

12/06/2022

Subject: Change to SAE/USCAR-21, Rev 4 (Letter #6)

Changes have been made to the USCAR-21 specification to add the graphic below as Figure 4.5.2.4 on page 22 of USCAR-21. It shows the environmental sequence called out in section 4.5.2.4. There are no changes to the test methods. The existing text remains; this is just a different way to see the same information. Comments can be sent to EWCAP@uscar.org.

Visual inspection per section 4.2 and Dry circuit resistance per section 4.5.3 for wire size ≤ 6 mm2 Voltage drop per section 4.5.6 for wire size >6 mm2 Thermal Shock per section 4.5.5 72 Cycles 30 ± 5 min. at +125° ± 3°C 30 ± 5 min. at $-40^{\circ} \pm 3^{\circ}$ C Dry circuit resistance per section 4.5.3 for wire size ≤ 6 mm2 (optional) Voltage drop per section 4.5.6 for wire size >6 mm² (optional) Temperature Humidity per section 4.5.4 4 Cycles 16 hrs ± 5 min. @ 95-98% R.H. @ +65° ±3°C 2 hrs \pm 5 min. @ -40° \pm 3°C **Humidity** not 2 hrs \pm 5 min. @ $+85^{\circ} \pm 3^{\circ}$ C controlled 4 hrs \pm 5 min. @ $+23^{\circ} \pm 3^{\circ}$ C Dry circuit resistance per section 4.5.3 for wire size ≤ 6 mm² Voltage drop per section 4.5.6 for wire size > 6 mm² and Visual inspection per section 4.2