

Enclosures

Damage to enclosures may impair the proper function of the installed equipment — e.g. Switch control gear — or, in the worst case, even render it inoperative, As well as affect the Ingress Protection (protection against dust and water) of the enclosures. The relevant protection category that specifies an enclosures resistance to impacts is the IK code - IEC62262. This IK code classification is established using a standardised testing method in line with the standard.

Hinges

### Degree of protection against external mechanical impacts (IK code)

Verification of the degree of protection against mechanical impacts shall be carried out in accordance with IEC 62262 by means of a test hammer suitable for the dimensions of the enclosure.

The enclosure shall be fixed on a rigid support as for normal use.

Locks

The impact energy shall be applied:

- Three times to each exposed surface in normal use whose largest dimension is not above 1m
- Five times to each exposed surface in normal use whose largest dimension is greater than 1m.

The test shall not be applied to the enclosure components(locks, hinges, etc.)

The impacts shall be applied with even distribution over the faces of the enclosure.

Handles

After the test, the enclosure shall continue to provide the Ingress Protection code and dielectric strength.

### IK code and impact energy

IK code	IK00	IK01	IK02	IK03	IK04	IK05	IK06	IK07	IK08	IK09	IK10
Impact energy (joule)	*	0,14	0,2	0,35	0,5	0,7	1	2	5	10	20

Accessories

### Impact test characteristics

IK code	IK00	IK01 to IK05	IK06	IK07	IK08	IK09	IK010
Impact energy (joule)	*	<1	1	2	5	10	20
R mm (radius of striking element)	*	10	10	25	25	50	50
Mass kg	*	0.2	0.5	.5	1.7	5	5
Pendulum hammer	*	Yes	Yes	Yes	Yes	Yes	Yes
Free fall Weight	*	No	Yes	Yes	Yes	Yes	Yes
Free fall Height	*	No	20cm	40cm	29,5cm	20cm	40cm

Insulators



Transformer Equipment

IK Testing

\*Photo taken in Allbro's Testing Lab

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