

# EN 50155:2008 and XTR

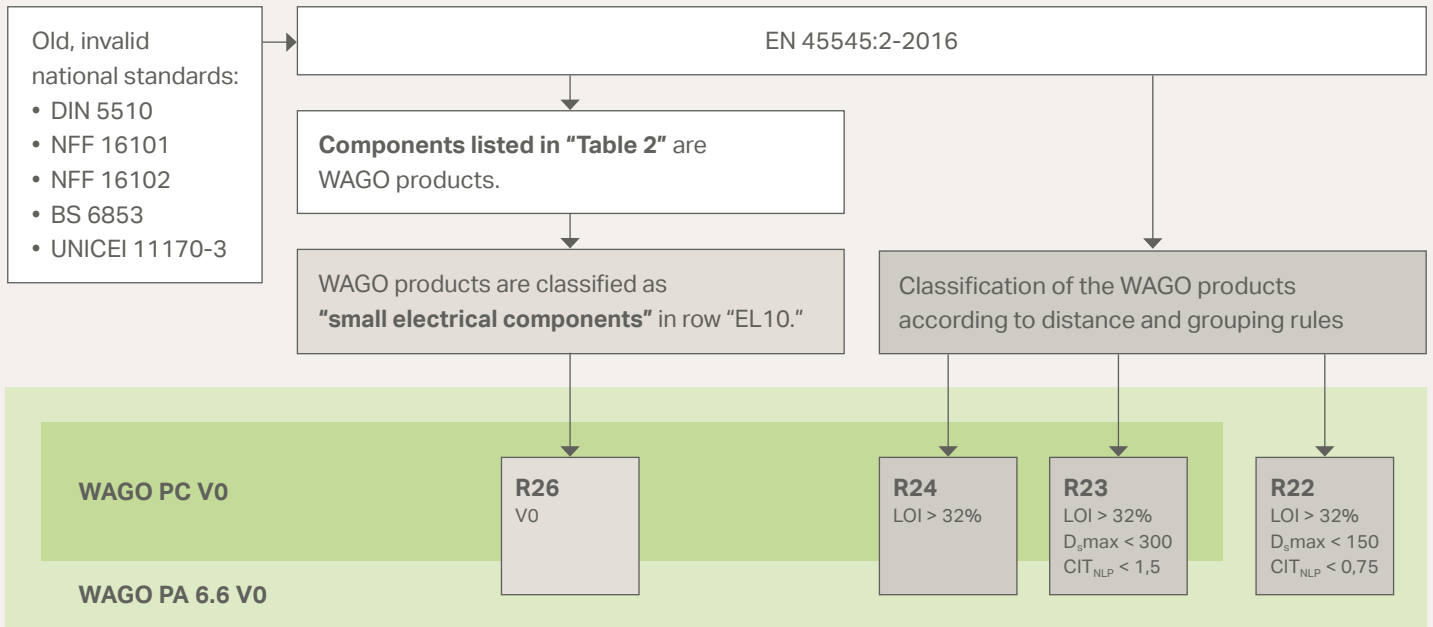
Railway Applications – Electronic Equipment Used in Rolling Stock



Section	Paragraph	Title	Reference to Additional Standards	Class	Values Defined in EN 50155:2008	Notes and Classification Achieved by XTR		
4	Environmental Operating Conditions	<b>Rated Operating Conditions</b>						
		4.1.1	Altitude above sea level	EN 50125-1	A1 A2 AX	< 1.400 m < 1.000 m > 1.400 m	AX	
		4.1.2	Ambient temperature		T1 T2 T3 TX	-25 ... +70 °C -40 ... +70 °C -25 ... +85 °C -40 ... +85 °C	TX	
		4.1.3	Shock and vibration	EN 61373	1A 1B	M, N, O, I, J D, K, E, F	1A 1B	
			Vibration Shock	EN 60068-2-64 EN 60068-2-27	2 3	G H		
4.1.4	Relative humidity	EN 50155:2008 Section 9.7 (Condensation EN 60721-3-3)			3K7		Conformal <b>coating</b> protects all PCBs from moisture, condensation and atmospheric pollutants.	
5	Electrical Operating Conditions	<b>Power Supply</b>						
		5.1.1.1	Power supply fluctuations			Minimum voltage: $0,7 \times U_n$  Maximum voltage: $1,25 \times U_n$		Via external power supply unit $0.725 U_n$ without power supply unit
		5.1.1.2	Power supply interruption		S1 S2	No interruption  < 10 ms	S1 S2	S1  S2 Via external power supply unit
		5.4	Surge, ESD, Burst Tests	> EN 50121-3-2			Fulfilled	<b>Required filter modules:</b> 750-626/040-00 or 750-624/040-001
		5.5	EMC – Interference Emission, Interference Immunity	> EN 50121-4 > EN 50121-5				Fulfilled
6	<b>Reliability, Maintenance and Service Life</b>						MTBF available	
7	<b>Development</b>						Developed to meet IRIS, modular construction, protected against external errors (short circuit, open circuit)	
8	Components	Sophisticated components have been optimized and carefully selected according to environmental requirements before being integrated. These permit eXTReme capabilities to be packaged into such a compact and finely modular system.						

# FIRE PROTECTION

The New Applicable EN 45545 Standard



**WAGO products meet the requirements of EN 45545-2.**



\* WAGO also uses V2 material.

Upon request you will receive:

- Statement
- Guidelines
- Test reports



If you have any questions or would like further information, please contact:

**Dipl.-Ing. Richard Markus**

Group Transport Management  
Market Management Industry & Process (MMIP)

Phone: +49 571 887-44165

E-mail: richard.markus@wago.com

or

**Kathrin Stemmer**

Phone: +49 571 887-49085

E-mail: kathrin.stemmer@wago.com

**WAGO Kontakttechnik GmbH & Co. KG**

Postfach 2880 · 32385 Minden  
Hansastraße 27 · 32423 Minden  
info@wago.com  
www.wago.com

Headquarters +49 571/ 887 - 0  
Sales +49 571/ 887 - 222  
Order Service +49 571/ 887 - 44 333  
Fax +49 571/ 887 - 84 41 69