

Table 3 – Permissible temperature rise of parts of the apparatus

Parts of the apparatus	Normal operating conditions	Fault conditions
	K	K
a) <i>ACCESSIBLE parts</i>		
Knobs, handles, etc. if		
– metallic	30	65
– non-metallic ^c	50	65
Enclosures if		
– metallic	40	65
– non-metallic ^{b+c}	60	65
b) <i>Parts providing electrical insulation^d</i>		
Supply cords and wiring insulation with		
– polyvinyl chloride or synthetic rubber		
– not under mechanical stress	60	100
– under mechanical stress	45	100
– natural rubber	45	100
Other insulations of:		
– thermoplastic materials ^e	f)	f)
– non-impregnated paper	55	70
– non-impregnated cardboard	60	80
– impregnated cotton, silk, paper and textile	70	90
– laminates based on cellulose or textile, bonded with		
– phenol-formaldehyde, melamine-formaldehyde, phenol-furfural or polyester	85	110
– epoxy	120	150
– mouldings of		
– phenol-formaldehyde or phenol-furfural, melamine and melamine phenolic compounds with		
– cellulose fillers	100	130
– mineral fillers	110	150
– thermosetting polyester with mineral fillers	95	150
– alkyd with mineral fillers	95	150
– composite materials of		
– polyester with glass-fibre reinforcement	95	150
– epoxy with glass-fibre reinforcement	100	150
– silicone rubber	145	190
c) <i>Parts acting as a support or a mechanical barrier including the inside of enclosures^d</i>		
Wood and WOOD-BASED MATERIALS	60	90
Thermoplastic materials ^e	f)	f)
Other materials	d)	d)
d) <i>Winding wires^{d+g}</i>		
– insulated with		
– non-impregnated silk, cotton, etc.	55	75
– impregnated silk, cotton, etc.	70	100
– oleoresinous materials	70	135
– polyvinyl-formaldehyde or polyurethane resins	85	150
– polyester resins	120	155
– polyesterimide resins	145	180
e) <i>Other parts</i>		
These temperature rises apply to parts not covered by items a), b), c) and d):		
Parts of wood and WOOD-BASED MATERIAL	60	140
Lithium batteries	40 ^h	50 ⁱ
Resistors and parts of metal, glass, ceramic, etc.	No limit	No limit
All other parts	200	300

For conditions see the following page.