



EVERY
CONNECTION
COUNTS

RoHS 2 TECHNICAL FILE

All black text is written as generic as possible and is intended to be ready for use in your technical file.

All red italic text provides extra instructions and is intended to be deleted in your technical file.

CONTENT

•This technical file contains following sections :

1. PRODUCT IDENTIFICATION

- description
- picture (optional)
- list of components
- list of suppliers
- applicable EEE category
- applicable exemptions

2. RISK ASSESSMENT

- approach
- material risk
- supplier risk
- part incompliance risk index (PIR-index)
- required level of technical documentation

3. EVALUATION OF DOCUMENTATION

- principle
- evaluation criteria

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5. OVERVIEW TABLE

PRODUCT IDENTIFICATION

DESCRIPTION

product group Hot air Gun		:	GPL 729
type CV-1981-PID-AT.		:	
CV-1983-110V-2260W-UK	441753-000		
CV-1983-220V-2260W	773898-000		
CV-1983-220V-2260W-UK	985426-000		
CV-1983-220V-3060W	538361-000		
CV-1983-220V-3060W-UK	231866-000		
Triac "S"			
CV-1981-110V-1460W-400HZ	461365-000	:	-
CV-1981-120V1600W-CANMK2	A42716-000		
CV-1981-120V1600W-UKMK2 Gun UK Version	E95798-000	:	
CV-1981-230V1600WMK2 Gun Europe Version	813914-000		
CV-1981-230V1600W-SEVMK2 Gun Swiss Version	F25836-000		
CV-1981-230V1600W-UKMK2 Gun UK Version	340970-000		
CV-1981-42V-1000W-NPMK2	F67999-000		

serial number N/A

batch:CV-1981-PID-AT. **Current and future build Started MAY 2012**

part number(s)

CV-1983 Range stated above current TE sales

• *Make sure that identification info matches with the identification info provided on the Declaration of Conformity.*



LIST OF COMPONENTS

All components are listed in the overview table.

LIST OF SUPPLIERS

All suppliers are listed in the overview table.

APPLICABLE EEE CATEGORY

6.electrical and electronic tools

• *list applicable EEE category the product belongs to (see Annex 1 of Directive 2011/65/EU)*

APPLICABLE EXEMPTIONS (if any)

• *list applicable exempted substance applications*

None

PICTURE (optional)





RISK ASSESSMENT

GENERAL APPROACH

- TE Connectivity considers following levels of technical documentation, ranked by effectiveness :
 1. internal or third party test reports
 2. full material declarations (FMD)
 3. part specific statements of compliance (SoC)
 4. generic statements of compliance *not used by TE*
 5. generic contractual agreements *not used by TE*
- TE Connectivity is never relying on generic contractual agreements or generic statements of compliance to fulfill technical documentation requirements.
- The necessity of a detailed risk assessment will be based on the availability of test data :
 - if TE already has test data available : no need for a detailed risk assessment; the test data, being the highest possible level of documentation, will be used by default.
 - if TE has no test data available : a detailed risk assessment, as described below, will determine the required technical documentation.

DETAILED RISK ASSESSMENT METHODOLOGY

- MATERIAL RISK + SUPPLIER RISK ⇒ PART INCOMPLIANCE RISK ⇒ REQUIRED TECHNICAL DOCUMENTATION
- The different building blocks of this methodology are explained below.

RISK ASSESSMENT (continued)

MATERIAL RISK

- Following TE's corporate compliance validation specification TEC-138-703 or Business Unit specific compliance specifications, TE Business Units evaluate their material risk.
- Although assessment procedures and scoring systems may differ between BU's, in the end all scores are to be transferred to a low - medium - high material risk evaluation.
- This material risk evaluation for every part is documented in the overview table.

SUPPLIER RISK

- Following TE's corporate compliance validation specification TEC-138-703 or Business Unit specific quality, supplier auditing or compliance specifications, TE Business Units assess their supply chain and evaluate their suppliers.
- Although assessment procedures and scoring systems may differ between BU's, in the end all scores are to be transferred to a low - medium - high supplier compliance risk evaluation.
- This supplier compliance risk evaluation for every supplier is documented in the overview table.

RISK ASSESSMENT (continued)

PART INCOMPLIANCE RISK index (PIR-index)

- The PIR-index combines the material risk evaluation and the supplier risk evaluation into an overall low-medium-high part incompliance risk ranking.
- The material risk is the main driving factor for the PIR-index, with a beneficial influence for trustworthy suppliers.

PIR-index			SUPPLIER COMPLIANCE RISK EVALUATION		
			LOW	MEDIUM	HIGH
MATERIAL RISK EVALUATION	LOW	⇒	LOW	LOW	LOW
	MEDIUM	⇒	LOW	MEDIUM	MEDIUM
	HIGH	⇒	LOW	MEDIUM	HIGH

- The PIR-index for every part/supplier-combination is documented in the overview table.

RISK ASSESSMENT (continued)

REQUIRED LEVEL OF TECHNICAL DOCUMENTATION

- Different levels of technical documentation, ranked by effectiveness, are :
 1. internal or third party test reports
 2. full material declarations (FMD)
 3. part specific statements of compliance (SoC)
 4. generic statements of compliance *not used by TE*
 5. generic contractual agreements *not used by TE*
- TE Connectivity is never relying on generic contractual agreements or generic statements of compliance.
- The PIR-index (material risk X supplier risk) determines the required level of technical documents for documenting the part's compliance with the RoHS substance restrictions.

required MINIMUM level of technical documentation			SUPPLIER RISK		
			LOW	MEDIUM	HIGH
MATERIAL RISK	LOW	⇒	supplier SoC	supplier SoC	supplier SoC
	MEDIUM	⇒	supplier SoC	supplier FMD or supplier test report	supplier FMD or supplier test report
	HIGH	⇒	supplier SoC	supplier FMD or supplier test report	internal or 3rd party test report

- The required technical documentation for every part is documented in the overview table.

EVALUATION OF DOCUMENTATION

PRINCIPLE

- All technical documentation needs to be evaluated whether the document is of sufficient quality to be included and can be used to confirm that the component meets the substance restrictions of RoHS2.
- The evaluation is documented in the overview table.

EVALUATION CRITERIA

- Following is a non-exhaustive list of criteria to take into account for the evaluation of supplier answers/test reports :
 - clear identification of supplier or test lab / letterhead
 - date of answer/test report
 - location of test lab and name of tester
 - analytical test method used for the test
 - applicable legislation stated
 - clear product identification
 - ISO 17025 certification of test lab
 - contact for further information
 - no unacceptable waiver statements
 - description of the conclusion of the testing / confirmation that all results actually meet substance restrictions limits
 - signature

C.E. Conformity

Directives: 2006/42, 2004/108, 2006/95

**Harmonized Standards: EN 12100-1, EN 12100-2, EN 60204-1, EN 14121-1,
EN 55014-1, EN 55014-2, EN 50366, EN 62233,
EN 61000-3-2, EN 61000-3-3, EN 60335-2-45**

Signed off by Leister.



EC declaration of conformity

(in terms of the EC machinery directive 2006/42;

Designation Hot Air Tool

Type Diode S, Diode PID,

Diode S with Minor, Diode PID with Minor

EC directive(s) 2006/42/EC (Machinery Directive)

2004/108/EC (EMC Directive)

2011/65/EU (RoHS Directive)

Harmonised standards EN 12100-1:2003 + A1:2009

EN 12100-2:2003 + A1:2009

EN 14121-1:2007

EN 55014-1:2006 + A1:2009

EN 55014-2:1997 + A1:2001 + A2:2008

EN 61000-3-2:2006 + A1:2009 + A2:2009

EN 61000-3-3:2008

EN 62233:2008

EN 60335-1:2002 + A1:2004 + A2:2006 + A11:2004 + A12:2006 + A13:2008

EN 60335-2-45:2002 + A1:2008

EN 50581:2012



Designation Hot Air Tool

Type Electron

EC directive(s) 2006/42/EC (Machinery Directive)

2004/108/EC (EMC Directive)

2011/65/EU (RoHS Directive)

Harmonised standards EN 12100-1:2003 + A1:2009

EN 12100-2:2003 + A1:2009

EN 14121-1:2007



EN 55014-1:2006 + A1:2009
EN 55014-2:1997 + A1:2001 + A2:2008
EN 61000-3-2:2006 + A1:2009 + A2:2009
EN 61000-3-3:2008
EN 62233:2008
EN 60335-1:2002 + A1:2004 + A2:2006 + A11:2004 + A12:2006 + A13:2008
EN 60335-2-45:2002 + A1:2008
EN 50581:2012

Designation Hot Air Tool

Type Sonora S1

EC directive(s) 2006/42/EC (Machinery Directive)

2004/108/EC (EMC Directive)

2011/65/EU (RoHS Directive)

Harmonised standards EN 14121-1:2007

EN 55014-1:2006 + A1:2009+ A2:2011

EN 55014-2:1997 + A1:2001 + A2:2008

EN 61000-3-2:2006 + A1:2009 + A2:2009

EN 61000-3-3:2008

EN 62233:2008

EN 60335-1:2002 + A1:2004 + A2:2006 + A11:2004 + A12:2006 + A13:2008 + A14:2010 + A15:2011

EN 60335-2-45:2002 + A1:2008 + A2:2012

EN 50581:2012



Designation Hot Air Tool

Type Triac AT

EC directive(s) 2006/42/EG (Machinery Directive)

2004/108/EG (EMC Directive)

2011/65/EU (RoHS Directive)

Harmonised standards EN 12100-1:2003 + A1:2009

EN 12100-2:2003 + A1:2009

EN 14121-1:2007

EN 55014-1:2006 + A1:2009+ A2:2011

EN 55014-2:1997 + A1:2001 + A2:2008

EN 61000-6-2:2005

EN 61000-3-2:2006 + A1:2009 + A2:2009

EN 61000-3-3:2008



EN 62233:2008

EN 60335-1:2002 + A1:2004 + A2:2006 + A11:2004 + A12:2006 + A13:2008 + A14:2010 + A15:2011

EN 60335-2-45:2002 + A1:2008 + A2:2012

EN 50581:2012

Designation Hot Air Tool

Type Triac S, Triac PID

EC directive(s) 2006/42/EG (Machinery Directive)

2004/108/EG (EMC Directive)

2011/65/EU (RoHS Directive)

Harmonised standards EN 12100-1:2003 + A1:2009

EN 12100-2:2003 + A1:2009

EN 14121-1:2007

EN 55014-1:2006 + A1:2009

EN 55014-2:1997 + A1:2001 + A2:2008

EN 61000-6-2:2005

EN 61000-3-2:2006 + A1:2009 + A2:2009

EN 61000-3-3:2008

EN 62233:2008

EN 60335-1:2002 + A1:2004 + A2:2006 + A11:2004 + A12:2006 + A13:2008

EN 60335-2-45:2002 + A1:2008

EN 50581:2012

umentation.

REFERENCES

EU documents

- Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment
- EN 50581 (2012) : Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances

TE Connectivity corporate compliance documents

- TEC-138-703 : Product Compliance Validation Specification

IDENTIFICATION		
MATERIALS		SUPPLIERS
TE part number	part description	supplier name
	CV-1981-PID-AT	Leister
441753-000	CV-1983-110V-2260W-UK	
773898-000	CV-1983-220V-2260W	
985426-000	CV-1983-220V-2260W-UK	
538361-000	CV-1983-220V-3060W	
231866-000	CV-1983-220V-3060W-UK	
Spares:CV 1983		
229277-000	CV-1983-230V-CNTRL-CRCT	
D40442-000	CV-1983-M2-230V-2200W-ELE	
123906-000	CV-1983-M2-230V-3060W-ELE	

CV 1981-Triac TYPE "S"		
CV-1981-110V-1460W-400HZ	461365-000	
CV-1981-120V1600W-CANMK2	A42716-000	
CV-1981-120V1600W-UKMK2 Gun UK Version	E95798-000	
CV-1981-230V1600WMK2 Gun Europe Version	813914-000	
CV-1981-230V1600W-SEVMK2 Gun Swiss Version	F25836-000	
CV-1981-230V1600W-UKMK2 Gun	340970-000	
CV-1981-42V-1000W-NPMK2	F67999-000	

Spares:CV-1981-TRIAC"S"

CV-1981-S-CIRBD-120V	134016-000	
CV-1981-S-ELEM-42V	161876-000	
CV-1981-S-HANDLE	583328-000	
CV-1981-S-PHOTO-DIOD	070592-000	
Spares for CV-1981 PID/Used on Triac "S".		
CV-1981-PID-CIRBD-02-R	877344-000	
CV-1981-PID-CIRBD-120V	001954-000	
CV-1981-PID-CIRBD-230V	876490-000	
CV-1981-PID-ELEM-120V	179178-000	
CV-1981-PID-ELEM-230V	091282-000	
CV-1981-PID-PHOTO-DIOD	111766-000	
CV-1981-PID-S-BHOLDER	237656-000	
CV-1981-PID-S-BRSH230V	827444-000	
CV-1981-PID-S-BRSH42V120V	848298-000	
CV-1981-PID-S-FAN	142620-000	
CV-1981-PID-S-MOTOR-120V	665184-000	
CV-1981-PID-S-MOTOR-230V	680986-000	
CV-1981-PID-S-STAND	767328-000	

CV-1981-PID-S-TEMP-LIM-SW	063152-000	
CV-1981-PID-S-TRIAC	037444-000	

Parts RoHS Compliant to manufacture heat guns.

Drawing ref : CV-1981-PID-AT.

CV-1981-PID-Triac "S"

CV-1981-Triac "S"



CV1981PIDExpView.GIF



CV1981 triac S.gif



Adobe Acrobat
Document

TEST RESULTS AVAILABLE ?	RISK ASSESSMENT (RA)			
yes = no RA(*) no = RA needed	material risk	supplier risk	CONCLUSION	
			PIR-index	required technical document
NO	HIGH	LOW	LOW	supplier FMD
NO	HIGH	LOW	LOW	supplier FMD
NO	HIGH	LOW	LOW	supplier FMD
NO	HIGH	LOW	LOW	supplier FMD
NO	HIGH	LOW	LOW	supplier FMD
NO	HIGH	LOW	LOW	supplier FMD
NO	HIGH	LOW	LOW	supplier FMD
NO	HIGH	LOW	LOW	supplier FMD
NO	HIGH	LOW	LOW	supplier FMD

NO		HIGH	LOW	LOW	supplier FMD	
NO		HIGH	LOW	LOW	supplier FMD	
NO		HIGH	LOW	LOW	supplier FMD	
NO		HIGH	LOW	LOW	supplier FMD	
NO		HIGH	LOW	LOW	supplier FMD	
NO		HIGH	LOW	LOW	supplier FMD	
NO		HIGH	LOW	LOW	supplier FMD	
NO		HIGH	LOW	LOW	supplier FMD	

[illegible]

NO		HIGH	LOW	LOW	supplier FMD	
NO		HIGH	LOW	LOW	supplier FMD	

YES
YES