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Certificate No: LR25333698TA Issue Date: 29/10/2025 Expiry Date: 28/10/2030

## **Type Approval Certificate**

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

**Manufacturer** Danfoss Drives AS

**Address** Ulsnæs 1, Gråsten, 6300, Denmark

Place of Production Aucom Electronics Limited

123 Wrights Road, Addington, Christchurch, New Zealand

**Type** Soft Starters

**Description** MCD200 series soft starters for electric motors

MCD 20w-xxx-Ty-CVz

Where:-

W=Designates the features of the starter

1=without motor protection

2=with motor protection (overload, phase loss, excess start time, etc.)

xxx=designates the nominal motor rating;

007 kW to 110kW

Y=designates the maximum voltage rating;

6=575V a.c.

Z=designates the control supply voltage 3=110 to 240V a.c. & 380 to 440V a.c.

1=24V a.c. or d.c.

Trade Name MCD200

**Application** Soft starter for three phase electric motors for Marine, offshore and industrial

applications for use in environmental categories ENV2 in the "Bridge and Deck

Ping Yuan Qi

Electrical & Control - Senior Specialist to Lloyd's Register Singapore Pte Ltd A member of the Lloyd's Register group

9 North Buona Vista Drive, #02-01, Metropolis Tower 1, 138588, Singapore

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### **Type Approval Certificate**

Zone" as defined in LR Type Approval System Test Specification No. 1 1-2002 where the Test Specification is satisfactory for the intended operation.

### **Specified Standard**

Identical with CSX soft starters for electric motors in LR type approval certificate No. 04/10097(E2) issued to AuCom Electronics Limited. Correspondence between CSX series and MCD200 series: "Description of product" 720 04051-00A MCD200 Lloyd's Description.doc.

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Type	Motor kW	Operational current(A)
007	007	18
015	015	34
018	018	42
022	022	48
030	030	60
037	037	75
045	045	85
055	055	100
075	075	140
090	090	170
0110	110	200
Operation	al voltago (V).	T6-200 575

Operational voltage (V): T6=200-575 Remarks: control supply: Freq.=45-66 Hz;

Volt.: CV3=11-240 V a.c. 380-440 V a.c. CV1=24 V a.c./d.c.

#### **Additional Tests**

Low Temperature Test at -10°

Dry heat test at 60°C

#### **Other Conditions**

- 1. The certificate attests to the hardware's suitability for the environmental categories stated.
- 2. Suitability of the software and system configurations is subject to a separate plan appraisal according to Lloyd's Register Rules and Regulations when placed on Lloyd's Register classed vessels.

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# **Type Approval Certificate**

This certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register Singapore Pte Ltd of any modification or changes to the equipment in order to obtain a valid Certificate.

Previous Version: LR2037188TA

The Design Appraisal Document LR25333698TA and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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