

1: These values are given for information only for transformers with inrush currents of around 25 In.
2: Thermal adjustment

Nominal power	24 V				42 V				230 V				400 V			
	Rating	Cartridge Cat.Nos	Rating	MCBS Cat.Nos	Rating	Cartridge Cat.Nos	Rating	MCBS Cat.Nos	Rating	Cartridge Cat.Nos	Rating	MCBS Cat.Nos	Rating	Cartridge Cat.Nos	Rating	MCBS Cat.Nos
400 VA	10	0 133 10	10	4 078 96	6	0 133 06	6	4 078 94	1	0 133 01	1	4 078 90	1	0 133 01	1	4 078 90
630 VA	16	0 133 16	16	4 078 98	10	0 133 10	10	4 078 96	2	0 133 02	2	4 078 91	1	0 133 01	1	4 078 90
1000 VA	25	0 133 25	25	4 079 00	16	0 133 16	16	4 078 98	4	0 133 04	3	4 078 92	2	0 133 02	2	4 078 91
1600 VA	40	0 143 40	40	4 079 02	25	0 133 25	20	4 078 99	4	0 133 04	6	4 078 94	4	0 133 04	3	4 078 92
2500 VA	63	0 153 63	63	4 079 04	40	0 143 40	32	4 079 01	6	0 133 06	6	4 078 94	4	0 133 04	6	4 078 94
4 kVA	100	0 153 96	100	4 093 63	63	0 153 63	50	4 079 03	10	0 133 10	10	4 078 96	6	0 133 06	6	4 078 94
6.3 kVA	160	0 163 55			100	0 153 96	80	4 093 62	16	0 133 16	16	4 078 98	10	0 133 10	10	4 078 96
10 kVA	250	0 173 65			160	0 163 55	125	4 093 64	25	0 133 25	25	4 079 00	16	0 133 16	16	4 078 98
16 kVA									40	0 143 40	40	4 079 02	25	0 133 25	25	4 079 00
25 kVA									63	0 153 63	63	4 079 04	40	0 143 40	40	4 079 02
40 kVA									100	0 153 96	100	4 093 63	63	0 153 63	63	4 079 04
50 kVA									125	0 153 97	125	4 093 64	80	0 153 80	80	4 093 62
63 kVA									160	0 163 55	160	4 200 17	100	0 153 96	100	4 093 63
80 kVA									200	0 168 60	200	4 200 18	125	0 153 97	125	4 093 64
100 kVA									250	0 173 65	250	4 200 19	160	0 163 55	160	4 200 17
125 kVA									315	0 178 70	400	0 255 38	200	0 168 60	200	4 200 18
160 kVA									400	0 178 75	400	0 255 38	250	0 173 65	250	4 200 19
200 kVA									500	0 181 25	630	0 255 40	315	0 178 70	320	0 255 37
250 kVA									630	0 181 30	630	0 255 40	400	0 178 75	400	0 255 38
315 kVA									800	0 185 85	800	0 258 09	500	0 181 75	500	0 255 39
400 kVA									1000	0 185 90	1000	0 258 10	630	0 181 80	630	0 255 40

Protection of transformers and their lines (continued)

■ Main transformer functions:

• Changing voltage:



Isolation transformer
(basic insulation between primary and secondary)



Auto-transformer
(no insulation between primary and secondary)

• Control circuit power supply



Control transformer
(basic insulation between primary and secondary)

• Protection against electric shock

- Protection against direct and indirect contact by:



Safety isolating transformers
(reinforced insulation between primary and secondary,
no-load voltage < 50 V)

- Protection against indirect contact by:



Isolating transformers
(reinforced insulation between primary and secondary)



Isolating transformers
For the supply of medical location (group II)

The transformer function(s) can either be defined by the equipment designer or can be imposed by installation guidelines or the equipment standard

Definitions:

- Electric shocks: physiological effect resulting from an electrical current through a human or animal body (IEV 195-01-04)
- Direct contact: electric contact of persons or animals with live parts (195-06-03)
- Indirect contact: electric contact of persons or animals with exposed-conductive-parts which have become live under fault conditions (195-06-04)