

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	ABB OY
Address	Hiomotie 13, FI-00380 Helsinki, Finland
Type	Electronic Frequency Convertor
Description	Liquid cooled frequency converter series ACS880LC ACS880-07CLC, ACS880-17LC, ACS880-37LC
Trade Name	ACS880LC; refer to Appendix for details
Application	Marine, offshore and industrial applications for use in environmental categories ENV1 and ENV2 (except for vibration, for radiated and conducted emission suitable for special power distribution zones only) as defined in Lloyd's Register Type Approval System, Test Specification Number 1: July 2015.
Specified Standard	EN 61800-3:2004 IEC 61800-5-1:2007 IACS E10 Rev.6
Ratings	Refer to Appendix for details
Other Conditions	The complete installation and function is subject to separate plan appraisal

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according applicable Rules and Regulations, when installed on LR classed vessels. Converters used for essential services or rated above 100kW to be manufactured and tested in compliance with LR Rules and Regulations. If used in marine and offshore applications the equipment is to be installed in metal enclosures and installation requirements according to ABB Hardware Manual to be fulfilled.

The type selection has to be according ABB selection guide.

The temperature range in operation is up to 45 °C. For 45 - 55 °C with current derating of 0.5%/1°C.

Equipment has to comply with IACS E10 Rev.7 when intended to be installed on ships contracted for construction on or after 1 January 2022.

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 EMEA of any modification or changes to the equipment in order to obtain a valid Certificate.

The Design Appraisal Document No. HTS/ETS 39674-20/AHB/TW and its supplementary Type Approval Terms and Conditions form part of this Certificate.

Appendix

TYPE

ACS880LC consisting of:

Single drive:	ACS880-07CLC
Single drive:	ACS880-17LC
Single drive:	ACS880-37LC
Supply unit:	ACS880-307LC+A019
Supply unit:	ACS880-207LC
Supply module:	ACS880-304LC+A019
Supply module:	ACS880-204LC
Inverter unit:	ACS880-107LC
Inverter module:	ACS880-104LC
Liquid cooling unit:	ACS880-1007LC
Braking unit:	ACS880-607LC
Braking module:	ACS880-604LC
DC / DC unit:	ACS880-1607LC
DC / DC module:	ACS880-1604LC

Type	Article No.	Frame Size	Power Rating Normal Load [kW]	Voltage [V]	Current Rating at 45°C IN [A]
ACS880LC Diode Supply Unit (DSU) SW –Version: V3.00					
Supply unit	ACS880-307LC+A019	1xD8D – 8xD8D	932 - 6874	690	820 - 5940
Supply module	ACS880-304LC+A019	1xD8D – 8xD8D	932 - 6874	690	820 - 5940
ACS880LC IGBT Supply Unit SW –Version: AINLX v3.10					
Supply unit	ACS880-207LC	1xR8i - 8xR8i	426 - 6874	690	360 - 5810
Supply module	ACS880-204LC	1xR8i - 8xR8i	426 - 6874	690	360 - 5810
ACS880LC Inverter Unit (INU) SW –Version: V2.90					
Inverter unit	ACS880-107LC	1xR8i - 8xR8i	355 - 6000	690	390 - 6460
Inverter module	ACS880-104LC	1xR8i - 8xR8i	355 - 6000	690	390 - 6460

TYPE continued

Type	Article No.	Frame Size	Power Rating Normal Load [kW]	Voltage [V]	Current Rating at 45°C IN [A]
ACS880LC DC/DC Converter Modules SW –Version: AINLX v3.10					
Converter unit	ACS880-1607LC	1xR8i - 2xR8i	351 - 1581	690	391 - 1760
Converter module	ACS880-1604LC	1xR8i - 2xR8i	351 - 1581	690	391 - 1760
Liquid Cooling Unit (LCU)					
Liquid cooling unit	ACS880-1007LC-0070 in drive cabinet	--	70 ⁽¹⁾	400/690	--
Liquid cooling unit	ACS880-1007LC-0195 in drive cabinet	--	195 ⁽¹⁾	400/690	--
Braking Unit (optional)					
Braking unit	ACS880-607LC	1-6xNBRW-669	404 - 2422	525/690	--
Braking module	ACS880-604LC	1-6xNBRW-669	404 - 2422	525/690	--
ACS880LC- Single Drive					
Single drive	ACS880-07CLC	1xD8D+1xR8i-8xD8D+8xR8i	355-6000	690	390 - 6460
Single drive	ACS880-17LC	1xR8i+1xR8i-8xR8i+8xR8i	355-6000	690	390 - 6260
Single drive	ACS880-37LC	1xR8i+1xR8i-8xR8i+8xR8i	355-6000	690	390 - 6260

¹= cooling power

**PLACES OF
PRODUCTION**

ABB Oy Drives
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Finland