



Reliability calculation

In accordance with RDF93 model (June 93) from CNET

Current sensor – VS range : VS050...VS4200

Environment :

- . Traction application
- . Ambient temperature : 40°C
- . Ground mobile material

SIZE 0

Parameters	VS050	VS125	VS250	VS500	VS750	VS1000	VS1500
$U_P = U_{PN}$ (V rms)	50	125	250	500	750	1000	1500
$I_S = I_{SN}$ (mA rms)	50	50	50	50	50	50	50
Power supply ($\pm V$ d.c.)	± 24	± 24	± 24	± 24	± 24	± 24	± 24

Results	VS050	VS125	VS250	VS500	VS750	VS1000	VS1500
Failure rate of the equipped board ($10^{-9}/h$)	1550	1550	1550	1550	1566	1566	1566
Failure rate of the finished sensor ($10^{-9}/h$)	1550	1550	1550	1550	1566	1566	1566
MTBF value (hours)	645 161	645 161	645 161	645 161	638 570	638 570	638 570
MTBF value (years)	29	29	29	29	29	29	29



Current sensor – VS range : VS050...VS4200

Environment :

- . Traction application
- . Ambient temperature : 40°C
- . Ground mobile material

SIZE 1

Parameters	VS2000	VS3000	VS4000	VS4200
$U_P = U_{PN}$ (V rms)	2000	3000	4000	4200
$I_S = I_{SN}$ (mA rms)	50	50	50	50
Power supply ($\pm V$ d.c.)	± 24	± 24	± 24	± 24

Results	VS2000	VS3000	VS4000	VS4200
Failure rate of the equipped board ($10^{-9}/h$)	1566	1575	1581	1583
Failure rate of the finished sensor ($10^{-9}/h$)	1566	1575	1581	1583
MTBF value (hours)	638 570	634 921	632 511	631711
MTBF value (years)	29	29	29	29