

# The Automotive Research Association of India

(Research Institute of the Automotive Industry with Ministry of Heavy Industries & Public Enterprises, Govt. of India)

## TEST REPORT

Page 1 of 3

1.	Test Report No.	2	ERL/2020-21/3100008237A 107 17.12.2020
2.	SO No.	:	3100008237
3.	Customer's Name	:	RAVIRAJ PROCESS CONTROLS
4.	Customer's Address	ě	Plot No. A-795, TTC Industrial Area, MIDC Village Khairne, Navi Mumbai, Thane Navi Mumbai-400709
5	Letter Reference and Date	•	Email dt. 03.09.2020
6.	Kind Attention	:	Mr. Nitin K. Head, Marketing
7.	Service Requirements	•	Testing of Cable samples as per AIS 140.
8.	No. of Samples	:	01
9.	No. of Pages	•	03
10	Test Report Compiled By	•	Brond 20

DEPUTY MANAGER

11 Test Report Verified by

Association OF INDIA

Ms. R. R. NAIK DEPUTY MANAGER

Date of Issue: 17.12.2020

Ms. S.P. MANE

12 Test Report Approved by

I.A. BAWASE

DEPUTY GENERAL MANAGER

Place of Issue: PUNE

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ARAI will preserve the tested samples for a period of **ONE** month from the date of issue of the test report. Queries, if any, regarding the sample or the test report, will be entertained / attended to in this stipulated period of one month only. Further, all the related test standards, drawings supplied by customer, letters, e mails etc exchanged with respect to this test work will be preserved in our custody for a span of only THREE years from the date of the test report.

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Website: www.araiindia.com

ARAI Homologation & Technology Centre (ARAI-HTC), Chakan ARAI Forging Industry Division (ARAI-FID), Chakan

# TEST REPORT

Customer's Name

: RAVIRAJ PROCESS CONTROLS.

Service requirements

: Testing of Cable samples as per AIS 140

Date of testing

: 07.12.2020 to 11.12.2020

# 1.Introduction:

The customer has submitted wire sample for testing as detailed below:

1. D	1. Details of the cables submitted for testing (refer notes	for testing (refer n	otes on pag	on page 2 of this checklist):	ecklist):				
Sr.	Manufacturer's Name	Nominal Cross Sectional Area, mm <sup>2</sup>	Color	Part No. (if any)	Batch No. & date	Conductor Insulation Material Material	Insulation Material	Wire Grade/ Type	Applicable standard (AIS028 or DIN 72551 or ISO 6722)
ej.	RAVIRAJ PROCESS CONTROLS	0.50	RED	Not Provided	03-09-20	ANNEALE D BARE COPPER	FLRY-B	AUTO CABLE	DIN 72551
2. D	2. Details of Wiring Harness (not mandatory):	t mandatory):							
е;	Manufacturer's name	RAVIRAJ PROCESS CONTROLS	ESS		d. Io	Identification code		Not Provided	vided
b.	Drawing/ part number	0.50SQMM, ABC, FLRY-B CABLE	C, FLRY-E	8	e. T	Total number of cables in W/H	oles in W/H	Not Provided	vided
ပဲ	Batch number and date	03-09-2020			f. H	How many cables are of same grade and sizes?	are of same	Not Provided	vided



Date: 17.12.2020

Page 3 of 3

## 2.0 Test results:

## 2.1 Flammability Test as per; IS: 2465-1984, Clause No.22, IS 10810 (Part 53)

Sr.	Wire Identification	Period of Burning, Seconds		Unaffected Portion of wire, mm	
No.		Specified	Observed	Specified	Observed
1	0.50 mm <sup>2</sup> , Red	Period of burning after removal of the flame shall not exceed 60 seconds.	1	The unaffected portion (un charred) from the lower edge of top clamp shall be at least 50 mm	322

## 2.2 Electrical Properties as per; DIN 72551.

Sr No	Wire Identification	Conductor Resistance, mΩ/m, Clause No. 3.5.1  Specified Observed at 20°C (For bare		Thirty-minute Electric Strength, Clause No. 3.5.3 Requirement:	Specific volume resistivity of insulation at 70° C, Clause No. 3.6.1 Requirement: Note
	1	copper)		Note 1*	2*
1	0.50 mm <sup>2</sup> , Red	34.1 min to	35.8	No breakdown	More than $10^{12}$
	W	37.1 max		occurred at 1 kV	$\Omega.\mathrm{cm}$
		37.1 IIIax		for 30 minutes	
				and	
				5 kV for 5	
				minutes	

\*Note 1: No disruptive discharge shall occur in the cable with any of test voltage applied:

• 1 kV up to 30 minutes.

• Up to 5 kV for 5 minutes

\*Note 2: The Specific volume resistivity shall be at least  $10^{10}\,\Omega$  .cm

## 3.0 Remarks:

Electrical cable sample submitted for testing meets the requirements of Flammability (as per IS 2465) and Electrical properties (as per DIN 72551) as specified in AIS 140 (Sr. no. 7 and 8 of table 6B).

Test report compiled by

Ms. S.P. MANE

DEPUTY MANAGER

Test report verified by

Ms. R. R. NAIK DEPUTY MANAGER

G:DeptDate/ERL: Date/AFR2020\_MAR2021\Wiring:\AIS 140/SO 8237\_Ravirsj\Main Test Report/Test Report/Test Report doc-----End of Test Report-----