



Lifetime

DEIF products are designed for and are being manufactured on electronics technology platforms, which target a general lifetime expectancy of minimum 10 years at a constant operation and at steady or varying ambient temperatures up to 40°C. DEIF products will – like all other electronics – in average have a declining lifetime with ascending temperature.

Lifetime issues of electronics are typically related to dry out of electrolytes and similar components. In general materials becomes more crispy with higher temperature and are more easy to crack and consequently malfunction (insolation and housing of component etc.).

Degrading of expected lifetime for electronic equipment in general can be expressed like this:

Lifetime will in average be halved for every rise of 10 °C in the ambient temperature – if the product is constantly located in this steady temperature environment. Short time appearance of high temperature will only reduce expected lifetime correspondingly.

Example of lifetime versus ambient temperature can be seen in below table where the requisite is that the product is operated 24/7 at a constant temperature in the stated interval:

Ambient temperature – constantly within these intervals	Up to 40°C	40°C - 50°C	50°C – 60°C
Expected average lifetime	10 years	5 years	2½ years

Maximum operation temperature is stated in the datasheet of the product.

Maintenance

In the ordinary lifetime according to above mentioned temperature consideration, no maintenance actions are required if situated in an environment suitable for the product.

Jan Aagaard
Senior Vice President, Research & Development
DEIF A/S, Power & Marine Division