

intreXis[®]

POWER SUPPLIES

intreXis AG

Tobelraastrasse 4

CH-8212 Neuhausen am Rheinfall

SWITZERLAND



Tel +41 (0)525111190 www.intrexis.ch

Fax +41 (0)525111199 info@intrexis.ch

White Paper

EN 50155 versus IEC 60571

Rev00

Written by:		Checked by:	
Ch.Carlen	02.04.2019	T.Schiegg	02.04.2019
			

For railway-applications, requirements for electrical and environmental operating-conditions, design requirements, construction and testing are defined in following main standards:

European Standard: **EN 50155: 2017**

International Standard: **IEC 60571: 2012**

The requirements in these two standards are nearly identical, except for minor differences in terminology and definitions. Being more recently updated, the EN 50155-standard specifies some requirements more in detail.

Examples for differences:

	EN 50155	IEC 60571
Operating temperature	<p>Six operating temperature classes are defined: OT1-OT6</p> <p>Short term thermal conditions are specified with the switch-on operating temperature classes: ST0-ST2</p> <p>Test cycles A, B and C are defined to perform the dry heat test for above temperature classes and their combinations.</p>	<p>Seven ambient temperature classes are defined: T1-Tx</p> <p>Short term start up thermal conditions are defined in an additional column within above temperature classes.</p> <p>No test cycles for dry heat test are defined.</p>
Interruptions of voltage supply	<p>Three "interruption voltage supply classes" are defined: S1-S3</p> <p>Specifies clearly that the interruption is caused by a short circuit of the DC supply distribution line and that the input voltage may reduce to 0 V. In this case, the DC distribution system presents a low impedance, which can cause reverse current from the device under test.</p>	<p>Two "interruption of voltage supply classes" are defined: S1-S2</p> <p>No specification of type of interruption.</p>

All DC/DC-converters from our intreXis Boardnet Converter Platform are fully compliant with both standards and therefore can be used in worldwide applications.

For a detailed analysis of all differences of the two standards, please contact intreXis for advice.