

## 126-116007 RoHS 3 Technical File; Leister Gun



EVERY  
CONNECTION  
COUNTS

## CV-1981/CV1983 Series Thermogun

### RoHS 3 TECHNICAL FILE



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# PRODUCT IDENTIFICATION

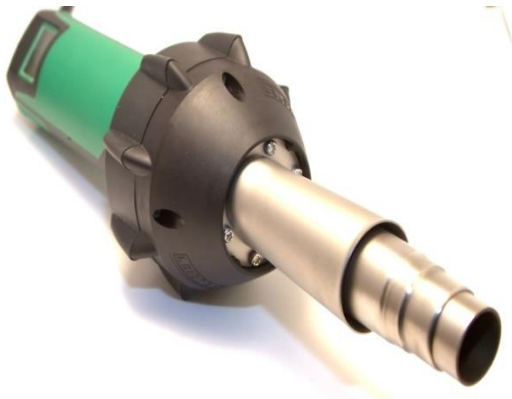
## Description

Product group Hot air Gun

Triac "S"/Triac "S" PID	Part Number
CV-1981-230V1600WMK2 Gun Europe Version	813914-000
CV1983-ST-230V3400W-EU	EG0998-000
CV1983-ST-230V2300W-EU	EG1100-000
CV1983-ST-120V2400W-CEE	EG1102-000
CV1983-ST-230V3400W-CEE	EG1104-000
CV1981-ATPID-230V1600W-EU	EG1106-000
CV1981-ATPID-230V1600W-UK	EG1108-000
CV1981-ATPID-120V1600W-US	EG1110-000
CV1981-ATPID120V1600W-CEE	EG1112-000
CV1981-ST-230V1600W-EU	EG1114-000
CV1981-ST-230V1600W-CH	EG1115-000
CV1981-ST-230V1600W-UK	EG1116-000
CV1981-ST-120V1600W-US	EG1118-000
CV1981-ST-120V1600W-UK	EG1120-000
<b>Spares for CV-1981MK2-PID –CV-1983M2</b>	
CV-1983-M2-230V-2200W-ELE	179178-000
CV-1983-M2-230V-3060W-ELE	091282-000
CV-1983-M2-230V-2200W-ELE	D40442-000
CV-1983-M2-230V-3060W-ELE	123906-000

## PICTURE (optional)

GPL729:



## **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
- Evaluation document

## **APPLICABLE EXEMPTIONS (if any)**

- NONE

## **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

### **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.

## 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.

## 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

**Leister Documentation of compliance. Leister manufacture's /supplies TE heat gun products and components referenced in the documentation**

**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;Appendix II A)

	<p><b>Designation</b> <b>Hot Air Tool</b></p> <p>Type Electron ST</p> <p>Option –</p> <p>EC directives 2006/42/EC (Machinery Directive) 2014/30/EU (EMC Directive) 2011/65/EU (RoHS Directive)</p> <p>Harmonised standards EN ISO 12100:2010 EN 55014-1:2017 EN 55014-2:2015 EN 61000-3-2:2014 EN 61000-3-3:2013 EN 61000-6-2:2005 EN 62233:2008 EN 60335-1:2012 + A11:2014 + A13:2017 EN 60335-2-45:2002 + A1:2008 + A2:2012 EN 50581:2012</p>
	<p><b>Designation</b> <b>Hot Air Tool</b></p> <p>Type Triac ST</p> <p>Option –</p> <p>EC directives 2006/42/EC (Machinery Directive) 2014/30/EU (EMC Directive) 2014/35/EU (Low Voltage Directive) 2011/65/EU (RoHS Directive)</p> <p>Harmonised standards EN ISO 12100:2010 EN 55014-1:2017 EN 55014-2:2015 EN 61000-6-2:2005 EN 61000-3-2:2014 EN 61000-3-3:2013 EN 62233:2008 EN 60335-1:2012 + A11:2014 + A13:2017 EN 60335-2-45:2002 + A1:2008+ A2:2012 EN 50581:2012</p>

<div data-bbox="206 231 440 380" style="border: 1px solid black; padding: 5px; text-align: center;">   Hot-Jet S </div>	<p><b>Designation</b> <b>Hot Air Tool</b></p> <p>Type Option – EC directives</p> <p>Hot-Jet S</p> <p>Harmonised standards</p> <p>2006/42/EC (Machinery Directive) 2014/30/EU (EMC Directive) 2014/35/EU (Low Voltage Directive) 2011/65/EU (RoHS Directive)</p> <p>EN ISO 12100:2010 EN 55014-1: 2006 + A1:2009 + A2:2011 EN 55014-2:2015 EN 61000-6-2:2005 EN 61000-3-2:2014 EN 61000-3-3:2013 EN 62233:2008 EN 60335-1:2012 + A11:2014 EN 60335-2-45:2002 + A1:2008+ A2:2012 EN 50581:2012</p>
<div data-bbox="180 804 483 953" style="border: 1px solid black; padding: 5px; text-align: center;">   <b>TRIAC AT</b> </div>	<p><b>Designation</b> <b>Hot Air Tool</b></p> <p>Type Option – EC directives</p> <p>Triac AT</p> <p>Harmonised standards</p> <p>2006/42/EC (Machinery Directive) 2014/30/EU (EMC Directive) 2011/65/EU (RoHS Directive)</p> <p>EN ISO 12100:2010 EN 55014-1: 2006 + A1:2009 + A2:2011 EN 55014-2:2015 EN 61000-6-2:2005 EN 61000-3-2:2014 EN 61000-3-3:2013 EN 62233:2008 EN 60335-1:2012 + A11:2014 + A13:2017 EN 60335-2-45:2002 + A1:2008+ A2:2012 EN 50581:2012</p>



Signed off by Leister.

**CB Test Certificate**

**Product Hot Air Tool**

Model/Type Ref Electron AT  
TriaC ST

**Name and address of the applicant :** Leister Technologies AG , Galileo-Strasses 10, 6056 Kägiswil ,Switzerland  
**Name and address of the manufacturer:** Leister Technologies AG , Galileo-Strasses 10, 6056 Kägiswil ,Switzerland  
**Name and address of the factory:** Leister Technologies AG , Riedstrasses, 6060 Sarnen ,Switzerland

**Ratings and principal characteristics:** Electron ST : 230V~,50/60Hz, 2300 W ,10A  
230V~,50/60Hz, 3400 W,15A  
TriaC ST : 230V~,50/60Hz, 1600 W, 7A  
Class II,IPX0

**National differences** EU Group Differences  
EU Special National Conditions  
EU A-Deviations

**A samples of product was tested and found in conformity with IEC:** CISPR 14-1:2005  
CISPR 14-1:2005/AMD1:2008  
CISPR 14-1:2005/AMD2:2011  
CISPR 14-1:2016  
CISPR 14-2:2015  
IEC 60335-1:2010  
IEC 60335-1:2010/AMD1:2013  
IEC 60335-2-45:2002  
IEC 60335-2-45:2002/AMD1:2008  
IEC 60335-2-45:2002/AMD2:2011  
IEC 61000-3-2:2014  
IEC 61000-3-3:2013  
IEC 61000-3-3:2013/ADM1:2017  
IEC 61000-4-13:2002  
IEC 61000-4-13:2002/ADM1:2019  
IEC 61000-4-13:2002/ADM2:2015  
IEC 61000-6-2:2005  
IEC 61000-6-2:2016  
IEC 62233:2005




Model/Type Ref Electron AT

**Name and address of the applicant :** Leister Technologies AG , Galileo-Strasses 10, 6056 Kägiswil ,Switzerland  
**Name and address of the manufacturer:** Leister Technologies AG , Galileo-Strasses 10, 6056 Kägiswil ,Switzerland  
**Name and address of the factory:** Leister Technologies AG , Riedstrasses, 6060 Sarnen ,Switzerland

**Ratings and principal characteristics:** : 230V~,50/60Hz, 460 W ,2A

**National differences** EU Group Differences  
EU Special National Conditions  
EU A-Deviations

**A samples of product was tested and found in conformity with IEC:** CISPR 14-1:2005  
CISPR 14-1:2005/AMD1:2008  
CISPR 14-1:2005/AMD2:2011  
CISPR 14-1:2015  
IEC 60335-1:2010  
IEC 60335-1:2010/AMD1:2013  
IEC 60335-2-45:2002  
IEC 60335-2-45:2002/AMD1:2008  
IEC 60335-2-45:2002/AMD2:2011  
IEC 61000-3-2:2014  
IEC 61000-3-3:2013  
IEC 61000-4-13:2002  
IEC 61000-4-13:2002/ADM1:2019  
IEC 61000-4-13:2002/ADM2:2015  
IEC 61000-6-2:2005

<b>Signed off by</b> <b>Leister.</b>	<b>CB Test Certificate</b>																		
<div data-bbox="50 317 313 466" style="border: 1px solid black; padding: 5px; text-align: center;">   <b>TRIA C AT</b> </div>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 40%;"><b>Product</b></td> <td style="text-align: right;"><b>Hot Air Tool</b></td> </tr> <tr> <td>Model/Type Ref</td> <td style="text-align: right;">Triac AT</td> </tr> <tr> <td><b>Name and address of the applicant :</b></td> <td style="text-align: right;">Leister Technologies AG , Galileo-Strasses 10, 6056 Kägiswil ,Switzerland</td> </tr> <tr> <td><b>Name and address of the manufacturer:</b></td> <td style="text-align: right;">Leister Technologies AG , Galileo-Strasses 10, 6056 Kägiswil ,Switzerland</td> </tr> <tr> <td><b>Name and address of the factory:</b></td> <td style="text-align: right;">Leister Technologies AG , Riedstrasses, 6060 Sarnen ,Switzerland</td> </tr> <tr> <td><b>Ratings and principal characteristics:</b></td> <td style="text-align: right;">Electron ST : 230V~,50/60Hz,7A, 1600 W 230V~,50/60Hz,15A ,1500 W Class II,IPX0</td> </tr> <tr> <td colspan="2"><b>A samples of product was tested and found in conformity with IEC:</b></td> </tr> <tr> <td></td> <td style="text-align: right;">CISPR 14-1:2016 CISPR 14-1:2015 IEC 60335-1:2010 IEC 60335-1:2010/AMD1:2013 IEC 60335-2-45:2002 IEC 60335-2-45:2002/AMD1:2008 IEC 60335-2-45:2002/AMD2:2011 IEC 61000-3-2:2018 IEC 61000-3-3:2013 IEC 61000-3-3:2013/ADM1:2017 IEC 61000-4-13:2002 IEC 61000-4-13:2002/ADM1:2019 IEC 61000-4-13:2002/ADM2:2015 IEC 61000-6-2:2005 IEC 61000-6-2:2016 IEC 62233:2005</td> </tr> <tr> <td><b>National differences</b></td> <td style="text-align: right;">EU Group Differences EU Special National Conditions EU A-Deviations</td> </tr> </table>	<b>Product</b>	<b>Hot Air Tool</b>	Model/Type Ref	Triac AT	<b>Name and address of the applicant :</b>	Leister Technologies AG , Galileo-Strasses 10, 6056 Kägiswil ,Switzerland	<b>Name and address of the manufacturer:</b>	Leister Technologies AG , Galileo-Strasses 10, 6056 Kägiswil ,Switzerland	<b>Name and address of the factory:</b>	Leister Technologies AG , Riedstrasses, 6060 Sarnen ,Switzerland	<b>Ratings and principal characteristics:</b>	Electron ST : 230V~,50/60Hz,7A, 1600 W 230V~,50/60Hz,15A ,1500 W Class II,IPX0	<b>A samples of product was tested and found in conformity with IEC:</b>			CISPR 14-1:2016 CISPR 14-1:2015 IEC 60335-1:2010 IEC 60335-1:2010/AMD1:2013 IEC 60335-2-45:2002 IEC 60335-2-45:2002/AMD1:2008 IEC 60335-2-45:2002/AMD2:2011 IEC 61000-3-2:2018 IEC 61000-3-3:2013 IEC 61000-3-3:2013/ADM1:2017 IEC 61000-4-13:2002 IEC 61000-4-13:2002/ADM1:2019 IEC 61000-4-13:2002/ADM2:2015 IEC 61000-6-2:2005 IEC 61000-6-2:2016 IEC 62233:2005	<b>National differences</b>	EU Group Differences EU Special National Conditions EU A-Deviations
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## 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

## Overview Table

IDENTIFICATION		Test Results Available?	Risk Assessment (RA)				Evaluation Of Documentation
MATERIALS		Yes =no RA(*) No =RA NEED	Material	Supplier			Quality check OK? YES/NO
			Risk	Risk	PIR-index	Required Technical document	
Part Description	TE Part Number						
CV-1983-M2-230V-2200W-ELE	D40442-000	NO	HIGH	LOW	LOW	Supplier FMD	
CV-1983-M2-230V-3060W-ELE	123906-000	NO	HIGH	LOW	LOW	Supplier FMD	
CV-1981-230V1600WMK2 Gun Europe Version	813914-000	NO	HIGH	LOW	LOW	Supplier FMD	YES
CV-1981-S-ELEM-42V	161876-000	NO	HIGH	LOW	LOW	Supplier FMD	YES
CV-1981-S-HANDLE	583328-000	NO	HIGH	LOW	LOW	Supplier FMD	YES
CV-1981-PID-ELEM-120V	179178-000	NO	HIGH	LOW	LOW	Supplier FMD	YES
CV-1981-PID-ELEM-230V	091282-000	NO	HIGH	LOW	LOW	Supplier FMD	YES
CV-1981-PID-S-BRSH230V	827444-000	NO	HIGH	LOW	LOW	Supplier FMD	YES
CV-1981-PID-S-BRSH42V120V	848298-000	NO	HIGH	LOW	LOW	Supplier FMD	YES
CV-1981-PID-S-MOTOR-230V	680986-000	NO	HIGH	LOW	LOW	Supplier FMD	YES
CV-1981-PID-S-TEMP-LIM-SW	063152-000	NO	HIGH	LOW	LOW	Supplier FMD	YES
CV1983-ST-230V3400W-EU	EG0998-000	NO	HIGH	LOW	LOW	Supplier FMD	YES
CV1983-ST-230V2300W-EU	EG1100-000	NO	HIGH	LOW	LOW	Supplier FMD	YES
CV1983-ST-120V2400W-CEE	EG1102-000	NO	HIGH	LOW	LOW	Supplier FMD	YES
CV1983-ST-230V3400W-CEE	EG1104-000	NO	HIGH	LOW	LOW	Supplier FMD	YES
CV1981-ATPID-230V1600W-EU	EG1106-000	NO	HIGH	LOW	LOW	Supplier FMD	YES
CV1981-ATPID-230V1600W-UK	EG1108-000	NO	HIGH	LOW	LOW	Supplier FMD	YES
CV1981-ATPID-120V1600W-US	EG1110-000	NO	HIGH	LOW	LOW	Supplier FMD	YES
CV1981-ATPID120V1600W-CEE	EG1112-000	NO	HIGH	LOW	LOW	Supplier FMD	YES
CV1981-ST-230V1600W-EU	EG1114-000	NO	HIGH	LOW	LOW	Supplier FMD	YES
CV1981-ST-230V1600W-CH	EG1115-000	NO	HIGH	LOW	LOW	Supplier FMD	YES
CV1981-ST-230V1600W-UK	EG1116-000	NO	HIGH	LOW	LOW	Supplier FMD	YES
CV1981-ST-120V1600W-US	EG1118-000	NO	HIGH	LOW	LOW	Supplier FMD	YES
CV1981-ST-120V1600W-UK	EG1120-000	NO	HIGH	LOW	LOW	Supplier FMD	YES
CV-1983-M2-230V-2200W-ELE	179178-000	NO	HIGH	LOW	LOW	Supplier FMD	YES
CV-1983-M2-230V-3060W-ELE	091282-000	NO	HIGH	LOW	LOW	Supplier FMD	YES
CV-1983-M2-230V-2200W-ELE	D40442-000	NO	HIGH	LOW	LOW	Supplier FMD	YES
CV-1983-M2-230V-3060W-ELE	123906-000	NO	HIGH	LOW	LOW	Supplier FMD	YES

<b>Triac AT</b>		 Adobe Acrobat Document	
<b>Triac ST</b>		 Adobe Acrobat Document	
<b>Electron ST</b>		 Adobe Acrobat Document	