

AppNotes - Understanding EMC Stands and Specifications Page 2 (Types of Standards)

Types of Standards

Basic standards describe the general and fundamental rules for meeting the requirements. Terminology, phenomena, compatibility levels, measurement, test techniques and classification of EM environments are so described within.

Generic standards refer to specific environments. They set minimal EMI levels which equipment in these environments must meet. Where no product standards exist then the generic standards are to be used. Generic standards describe household and industrial EMI environments.

Products standards are for specific products or product groups. These standards are coordinated with the generic standards.

In countries outside Europe other standards will be used, such as the FCC in the USA. Table 1 shows the main European standards.

Tab. 1 European EMC Standards

Product Type	Emissions		
	Harmonic	Voltage Fluctuations	Radio Interference
Household appliances & portable tools	EN 60555	EN 60555-3	EN 55014
vacuum cleaners, washing machines, heating	-	-	-
cooking equipment, dimmers	-	-	-
Luminaries with discharge lamps	-	-	EN 55015
TV receivers	EN 60555	-	EN 55013
Information Technology Equipment (ITE)	EN 60555	-	EN 55022
Mains signalling equipment	EN 60555	-	EN 50065-1
Industrial, scientific and medical equipment	-	-	EN 55011
designed to generate RF energy	-	-	-
Industrial electronic power and control	-	-	-
equipment	-	-	-
Industrial non-electrical	-	-	EN 50081-2

Product Type	Immunity	ALL aspects
Household appliances & portable tools	EN 50082	EN 50082
vacuum cleaners, washing machines, heating	-	-

cooking equipment, dimmers	-	-
Luminaries with discharge lamps	EN 50082	EN 50082
TV receivers	EN 55020	EN 55020
Information Technology Equipment (ITE)	EN 55024 all parts	EN 55024
Mains signalling equipment	EN 50082	EN 50082
Industrial, scientific and medical equipment	EN 50082	EN 50082
designed to generate RF energy	-	-
Industrial electronic power and control equipment	EN 50082	EN 50082
Industrial non-electrical	-	