



NIPPON KAIJI KYOKAI

TYPE APPROVAL CERTIFICATE FOR AUTOMATIC DEVICES AND EQUIPMENT

Certificate No. TA20120M

This is to certify that the undernoted product(s) has/have been approved in accordance with the requirements specified in Chapter 1, Part 7 of “Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use” and the relevant Society's Rules.

This certificate is issued to

Manufacturer:	ABB Oy Drives
Place of Manufacturing:	P. O. Box 184, Hiomotie13, FIN-00381 Helsinki, Finland
Product description:	Frequency Converter
Model:	ACS 800-01/-U1/-04 series

Approval No.:	10A002
Valid until:	24 January 2025

This certificate is subject to the conditions specified in the attached sheet(s).

Issued at Tokyo on 25 January 2020.

T. Shimada
General Manager
Machinery Department

Note: The manufacturer, if desired, is requested to apply to the Society for renewal prior to the expiration date.

Specification & documents:**1. Product description**

3-phase variable speed drive for motor application

2. Components and reference drawings:

Component	Drawing
ACS800-xx-yyyy-z-frame + C132 xx : -01, -04 (standard) or -U1 (optional) yyyy : kVA rating 0001, 0002, 0003, 0004, 0005, 0006, 0009, 0011, 0016, 0020, 0023, 0025, 0028, 0030, 0035, 0040, 0050, 0060, 0070, 0075, 0100, 0105, 0120, 0135, 0140, 0145, 0165, 0175, 0205, 0255 z : voltage class 2 for 208 to 240V $\pm 10\%$ 3 for 380 to 415V $\pm 10\%$ 5 for 380 to 500V $\pm 10\%$ 7 for 525 to 690V $\pm 10\%$ frame : R2, R3, R4, R5, R6 C132 : obligatory option	3AFE68326753 REV O / EN (Technical catalogue 7.5.2013) 3AFE68291275 REV F / EN (Marine Supplement 1.4.2014) 3AFE64382101 REV K / EN (Hardware Manual 27.6.2013) 3AFE68372984 REV E / EN (Hardware Manual 27.6.2013)

3. Documentation and Test Reports:

- Electromagnetic Compatibility (EMC) test report T08-560A-EMC (23-April-2008)
- Mechanical Test for ACS800-01, R5 VTT-06037-07 (2-July-2007)
- Electromagnetic Compatibility (EMC) test report T08-540A-EMC (10-April-2008)
- ACS800EMC Test Report 3AFE 68991668,68998905(26 and 31-Mar-2008)
- Sine Vibration Test for ACS800-01-0205-5+D150+E202+P901 VTT-S-01192-07 (2-Feb-2007)
- Mechanical Tests for ACS801 R2 AUT46-010770, (31-Dec-2001)
- Mechanical Tests for ACS801 R3 AUT46-020054, (11-Feb-2002)
- Sine Vibration Test for ACS800-01 R4 with Aeroflex GC3 Isolators TUO26-033091 (18-Sep-2003)
- Sine Vibration Test for ACS800-01 R5 with Aeroflex GC3 Isolators TUO26-033092 (18-Sep-2003)
- Sine Vibration Test for ACS800-01-0140-5+D150+E202 R6 with Aeroflex GC3 and CCA Isolators
- TUO26-033032 (18-Sep-2003)

- To be continued -

- Steady State Humidity Test for ACS800-0-0025-5+L202+L503+P901 (R3) TUO26-033445 (3-Dec-2003)
- Steady State Humidity Test for ACS800-01-0070-5+E202+L503+P901 (R5) TUO26-033446 (3-Dec-2003)
- Cyclic Damp Heat Test for ACS800-01-0040-3+B056+E200+L500+P901 (R5) TUO26-044024 (29-Mar-2004)
- Cold Test Test Report 3AFE 00170923 (15-May-2002)
- ACS800EMC Test Report 3AFE 64592777, 64592157, 64625390, 64625403, 64625420, 64625438, 64600371, 64619233, 64685422, 64570439, 64619322, 64755153, 64645803, 64766970, 64787071, 64776444 (25-Feb-2002 to 4-Jun-2003)
- EMC Test for ACS800-01-0025-3+E202+L500+L501+L503 Test Report1021188 (15-Feb-2002)
- EMC Test for ACS800-01/U1-0040-7+E200+L503 Test Report1021498 (28-Nov-2002)
- EMC Test for ACS800-06-0140-5+E202+L503 Test Report1031981 (8-Dec-2003)
- EMC Test for ACS800-01-0025-5+E202+P901 Test Report1032037 (7-Jan-2004)
- EMC Test for ACS800-01/U1-0140-5+E202+L503 Test Report1031978 (1-Dec-2003)
- EMC Test for ACS800-01-0011-5+E202+P901 Test Report1031979 (2-Dec-2003)
- EMC Test for ACS800-06-0140-5+E202+L503 Test Report1032015 (8-Dec-2003)
- EMC Test for ACS800-01-0004-5+E202+L503+L501+L500 Test Report1011099 (13-Dec-2001)
- EMC Test for ACS800-01-0004-5+L503 Test Report1021168 (4-Feb-2002)
- EMC Test for ACS800-01-0011-5+E202+L500+L501+L503 Test Report1010974B (2-Apr-2002)
- EMC Test for ACS800-01-0011-5+E202+L503+K458 Test Report1010996B (2-Apr-2002)
- EMC Test for ACS800-01-0011-3+E202+L500+L503+K458 Test Report1011107 (20-Dec-2001)
- EMC Test for ACS800-01-0011-3+E202+L502+L503+K454 Test Report1011115B (31-Dec-2001)
- EMC Test for ACS800-01-0025-5+E202+L503 Test Report1011078 (8-Apr-2002)
- EMC Test for ACS800-01-0140-5+E202+L503 Test Report1011095B (2-Apr-2002)
- EMC Test for ACS800-01-0070-5+E202+L503 Test Report1021214 (2-Apr-2002)
- EMC Test for ACS800-01-0060-7+D150+E200+L503 Test Report1031653 (26-Mar-2003)
- EMC Test for ACS800-01-0140-5+E202+L503 Test Report1021299 (10-Jun-2002)
- EMC Test for ACS800-01/U1-0070-2+E202+L503 Test Report1021459 (1-Nov-2002)
- EMC Test for ACS800-01/U1-0140-5 Test Report1031704 (15-May-2003)
- EMC Test for ACS800-01-0120-7+L503 Test Report1031551 (16-Jan-2003)
- EMC Test for ACS800-01-009-3+E202+L503 Test Report1011062B (26-Mar-2002)

- To be continued -

Test items & approval conditions:

1. Test items:

(Applied testing items are marked with X.)

ENVIRONMENTAL TESTS		Mark
External examination		X
Operation test and performance test		X
Electric power supply failure test		X
Power supply fluctuation test	Electric	X
	Pneumatic and Hydraulic	--
Insulation resistance test		X
High voltage test		X
Pressure test (Pneumatic and Hydraulic)		--
Dry heat test (Temperature 55°C × 16 hours)		X
Damp heat test		X
Vibration test (Acceleration ±0.7g)		X
Inclination test		X
Cold test (Temperature 5°C × 2 hours)		X
Salt mist test		--
Electrostatic discharge immunity test		X
Radiated radio frequency immunity test (80-2000MHz)		X
Conducted low frequency immunity test		X
Conducted high frequency immunity test		X
Burst / Fast transient immunity test		X
Surge immunity test		X
Radiated emission test (0.15-2000MHz)		X
Conducted emission test		X
Flame retardant test		--

2. Approval condition:

- The product is not allowed to be installed on open decks.
- The product is not to be installed on ship contracted for construction on or after 1 January 2022.

- The End -