



Certificate No. : TC-5389

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TEST REPORT

SHEET 1 OF 24

NAME AND ADDRESS OF CUSTOMER: Ashida Electronics Pvt. Ltd., Plot No. A-308, Road No.21, Wagle Industrial Estate, Thane-400604 Maharashtra, India.	REPORT NO.: RP-1718-003663	
	DATE : 24.04.2017	
	CUSTOMER REF. NO.: NIL	
	DATED: 14.04.2017	
	DATE OF SAMPLE RECEIPT	DATE OF TESTING
	14.04.2017	17.04.2017
SAMPLE DESCRIPTION: See Annexure-I Sheet No.2 of this report	SAMPLE IDENTIFICATION: See Annexure-I Sheet No.2 of this report	
TEST DETAILS Ring wave Immunity test	TEST SPECIFICATION: As per customer requirement & test procedure followed as per cl no.8, Table 1 of IEC 61000-4-12:2006.	
Notes: 1) Only Ring wave immunity test has been carried out as per customer requirements. 2) Operating procedure & acceptance criteria of the sample under test (EUT) as specified by the customer are mentioned on sheet no.3 & 4 of this test report. 3) Ring wave immunity test was carried out on ports as mentioned on Annexure-II of this test report. 4) Detailed operating & test procedure of the ports during the test mentioned on sheet No. 5 & 6 of this test report. 5) The list of the major equipments used during the test is mentioned on sheet no.8 of this report. 6) Test set up block diagram is shown on sheet no.9 of this test report. 7) Photograph of test setup & sample description of EUT is shown on sheet no. 23 & 24 of this test report.		
REMARK: The sample conforms to the requirement as specified by the customer for the above-mentioned test.		
WITNESSED BY: Mr. Prashant Patil - Ashida Electronics Pvt. Ltd., Thane.		
		
PREPARED BY	CHECKED BY	Dr. Vinod Gupta APPROVED BY

Note: 1. This report relates only to the particular sample received for testing in good condition at ERDA, Vadodara.

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ANNEXURE-I

SAMPLE DESCRIPTION:	SAMPLE IDENTIFICATION:
ASHIDA Feeder Protection Relay CT : 1A / 5A PT : 63.5 VAC Freq.: 50 Hz / 60 Hz Aux Supply = 24 V to 230 V AC/DC	Sr. No: 16L245M0001 Platform: ADR24xB-M ERDA Sample Code No.: ERDA-00193872
Accessories used: <ul style="list-style-type: none">• Doble - Model no.:F6150, Sr. No.: 61315485• Laptop	
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Operating procedure of the sample under test as specified by the customer:

Sample / Equipment under Test (EUT)

EUT: Feeder Protection Relay

EUT Brief Description:

The EUT is a high performance Enhance Aditya M (Modular) protection relay platform, designed for highly electrical noisy substation environment. Following are some of the feature of this platform:

- High performance 32-Bit processor with Floating point Unit operating at 200MHz
- 8 Analogue input having 16 bit simultaneous sampling ADC, design for CT or PT
- 32 Digital Input / Output extended up to 64 Nos.
- RTD and 4-20mA analogue input
- Dual redundant Ethernet ports
- RS485 port
- 16 dual colour LEDs
- Breaker Close / Trip Push buttons
- Graphical Display

Operating Procedure:

Connect the Input supply 110V DC to the power supply terminal of EUT.

Pick up value Test:

- Connect current source at 1A current to input terminal.
- Set current setting value to 100% i.e. 1A, TMS at Minimum (x0.02) value and Curve setting to C1.
- Start current injector & increase current value till relay get pick up and trip.
- The operating value should be within 1 to 1.1 times of set pickup value.

Operating Time Test:

- Set current 2N i.e. 2A and connect trip contact to timer.
- Change the TMS setting at 1.00.
- Start the current injector and measure the operating time. The trip time value should be within $\pm 12.5\%$ of actual value. (Actual time 10.029 Sec.)

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Operating condition, performance and acceptance criteria of the sample under test as specified by the customer:

Continued....

Operating condition during the test:

- EUT shall be in "ON" condition during the test.
- Applied 110 VDC to Auxiliary supply input terminal.
- During test, Set Current value less than trip value (<90%). i.e.0.9 A
- All Binary inputs are energized with 110V DC.
- RS485 communication will be in working condition.
- During the test 63.5 VAC apply to PT input terminal.

Performance Criteria as specified by customer :

Following parameters should be monitored Before during & after the test.

- 'ENABLE' LED (Green) should be continuously 'ON'.
- Display of EUT should not garbage, reset and hang-up.
All programmable LEDs (15 Nos. dual colour) should remain OFF.
- Monitor device should be healthy condition on relay talk software.

Acceptance criteria 'A' as per IEC 61000-4-12 as specified by customer:

- Normal performance within limits specified by the manufacturer, requestor or purchaser:

Following parameters of EUT should be checked before & after the test.

	A Ph. Value	B Ph. Value	C Ph. Value	Earth	Tolerance
Pick Up					1-1.1 Amp
Operating Time (2 Amp)					8.77-11.29 Sec

Notes:

- During performance test of EUT, measured value shall be observed on Relay test unit (Doble)/Laptop.
- Relay shall be considered to be stable subject to fulfillment of the performance criteria as specified by the customer.

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Operating & test procedure of ports under 'Non-Operate condition' of sample under test as specified by the customer:

1) Power Supply:

- Applied 110 VDC to Auxiliary supply input terminal.
- During test, Set Current value less than trip value (<90%). i.e.0.9 A
- All Binary inputs are energized with 110V DC.
- RS485 communication will be in working condition.
- During the test 63.5 VAC apply to PT input terminal.

2) PT Input:

- Applied 110 VDC to Auxiliary supply input terminal.
- During test, Set Current value less than trip value (<90%). i.e.0.9 A
- All Binary inputs are energized with 110V DC.
- RS485 communication will be in working condition.
- During the test 63.5 VAC apply to PT input terminal.

3) CT Input:

- Applied 110 VDC to Auxiliary supply input terminal.
- During test, Set Current value less than trip value (<90%). i.e.0.9 A
- All Binary inputs are energized with 110V DC.
- RS485 communication will be in working condition.
- During the test 63.5 VAC apply to PT input terminal.

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Operating & test procedure of ports under 'Non-Operate condition' of sample under test as specified by the customer:

Continued....

4) Binary Input For H card (IN1):

- Applied 110 VDC to Auxiliary supply input terminal.
- During test, Set Current value less than trip value (<90%). i.e.0.9 A
- All Binary inputs are energized with 110V DC.
- RS485 communication will be in working condition.
- During the test 63.5 VAC apply to PT input terminal.

5) Binary Input For I card (IN1):

- Applied 110 VDC to Auxiliary supply input terminal.
- During test, Set Current value less than trip value (<90%). i.e.0.9 A
- All Binary inputs are energized with 110V DC.
- RS485 communication will be in working condition.
- During the test 63.5 VAC apply to PT input terminal.

6) RS 485 Port

- Applied 110 VDC to Auxiliary supply input terminal.
- During test, Set Current value less than trip value (<90%). i.e.0.9 A
- All Binary inputs are energized with 110V DC.
- RS485 communication will be in working condition.
- During the test 63.5 VAC apply to PT input terminal.

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Annexure-II						
Test shall be performed on the following ports:						
Sr. No.	Port	Category	CDN	Condition	Terminal	Test Voltage
1)	Power Supply	Aux. Supply	CDN	Non-operate	E1-E5	± 2.5 kV
					E3-E5	± 2.5 kV
					E1-E3	± 1 kV
2)	CT Input (1Amp./5Amp. CT)	Phase CT Input- A	CDN	Non-operate	A1-E5	± 2.5 kV
					A2-E5	± 2.5 kV
					A1-A2	± 2.5 kV
3)	PT Input	Phase PT Input- A	CDN	Non-operate	B1-E5	± 2.5 kV
					B2-E5	± 2.5 kV
					B1-B2	± 2.5 kV
4)	Binary Input For H card (IN1)	Input Port	CDN	Non-operate	H1-E5	± 2.5 kV
					H2-E5	± 2.5 kV
					H1-H2	± 1 kV
5)	Binary Input For I card (IN1)	Input Port	CDN	Non-operate	I1-E5	± 2.5 kV
					I2-E5	± 2.5 kV
					I1-I2	± 1 kV
6)	RS 485 port	Communication port	CDN	Non-operate	F3-E5	± 2.5 kV
					F4-E5	± 2.5 kV
					F3-F4	± 1 kV
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LIST OF THE MAJOR EQUIPMENTS USED DURING THE TEST

Sr. No	Details of equipments used	Specifications	Traceability
1)	Ring wave generator with digital oscilloscope & H.V. probe ERDA Sr. No: 10091 Validity of calibration till date: 15.07.2017	Voltage Range: 500 V to 2500 V Peak Amplitude: Nominal $\pm 10\%$ Decaying: 50% of the peak value between the third and the six periods Rise time (10-90%): 75 ns $\pm 20\%$ Oscillation frequency: 100 kHz $\pm 10\%$	Calibration results are traceable to National and International Standards.
2)	Relay Test Unit (provided by customer) Sr. No. 61315485 ▪ Make: Doble ▪ Validity of calibration till date: 29.06.2017	AC Amplitude Accuracy at 50/60 Hz Voltage & Current Sources: Accuracy: Typically 0.02% of Rdg Timers and Triggers Accuracy: $\pm 0.0005\%$ of Rdg, $\pm 50\mu\text{sec}$.	Calibration results are traceable to National Standards

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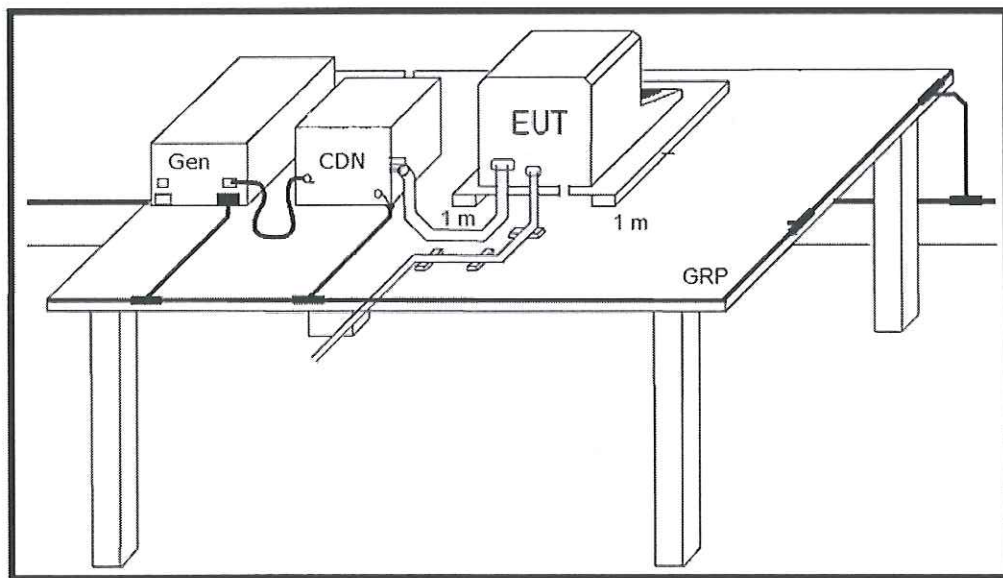
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Test set up block diagram for Ring wave immunity test

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Sr. No.	Particular of test and Cl. No.	Requirement as per customer specifications	Obtained value	Remarks
	Ring wave Immunity test as per customer requirements & test procedure followed as per cl no.8, Table 1 of IEC 61000-4-12:2006.	<p>Ring wave Immunity test as per customer requirements & test procedure followed as per cl no.8, Table 1 of IEC 61000-4-12:2006.</p> <p>The general test setup shall be as specified in Cl. no.7 of IEC 61000-4-12:2006.</p> <p>Parameters set during the test are mentioned below: Test level was selected as per Cl no. 5 of Table 1. of IEC 61000-4-12:2006 as follows: Voltage oscillation frequency: 100 kHz Impedance: 30 Ω Test time: 1s Burst Polarity: +/- Pulse: Five positive & five Negative Test Level: X</p> <p>Differential mode: E1-E3 : ± 1 kV Common mode: E1-E5 : ± 2.5 kV E3-E5 : ± 2.5 kV</p> <p>The EUT shall be energized and operated as specified on sheet No. 3 to 4 of this report</p> <p>Performance criteria and acceptance criteria as specified by customer are mentioned on sheet no. 4 & 5 of this report.</p>	The EUT was energized & operated as specified on sheet no. 3 & 4 of this report.	Conforms

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Sr. No	Particular of test and Cl. No.	Requirement as per customer specifications	Obtained value	Remarks
		1) Power Supply port: ('Non-operate' condition) Operating & test procedure of ports as mentioned on sheet no.5 & 6 of this report.	1) Power Supply port: ('Non-operate' condition) Performance test was carried out on 'Power Supply' port of EUT before & after test. The obtained values are mentioned on Annexure-III of this report. Following parameters were observed before, during and after the test as follows: <ul style="list-style-type: none"> ▪ 'ENABLE' LED (Green) was continuously 'ON'. ▪ Display of EUT did not garbage, reset and hang-up. ▪ All programmable LEDs (15 Nos. dual colour) remained OFF. ▪ Monitor device was healthy condition on relay talk software. 	
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Annexure-III Obtained values

Before Test:

	A Ph. Value	B Ph. Value	C Ph. Value	Earth	Tolerance
Pick Up	1.05	1.06	1.05	1.05	1-1.1 Amp
Operating Time (2 Amp)	10.04	10.06	10.04	10.07	8.77-11.29 Sec

After Test:

	A Ph. Value	B Ph. Value	C Ph. Value	Earth	Tolerance
Pick Up	1.05	1.06	1.05	1.05	1-1.1 Amp
Operating Time (2 Amp)	10.04	10.07	10.14	10.30	8.77-11.29 Sec

Note: During performance test of sample, measured values were observed on Relay test unit (Doble)/Laptop.

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Sr. No	Particular of test and Cl. No.	Requirement as per customer specifications	Obtained value	Remarks
		<p>2) PT Input: ('Non operate' condition) Ring wave Immunity test as per customer requirements & test procedure followed as per cl no.8, Table 1 of IEC 61000-4-12:2006.</p> <p>The general test setup shall be as specified in Cl. no.7 of IEC 61000-4-12:2006.</p> <p>Parameters set during the test are mentioned below: Test level was selected as per Cl no. 5 of Table 1. of IEC 61000-4-12:2006 as follows:</p> <p>Voltage oscillation frequency: 100 kHz Impedance: 30 Ω Test time: 1s Burst Polarity: +/- Pulse: Five positive & five Negative Test Level: X</p> <p>Performance criterion as specified by customer are mentioned on sheet no.2 of this report.</p> <p>Differential mode: B1-B2 : ± 2.5 kV Common mode: B1 - E5: ± 2.5 kV B2 - E5 : ± 2.5 kV</p> <p>The EUT shall be energized and operated as specified on sheet No. 3 to 4 of this report</p> <p>Performance criteria and acceptance criteria as specified by customer are mentioned on sheet no. 4 & 5 of this report.</p>	<p>2) PT Input: ('Non operate' condition)</p> <p>Performance test was carried out on PT Input port of EUT before & after the test. The obtained values are mentioned on Annexure-IV.</p> <p>Following parameters were observed before, during and after the test as follows:</p> <ul style="list-style-type: none">ENABLE' LED (Green) was continuously 'ON'.Display of EUT did not garbage, reset and hang-up.All programmable LEDs (15 Nos. dual colour) remained OFF.Monitor device was healthy condition on relay talk software.	

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Annexure-IV Obtained values

Before Test:

	A Ph. Value	B Ph. Value	C Ph. Value	Earth	Tolerance
Pick Up	1.05	1.06	1.05	1.05	1-1.1 Amp
Operating Time (2 Amp)	10.04	10.07	10.14	10.30	8.77-11.29 Sec

After Test:

	A Ph. Value	B Ph. Value	C Ph. Value	Earth	Tolerance
Pick Up	1.05	1.06	1.05	1.06	1-1.1 Amp
Operating Time (2 Amp)	10.04	10.07	10.04	10.06	8.77-11.29 Sec

Note: During performance test of EUT, measured values were observed on Relay test unit (Doble)/Laptop.

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Sr. No	Particular of test and Cl. No.	Requirement as per customer specifications	Obtained value	Remarks
		<p>3) CT Input: ('Non operate' condition) Ring wave Immunity test as per customer requirements & test procedure followed as per cl no.8, Table 1 of IEC 61000-4-12:2006.</p> <p>The general test setup shall be as specified in Cl. no.7 of IEC 61000-4-12:2006.</p> <p>Parameters set during the test are mentioned below: Test level was selected as per Cl no. 5 of Table 1. of IEC 61000-4-12:2006 as follows:</p> <p>Voltage oscillation frequency: 100 kHz Impedance: 30 Ω Test time: 1s Burst Polarity: +/- Pulse: Five positive & five Negative Test Level: X</p> <p>Performance criterion as specified by customer are mentioned on sheet no.2 of this report. Differential mode: A1-A2 : ± 2.5 kV Common mode: A1 - E5: ± 2.5 kV A2 - E5 : ± 2.5 kV</p> <p>The EUT shall be energized and operated as specified on sheet No. 3 to 4 of this report</p> <p>Performance criteria and acceptance criteria as specified by customer are mentioned on sheet no. 4 & 5 of this report.</p>	<p>3) CT Input: ('Non operate' condition)</p> <p>Performance test was carried out on CT Input port of EUT before & after the test. The obtained values are mentioned Annexure-V.</p> <p>Following parameters were observed before, during and after the test as follows:</p> <ul style="list-style-type: none">▪ 'ENABLE' LED (Green) was continuously 'ON'.▪ Display of EUT did not garbage, reset and hang-up.▪ All programmable LEDs (15 Nos. dual colour) remained OFF.▪ Monitor device was healthy condition on relay talk software.	

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Annexure-V

Obtained values

Before Test:

	A Ph. Value	B Ph. Value	C Ph. Value	Earth	Tolerance
Pick Up	1.05	1.06	1.05	1.06	1-1.1 Amp
Operating Time (2 Amp)	10.04	10.07	10.04	10.06	8.77-11.29 Sec

After Test:

	A Ph. Value	B Ph. Value	C Ph. Value	Earth	Tolerance
Pick Up	1.05	1.06	1.05	1.06	1-1.1 Amp
Operating Time (2 Amp)	10.20	10.15	10.04	10.05	8.77-11.29 Sec

Note: During performance test of EUT, measured values were observed on Relay test unit (Doble)/Laptop.

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TEST REPORT NO.: RP-1718-003663

DATE: 24.04.2017

SHEET 17 OF 24

Sr. No	Particular of test and Cl. No.	Requirement as per customer specifications	Obtained value	Remarks
		<p>4) Binary input port for H card (IN1): ('Non operate' condition) Ring wave Immunity test as per customer requirements & test procedure followed as per cl no.8, Table 1 of IEC 61000-4-12:2006.</p> <p>The general test setup shall be as specified in Cl. no.7 of IEC 61000-4-12:2006.</p> <p>Parameters set during the test are mentioned below: Test level was selected as per Cl no. 5 of Table 1. of IEC 61000-4-12:2006 as follows:</p> <p>Voltage oscillation frequency: 100 kHz Impedance:30 Ω Test time:1s Burst Polarity:+/- Pulse: Five positive & five Negative Test Level:X</p> <p>Differential mode: H1-H2 : ±1 kV Common mode: H1 - E5: ± 2.5 kV H2 - E5 : ± 2.5 kV</p> <p>The EUT shall be energized and operated as specified on sheet No. 3 to 4 of this report</p> <p>Performance criteria and acceptance criteria as specified by customer are mentioned on sheet no. 4 & 5 of this report.</p>	<p>4) 'Binary input port for H card (IN1): ('Non operate' & 'Operate' condition)</p> <p>Performance test was carried out on Binary input port for H card (IN1) of EUT before & after the test. The obtained values are mentioned on Annexure-VI.</p> <p>Following parameters were observed before, during and after the test as follows:</p> <ul style="list-style-type: none"> ▪ 'ENABLE' LED (Green) was continuously 'ON'. ▪ Display of EUT did not garbage, reset and hang-up. ▪ All programmable LEDs (15 Nos. dual colour) remained OFF. ▪ Monitor device was healthy condition on relay talk software. 	
PREPARED BY		CHECKED BY		

TC 2211350





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TEST REPORT NO.: RP-1718-003663

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Annexure-VI Obtained values

Before Test:

	A Ph. Value	B Ph. Value	C Ph. Value	Earth	Tolerance
Pick Up	1.05	1.06	1.05	1.06	1-1.1 Amp
Operating Time (2 Amp)	10.20	10.15	10.04	10.05	8.77-11.29 Sec

After Test:

	A Ph. Value	B Ph. Value	C Ph. Value	Earth	Tolerance
Pick Up	1.05	1.04	1.06	1.05	1-1.1 Amp
Operating Time (2 Amp)	10.15	10.20	10.07	10.04	8.77-11.29 Sec

Note: During performance test of EUT, measured values were observed on Relay test unit (Doble)/Laptop.

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TC 2211351



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Sr. No	Particular of test and Cl. No.	Requirement as per customer specifications	Obtained value	Remarks
		<p>5) Binary input port for I card (IN1): ('Non-operate' condition)</p> <p>Ring wave Immunity test as per customer requirements & test procedure followed as per cl no.8, Table 1 of IEC 61000-4-12:2006.</p> <p>The general test setup shall be as specified in Cl. no.7 of IEC 61000-4-12:2006.</p> <p>Parameters set during the test are mentioned below: Test level was selected as per Cl no. 5 of Table 1. of IEC 61000-4-12:2006 as follows:</p> <p>Voltage oscillation frequency: 100 kHz Impedance:30 Ω Test time:1s Burst Polarity:+/- Pulse: Five positive & five Negative Test Level:X</p> <p>Differential mode: I1-I2 : ±1 kV Common mode: I1 - E5: ± 2.5 kV I2 - E5 : ± 2.5 kV</p> <p>The EUT shall be energized and operated as specified on sheet No. 3 to 4 of this report</p> <p>Performance criteria and acceptance criteria as specified by customer are mentioned on sheet no. 4 & 5 of this report.</p>	<p>5) Binary input port for I card (IN1): ('Non-operate' condition)</p> <p>Performance test was carried out on 'Binary input port for I card (IN1) of EUT before & after the test. The obtained values are mentioned on Annexure-VII.</p> <p>Following parameters were observed before, during and after the test as follows:</p> <ul style="list-style-type: none"> ▪ 'ENABLE' LED (Green) was continuously 'ON'. ▪ Display of EUT did not garbage, reset and hang-up. ▪ All programmable LEDs (15 Nos. dual colour) remained OFF. ▪ Monitor device was healthy condition on relay talk software. 	

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Annexure-VII Obtained values

Before Test:

	A Ph. Value	B Ph. Value	C Ph. Value	Earth	Tolerance
Pick Up	1.05	1.04	1.06	1.05	1-1.1 Amp
Operating Time (2 Amp)	10.15	10.20	10.07	10.04	8.77-11.29 Sec

After Test:

	A Ph. Value	B Ph. Value	C Ph. Value	Earth	Tolerance
Pick Up	1.05	1.06	1.05	1.05	1-1.1 Amp
Operating Time (2 Amp)	10.04	10.08	10.04	10.07	8.77-11.29 Sec

Note: During performance test of EUT, measured values were observed on Relay test unit (Doble)/Laptop.

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Sr. No	Particular of test and Cl. No.	Requirement as per customer specifications	Obtained value	Remarks
		<p>6) RS 485 port</p> <p>Ring wave Immunity test as per customer requirements & test procedure followed as per cl no.8, Table 1 of IEC 61000-4-12:2006.</p> <p>The general test setup shall be as specified in Cl. no.7 of IEC 61000-4-12:2006.</p> <p>Parameters set during the test are mentioned below: Test level was selected as per Cl no. 5 of Table 1. of IEC 61000-4-12:2006 as follows:</p> <p>Voltage oscillation frequency: 100 kHz Impedance:30 Ω Test time:1s Burst Polarity:+/- Pulse: Five positive & five Negative Test Level:X</p> <p>Differential mode: F3-F4 : ±1 kV Common mode: F3 - E5: ± 2.5 kV F4 - E5 : ± 2.5 kV</p> <p>The EUT shall be energized and operated as specified on sheet No. 3 to 4 of this report</p> <p>Performance criteria and acceptance criteria as specified by customer are mentioned on sheet no. 4 & 5 of this report.</p>	<p>6) RS 485 port</p> <p>Performance test was carried out on 'RS 485 port of EUT before & after the test. The obtained values are mentioned on Annexure-VIII.</p> <p>Following parameters were observed before, during and after the test as follows:</p> <ul style="list-style-type: none"> ▪ ENABLE' LED (Green) was continuously 'ON'. ▪ Display of EUT did not garbage, reset and hang-up. ▪ All programmable LEDs (15 Nos. dual colour) remained OFF. ▪ Monitor device was healthy condition on relay talk software. 	

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TEST REPORT NO.: RP-1718-003663

DATE: 24.04.2017

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Annexure-VIII Obtained values

Before Test:

	A Ph. Value	B Ph. Value	C Ph. Value	Earth	Tolerance
Pick Up	1.05	1.06	1.05	1.05	1-1.1 Amp
Operating Time (2 Amp)	10.04	10.08	10.04	10.07	8.77-11.29 Sec

After Test:

	A Ph. Value	B Ph. Value	C Ph. Value	Earth	Tolerance
Pick Up	1.05	1.06	1.05	1.05	1-1.1 Amp
Operating Time (2 Amp)	10.04	10.06	10.04	10.07	8.77-11.29 Sec

Note: During performance test of EUT, measured values were observed on Relay test unit (Doble)/Laptop.

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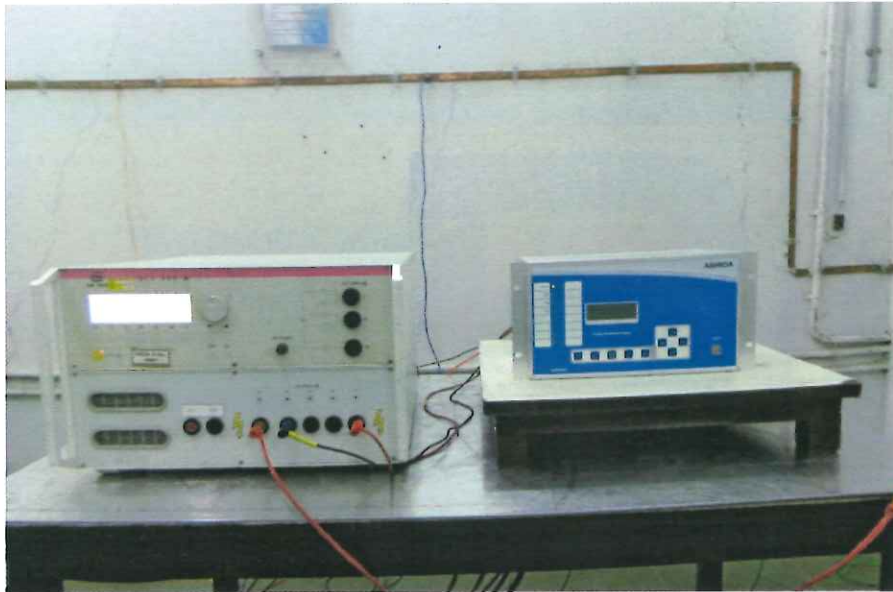
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TEST REPORT NO.: RP-1718-003663

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SHEET 23 OF 24



Photograph of test set up for the Ring wave immunity test.

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TEST REPORT NO.: RP-1718-003663

DATE: 24.04.2017

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Your reference . . .	
Platform: ADR24xB-M	Sr No. : 16L245M0001
Model: ADR245B-M-AM-M-0-0-3-0-1-1-0-2-2-H	
AUX : 24-230 VAC/DC	CT: 1A/5A
Cabinet Type : M14	PT: 63.5 VAC
Test Report: <input type="checkbox"/>	Connectors: <input type="checkbox"/> Extra Screws: <input type="checkbox"/>
Operating Manual: <input type="checkbox"/>	Mounting: <input type="checkbox"/> Imps: <input type="checkbox"/>
Operator's Instruction: <input type="checkbox"/>	Battery Isolation Strip: <input type="checkbox"/>
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ASHIDA	

Sample Description mentioned on EUT

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