

# **Karandikar** Laboratories



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# TYPE EXAMINATION REPORT

- 2) **Electrical Apparatus for Explosive Atmospheres**
- TE Report Number: KLPL/Ex/19-015X 3)

Issued On: 27.01.2019

4)	Electrical Apparatus:	4/10 Channel Earth Monitoring System-Interface Unit
		Model: Decalock-DL0317_Interface Unit
5)	Name and Address of the	ESD CONTROL SYSTEMS
	Manufacturer:	Plot No.41, Venkateswara Enclave, Suchitra 'x' Roads,
		Jeedimetla, Hyderabad-500055, Telangana.

- 6) This equipment and any acceptable variation thereto are specified in the schedule to this report and the documents therein referred to.
- 7) Karandikar Laboratories Pvt. Ltd. reports that this equipment has been found to comply with requirements of the following standards relating to the design and construction of electrical apparatus for explosive gas atmospheres.
- 8) This TE Report was issued as verification that a sample, representative of production, was assessed and tested and found to comply with the IS/IEC standards listed below:

IS/IEC 60079-0: 2011, IS/IEC 60079-11: 2006

9) The Examination and Test results are recorded in KLPL's confidential

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- 10) The sign X if placed after the report number; it indicates that the equipment is subject to special conditions of safe use specified in the schedule to this certificate.
- 11) This Report does not indicate compliance with electrical safety and performance requirements other than those expressly included in the above listed standards.
- 12) The marking of the Equipment shall include the following:

[Ex ib] IIB Gb (-10 °C ≤ Ta ≤ +50 °C

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Atul D. Marathe (Technical Manager) This certificate may only de reproduced in its entirety, without an

## Karandikar Laboratorics Pvt. Ltd.

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#### 13) Description of Product:

The **'Decalock-DL0317\_Interface Unit'** is part of the **'DECALOCK MODEL DL0317** four / ten channel earth monitoring system with interlock', which ensures truthful functioning of temporary earthings of mobile material handling equipment used in pharma and chemical industries. The **'Decalock-DL0317\_Interface Unit'** consists of power supply and fault latching relay logic circuitry. It is placed in safe area. It provides intrinsically safe power supply and control signals

**SCHEDULE** 

routed through certified cable glands leading to 'Decalock-DL0317\_Main Unit' which is placed in hazardous area. It provides four / ten no. potential free relay contacts as fault interlock for the field equipment. The circuitry is enclosed in a 1.2 mm thick MS box with cover. The enclosure is wall mounting type with 4 no. of screw fitting eyelets fitted outside the box.

	ESD CONTROL SYST							
		Apparatus: 4/10 Channel Earth Monitoring System Interface Unit						
Wodel. Decalock-DL0317_Interface Onit, Senai NO. 2222								
Installation: SAFE AREA [Ex ib] llb Gb (-10 $^{\circ}$ C < Tamb < +50 $^{\circ}$ C)								
[Ex ib] Ilb Gb (-10 $^{\circ}$ C $\leq$ Tamb $\leq$ +50 $^{\circ}$ C)								
	Entity Parameters							
	Input parameters: Um = 253 V rms, Ii = 80.04 mA rms, Pi = 20.25W, Li = 0, Ci = 0 Output Parameters: Uo = 9.4V, Io = 319mA, Po = 3 W, Lo = 1mH, Co = 5 $\mu$ F							
	Output Parameters: $U_0 = 9.4V$ , $I_0 = 319$ mA, $P_0 = 3$ W, $L_0 = 1$ mH, $C_0 = 5 \mu$ F Warning Marking: 'DO NOT OPEN WHEN ENERGISED';							
	'To be used with 4/10 Channel Earth Monitoring System Main Unit apparatus.'							
	Certified By- KARANDIKAR LABORATORIES PVT. LTD. Z's denote product serial number. Y's denote year of manufacturing							
14)	Model Designation:	'Decalock-DL0317_Interface CONTROL SYSTEMS.	Unit' Model manufact	tured by ESD				
15)	Ingress Protection:	Enclosure: IP 54 as per IS/IE	C 60529: 2001					
16)	Ambient Temperature:	0 °C ≤ Tamb ≤ +50 °C						
17)	Specific Conditions of use:	To be place in safe area only						
		LABORAJOR BOAAC	-					
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18) Documents submitted along with the Test Report:

Sr. No	Doc. Date	Doc. No.	Rev. No.	Doc. Title	No. of Pages
1	20.11.2017	ESDCS-317-0110-DOC-01	01	Decalock-Application & Working	2
2	20.11.2017	ESDCS-317-0110-DOC-02	01	Decalock-Technical Specifications	3
3	04.04.2018	ESDCS-317-0110-CD01	02	Schematic circuit diagram- Mains input protection PCB ESDCS DL0317-01	1
4	08.06.2018	ESDCS-317-0110-BOM01	02	DECALOCK BOM FOR PCB 01	1
5	04.04.2018	ESDCS-317-0110-CD02	04	Schematic circuit diagram- 12 V DC Regulated Power Supply PCB ESDCS DL0317- 02	1
6	08.06.2018	ESDCS-317-0110-BOM02	02	DECALOCK BOM FOR PCB 02	2
7	04.04.2018	ESDCS-317-0110-CD03	03	Schematic circuit diagram- 8 V DC Regulated Power Supply PCB ESDCS DL0317-03	1
8	08.06.2018	ESDCS-317-0110-BOM03	02	DECALOCK BOM FOR PCB 03	2
9	26.07.2018	ESDCS-317-0110-CD04	02	Schematic circuit diagram- Interface Relay Board PCB ESDCS DL0317-04	1
10	08.06.2018	ESDCS-317-0110-BOM04	02	DECALOCK BOM FOR PCB 04	5
11	12.02.2018	ESDCS-317-0110-EL05	01	Safe Area Unit Cable, Wire Harnessed Wire Bunches Chart	5
12	08.06.2018	ESDCS-317-0110-BOM03	02	Safe Area Unit Cable, Wire Harnessed Wire Bunches BOM with datasheets (Finolex, Finecab)	
13	29.12.2012	CIMFR/TC/SR/H520	-	Test Report for FLP-WP Double Compression Cable Glands	
14	03.03.2018	18/447	-	Test Report for Transformers	1
15	12.12.2018	ESDCS-317-0110-DOC- SA03	01	Marking Lable	
16	20.11.2017	ESDCS-317-0110-DOC-13	01	DECALOCK- Details of conformal coating	3

#### END OF THE DOCUMENT



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