

# 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.

<b>Manufacturer</b>	<b>AuCom Electronics Ltd</b>
<b>Address</b>	123 Wrights Road PO Box 80208 Christchurch 8440 New Zealand
<b>Place of Production</b>	AuCom Electronics Ltd 123 Wrights Road PO Box 80208 Christchurch 8440 New Zealand
<b>Type</b>	Control Units
<b>Description</b>	LV2012 series Soft Starter for three phase electric motors consist of: EMX4i-0190C; EMX4i-0260C; EMX4i-0341C; EMX4i-0404C; EMX4i-0474C; EMX4i-0184E; EMX4i-0200E; EMX4i-0229E; EMX4i-0250E; EMX4i-0352E; EMX4i-0397E; EMX4i-0410E; EMX4i-0550E; EMX4i-0580E; EMX4i-0024; EMX4i-0042; EMX4i-0052; EMX4i-0064; EMX4i-0069; EMX4i-0115; EMX4i-0105; EMX4i-0135; EMX4i-0184; EMX4i-0200; EMX4i-0229; EMX4i-0250; EMX4i-0352; EMX4i-0397; EMX4i-0410; EMX4i-0550; EMX4i-0580(Low temperature tested at -25°C is conducted); EMX4i-0835B; EMX4i-0940B; EMX4i-1070B; EMX4i-1230B; EMX4i-1250B; EMX4i-0735C; EMX4i-0830C; EMX4i-1025C; EMX4i-1170C; EMX4i-1220C (Low temperature tested at -10°C is conducted);
<b>Trade Name</b>	LV2012
<b>Application</b>	Marine applications for use in environmental categories ENV1, ENV2 in the "Equipment on bridge and deck zone" as defined in LR Type Approval System Test Specification No. 1 July 2015.
<b>Specified Standard</b>	IEC 60947-1:2007, incorporating amendment 1: 2010; IEC 60947-4-2:2011, incorporating corrigendum July 2012;

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## Type Approval Certificate

### Ratings

EMX4u-nnnnW-xyz

u: type

i: =3 phase control

nnnn: nominal current rating in amperes

W: the utilisation category

B=internal bypass, or C=continuous operation, E=external bypass

x: main supply voltage:

5=200~525 VAC

7=380~690 VAC

y: control supply voltage:

1=110~120 VAC and 220~240 VAC

2=24 VAC/VDC

z: fitting of human machine interface(HMI):

1=HMI fitted

### Additional Tests

Low temperature tested at -10°C or -25°C for 16 hours;

Dry heat tested at 60°C for 16 hours;

### Other Conditions

The approval covers hardware only, software has been tested to the extent required to verify correct operation during type approval tests only.

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 Classification Society (China) Co Ltd of any modification or changes to the equipment in order to obtain a valid Certificate.

The Design Appraisal Document 16-80090-04 and its supplementary Type Approval Terms and Conditions form part of this Certificate.