

Announcement N° CC13624: ERIFLEX FLEXIBAR ADVANCED, IBS & IBSB ADVANCED and FLEXBUS – IEC Voltage certifications

Date: April 29th, 2024

We, nVent, confirm that ERIFLEX FLEXIBAR ADVANCED, IBS & IBSB ADVANCED and FLEXBUS are tested according to various IEC standards for low and medium voltages, the table below summarize those tests and certifications.

Rated voltages for nVent FleXbus, Flexibar Advanced and IBSB Advanced power braided conductor:

Rated voltage				
		EL WI	Flexibar	IBSxx series
Standards		FleXbus	Advanced	Advanced
LV	IEC 61 439-1 (Low-Voltage Switchgear and Controlgear	1000VAC /	1000VAC /	1000VAC /
	Assemblies)	1500VDC	1500VDC	1500VDC
	IFC 60 264 (Low Voltage Flectrical Installations)	1000VAC /	1000VAC /	1000VAC /
	IEC 60 364 (Low-Voltage Electrical Installations)	1500VDC	1500VDC	1500VDC
MV	IEC 62271-1 (High-voltage switchgear and controlgear Part 1: Common specifications for alternating current switchgear and controlgear) – for chapter 7.2.7.2 (Power-frequency voltage tests) and 7.2.7.3.(Lightning impulse voltage tests)	3600VAC	3600VAC	3600VAC
	EN50264-3-1 (Railway applications. Railway rolling stock power and control cables having special fire performance) - Chapter 7.3, 7.5, 7.6 and 7.7	3,6/6 kV AC (1) 5,4 kV DC (2)	3,6/6 kV AC (1) 5,4 kV DC (2)	3,6/6 kV AC (1) 5,4 kV DC (2)



According to EN50264-1: Railway applications - Railway rolling stock power and control cables having special fire performance -- Part 1: General requirements:

(1)

The rated voltage is expressed by the combination of the following values (in volts): U₀/U, Where:

- U_0 is the r.m.s. value between any insulated conductor and earth, i.e. metal covering of the cable or the surrounding medium, e.g. $U_0 = 3600 \text{ V}$:
- U is the r.m.s. value between any two phase-conductors of a multicore cable or of a system of single-core cables, e.g. U = 6 000 V;

(2)

 \dot{V}_{o} is the d.c. value between any insulated conductor and earth, i.e. metal covering of the cable or the surrounding medium, e.g. Vo = 5400 V.

The rated voltage recognized for the purposes of all parts of EN 50264 shall be as given in Table 1.

NOTE In the Railway industry it is common practice to identify cables and systems by the value of Uo, not the more usual normal practice of U.

Best Regards,

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