

QUALITY ASSURANCE

Date : OCT 20th 2022
Object : MTTF for Circuit Breaker LF
No. ref : MTTF-2022

TO WHOM IT MAY CONCERN :

Terms

We consider the hypothesis that the failure rate is constant during all the useful lifetime of the equipment (exponential reliability law). According to this hypothesis and as the Mean Down Time (MDT) is negligible in comparison to the Mean Up Time (MUT), the MeanTime Between Failure (MTBF) is similar to the MTTF.

Formula

$$\text{Failure Rate} = \frac{\text{Nb. of failures recorded on the equipment during the observation time \{1 year\}}{(\text{Nb. of equip. manufactured at the end of monitor time}) \times (\text{Nb. of hours in the monitor time \{8760\}})}$$

Unit of measurement = Mean number of failures by hour

$$\text{MTTF} = \frac{1}{(\text{Failure rate}) \times (\text{Nb. of hours in the monitor time \{8760\}})}$$

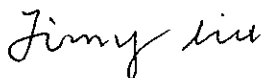
Unit= Years

Result

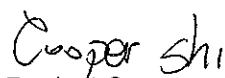
According to the total number of installed Circuit Breakers and considering the major and critical defects (during operation) on the period 2006 -2021:

- the operational **failure rate** is about **4.98 E-8** failures by hour
- the corresponding **MTTF** is about **2291 years**.

Yours faithfully



Offer Quality Leader
Optimum CB Squad, MV Line of Business



Product Owner
Optimum CB Squad, MV Line of Business

Schneider Electric

Postal address / Adresse postale :
Site Technopole
28, rue Henri Tarze
F-38050 Grenoble Cedex 9
Tel. +33 (0)4 76 57 60 60

schneider-electric.com

Legal information / Mentions légales
Société par actions simplifiée au capital de 928.298.512 euros
954 503 439 rcs Nanterre – code APE : 2712Z
Siret : 954 503 439 01719
n° ident. TVA : FR 04 954 503 439
Siège social : 35 rue Joseph Monier
F – 92500 Rueil-Malmaison