



## General conditions:

Devices must not be stored in a high humidity environment, in the presence of corrosive aggressive substances and in an environment with rapid temperature changes where vapor condensation occurs.

Circuit breakers are supplied by the manufacturer in a switched-off state and must be stored in this way.

## Storage conditions:

Products must be stored in an environment with the following parameters according to EN 60721-3-1:

### 1K2/1Z1/1B1/1C2/1S2/1M2

#### 1K2/1Z1:

This class includes closed temperature-controlled places. Humidity is not regulated. Heating or cooling is used to maintain the required conditions, especially when there are large differences between the required conditions and the outside climate.

The stored products may be exposed to solar and thermal radiation except for radiant heat. Products may also be exposed to ambient airflow in buildings caused by draft due to open windows, special operating conditions, etc.

Minimum air temperature	+5 °C	for cartons +15 °C <sup>1)</sup>
Maximum air temperature	+40 °C	for cartons +25 °C <sup>1)</sup>
Low relative humidity	5 %	for cartons 30 % <sup>1)</sup>
High relative humidity	85 %	for cartons 60 % <sup>1)</sup>
Low absolute humidity	1 g/m <sup>3</sup>	for cartons 10 g/m <sup>3</sup> <sup>1)</sup>
High absolute humidity	25 g/m <sup>3</sup>	for cartons 20 g/m <sup>3</sup> <sup>1)</sup>
Rate of temperature change	0.5 °C/minute	
Low air pressure	70 kPa (70 kPa is about 3 000 m)	
High air pressure	106 kPa	
Solar radiation	700 W/m <sup>2</sup>	
Thermal radiation	Avoid radiant heat ( <b>1Z1</b> )	
Ambient air flow	maximum 1 m/s	

1)

*Temperature and humidity limitations are caused by the stackability of devices packed in cardboard boxes. If the limit values are exceeded, the strength of the cardboard boxes changes. If the specified conditions cannot be met, the load of the cardboard boxes must be adapted to the current situation.*





Condensation	NO
Rain	NO
Water from sources other than rain	NO
Formation of ice and icing	NO

**1B1:**

A place without a special risk of being attacked by biological factors. It includes protective measures such as special product design or storage at locations constructed in such a way that mold, pest infestation, etc. are highly unlikely.

Flora	Negligible
Fauna	Negligible

**1C2:**

Places with a level of pollution typical for urban areas with industrial activity spread over the area or with a high traffic intensity. Salt mist may be present at sheltered places of coastal areas.

Salts contained in seawater and salts used for road salting	Salt mist due to road salting or adequate sea salt concentration in mist		
Sulfur dioxide	0.3 mg/m <sup>3</sup> ;	0.11 cm <sup>3</sup> /m <sup>3</sup>	... mean value
	1.0 mg/m <sup>3</sup> ;	0.37 cm <sup>3</sup> /m <sup>3</sup>	... highest value
Hydrogen sulfide	0.1 mg/m <sup>3</sup> ;	0.071 cm <sup>3</sup> /m <sup>3</sup>	... mean value
	0.5 mg/m <sup>3</sup> ;	0.36 cm <sup>3</sup> /m <sup>3</sup>	... highest value
Chlorine	0.1 mg/m <sup>3</sup> ;	0.034 cm <sup>3</sup> /m <sup>3</sup>	... mean value
	0.3 mg/m <sup>3</sup> ;	0.1 cm <sup>3</sup> /m <sup>3</sup>	... highest value
Hydrogen chloride	0.1 mg/m <sup>3</sup> ;	0.066 cm <sup>3</sup> /m <sup>3</sup>	... mean value
	0.5 mg/m <sup>3</sup> ;	0.33 cm <sup>3</sup> /m <sup>3</sup>	... highest value
Hydrogen fluoride	0.01 mg/m <sup>3</sup> ;	0.012 cm <sup>3</sup> /m <sup>3</sup>	... mean value
	0.3 mg/m <sup>3</sup> ;	0.036 cm <sup>3</sup> /m <sup>3</sup>	... highest value
Ammonia	1.0 mg/m <sup>3</sup> ;	1.4 cm <sup>3</sup> /m <sup>3</sup>	... mean value
	3.0 mg/m <sup>3</sup> ;	4.2 cm <sup>3</sup> /m <sup>3</sup>	... highest value
Ozone	0.05 mg/m <sup>3</sup> ;	0.025 cm <sup>3</sup> /m <sup>3</sup>	... mean value
	0.1 mg/m <sup>3</sup> ;	0.05 cm <sup>3</sup> /m <sup>3</sup>	... highest value
Nitrogen oxides	0.5 mg/m <sup>3</sup> ;	0.26 cm <sup>3</sup> /m <sup>3</sup>	... mean value
	1.0 mg/m <sup>3</sup> ;	0.52 cm <sup>3</sup> /m <sup>3</sup>	... highest value



**1S2:**

This class includes places without special measures to limit the presence of dust or sand, but which are not located near to dust or sand sources.

Sand	30 mg/ m <sup>3</sup>
Dust (suspension)	0.2 mg/ m <sup>3</sup>
Dust (sedimentation)	1.5 mg/(m <sup>3</sup> ·h)

**1M2:**

This class includes places with little significant vibrations.

*Stationary sinusoidal vibrations*

Deflection amplitude	1,5 mm	frequency range 22 ÷ 9 Hz
Acceleration amplitudes	5 m/s <sup>2</sup>	frequency range 92 ÷ 200 Hz

*Non-stationary vibrations including blows*

Peak acceleration	40 m/s <sup>2</sup> response spectrum type „L“
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**More detailed information in EN 60721-3-1**

Note: These storage conditions apply for basic packaging of products. In addition, the special packaging can be stored in less favorable conditions.

