

Technical Publication

No.	RT-E79-1
Date	2002.4.26

Subject: Reliability prediction about micro programmable logic controller FC4A series

Testing Date	Temperature	Humidity	Approved	Checked	Inspected
2002.4.26	-	-	<i>K. Matsuura</i>	<i>N. Sasak</i>	N.KAKIKAWA

Calculating MTBF about following products, based on MIL-HDBK-217F.

Calculation conditions

- Environmental condition : Ground-Fix
- Ambient temperature : 20

type	FR/MTBF	Ta=20	type	FR/MTBF	Ta=20
FC4A-N08B1	FR	1.742 FR/10 ⁶ h	FC4A-T16K3	FR	2.654 FR/10 ⁶ h
	MTBF	574052 h (65.5 year)		MTBF	376790 h (43.0 year)
FC4A-N16B1	FR	2.476 FR/10 ⁶ h	FC4A-T16S3	FR	2.654 FR/10 ⁶ h
	MTBF	403877 h (46.1 year)		MTBF	376790 h (43.0 year)
FC4A-M08BR1	FR	1.562 FR/10 ⁶ h	FC4A-T32K3	FR	5.309 FR/10 ⁶ h
	MTBF	640204 h (73.1 year)		MTBF	188359 h (21.5 year)
FC4A-R081	FR	1.483 FR/10 ⁶ h	FC4A-T32S3	FR	5.309 FR/10 ⁶ h
	MTBF	674308 h (77.0 year)		MTBF	188359 h (21.5 year)
FC4A-R161	FR	2.256 FR/10 ⁶ h	FC4A-M24BR2	FR	3.732 FR/10 ⁶ h
	MTBF	443262 h (50.6 year)		MTBF	267952 h (30.6 year)
FC4A-T08K1	FR	1.797 FR/10 ⁶ h	FC4A-L03AP1	FR	13.822 FR/10 ⁶ h
	MTBF	556483 h (63.5 year)		MTBF	72347 h (8.3 year)
FC4A-T08S1	FR	1.802 FR/10 ⁶ h	FC4A-L03A1	FR	12.014 FR/10 ⁶ h
	MTBF	554939 h (63.3 year)		MTBF	83236 h (9.5 year)
FC4A-N16B3	FR	2.381 FR/10 ⁶ h	FC4A-J2A1	FR	10.854 FR/10 ⁶ h
	MTBF	419991 h (47.9 year)		MTBF	92132 h (10.5 year)
FC4A-N32B3	FR	4.762 FR/10 ⁶ h	FC4A-K1A1	FR	8.788 FR/10 ⁶ h
	MTBF	209996 h (24.0 year)		MTBF	113798 h (13.0 year)

*1:MTBF(Mean Time Between Failure)

*2:FR(Failure Rate)