



INTERNATIONAL
ACCREDITATION
SERVICE®

CERTIFICATE OF ACCREDITATION

This is to attest that

DANFOSS INDUSTRIES PVT. LTD.,

A-19-2 SIPCOT INDUSTRIAL GROWTH CENTER, ORAGADAM VILLAGE
SRIPERUMBUDUR, KANCHEEPURAM DISTRICT
CHENNAI, TAMIL NADU 602105, INDIA

Testing Laboratory TL-1306

has met the requirements of AC89, *IAS Accreditation Criteria for Testing Laboratories*, and has demonstrated compliance with ISO/IEC Standard 17025:2017, *General requirements for the competence of testing and calibration laboratories*. This organization is accredited to provide the services specified in the scope of accreditation.

Expiry Date April 1, 2026

Effective Date March 18, 2025



International Accreditation Service

Issued under the authority of IAS management

Visit www.iasonline.org for current accreditation information.

SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | www.iasonline.org

DANFOSS INDUSTRIES PVT. LTD.,

Contact Name Sivakumar Paulraj

Contact Phone +919900918381

Accredited to ISO/IEC 17025:2017

Effective Date March 18, 2025

| Electrical | |
|------------------------------|---|
| IEC 61800-5-1:2007+AMD1:2016 | Adjustable speed electrical power drive systems - Part 5-1: Safety requirements - Electrical, thermal and energy Exclusions: Deformation Test Deflection Mechanical Test Partial Discharge Protective Impedance High Current Arcing Ignition Glow Wire Hot wire Ignition Flammability Vibration Test |
| IEC 61800-5-1:2022/COR1:2023 | Adjustable speed electrical power drive systems-Part 5-1: Safety requirements – Electrical, thermal and energy Exclusions: Deflection Partial Discharge Protective Impedance High Current Arcing Ignition Glow Wire Hot wire Ignition Flammability Vibration Test Hydrostatic Pressure Cemented Joints Test UV Resistance Test Strain Relief Test Isolating means and Interlock integrity Test Acoustic Nois Test Thin Sheet material Test Test Procedure For Separable thin sheet material Mandrel Test Salt mist Test Dust Test Sand Test |

TL-1306

DANFOSS INDUSTRIES PVT. LTD.,

Effective Date March 18, 2025

Page 2 of 4

IAS/TL/100-1



SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | www.iasonline.org

| | |
|---------------------|--|
| | Electromagnetic Fields Internal SPD monitoring Test |
| IEC 61800-5-2 | Adjustable speed electrical power drive systems - Part 5-2: Safety requirements – Functional <u>Inclusion:</u> 4.2.3.2 Safety Torque Off (STO) |
| TDP-3835 | STO functional verification - Functional Safety (Internal Test Method) |
| EMC | |
| CISPR 11 | Industrial, scientific and medical equipment - Radio-frequency disturbance characteristics - Limits and methods of measurement <u>Inclusion:</u> Conducted Emission Test |
| IEC 60146-1-1 | Semiconductor converters - General requirements and line commutated converters Commutation Notch <u>Inclusion:</u> 5.4.1 Commutation notch |
| IEC 61000-2-4 | Electromagnetic compatibility (EMC) - Part 2-4: Environment - Compatibility levels in power distribution systems in industrial locations for low-frequency conducted disturbances <u>Inclusions:</u> 5.4 Voltage imbalance 5.6 Voltage Harmonic Distortion |
| IEC 61000-3-11:2017 | Electromagnetic compatibility (EMC) - Part 3-11: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems - Equipment with rated current ≤ 75 A and subject to conditional connection |
| IEC 61000-3-12 | Limits for harmonic currents produced by equipment connected to public low-voltage systems with input current >16 A and ≤ 75 A per phase |
| IEC 61000-3-2 | Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current ≤ 16 A per phase) |
| IEC 61000-3-3 | Electromagnetic compatibility (EMC) - Part 3-3: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current ≤ 16 A per phase and not subject to conditional connection |
| IEC 61000-4-11 | Electromagnetic compatibility (EMC) - Part 4-11: Testing and measurement techniques - Voltage dips, short interruptions and voltage variations immunity tests for equipment with input current up to 16 A per phase |

SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | www.iasonline.org

| | |
|----------------------|---|
| IEC 61000-4-2 | Electromagnetic compatibility (EMC) - Part 4-2: Testing and measurement techniques - Electrostatic discharge immunity test |
| IEC 61000-4-28 | Electromagnetic compatibility (EMC) - Part 4-28: Testing and measurement techniques - Variation of power frequency, immunity test |
| IEC 61000-4-34 | Electromagnetic compatibility (EMC) - Part 4-34: Testing and measurement techniques - Voltage dips, short interruptions and voltage variations immunity tests for equipment with mains current more than 16 A per phase |
| IEC 61800-3 | IEC 61800-3: 2022 Adjustable speed electrical power drive systems - Part3: EMC requirements and specific test methods for PDS and machine tools Inclusions: 5.2.1 Harmonics 5.2.2 Voltage dips and short interruptions 5.2.3 Frequency variations 5.3.2 ESD for Residential, commercial and light industrial environment, 5.3.3 ESD for industrial environment 6.3.1 Harmonics line current emission 6.3.2 Voltage fluctuations and flicker 6.4.1.2 Conducted emission B.1 Commutation Notches B.5 Voltage unbalance |
| SEMI F47 | Voltage Sag Immunity Standard |
| Environmental | |
| IEC 60068-2-1 | Environmental testing - Part 2-1: Tests - Test A: Cold |
| IEC 60068-2-2 | Environmental testing - Part 2-2: Tests - Test B: Dry heat |
| IEC 60068-2-30 | Environmental testing - Part 2-30: Tests - Test Db: Damp heat, cyclic (12 h + 12 h cycle) |
| IEC 60068-2-78 | Environmental testing - Part 2-78: Tests - Test Cab: Damp heat, steady state |
| IEC 60529 | Degrees of protection provided by enclosures (IP Code) Inclusions: 14.2.5 - Test for Second Characteristic numeral 5 with the 6.3 mm Nozzle 14.2.6 - Test for Second Characteristic Numeral 6 with 12.5 mm Nozzle 13.2 - Test conditions for First Characteristic numerals 2,4 |
| UL 50E | Enclosures for Electrical Equipment, Environmental Considerations Inclusions: 8.4.2.1.2 Atomized-water method (Method A) 8.6 Hosedown test |

