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(Engineers),
कलस, आलंदी रोड, दिघी पो.ऑ., पुणे - 411015, भारत
Kalas, Alandi Road, Dighi P.O., Pune-411 015,
INDIA

ENVIRONMENTAL TEST REPORT

Job No. : RE 08 RQ [] 09
Test Report No. : 061109 Date : 07 Jan' 2010
1) Reference No. : i) EUPL-L/R&DE/09-10/A0146 dtd. 14 Oct' 2009
2) Name of sample/ Equipment : 20 kVA, UPS, 3 Phase, I/P & single phase O/P, Type: Floor Mounted, Model - True On Line. UPS Sr.No.200907130.
3) Name of Mfg./ Supplier/ Group : M/s Eertech UPS Pvt. Ltd, Pune
4) Type of test : **Environmental Testing**
1) Dry Heat Test : 16 hrs Soaking at + 55° C as per IS:9000
Test No.'B' part. 3 / sec. 5
2) Damp Heat Test: 40° C, 2 cycles (12+12Hrs), (each cycle of 24Hrs) as per IS:9000, Test No.'D' part. 5 / sec. 2
3) Cold Test: -10 ° C for 4 hrs soaking, as per IS:9000, Test No.'A' part. 2 / sec.4
5) Specification followed : As per IS: 9000 and customer requirement
6) Test conducted by : 1) Shri PK Dey, TO'C' - R&DE
: 2) Shri N Kundu, TO'B' - R&DE
: 3) Shri BP Kamble, Tech 'C' - R&DE
7) Test witness by : 1) Shri.MA SAJJAN, Chief Executive Officer - M/s.Enertech,Pune
8) Test result : Enclosed as appendixes 'A', 'B', 'C' & 'D' (Total 8 Pages)
9) Instruments used : (a) Digital/ Storage CRO, Serial No.54600B, Due on 31/ 12/2009
(b) H.V. Tester, Sr.No.970502, Due on 21/02/2010
(c) Megger, Sr. No.2026303, Due on 27/02/2010
(d) Digital Multimeter, Sr.No.0740641, Due on 27/01/2010
(e) Fluke F-41 B, Sr.No. 6962023, due on 27/01/2010

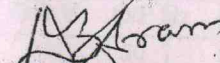
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Distribution :

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Appendix 'A'

Equipment under test : 20 kVA UPS 3 Phase 400 VAC I/P & 1 Phase 230 VAC OUTPUT
 UPS Sr. No: 200907130, Model: True ON Line. Device Used: IGBT,
 Cabinet: IP - 2L1, Type: Floor Mounted with Isolation transformer.

DRY HEAT TEST: (Date of Commencement : 24/11/09 & Date of Completion : 25/11/09)
 Conducted in accordance with IS 9000 (Part 3/Sec.5) 1977 (reaffirmed 2004) at +55 ° C for 16 hrs.

PRE TEST : Following parameters checked before conducting the environmental tests of Dry heat condition simulation in the chamber :

Srl. No.	TEST PARAMETER	TEST CONDITIONS	REQUIREMENT	Observation	Remark												
1.	Visual Examination -		a. UPS Shall be free from workmanship defects, sharp edges, nicks, scratches, burs, etc. All fasteners shall be fixed properly. The equipment shall be complete with all parts and all parts shall be functional. Physically UPS should be verified. b. Enclosure shall confirm to protection requirement of IP2L1 c. By-pass facility shall be provided for maintenance of UPS. Physically manual bypass switch shall be verified	Overall Physical condition of the UPS checked and found to be Ok. It has been verified that Enclosure conforms to IP2L1 Manual Bypass switch 100A, 2 pole 2 way Salzer make provided on Front door	- - -												
2.	UPS supply O/P power, charger current & O/P frequency at the same time	Connect 3 ph 400VAC, 50Hz at UPS I/P. Connect 20kVA load at UPS O/P. Connect batteries. Check charging current & O/P frequency	The UPS shall supply O/P Power & charging current at the same time and O/P freq. shall be measured.	Charging current = 13A O/P Freq. = 50 Hz	- -												
3.	Input voltage variation Test. (voltage regulation Test)	Connect 3ph 400VAC, 50Hz at UPS I/P. Connect 20 kVA load at UPS O/P, Vary the input voltage from 300 VAC to 450V AC & Check the output voltage on full load. At Input frequency 50Hz ± 3%	Output shall be 230V; 1ph +/- 1% & O/P frequency shall be 50 Hz +/- 0.5 Hz (with alternative setting for 220 V +/- 1%)	<table border="1"> <thead> <tr> <th>I/P V</th> <th>O/P V</th> <th>O/P Hz</th> </tr> </thead> <tbody> <tr> <td>300</td> <td>231</td> <td>50</td> </tr> <tr> <td>400</td> <td>230</td> <td>50</td> </tr> <tr> <td>450</td> <td>230</td> <td>50</td> </tr> </tbody> </table>	I/P V	O/P V	O/P Hz	300	231	50	400	230	50	450	230	50	- -
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प्री. क. डेय, अधिकारी 'सी'
 P. K. Dey Tech. Officer 'C'

