


Reference No. STR L2571


Our ref. HEL-CERT220500859-01

STATEMENT OF TEST RESULTS

Product	Air-cooled frequency converter
Tested on request of	ABB Oy Drives, P.O. Box 184, FI – 00381 HELSINKI, FINLAND
Name and address of the manufacturer	ABB Oy Drives, Hiomotie 13, FI – 00380 HELSINKI, FINLAND
Name and address of the factory	See page 2
Rating and principal characteristics	Class I. For voltage, current and frequency ratings, see pages 3 to 4.
Trademark (if any)	
Type	ACS880-11 and ACS880-31 See pages 3 to 4 for type code details.
Additional information (if any)	See page 2.
Sufficient samples of the product have been tested and found to be in conformity with the standard (number and edition)	IEC 61800-5-1:2007 + AMD1:2016 EN 61800-5-1:2007 + A1:2017
As shown in the test report (reference No.)	HELES2111001176-1, HELES2111001176-2, HELES2111001176-5 and HELES2201000059-1

This statement of test results is based on tested samples of the product. Samples of the product have been tested and found to be in conformity with above mentioned standard(s) which are harmonised under the Low Voltage Directive (2014/35/EU).

This statement of test results is not a FI certificate thus not giving the right to use the FI or SGS FI mark on products, its packaging or any marketing material or activities.

Date of issue	2022-09-09
	SGS Fimko Ltd
Signature	 Timo Leismala Team Leader, EMC & RF

Name and address of the factory

ABB Oy Drives
Hiomotie 13
FI-00380 Helsinki, Finland

ABB Inc., Drives & Power Products
16250 West Glendale Drive
WI 53151-2840, New Berlin, Wisconsin,
United States of America

ABB Beijing Drive Systems Co Ltd.
No1, Blk D, A-10, Jiuxianqiao Beilu
Chaoyang District, Beijing, 100015, China

Additional information (if any)
Air-cooled frequency converters / drives:

ACS880-11 (air-cooled regenerative frequency converter)
ACS880-31 (air-cooled low harmonic frequency converter)

Ambient temperature during operation (°C) with/without derating:

+40°C without output current de-rating

ACS880 models:

IP21 and IP55: +40 °C – +55 °C de-rating of 1 % per each 1 °C.

Exceptions:

ACS880-11-206A-3 IP55 and ACS880-11-180A-5 IP55 models: +55 °C with 1,5 % derating of rated output current per 1 K temperature increase above +40 °C.

ACS880-11-...+X5663: +40 °C - +45 °C 95 % of rated output current, +45 °C - +50 °C 90 % of rated output current, +50 °C - +55 °C 85 % of rated output current.

Additional information:

The fuses or circuit breakers can be alternatively used to protect against overcurrent and short-circuit conditions, ref. hardware manual for details.

Frame sizes R3 and R6:

Non-corner earthed TN/TT/IT networks: Max. 4000 m

Frame size R8:

Max. operation altitude 4000 m (TN, TT: neutral earthed network systems; IT: non-corner earthed network system)

Max. operation altitude 2000 m (TN, TT, IT: corner earthed network systems)

IP classes:

IP21 or IP55. Frame size R8 cabinet installation (option +P940): IP20

Rating table:

Drive type	Frame size	IEC ratings $U_N = 3\sim 400$ V AC			
		Input	Output		
		I1 (A)	I2 (A)	S _N (kVA)	P _N (kW)
ACS880-x1-09A4-3	R3	8	10	6,9	4
ACS880-x1-12A6-3	R3	10	12,9	8,9	5,5
ACS880-x1-017A-3	R3	14	17	12	7,5
ACS880-x1-025A-3	R3	20	25	17	11
ACS880-x1-032A-3	R6	27	32	22	15
ACS880-x1-038A-3	R6	33	38	26	18,5
ACS880-x1-045A-3	R6	40	45	31	22
ACS880-x1-061A-3	R6	51	61	42	30
ACS880-x1-072A-3	R6	63	72	50	37
ACS880-x1-087A-3	R6	76	87	60	45

With $f_1 = 50/60$ Hz, $U_2 = 3\sim 0\ldots U_1$ and $f_2 = 0\ldots 500$ Hz, $I_{cc} = 100$ kA.

With “-x1” = “-11” or “-31”.

Drive type	Frame size	IEC ratings $U_N = 3\sim 500$ V AC			UL ratings $U_N = 3\sim 480$ V AC		
		Input	Output		Input	Output	
		I1 (A)	I2 (A)	P _N (kW)	I1 (A)	I _{LD} (A)	P _{LD} (hp)
ACS880-x1-07A6-5	R3	7	7,6	4	7	7,6	5
ACS880-x1-11A0-5	R3	9	11	5,5	9	11	7,5
ACS880-x1-014A-5	R3	12	14	7,5	12	14	10
ACS880-x1-021A-5	R3	17	21	11	17	21	15
ACS880-x1-027A-5	R6	24	27	15	24	27	20
ACS880-x1-034A-5	R6	29	34	18,5	29	34	25
ACS880-x1-040A-5	R6	34	40	22	34	40	30
ACS880-x1-052A-5	R6	44	52	30	44	52	40
ACS880-x1-065A-5	R6	54	65	37	54	65	50
ACS880-x1-077A-5	R6	66	77	45	66	77	60

With $f_1 = 50/60$ Hz, $U_2 = 3\sim 0\ldots U_1$ and $f_2 = 0\ldots 500$ Hz, $I_{cc} = 100$ kA.

With “-x1” = “-11” or “-31”.

Rating table:

Drive type ACS880-11/31-	Frame size	IEC ratings $U_N = 500 \text{ V}$				UL ratings $U_N = 480 \text{ V}$			
		I1 / A	S _N / kVA	I2 / A	P _N / kW	I1 / A	S _N / kVA	I _{LD} / A	P _{LD} / hp
-101A-5	R8	71	87	101	55	74	87	96	75
-124A-5	R8	96	107	124	75	100	107	124	100
-156A-5	R8	115	137	156	90	120	137	156	125
-180A-5	R8	141	156	180	110	147	156	180	150

with f1: 50/60 Hz, f2: 0...500 Hz and U2: 3~ 0...U1 V.

Drive type: ACS880-11-...+X5663	Frame size	Input ratings			Nominal use		Cyclic load use			
		I1 / A (U1 = 380V)	I1 / A (U1 = 500V)	I _{max} / A (t < 2s)	S _N / kVA	I2 / A	P _N / kW	Nominal I2 / A	Acceleration I2 / A	Deceleration I2 / A
-119A-5	R8	125	95	264	82	119	72	100	240	60
-179A-5	R8	187	142	396	124	179	110	150	360	90

with f1: 50/60 Hz, f2: 0...500 Hz and U2: 3~ 0...U1 V.

Model ACS880-11/31-	Frame size	IEC ratings $U_N = 400 \text{ V}$			
		I1 / A	S _N / kVA	I2 / A	P _N / kW
-105A-3	R8	88	73	105	55
-145A-3	R8	120	100	145	75
-169A-3	R8	144	117	169	90
-206A-3	R8	176	143	206	110

with f1: 50/60 Hz, f2: 0...500 Hz and U2: 3~ 0...U1 V.