

Test Report

TEST OBJECT	Solid insulated automatic circuit recloser
DESIGNATION	EPR-1 15.5 kV 630 A 50 Hz/60 Hz
APPLICANT	Entec Electric & Electronic Co., Ltd. 225-38, Choerubaek-ro, Bongdam-eup, Hwaseong-si, Gyeonggi-do, Republic of Korea
MANUFACTURER	Entec Electric & Electronic Co., Ltd. 225-38, Choerubaek-ro, Bongdam-eup, Hwaseong-si, Gyeonggi-do, Republic of Korea
DATE OF TESTS	2022-03-31
ISSUED NUMBER	22TC200278

The test object, constructed complying with the description, drawings and photographs incorporated in this Test Report has been subjected to the performance tests in accordance with

IEC 62271-111: 2019 subclause 7.2.7.2

The values obtained and the general performance are considered to comply with the above Standard. This Test Report applies only to the test object. The responsibility for conformity of any object having the same designations with that tested rests with the Manufacturer. This Test Report comprises 14 sheets in total.

COPYRIGHT : Only integral reproduction of this 'Test Report' is permitted without written permission from KERI. Electronic copies are information only. The sealed version of this 'Test Report' is the only valid version.

Prepared by

안건현

Ahn, Gun-hyun

Approved by

김건용

Kim, Geun-yong

Date of issue

2022-04-13

President



[DF-HH-7081-05/02]

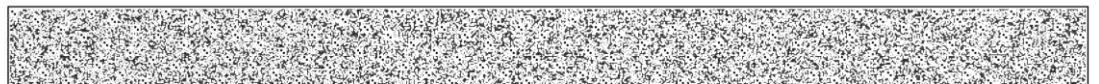


Summary of tests

Standard IEC 62271-111: 2019

Test Item(s)		Comment
7.2.7.2	Power-frequency voltage tests	Pass

♣ IEC GUIDE 115 was applied as the decision rule.



Contents

Ratings	4
Identification of test object	5
List of drawing(s)	6
General	7
Test results	9
Drawing(s)	12
Information sheet	14

ELECTROCON SRL



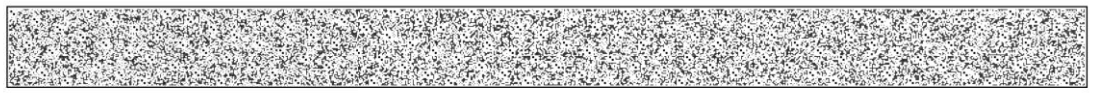
Ratings

Solid insulated automatic circuit recloser

Power-frequency withstand voltage

50 kV

ELECTROCON SRL



Identification of test object

Assigned by manufacturer

Solid insulated automatic circuit recloser

Manufacturer	Entec Electric & Electronic Co., Ltd.
Designation	EPR-1
Serial No.	22030001
Maximum voltage	15.5 kV
Normal current	630 A
Frequency	50 Hz/60 Hz



List of drawing(s)

The manufacturer has guaranteed that the test object submitted has been manufactured in accordance with the following drawings. KERI has verified that these drawings adequately represent the test object.

The following drawings have been included in this test report.

Ref. No.	Drawing No.(Rev. No.)	Title	Date
001	EPR1-KE001(0)	LAYOUT	2019-04-10

The following drawings have been returned to the manufacturer and listed only for reference.

Ref. No.	Drawing No.(Rev. No.)	Title	Date
N.A.			



General

Approved by :

Kim, Geun-yong

High Voltage Laboratory (Ansan)

Tested by :

Ahn, Gun-hyun

High Voltage Laboratory (Ansan)

Witnessed by :

N.A.

Measurement uncertainty

N.A.

ELECTROCON SRL



The others

Thew tests were carried out on the thest objects submitted by the applicant.

ELECTROCON SRL



Test results

	Test item	Location	Page
1	Power-frequency voltage tests	KERI-C2	10

KERI-C2 : KERI Electrical Apparatus Evaluation Division(Ansan)
111, Hanggaul-ro, Sangnok-gu, Ansan-si, Gyeonggi-do, Korea



1. Power-frequency voltage tests

Test Date 2022-03-31

1) Power-frequency dry voltage tests

Test conditions

Serial No.	22030001
Atmospheric conditions	14.6 °C, 63.2 % R.H., 1 020 hPa
Atmospheric correction factor	1.000 ¹⁾
Test voltages	
Phase-to-earth	50 kV
Between phases	50 kV
Across open switching device	50 kV
Test frequency	60 Hz
Test duration	60 s

Test results

Voltage applied to		Switching devices	Test results
Phase-to-earth and between phases	Aa - BbCcF	Closed	Withstood
	Bb - AaCcF		Withstood
	Cc - AaBbF		Withstood
Across open switching device	A - aBbCcF	Open	Withstood
	B - bAaCcF		Withstood
	C - cAaBbF		Withstood
	a - ABbCcF		Withstood
	b - BAaCcF		Withstood
	c - CAaBbF		Withstood
* A, B, C : Fixed contact side terminal * a, b, c : Moving contact side terminal * F : Frame			

Remarks

¹⁾ This value was applied with the consent of the applicant(Calculated atmospheric correction factor : 0.997).



2) Power-frequency wet voltage tests

Test conditions

Serial No.	22030001
Atmospheric conditions	14.6 °C, 63.2 % R.H., 1 020 hPa
Atmospheric correction factor	1.005 ¹⁾
Test voltages	
Phase-to-earth	50 kV
Between phases	50 kV
Across open switching device	50 kV
Test frequency	60 Hz
Test duration	60 s
Precipitation conditions	
Vertical component	2 mm/min
Horizontal component	2 mm/min
Conductivity of water	100.2 μS/cm
Temperature of water	15.3 °C

Test results

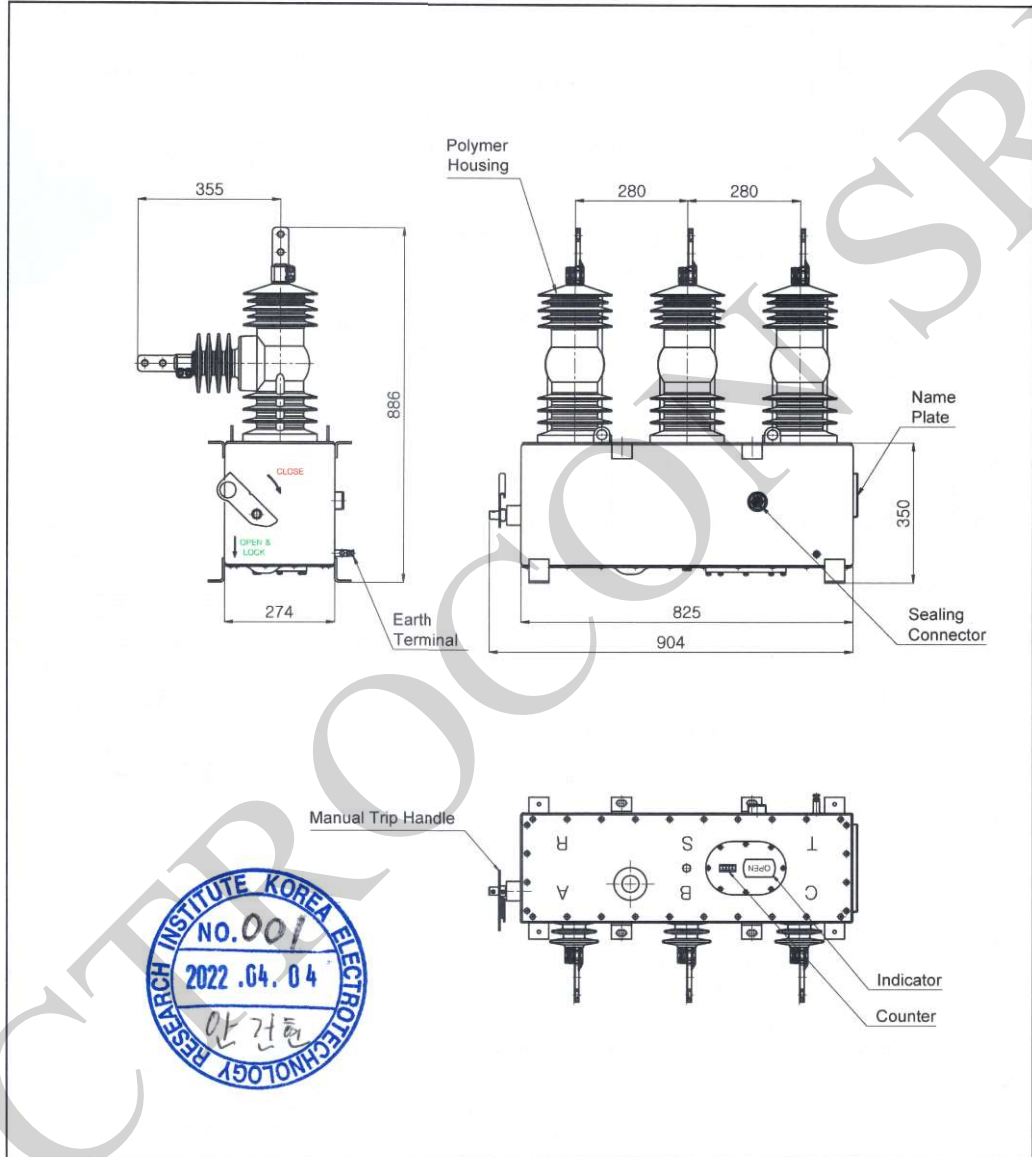
Voltage applied to		Switching devices	Test results
Phase-to-earth and between phases	Aa - BbCcF	Closed	Withstood
	Bb - AaCcF		Withstood
	Cc - AaBbF		Withstood
Across open switching device	A - aBbCcF	Open	Withstood
	B - bAaCcF		Withstood
	C - cAaBbF		Withstood
	a - ABbCcF		Withstood
	b - BAaCcF		Withstood
	c - CAaBbF		Withstood
* A, B, C : Fixed contact side terminal * a, b, c : Moving contact side terminal * F : Frame			

Remarks

¹⁾ This value was applied to the external insulation of test object.



Drawing(s)



품번 NO.	품명 DESCRIPTION			재질 MATERIAL		수량 Q'TY	규격 SPEC	도번 DWG.NO.	비고 REMARK
제도 DRAWN	설계 DESIGNED	검도 CHECKED	승인 APPROVED	공차 TOLERANCE	작성일 DATE	척도 SCALE	15.5kV POLYMER INSULATED AUTOMATIC CIRCUIT RECLOSER		
	Shin Y.S.	Kim T.H.	Kim Y.I.	±3%	2019. 04.10	N / S	도명 TITLE	LAY OUT	
ENTEC ELECTRIC & ELECTRONIC CO.,LTD.							도번 DWG.NO.	EPR1-KE001	개정 REV.
							관련도면 REF.NO.		0

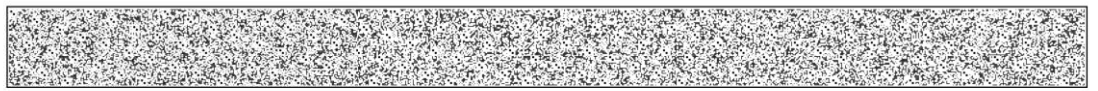
LAYOUT



Attachment



Photo_Test object



INFORMATION SHEET

KERI(Korea Electrotechnology Research Institute) issues following types of Test Documents.

1. STL Type Test Certificate

This Certificate is the most prestigious records of Type Tests performed in compliance with IEC standards and regional or national standards that are identical to corresponding IEC standards following STL Guide and Rules. This Certificate provides the verification of the rated characteristics of the test object.

2. KERI Type Test Certificate

This Certificate is the records of Type Tests performed in compliance with IEC standards and regional or national standards that are identical to corresponding IEC standards following STL Rules and KERI certification procedures. This Certificate provides the verification of the rated characteristics of the test object.

3. Type Test Report

This Report is the records of a complete series of Type Tests performed in compliance with the authorized standard recognized by KERI following KERI Testing Regulations.

4. Test Report

This Report is the records of one or more tests performed in compliance with authorized standards.

5. Record of Test Results

This is the records of the performed tests according to the specifications or instructions presented by the applicant.

- The authenticity of the test results can be identified at the following website : https://trca2.keri.re.kr/KERI_CUS_PORTAL/main.lims
- For further information, please visit KERI website(www.keri.re.kr) or contact Testing Management Department(+82-55-280-1111).

End.