

5 Environmental conditions

5.1 Climatic conditions

Table 1: Climate parameters for environmental classes 3.1 to 3.6

Environmental parameter	Unit	Class							
		3.1		3.2	3.3	3.4	3.5	3.6	
		Normal	Exceptional (E)						
a)	Low air temperature	°C	+5	-5	-5	-25	-40	-40	+15
b)	High air temperature	°C	+40	+45	+45	+55	+70	+40 (see note 5)	+30
c)	Low relative humidity	% RH	5	5	5	10	10	10	10
d)	High relative humidity	% RH	85	90	95	100	100	100	75
e)	Low absolute humidity	g/m ³	1		1	0,5	0,1	0,1	2
f)	High absolute humidity	g/m ³	25		29	29	35	35	22
g)	Rate of change of temperature (see note 1)	°C/min	0,5		0,5	0,5	1,0	1,0	0,5
h)	Low air pressure	kPa	70		70	70	70	70	70
i)	High air pressure (see note 2)	kPa	106		106	106	106	106	106
j)	Solar radiation	W/m ²	700		700	1 120	1 120	-	700
k)	Heat radiation	W/m ²	600		600	600 (see note 4)	600 (see note 4)	600 (see note 6)	600
l)	Movement of the surrounding air (see note 3)	m/s	5		5	5	5	30	5
m)	Conditions of condensation	none	no		yes	yes	yes	yes	no
n)	Conditions of wind - driven rain, snow, hail, etc.	none	no		no	Yes (see note 4)	yes	yes	no
o)	Conditions of water from sources other than rain	none	no		no	dripping	dripping spraying	dripping spraying	no
p)	Conditions of icing	none	no		yes	yes	yes	yes	no
	Climatogram, figure		1		2	3	4	5	6

NOTE 1: Averaged over a period of 5 minutes.

NOTE 2: Conditions in mines are not considered.

NOTE 3: A cooling system based on non-assisted convection may be disturbed by adverse movement of the surrounding air.

NOTE 4: Temporarily.

NOTE 5: Direct solar radiation and heat-trap conditions do not exist.

NOTE 6: Secondary effect of solar radiation.

5.2 Biological conditions

Table 2: Biological conditions for environmental classes 3.1 to 3.6

Environmental parameters	Unit	Class	
		3.1 and 3.6	3.2 to 3.5 (see note)
a)	Flora	none	presence of mould, fungus, etc.
b)	Fauna	none	presence of rodents and other animals harmful to products but excluding termites

NOTE: At non-heated locations (class 3.3) only mould growth may be encountered.