

DECLARATION OF PERFORMANCE

by analogy with Annex III to Regulation (EU) No 305/201

EFCO CLIC Radiation Cable Clamp SKH, Use in railway tunnels for high-speed traffic

Nr.: EfcO – SKH - DOP edit 02-2022

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| 1. Unique identification code of the product-type: | EFCO CLIC SKH |
| 2. Type, batch or serial number or other mark identifying the product in accordance with Article 10(6) | <p>Item number – designation</p> <p>A 88.470 - CLIC SKH ½ "</p> <p>A 88.471 - CLIC SKH ⅜ "</p> <p>A 88.472 - CLIC SKH 1 ¼ "</p> <p>A 88.473 - CLIC SKH 1 ⅝ "</p> <p>Batch number indicated on the packaging</p> |
| 3. Intended use/es: | <p>Mechanical fastener for spacing radiator cables (mobile and object radio) from the surface in areas that are not exposed to permanent UV radiation (such as tunnels, building interiors).</p> <p>No harmonised standards applicable</p> |
| 4. The name, registered trade name or registered trade mark and contact address of the manufacturer in accordance with Article 11(5): | EFCO Befestigungstechnik AG, Grabenstrasse 1, CH-8606 Nänikon, Schweiz |
| 5. Authorised representative: | not applicable |
| 6. system for the assessment and verification of constancy of performance of the device in accordance with Annex V. | System 4 |
| 7. Regulations, directives and reports on which the declaration of performance is based | <p>Deutsche Bahn, "Railway tunnel design, construction and maintenance. Aerodynamic effects", Guideline 853.2001A01, Update 9, 01.09.2018.</p> <p>European Commission, "Regulation 1302/2014 concerning a technical specification on the interoperability of the rolling stock - locomotives and passenger rolling stock subsystem of the rail system within the European Union"; TSI LOC PAS; 18.11.2014.</p> <p>Aerodynamic loading of a radiating cable support in railway tunnels during high speed traffic; Report 21-002-001, HBI Haerter 3007 Bern, Switzerland; 2021-06-03</p> |
| 8. The technical verification on which the declaration of performance is based | <p>Test report: TB21-04382-01-00; Qualitech AG, accredited test centre; 8404 Winterthur Switzerland, 2021-08-26</p> <p>Test reports: 185/18, 222/18: Bautechnische Versuchsanstalt; 6830 Rankweil Austria</p> |

9. Performance declared

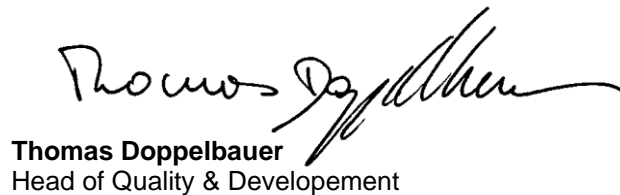
| Essential characteristics | Performance declared | Remark |
|--|------------------------|---|
| Static load | > 300 N | (20°C ambient temperature, safety factor 3) |
| Fatigue resistance | > 2.6 mio load changes | Max. Load case with 76N/m cable length, at v= 330 km/h traction speed. Cable is laid crosswise to the direction of travel. Distance between fastenings 1m. Tunnel cross-section $\geq 41\text{m}^2$ |
| Dimensionally stable temperature (210h) | > 80°C | Load 30N |

Signed for and on behalf of the manufacturer by:



Andreas Gschwind
General Manager

Nänikon, 07.02.2022



Thomas Doppelbauer
Head of Quality & Development