

Transformer permissible overloads

If the rated full power of the transformer is not used in a continuous duty cycle, the transformer can be overloaded with higher power values. In this context, refer to the indications given in table 1.

In addition, the rated power shown on AB transformers is the maximum power that can be delivered by the secondary winding in continuous duty, without exceeding the prescribed overtemperature limits, with maximum ambient temperature of 40 °C and installation site at 1000 m a.s.l. If the application conditions result in operation beyond these limits, the deliverable power values must not exceed the values shown in tables 2 and 3. When transformers are installed in sealed enclosures, the maximum deliverable power must not exceed 80% of the rated power.

Transformer load (% of rated power)	Permissible duration of transformer overload in minutes (% of rated power)				
	10%	20%	30%	40%	50%
50%	180	105	65	45	30
60%	170	95	60	40	25
70%	155	80	45	30	20
80%	140	75	40	25	15
90%	120	60	30	15	8

table 1

Ambient temperature °C	40	45	50	55	60	65
Available power in %	100	90	80	72	66	62

table 2

Altitude m	1000	1500	2000	3000	4000	5000
Available power in %	100	97,5	95	90	85	80

table 3