

ALTITUDE & AMBIENT DERATION CONNECTION DIAGRAMS

STAMFOR

ALTITUDE

Up to 1000m (3300 ft.) no deration in output is required. Above 1000m (3300 ft.) the air becomes less dense and its ability to transfe declines. For every 500m (1650 ft.) above 1000m, the output of the machine must be reduced by 3%.

Altitude	Deration	Factor	Altitude	Deration	Factor
1,500m (4,900 ft.)	3%	0.97	3,000m (9,900 ft)	12%	0.88
2,000m (6,600 ft.)	6%	0.94	3,500m (11,500 ft)	15%	0.85
2,500m (8,200 ft.)	9%	0.91	4,000m (13,100 ft.)	18%	0.82

AMBIENT

Insulation materials and systems are rated by their total thermal capacity. We use Class H materials throughout the range of produc

The standards, i.e. NEMA, BSS, IEC, CSA, limit the total temperature as follows:

Class H	Temp. Rise	Ambient	Total
Peak Stand-by	163 °C	27 °C	190 °C
Standby	150 °C	40 °C	190 °C
Continuous	125 °C	40 °C	165 °C

For Ambient temperatures above 40 °C the following derates are required.

Ambient	Deration	Factor
45 °C (113 °F)	3%	0.97
50 °C (122 °F)	6%	0.94
55 °C (131 °F)	9%	0.91
60 °C (140 °F)	12%	0.88