



EN 62262 IK Rating

The European standard **EN 62262** – the equivalent of international standard IEC 62262:2002 – relates to IK ratings. This is an international numeric classification for the degrees of protection provided by enclosures for electrical equipment against external mechanical impacts. It provides a means of specifying the capacity of an enclosure to protect its contents from external impacts. The **IK Code** was originally defined in European Standard BS EN 50102:1995 and amended in 1998. Following its adoption as an international standard (IEC 62262) in 2002, the European standard was renumbered EN 62262.

Before the advent of the IK code, a third numeral had been occasionally added to the closely related IP Code on ingress protection, to indicate the level of impact protection e.g. IP66(9). Nonstandard use of this system was one of the factors leading to the development of this standard, which uses a separate two numeral code to distinguish it from the old differing systems. The standard came into effect in October 1995 and conflicting national standards had to be withdrawn by April 1997.

EN 62262 specifies the way enclosures should be mounted when tests are carried out, the atmospheric conditions that should prevail, the number of impacts (5) and their (even) distribution, and the size, style, material, dimensions etc. of the various types of hammer designed to produce the energy levels required.





IK code and impact energy (values changed in Amd 1:1998)											
IK code	IK00	IK01	IK02	IK03	IK04	IK05	IK06	IK07	IK08	IK09	IK10
Impact energy (joules)	*	0.15	0.2	0.35	0.5	0.7	1	2	5	10	20

IK number	Impact energy (joules)	Equivalent impact				
00	Unprotected	No test				
01	0.15	Drop of 200 g object from 7.5 cm height				
02	0.2	Drop of 200 g object from 10 cm height				
03	0.35	Drop of 200 g object from 17.5 cm height				
04	0.5	Drop of 200 g object from 25 cm height				
05	0.7	Drop of 200 g object from 35 cm height				
06	1	Drop of 500 g object from 20 cm height				
07	2	Drop of 500 g object from 40 cm height				
08	5	Drop of 1.7 kg object from 29.5 cm height				
09	10	Drop of 5 kg object from 20 cm height				
10	20	Drop of 5 kg object from 40 cm height				

Impact test characteristics									
IK code	IK00	IK01 to IK05	IK06	IK07	IK08	IK09	IK10		
Impact energy (joules)	*	<1	1	2	5	10	20		
R mm (radius of striking element)	*	10	10	25	25	50	50		
Material	*	polyamide1	polyamide2	steel2	steel2	steel2	steel2		
Mass kg	*	0.2	0.5	0.5	1.7	5	5		
Pendulum hammer	*	Yes	Yes	Yes	Yes	Yes	Yes		
Spring hammer	*	Yes	Yes	Yes	No	No	No		
Free fall hammer	*	No	No	Yes	Yes	Yes	Yes		

^{*} not protected according to the standard