

Certificate MTTF and MTTFd / B10d

Jul 2, 2016

Order code:

BTL00W2

Part number:

BTL5-T110-M0250-B-S103

MTTF (40°C)	MTTFd	MTTFd worst case	B10d	Diagnostic Coverage
59 years	118 years	12 years	–	0 %

Calculation formulas		
$MTTF = \frac{1}{\sum_{i=1}^n \frac{1}{MTTF_i}}$	$MTTFd = MTTF \cdot 2$	$MTTFd_{\text{Worst Case}} = \frac{MTTF \cdot 2}{10}$

Standard

DIN EN ISO 13849-1:2008 and SN29500, T=40°C.

Standard sections

C.5: MTTF, MTTFd data for electrical components (typical and worst case)

D.1: Parts Count method, worst case with a safety factor of 10

General comments

The MTTFd value of our electronic products is determined using special software and the parts-count method per EN 13849. 8760 operating hours over one year are assumed. For our electromechanical sensors we give the B10d value, which we have obtained as the result of life expectancy tests. The diagnostic coverage is determined using an FMEA per EN 13849. The mission time is the result of continuous long-term tests and years of market observation.

Specification of the MTTF value, the MTTFd value, the MTTFd worst case value, the B10d value, the mission time and the diagnostic coverage do not represent any binding quality and/or life expectancy guarantees; these are simply experiential values with no binding nature. These values also do not extend the expiration of warranty terms or affect them in any way.

No liability for the correctness and completeness of this information can be assumed, since errors are not completely avoidable in spite of all possible care.

Note that the products listed here are not themselves safety components according to the Machine Directive 2006/42/EG Article 2 c. It is however possible to create corresponding structures with a high Performance Level per EN 13849-1 by means of two-channel utilization.

We reserve the right to make changes

Balluff GmbH
Schurwaldstraße 9
73765 Neuhausen a.d.F.
Germany
Tel. +49 7158 173-0
Fax +49 7158 5010
balluff@balluff.de