



Reliability calculation

In accordance with RDF2000 model (year 2000) from CNET

ABB Current Sensor

NCS125 and NCS165 Industry & Traction (fixed installation)

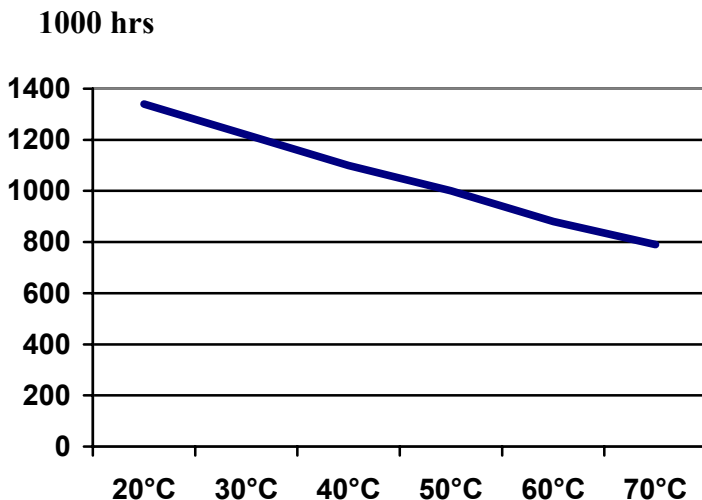
- . $I_p = I_{pn} = 2 \text{ to } 10\text{kA}$ (NCS125)
- . $I_p = I_{pn} = 4 \text{ to } 20\text{kA}$ (NCS165)
- . $I_s = I_{sn} = \pm 20\text{mA}$
- . $V_s = V_{sn} = \pm 10\text{V}$
- . $V_a = \pm 24\text{V}$

Environment :

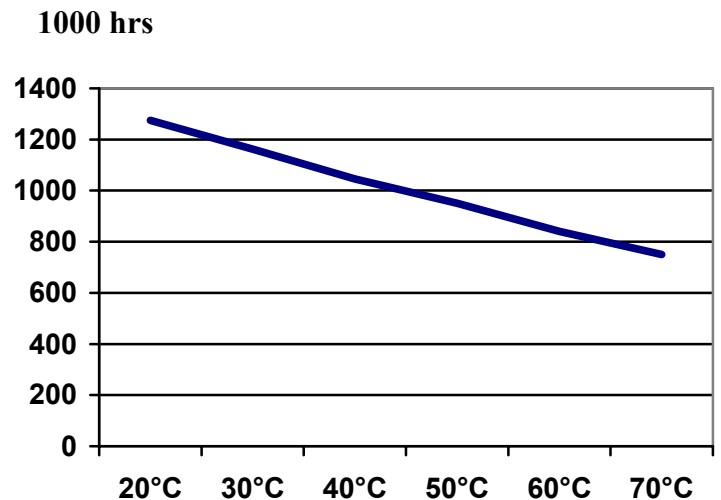
- . Ambient temperature : 40°C
- . Ground fixed not protected

	NCS125	NCS165
Hall probes failure rate ($E10^{-9}/h$)	246	281
Sensor failure rate ($E10^{-9}/h$)	910	958
Sensor MTBF (1000 hrs)	1100	1045
Sensors MTBF (years) ¹	127	120

NCS125 (total MTBF)



NCS165 (total MTBF)



¹ After the MTBF duration, it will remain 37% of operational sensors.