

TECHNICAL INFORMATION

F.2

DIN EN 60664-1 (VDE 0110-1), table F.2 (extract)
Clearance for transient overvoltages

Required impulse withstand voltage ^{1) 5)}	Minimum clearance in air up to 2 000 m above sea level		
	Case A Inhomogeneous field (see 3.15)		
	Pollution degree		
kV	1 mm	2 mm	3 mm
1,2	0,25	0,25	0,8 ⁴⁾
1,5 ²⁾	0,5	0,5	
2,0	1,0	1,0	1,0
2,5 ²⁾	1,5	1,5	1,5
3,0	2,0	2,0	2,0
4,0 ²⁾	3,0	3,0	3,0
5,0	4,0	4,0	4,0
6,0 ²⁾	5,5	5,5	5,5
8,0 ²⁾	8,0	8,0	8,0

¹⁾ This voltage is

- for functional insulation, the maximum impulse voltage expected to occur accross the clearance (see 5.1.5),
- for basic insulation directly exposed to or significantly influenced by transient overvoltages from the low-voltage mains (see 4.3.3.3, 4.3.3.4.1 and 5.1.6), the rated impulse voltage of the equipment,
- for other basic insulation (see 4.3.3.4.2), the highest impulse voltage that can occur in the circuit.

²⁾ Preferred values as specified in 4.2.3.

⁴⁾ The minimum clearances given for pollution degrees 2 and 3 are based on the reduced withstand characteristics of the associated creepage distance under humidity conditions (see IEC 60664-5).

⁵⁾ For parts or circuits within equipment subject to impulse voltages according to 4.3.3.4.2, interpolation of values is allowed. However, standardization is achieved by using the preferred series of impulse voltage values in 4.2.3.