

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

Date: April 29<sup>th</sup>, 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 :

Standards		Rated voltage		
		Flexbus	Flexibar Advanced	IBSxx series Advanced
<b>LV</b>	IEC 61 439-1 (Low-Voltage Switchgear and Controlgear Assemblies)	1000VAC / 1500VDC	1000VAC / 1500VDC	1000VAC / 1500VDC
	IEC 60 364 (Low-Voltage Electrical Installations)	1000VAC / 1500VDC	1000VAC / 1500VDC	1000VAC / 1500VDC
<b>MV</b>	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):  $U_0/U$ , 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.  $U_0 = 3600$  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.  $U = 6000$  V;

(2)

$V_0$  is the d.c. value between any insulated conductor and earth, i.e. metal covering of the cable or the surrounding medium, e.g.  $V_0 = 5400$  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  $U_0$ , not the more usual normal practice of  $U$ .

Best Regards,

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