



中国认可
国际互认
检测
TESTING
CNAS L1460



Security Code: 554516123

TEST REPORT

Report No: ZGA200342R

Product Name: Three Phase Four Wire Static Energy Meter
(DIN-rail mounted)

Model: ADW300

Test Date: From 2020-08-20 to 2020-08-20

Client: Acrel Co., Ltd.

MECHANICAL & ELECTRICAL PRODUCTS AND VEHICLE TESTING CENTER
OF WUXI CUSTOMS

(STATE KEY TESTING LAB OF ELECTRICAL SAFETY)
(STATE KEY TESTING LAB OF INTERNET OF THINGS PRODUCTS)
(STATE KEY TESTING LAB OF MOTOR VEHICLE AND COMPONENT)

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4. You have one month to draw back the testing sample after receiving the report. We will deal with it ourselves exceed the limit time.
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9. Supervision and complaints can be addressed through the telephone number 0510-83583556, 0510-83598952.

TESTING INSTITUTION INFORMATION

Laboratory Name: Mechanical & Electrical Products and Vehicle Testing Center of Wuxi Customs

Address: 328 Yanxin Road, Huishan District, Wuxi, Jiangsu

Post Code: 214174

Telephone: 0510-83583537 (Safety & performance of vehicle parts testing)
0510-83583525 (EMC, environment reliability testing)
0510-83597963 (Hazardous substance testing)
0510-83583550 (Electrical safety, performance testing and so on)

Fax: 0510-83583539

Product:	Three Phase FourWire Static Energy Meter(DIN-rail mounted)	
Trade Mark:	N/A	
Model:	ADW300	
Manufacturer:	Jiangsu Acrel Electrical Manufacturing. Co., Ltd.	
Address:	No.5, Dongmeng Road, Nanzha Street, Jiangyin City, Jiangsu Province, China	
Rating:	IP30	
Quantity:	1	
Received date:	2020-08-20	
Client:	Acrel Co., Ltd.	
Address:	No.253, Yulv Road, Jiading District, Shanghai, China	
Test standard:	IEC 60529:2013 Degrees of protection provided by enclosure (IP code)	
Deviation note:	N/A	
Non-standard method:	N/A	
Test address:	328 Yanxin Road, Huishan District, Wuxi, Jiangsu	
Test conclusion:	The test items meet the above standards	
Remark:	N/A	
Tested by:	Tao Cheng	Signature: <i>Tao Cheng</i>
Reviewed by:	Jun Dong	Signature: <i>Dong Jun</i>
Approved by:	Jiejun Zhao	Signature: <i>Jiejun Zhao</i>
Date of issue:	2020-08-21	

Markings of sample:

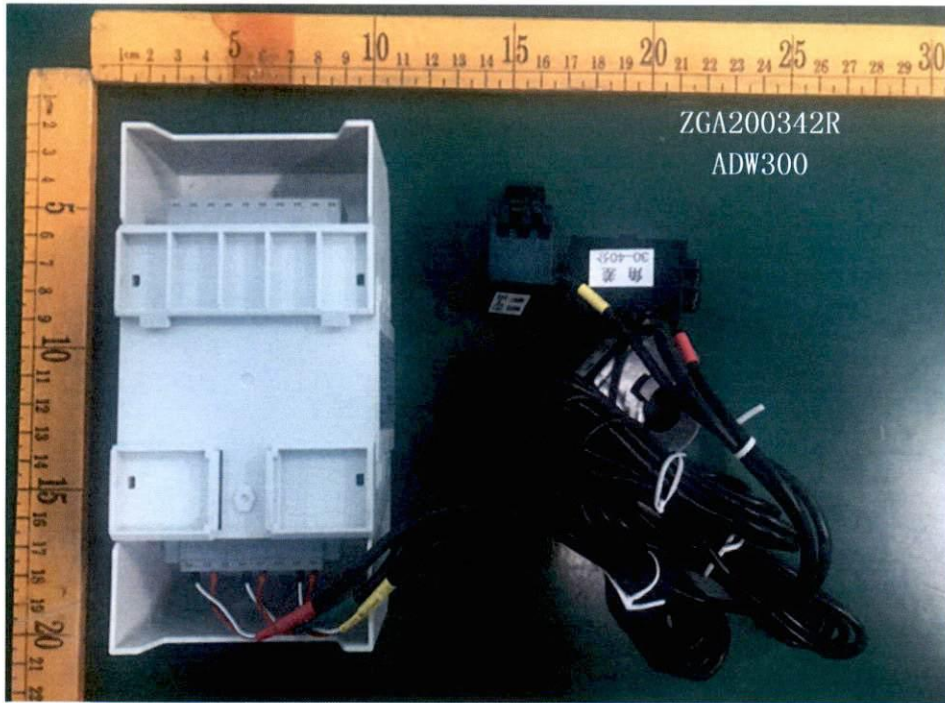
N/A

Pictures of sample:

Initial



Pictures of sample:

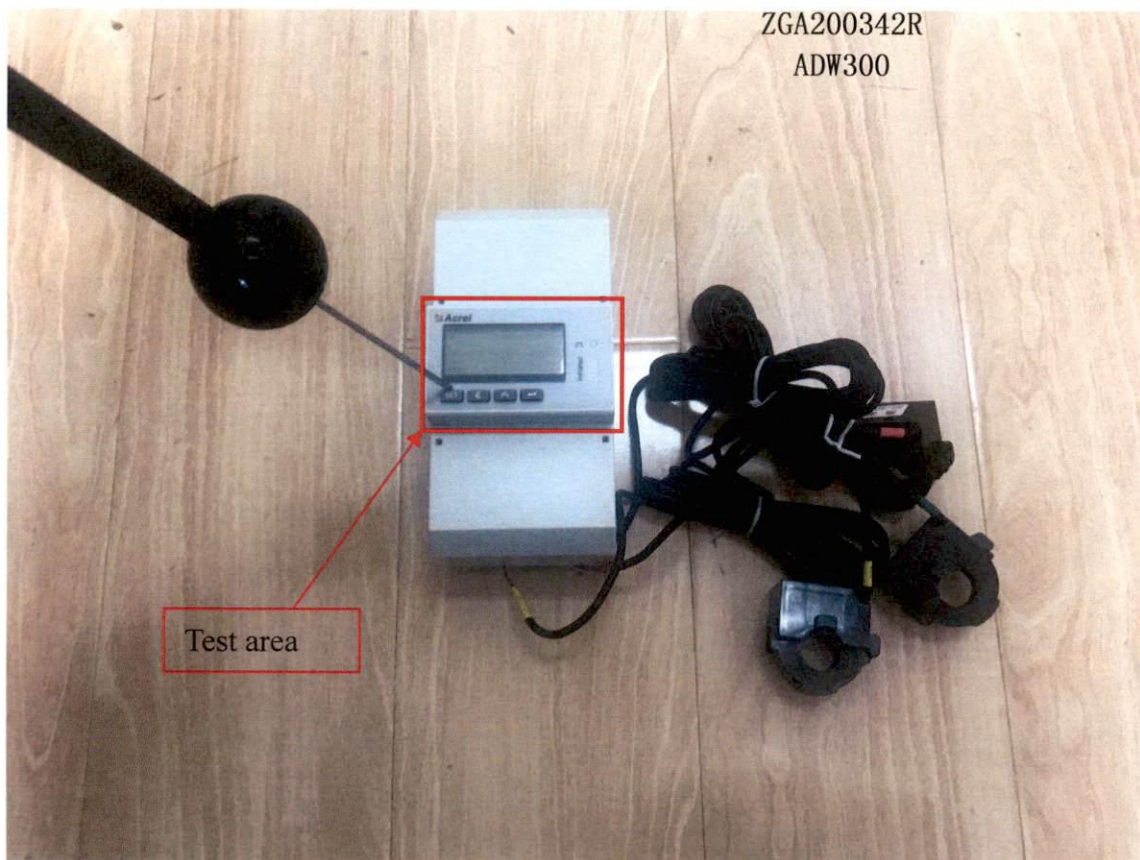


IP3X test



ZGA200342R
ADW300

Pictures of sample:



IEC 60529:2013			
Clause	Requirement-Test	Result-Remark	Verdict
5	Degrees of protection against access to hazardous parts and against solid foreign objects indicated by the first characteristic numeral	IP <u>3X</u>	P
5.1	Protection against access to hazardous parts		
	First characteristic numeral 0. Non-protected		N/A
	First characteristic numeral 1. Protected against access to hazardous parts with the back of a hand. The access probe, sphere of 50 mm Ø, shall have adequate clearance from hazardous parts The sphere of 50 mm Ø shall not fully penetrate and adequate clearance shall be kept.		N/A
	First characteristic numeral 2. Protected against access to hazardous parts with a finger. The joint test finger of 12 mm Ø, 80 mm length, shall have adequate clearance from hazardous parts The jointed test finger may penetrate up to its 80 mm length, but adequate clearance shall be kept		N/A
	First characteristic numeral 3. Protected against access to hazardous parts with a tool. The access probe of Ø2.5 mm shall not penetrate. The test rod of Ø2.5 mm shall not penetrate and adequate clearance shall be kept	The test rod does not penetrate and adequate clearance is kept (only for Test area)	P
	First characteristic numeral 4. Protected against access to hazardous parts with a wire. The access probe of 1.0 mm Ø shall not penetrate. The test wire of 1.0 mm Ø shall not penetrate and adequate clearance shall be kept		N/A
	First characteristic numeral 5. Protected against access to hazardous parts with a wire. The access probe of 1.0 mm Ø shall not penetrate. The test wire of 1.0 mm Ø shall not penetrate and adequate clearance shall be kept		N/A
	First characteristic numeral 6. Protected against access to hazardous parts with a wire. The access probe of 1.0 mm Ø shall not penetrate. The test wire of 1.0 mm Ø shall not penetrate and adequate clearance shall be kept		N/A
5.2	Protection against solid foreign objects		
	First characteristic numeral 0. Non-protected		N/A
	First characteristic numeral 1. Protected again solid foreign objects of 50 mm Ø and greater. The object probe, sphere of 50 mm Ø, shall not fully penetrate The sphere of 50 mm Ø shall not fully penetrate and adequate clearance shall be kept. Test force 50N ± 10%		N/A

IEC 60529:2013			
Clause	Requirement-Test	Result-Remark	Verdict
	<p>First characteristic numeral 2. Protected against solid foreign objects of 12.5 mm Ø and greater. The object probe, sphere of 12.5 mm Ø, shall not fully penetrate</p> <p>The sphere of 12.5 mm Ø shall not fully penetrate. Test force. Test force 30N ± 10%.</p>		N/A
	<p>First characteristic numeral 3. Protected against solid foreign objects of Ø 2.5 mm and greater. The object probe, sphere of Ø 2.5 mm, shall not penetrate at all</p> <p>The test rod of Ø2.5 mm shall not penetrate and adequate clearance shall be kept. Test force 3N ± 10%</p>	The test rod does not penetrate and adequate clearance is kept (only for Test area)	P
	<p>First characteristic numeral 4. Protected against solid foreign objects of 1.0 mm Ø and greater. The object probe of 1.0 mm Ø, shall not penetrate at all</p> <p>The test wire of 1.0 mm Ø shall not penetrate and adequate clearance shall be kept. Test force 1 N ± 10%</p>		N/A
	<p>First characteristic numeral 5. Dust-protected. Ingress of dust is not totally prevented, but dust shall not penetrate in a quantity to interfere with satisfactory operation of the apparatus or to impair safety.</p> <p>1) Category 1</p> <p>The enclosure under test is supported inside the test chamber and the pressure inside the enclosure is maintained below the surrounding atmospheric pressure by a vacuum pump.</p> <p>a) If an extraction rate of 40 to 60 volumes per hour is obtained the duration of the test is 2h</p> <p>b) If, with a maximum depression of 2kPa(20 mbar), the extraction rate is less than 40 volumes per hour, the test is continued until 80 volumes have been drawn through, or a period of 8h has elapsed</p> <p>2) Category 2(unless the relevant product standard for the equipment specifies the enclosure is category 2)</p> <p>The enclosure under is supported in its normal operating position inside the chamber, but is not connected to a vacuum pump. Any drain-hole normally open shall be left open for the duration of the test. The test shall be continued for a period of 8h.</p> <p>The protection is satisfactory if, on inspection, talcum powder has not accumulated in a quantity or location such that, as with any other kind of dust, it could interfere with the correct operation of the equipment or impair safety. Except for special cases to be clearly specified in the relevant product standard, not dust shall deposit where it could lead to tracking along the creepage distances.</p>		N/A

IEC 60529:2013

Clause	Requirement-Test	Result-Remark	Verdict
	<p>First characteristic numeral 6. Dust-tight. No ingress of dust.</p> <p>The enclosure under test is supported inside the test chamber and the pressure inside the enclosure is maintained below the surrounding atmospheric pressure by a vacuum pump.</p> <p>If an extraction rate of 40 to 60 volumes per hour is obtained the duration of the test is 2h</p> <p>If, with a maximum depression of 2kPa(20 mbar), the extraction rate is less than 40 volumes per hour, the test is continued until 80 volumes have been drawn through, or a period of 8h has elapsed</p> <p>The protection is satisfactory if no deposit of dust is observable inside the enclosure at the end of the test.</p>		N/A

DETERMINATION: P(Pass) Test object does meet the requirement.
 F(Fail) Test object does not meet the requirement.
 N/A Test case does not apply to the test object.

LIST OF TEST EQUIPMENT

NO.	Name	Model	Serial Number	Calibration Valid Until	Use (√)
1	Portable IP test kit	ILT-I03 (IP3X)	S13050773-3	2020.12.26	√
2	Force Gauge	PS100N	S99020283	2020.12.26	√

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