
 365 - 148		PRODUCT ENGINEERING / V&SB PURCHASE SPECIFICATION OF HEAVY DUTY LIMIT SWITCH FOR SOOT BLOWERS (NON FLAME PROOF TYPE)		SPEC: SB : 0001 PAGE 01 OF 02		REV: 02 Dt. 18.07.11																																																																																																																																																																																																																																																									
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<p style="text-align: center;"><u>ANNEXURE - A</u> <u>TEST SCHEDULE FOR HEAVY DUTY LIMIT SWITCHES</u></p> <p>THE FOLLOWING TYPE TESTS SHOULD BE CARRIED ON EVERY ONE SWITCH IN 100 FROM THE LOT PRODUCED IN THE PRESENCE OF INSPECTING AGENCY .</p> <p>(a) WATER PROOF TEST, (b) TEMPERATURE TEST, (c) RATING TEST</p> <p>(a) <u>WATER PROOF TEST (AS PER NEMA Std. 4) :</u></p> <p>IN ORDER TO ENSURE THAT THE SWITCH IS WATER PROOF, THE SWITCH WILL BE TESTED BY WATER JET APPLIED ON ALL THE SIDES OF THE SWITCH FOR 5 MINUTES. THE SWITCH IS THEN OPENED TO FIND OUT THE PRESENCE OF ANY INGRESS OF MOISTURE IN THE SWITCH OR ANY OF ITS WORKING PARTS.</p> <p>b) <u>TEMPERATURE TEST:</u></p> <p>THE SWITCH IS KEPT IN A OVEN WHICH IS SET AT A TEMPERATURE OF 85°C UNDER HUMID CONDITIONS (WITH THE AVAILABLE FACILITY AT SUPPLIER'S WORKS) FOR ONE HOUR. THEN THE SWITCH IS REMOVED FROM THE OVEN AND TESTED FOR ITS FUNCTION GIVING 100 CYCLES UNDER LOADED CONDITIONS.</p> <p>c) <u>RATING TEST:</u></p> <p>THE RATING TEST WILL CONSIST OF TEST WHEN THE SWITCH WILL BE SUBJECTED TO 6000 CYCLES OF OPERATION MAKING AND BREAKING A CIRCUIT AT RATED VOLTAGE AND LOAD. THE FIRST 1000 CYCLES SHALL BE AT THE RATE OF ONE CYCLE PER SECOND EXCEPT THAT THE FIRST 10 TO 12 OPERATION SHALL BE MADE AS RAPIDLY AS POSSIBLE. IN THE REMAINING 5000 CYCLES SHALL BE AT THE RATE OF 6 CYCLES PER MINUTE. MANUAL SLOW RELEASE AND SNAP ACTION TESTS SHALL BE CONDUCTED ON THIS TEST L. S.</p> <p>II. <u>ROUTINE TEST (100 %):</u></p> <p>ALL THE LIMIT SWITCHES ARE TO BE TESTED FOR THE FOLLOWING IN THE PRESENCE OF INSPECTING AGENCY.</p> <p>(a). PRE TRAVEL (b). DIFFERENTIAL TRAVEL (c). RESET (d). TOTAL TRAVEL (e). OPERATING TORQUE (f). CONTINUITY (g). INSULATION RESISTANCE (SHOULD NOT BE LESS THAN 5 MEGA OHMS) (h). MANUAL SLOW RELEASE TEST. THE CONTACT SHOULD MAKE AND BREAK WITH SMOOTH OPERATION. IF THE CONTACT STOPS IN OPERATION THE L. S. SHOULD BE REJECTED. (i). SNAP ACTION TEST (j). HIGH VOLTAGE TEST AT 2 KV FOR 2 MINUTES.</p> <p>TO MEASURE THE ABOVE PRE TRAVEL, DIFFERENTIAL TRAVEL, RESET, TOTAL TRAVEL, THE ASSEMBLED SWITCH IS MOUNTED IN A FIXTURE. THE DETAILS OF 4 PARAMETERS (a TO d) MENTIONED ABOVE IS EASILY UNDERSTOOD WITH A REFERENCE TO DRAWING. NO. : 4-20-001-01130. WITH LATEST REVISION.</p>			
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