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Karandikar Laboratories



1) TYPE EXAMINATION REPORT

2) Electrical Apparatus for Explosive Atmospheres

3) TE Report Number: KLPL/Ex/19-015X

Issued On: 27.01.2019

4) Electrical Apparatus: 10 Channel Earth Monitoring System-Interface Unit

Model: Decalock-DL0317_Interface Unit

5) Name and Address of the Manufacturer: ESD CONTROL SYSTEMS

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
Report No: KLPL/Ex/ESD-19/001; Dated: 27.01.2019

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)



Atul D. Marathe

Atul D. Marathe (Technical Manager)

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Karandikar Laboratories Pvt. Ltd.

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Dated: 27.01.2019

SCHEDULE

13) Description of Product:

The 'Decalock-DL0317_Interface Unit' is part of the 'DECALOCK MODEL DL0317 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 routed through certified cable glands leading to 'Decalock-DL0317_Main Unit' which is placed in hazardous area. It provides 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 SYSTEMS, HYDRABAD

Apparatus: 10 Channel Earth Monitoring System Interface Unit

Model: 'Decalock-DL0317_Interface Unit'; Serial No. ZZZZ Year. YYYY

Installation: SAFE AREA

[Ex ib] IIb Gb (-10 °C ≤ Tamb ≤ +50 °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 µF

Warning Marking: 'DO NOT OPEN WHEN ENERGISED';

'To be used with 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 Unit' Model manufactured by ESD CONTROL SYSTEMS.
- 15) Ingress Protection: Enclosure: IP 54 as per IS/IEC 60529: 2001
- 16) Ambient Temperature: 0 °C ≤ Tamb ≤ +50 °C
- 17) Specific Conditions of use: To be place in safe area only.





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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)	3+6
13	29.12.2012	CIMFR/TC/SR/H520	-	Test Report for FLP-WP Double Compression Cable Glands	9
14	03.03.2018	18/447	-	Test Report for Transformers	1
15	12.12.2018	ESDCS-317-0110-DOC-SA03	01	Marking Lable	1
16	20.11.2017	ESDCS-317-0110-DOC-13	01	DECALOCK- Details of conformal coating	3

END OF THE DOCUMENT



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