

MTBF DECLARATION

This statement provides the estimated MTBF value for SENECA products determined through specific analyses and standardized methodologies.

The MTBF value is based on accelerated testing and statistical analysis.

It does not represent a maximum continuous operating time, but rather an average estimate between failures under specific conditions.

Factors such as high temperatures, vibration, humidity, or other extreme conditions can reduce the actual MTBF.

Products	MTBF		Temperature	Calculation Method
	Years	Hours (Millions)		
Generic product (average values)	85	0,75	40°C	Statistical analysis of failures, considering total parts sold from 1999 to present.
Temperature transmitters (T120/K120RTD)	360	3,15	50°C	The MTBF was calculated using the Siemens SN29500 reliability prediction method.
	123	1,07	80°C	
Converters/Isolators K Line	950	8,32	35°C	Using our database, we calculate the average number of units installed per year and determine the total operating hours these units have accumulated in the field. We assume that the units were operational 50% of the time and for 200 days per year. The MTBF is then calculated by dividing the total 'hours of operation' by the 'number of failures'.
Converters/Isolators Z Line	57	0,5	40°C	Using our database, we determined the average number of units installed per year and calculated the total operating hours for these units. We assumed the units operated 50% of the time over 200 days per year. To adopt a conservative approach, the number of failed devices was doubled. The MTBF was then calculated by dividing the total 'hours of operation' by the 'number of failures'.
Current Transducers T201 Series	883	7,73	35°C	Using our database, we determined the average number of units installed per year and calculated the total operating hours for these units. We assumed the units operated 50% of the time over 200 days per year. To adopt a conservative approach, the number of failed devices was multiplied by five. The MTBF was then calculated by dividing the total 'hours of operation' by the 'number of failures'.
Datalogger Z-UMTS	91	0,8	30°C	The calculation was performed using a predictive method according to the Telecordia SR332 Issue 2 standard.
Multiunction Controllers (Z-PASS1/2; Z-TWS4)	111	0,972	35°C	Using our database, we calculate the average number of units installed per year and determine the total operating hours these units have accumulated in the field. We assume the units were operational 100% of the time for 220 days per year. The MTBF is then calculated by dividing the total 'hours of operation' by the 'number of failures'.
I/O modules R Line	45	0,4	40°C	The MTBF was calculated using the Siemens SN29500 reliability prediction method.

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