge-Test	08 Nov 2019
1-000-049-833 EMC Test Report Frame 12 Dips & Interrupts Full Load Test Report	11 Sept 2019
1-000-048-830 EMC Test Report Frame 12 Surge Immunity	13 Jan 2021
1-000-048-322 EMC Test Report Frame 12 ESD Test Report	Not dated
1-000-047-483 EMC Test Report Frame12 Fast Transient Bursts Test1	21 Apr 2021
1-000-049-929 EMC Test Report - Commander C200 C300 Frame Size 1	21 May 2020
1-000-050-783 EMC Test Report - Commander C200 C300 frame size 2	04 Jun 2020
1-000-051-281 EMC Test Report - Commander C200 C300 frame size 3	22 May 2020
1-000-051-301 EMC Test Report - Commander C200 C300 frame size 4	22 May 2020
1-000-050-885 EMC Test Report - Unidrive-M frame size 3	03 Apr 2020
1-000-051-659 EMC Test Report - Unidrive-M frame size 4	18 May 2020
1-000-051-661 EMC Test Report - Unidrive-M frame size 5	22 May 2020
1-000-050-900 EMC Test Report - Unidrive-M frame size 6	22 May 2020
1-000-051-326 EMC Test Report - Unidrive-M frame size 7	22 May 2020
1-000-051-708 EMC Test Report - Unidrive-M frame size 8	26 May 2020
1-000-051-710 EMC Test Report - Unidrive-M frame size 9 and 10	26 May 2020
1-000-051-744 EMC Test Report - Unidrive-M frame size 11	28 May 2020
1-000-057-846 Shock and vibration Type Test Reports	Not dated



SUPPORTING DOCUMENTS

DNV Type Approval TAE00001U5 Rev 3 for Unidrive M600, M700, M701 & M702 Ex Date 30/06/2024	26 Jan 2022
NIDEC Control Techniques Ltd Letter of Intent for TA Renewal TAE00001U5 Rev 3	10 Jul 2024
NIDEC Written Mandate	17 May 2023
DNV-GL Type Approval TAE000046M Rev 1 for Commander C200 and C300 and Pump drives F600	26 Jan 2021
EU Declaration of Conformity Nidec Control Techniques Ltd 1-000-022-213 Rev 00.26	21 Mar 2024
UK Declaration of Conformity Nidec Control Techniques Ltd 1-000-022-213 Rev 00.25	08 Nov 2023
CTDP R037 List of Subcontract Laboratories 01.01	04 Apr 2025
DoC LVD EMC RoHS Unidrive-M Commander-C and Derivative Products Rev 00.03	13 Feb 2025
DoC Machinery Directive Commander C300 Rev 00.04	13 Nov 2023
DoC Machinery Directive Unidrive M400 HS30 Rev 00.04	13 Nov 2023
DoC Machinery Directive Unidrive-M Digitax HD Rev 00.16	13 Feb 2025
UL DAP Assessment Report 2025 - CTDP - Client Test Data Program Rev 39	27 Mar 2025
1-000-022-213 Rev 00.25 Commander Unidrive UKCA	08 Nov 2023

Matt Higgins MIET
Senior Electrical Specialist
Engineering Systems
UK&I Technical Support Office, Marine & Offshore
Lloyd's Register EMEA

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