

# 技術文書

## (1)技術文書(TD)とは？

1. Technical Documentation の略で"技術文書"の意味です。
2. CE マーキングの EU 各指令に適合し、その宣言 (DoC: Declaration of Conformity) を行い、対象製品に"CE"マークを表示して適合宣言した根拠となる技術的な内容を記載した文書です。

## (2)何のために必要か？

1. CE 自己宣言のために必要で基本的にメーカー自身が作成するものです。
2. EU の税関の査察で要求された場合に提示する義務があります。

## (3)作成したあとの運用は？

1. メーカーが保管、維持管理します。(10年間の保管義務)
2. 変更、修正などが生じた場合には、その内容を更新して対象製品と技術資料(TD)の内容が整合していることが求められます。

## (4)TD の内容とは？

基本的に安全、EMC、RoHS に関する技術資料で、CE マーキングをした根拠が簡潔に分かるものが求められます。まとめ方はメーカーにより違いがありますが、弊社がご提供さしあげているものは、下記のもので構成されています。弊社では、最終的に内容の更新、変更などのメンテナンスが必要なために文書ファイルは、ワードファイル(.doc)で納品(CD-ROM)させていただいております。

### 1. TECHNICAL DOCUMENTATION ← 表紙と目次

- \*メーカーの責任者(代表者)のサイン  
(製造元が作成して準備するので弊社は、作成を支援する立場となります)
- \*基本的に CE 宣言する日、又はそれ以前の日付とします。

### 2. GENERAL DESCRIPTION ← 製品の概要

### 3. TECHNICAL DESCRIPTION ← 技術的説明(安全/EMC 関連)

- \*Block Diagram, CDF(Critical components), Risk Assessment Report などを添付する。

### 4. EMC DESCRIPTION ← EMC に関する記述 (試験を行った場合は、EMC テストレポートを添付)

### 5. SAFETY DESCRIPTION ← 安全に関する記述 (試験を行った場合は、安全テストレポートを添付)

### 6. RoHS DESCRIPTION ← RoHS に関する記述 (EN 50581 に基づく適合根拠の説明)

### 7. DECLARATION OF CONFORMITY ← CE 自己宣言書

- \*宣言書は、メーカーの定型書式がある場合にはそれを使用します。

### 8. APPENDIXES ← 関連資料(英文) \*メーカー自身で準備します。

- 1) Specification
- 2) Electrical Drawings
- 3) Manuals (Operation / Installation / Maintenance)

**SAMPLE**

# **TECHNICAL DOCUMENTATION**

**Product Name: SAFETY PRODUCT**

**Model: FSS**

**Day Month, Year**

Place: Yokohama Japan

Date; Day Month, Year

Prepared by; \_\_\_\_\_

Type name

Title, Dept. or Sec.

\*This documentation was compiled by the manufacturer to declare CE conformity according the EU Directives.

**FUJISAFETY SUPPORT CORPORATION**

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# Contents

The following documents provide for technical evidence to meet the requirements of EU Directives for CE Marking regarding the relevant product.

No.	Title	Document No.
1.	GENERAL DESCRIPTION.....	FSS-GEN-001
	1-(1) Manufacturer's Identification	
	1-(2) Evaluation and Testing	
	1-(3) Product	
	1-(4) Applicable Standards	
2.	TECHINICAL DESCRIPTION .....	FSS-TEC-001
	2-(1) Technical Description of Equipment	
	2-(2) Risk Assessment	
	2-(3) Test Description	
	2-(4) List of Appendixes	
3.	EMC DESCRIPTION .....	FSS-EMC-001
	3-(1) Measures for EMC at design	
	3-(2) Electrical Components	
	3-(3) External Wiring Consideration	
	3-(4) EMC Installation Procedure	
	3-(5) Counter-measures for EMC test	
	3-(6) EMC Test Report	
4.	SAFETY DESCRIPTION .....	FSS-SAF-001
	4-(1) Summary of Safety test	
	4-(2) Safety Test Report	
5.	RoHS DESCRIPTION .....	FSS-RoH-001
	5-(1) Summary	
	5-(2) Risk Assessment	
5.	DECLARATION OF CONFORMITY.....	Attached

△: Revised History

\*Revision(Doc No.); To be recorded document revision with its suffix number.

No.	Date	Revision (Doc. No)	Approved	Remarks

## GENERAL DESCRIPTION

MODEL: FSS

Kind of Product: SAFETY PRODUCT

### Contents

1-(1) Manufacturer's Identification .....	
1-(2) Testing Laboratory .....	
1-(3) Product .....	
1) Product Type and Model	
2) Product Description	
1-(4) Applicable Standards.....	
1) Safety (LV)	
2) EMC	
3) RoHS	

### 1-(1) Manufacturer's Identification

Manufacturer      Name:      \*\*\* CORPORATION  
                         Address:  
                         Tel:  
                         Fax:

Factory            Name:      \*\*\* CORPORATION  
                         Address:  
                         Tel:  
                         Fax:

### 1-(2) Testing Laboratory

Name: \*\*\* CORPORATION  
Address:  
Tel:  
Fax:

### 1-(3) Product

#### 1) Product Type and Model

Kind of product: SAFETY PRODUCT  
Model name: FSS  
Electrical rating: AC\*\*\*V, \*-Phase, \*\*Hz, \*\*VA  
Identification and Rating Label:

#### 2) Product Description

This product is an instrument used in...

The instrument is Installed / equipped in a specified location as the following conditions.

Temperature:    -    °C  
Humidity:       -    %RH (non-condensing)  
Altitude:       2000m max.  
Power Source: AC\*\*\*V, \*\*Hz, \*\*VA  
Fluctuation of Power Voltage: within  $\pm$     %

This instrument is comprised of the following units.

...

The main electric power is supplied from the electricity of the building specified by a customer.  
The followings are processes of the equipment to connect the electricity.

...

#### 1-(4) Applicable Standards

The following aspects are taken into consideration to determine the standards.

...

##### 1) Safety (LV: Low Voltage)

The Safety Testing was performed at \*\*\*\*\* by \*\*\*\*\*.

##### 2) EMC (Electromagnetic Compatibility)

Emission (EMI):

Immunity (EMS):

The EMC Testing was performed at \*\*\*\*\* by \*\*\*\*\*.

##### 4) RoHS

(The Restriction of the use of certain Hazardous Substances in Electrical and Electronic Equipment)

The RoHS evaluation was performed at \*\*\*\*\* by \*\*\*\*\*.

## TECHNICAL DESCRIPTION

MODEL: FSS

Kind of Product: SAFETY PRODUCT

### Contents

2-(1) Technical Description of Machine .....	
1) System Block Diagram	
2) Constructions	
3) Electrical Components (CDF)	
4) Safety Protection Devices	
2-(2) Risk Assessment .....	
2-(3) Test Description .....	
1) Equipment under Test	
2) Operation Model of EUT	
3) Test Result and Report	
2-(4) List of Appendixes	
1) Specifications	Attached
2) Electrical Drawings	Attached
3) Configurations	Attached
4) Manuals	Attached
(Operation/Maintenance/Installation)	

## 2-(1) Technical Description of Machine

### 1) System Block Diagram

...

### 2) Constructions

Major constructions of the instrument were shown as the following photos.

...

### 3) Electrical Components (CDF)

...

### 4) Safety Protection Devices

The \*\*\*\*\* has some kinds of safety protection devices to prevent mechanical and electrical hazard.

...

#### 1. Safety operations

...

#### 2. Functions of Safety Devices

...

## 2-(2) Risk Assessment

...

See attached the Risk Assessment Report (No.\*\*\*\*\*)....

## 2-(3) Test Description

### 1) Equipment under Test

Model : FSS  
Input voltage : AC\*\*\*V, \*\*Hz  
Rated current : \*\*A  
Protection class: I

### 2) Operation Mode of EUT

The instrument / apparatus / machine under test was operated according to the following mode during the measurement.

Operation Mode		Description
1	Standby	Not conducted
2	Running test program	Customer specific
3	Practice operation	No operation on control panel

The EUT works, the following procedures are performed repeatedly.

### 3) Test Result and Report

Testing and evaluation results as to the Safety and the EMC are described in their reports.

...



# EMC DESCRIPTION

MODEL: FSS

Kind of Product: SAFETY PRODUCT

Contents

- 3-(1) Measures for EMC in design.....
- 3-(2) Electrical Components .....
- 3-(3) External Wiring Consideration .....
- 3-(4) EMC Installation Procedure .....
- 3-(5) Counter-measures for EMC test.....

### **3-(1) Measures for EMC in design**

The following measures were considered in the design stage to meet the EMC testing.  
...

### **3-(2) Electrical Components**

EMC relevant components are...

### **3-(3) External Wiring Consideration**

The apparatus/machine has...

### **3-(4) EMC Installation Procedure**

The apparatus/machine is built at the manufacturer's plant...

### **3-(5) Counter-measures for EMC test**

During the EMC testing,...

See attached EMC Test Report (No.\*\*\*\*\*)....

## **SAFETY DESCRIPTION**

MODEL: FSS

Kind of Product: SAFETY PRODUCT

### Contents

4-(1) Summary of Safety test.....	
4-(2) Test Result (Data) .....	
4-(3) Test Report .....	

#### **4-(1) Summary of Safety test**

Safety test of the instrument was performed at \*\*\*\* place according to the standards,...

#### **4-(2) Test Result (Data)**

The EUT (Test sample) has satisfied safety requirements of the applicable standard....

#### **4-(3) Test Report**

Please see the attached test report (No.\*\*\*\*\*).

Doc. No. FSS-RoH-001 Rev.  
Date:

# RoHS DESCRIPTION

MODEL: FSS

Kind of Product: SAFETY PRODUCT

## Contents

5-(1) Summary .....

5-(2) Materials, parts, Sub-assemblies.....

5-(3) Determine the information needed .....

5-(4) Evaluation of information.....

5-(5). Risk Assessment.....

### **5-(1) Summary**

The RoHS assessment has been performed at \*\*\*\* place according to the standards,....

### **5-(2) Materials, parts, Sub-assemblies**

Describing of components of the product.....

### **5-(3) Determine the information needed**

Considering hazardous substances of materials, parts, sub-assemblies.....

### **5-(4) Evaluation of information**

Evaluating collected data and evidences.....

### **5-(2) Risk Assessment**

Please see the attached Risk Assessment Report (No.\*\*\*\*\*). ....