



More than **sensors + automation**

Certificate

Environmental Testing According to EN 50155

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Applicants Name **JUMO GmbH & Co KG**
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Manufacturer **JUMO GmbH & Co KG**
Address Moritz-Juchheim-Strasse 1, 36039 Fulda/Germany

Product description **Thermostate, EM Series and AMTH Series**
Trademark JUMO
Model and/or type list 602021/603051(Extra code 950) - **Railway application**

Applied Tests by JUMO

Test	Standard	Result
1 Cold, -60°C, 2h	EN 60068-2-1:2007	passed
2 Dry Heat, 125°C, 18h	EN 60068-2-2:2007	passed
3 Damp heat, cyclic, 95%, 4x24h	EN 60068-2-30:2005	
4 Surge 2kV line to earth 1,2/50µs 42Ω	EN 61000-4-5:2014	passed
5 Vibration random 5-150Hz, 7,9m/s ² 5h/axis	EN 61373 Cat.1B:2010	passed
6 shock test category 1 class B vertica 50m/s ² , 6ms cross direction 50m/s ² , 6ms longitudinal direction 50m/s ² , 6ms 3 shocks/direction Total 18 shocks/test sample	EN 61373 Cat.1B:2010	passed
7 Insulation test, 500VDC >>100MΩ	EN 50155:2017	passed
8 Switching cycle test 24V / 125mA >5.000.000 cycles		passed
Supplementary tests for Progr.603051		
9 Protection class IP54 (plastic housing) IP65 (aluminium housing)	EN 60529:1991 + A1: 2000 A2: 2013	passed
10 Salt mist class ST4 (96h)	EN 50155:2017	passed
11 Fire protection on railway vehicles	DIN EN 45545.2: 2020	passed

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Signature *i.v. 8 10 4*
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