



Lloyd's  
Register

## 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.*

This certificate is issued to:

<b>PRODUCER</b>	ABB Oy Drives Hiomotie 13 FI-00380 Helsinki Finland
<b>DESCRIPTION</b>	Liquid cooled frequency converter series ACS880LC and accessories
<b>TYPE</b>	ACS880LC consisting of:  Single drive: ACS880-07CLC Supply unit: ACS880-307LC+A019 <sup>(1)</sup> Supply module: ACS880-304LC+A019 <sup>(1)</sup> Inverter unit: ACS880-107LC <sup>(2)</sup> Inverter module: ACS880-104LC <sup>(2)</sup> Liquid cooling unit: ACS880-1007LC Braking unit: ACS880-607LC Braking module: ACS880-604LC  <sup>(1)</sup> SW -Version: V3.00 <sup>(2)</sup> SW -Version: V2.90

**APPLICATION** Marine, offshore and industrial applications for use in environmental categories ENV1 and ENV2 (for radiated and conducted emission suitable for general power distribution zones only) as defined in Lloyd's Register Type Approval System, Test Specification Number 1: July 2015.

<b>Certificate No.</b>	19/20031
<b>Issue Date</b>	25 April 2019
<b>Expiry Date</b>	24 April 2024
<b>Sheet</b>	1 of 3



LR031.1.2016.06

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**STANDARD**

EN 61800-3:2004  
IEC 61800-5-1:2007

**RATINGS**

Type	Article No.	Frame Size	Power Rating Normal Load [kW]	Voltage [V]	Current Rating at 45°C IN [A]
<b>ACS880LC Diode Supply Unit (DSU) SW -Version: V3.00</b>					
Supply unit	ACS880-307LC+A019	1xD8D - 8xD8D	355 - 6784	690	390 - 5940
Supply module	ACS880-304LC+A019	1xD8D - 8xD8D	355 - 6784	690	390 - 5940
<b>ACS880LC Inverter Unit (INU) SW -Version: V2.90</b>					
Inverter unit	ACS880-107LC	1xR8i - 8xR8i	355 - 6000	690	390 - 6460
Inverter module	ACS880-104LC	1xR8i - 8xR8i	355 - 6000	690	390 - 6460
<b>Liquid Cooling Unit (LCU)</b>					
Liquid cooling unit	ACS880-1007LC-0070 in drive cabinet	--	70 <sup>(3)</sup>	400/690	--
Liquid cooling unit	ACS880-1007LC-0195 in drive cabinet	--	195 <sup>(3)</sup>	400/690	--
<b>Braking Unit (optional)</b>					
Braking unit	ACS880-607LC	1-6xNBRW-669	400 - 2400	525/690	--
Braking module	ACS880-604LC	1-6xNBRW-669	400 - 2400	525/690	--
<b>ACS880-07CLC Single Drive</b>					
Single drive	ACS880-07CLC	1xD8D+1xR8i- 8xD8D+8xR8i	355-6000	690	390 - 6460

<sup>3</sup>= cooling power

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**OTHER CONDITIONS**

The complete installation and function is subject to separate plan appraisal 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 .

**PLACE OF PRODUCTION**

ABB Oy Drives  
Hiomotie 13  
FI-00380 Helsinki  
Finland

*The Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.*

*If the specified standards are amended during the validity of this certificate, the product is to be re-approved prior to it being supplied to vessels to which the amended standards apply.*

*The Design Appraisal Document No. HTS/ETS 38143-19 and its supplementary Type Approval Terms and Conditions form part of this Certificate.*

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