



EVERY
CONNECTION
COUNTS

RoHS 2 TECHNICAL FILE

Mini ray system



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

4. REFERENCES

5. OVERVIEW TABLE

PRODUCT IDENTIFICATION

DESCRIPTION

product group : GPL 729
 type : Mini ray system
 Miniray IR-1759-Mk4/A & IR-3104-Mk4/A Hand tools
 ED-7-001/002, ED-7-Cont-230/110V &
 ED-7-Batterybox-230/110V Control Units

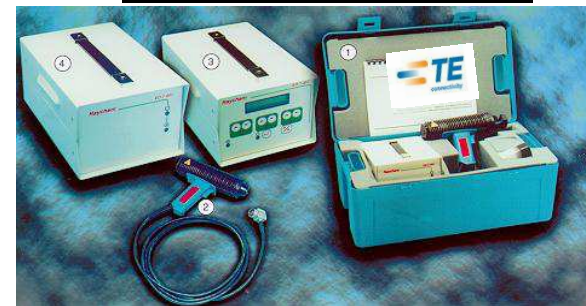
serial number : -

batch : -

part number(s) :

Handtool/Reflector/Control Box (1)	IR1759-MK4-AT3130-EDCont	CF0024-000
Handtool, standard aperture (2)	IR-1759-MK4/A	CF0025-000
Handtool, large aperture (2)	IR-3104-MK4/A	CF5497-000
Control Box with time control-230 V (3)	ED-7-001-MK4-230V-50HZ	CF0199-000
Control Box with time control-110 V (3)	ED-7-002-MK4-110V-60HZ	CF0201-000
Control Box manual control 110/230 (4)	ED-7-CONT-230/110V-MK4	CF0026-000
Battery Box	ED-7-BATTBOX-MK4-230/110V	CF0200-000

PICTURE (optional)



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*





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
	MEDIUM	↔	LOW	MEDIUM
	HIGH	↔	LOW	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

NAME OF MANUFACTURER OR SUPPLIER



TE Connectivity

FULL POSTAL ADDRESS INCLUDING COUNTRY OF ORIGIN

Tyco Electronics U.K. Ltd
Faraday Rd,
Dorcan, Swindon,
Wiltshire,SN3 5HH, U.K

DESCRIPTION OF PRODUCT

Infra-red heating tool for installing heat shrinkable products and solder sleeves.

NAME, TYPE OR MODEL.

MiniRay family: Heating tools
IR1759-Mk4, IR3104-Mk4 (mk 4 versions RoHs compliant.)
Controllers **ED-7-CONT-230/110V-MK4 ED-7-BATTBOX-MK4-230/110V**
ED-7-001-MK4-230V-50HZ ED-7-002-MK4-110V-60HZ
(Controllers mk4 versions RoHs compliant)

**STANDARDS USED, INCLUDING NUMBER, TITLE, ISSUE DATE
AND OTHER RELATIVE DOCUMENTS**

The Electrical Equipment (Safety) Regulations
EN 60335 - 1: 1995,EN60335-1:1996, 2002+A2 /2011 EN 60204-1:2006/2009
EN 60742-1:1995EN 292-2/A1 : 1 BS EN ISO 12100:2010995 EN 294: 1992

EMC compliance:
Report Nos. SRP/5/0146-1B, AERAY/AVT/003, AERAY/AVT/004, BSi 228/4146642
89/336/EEC EMC Directive. Reassessed to 2004/108/EC made up of (EN50081-1
1992 Emissions) EN 610000-6-2/6-3 /4-2/4-3/4-4/4-5/4-6/4-11:1999 /2005/2007. DD
ENV 50204:1996

2011/65/EU (RoHS Directive)
PLACE / DATE OF ISSUE

PLACE / DATE OF ISSUE

Swindon Wiltshire Jan 2013

NAME OF AUTHORISED REPRESENTATIVE (PLEASE PRINT)

Mark Taylor

POSITION OF AUTHORISED REPRESENTATIVE

EPS Systems Group Product Manager

FULL POSTAL ADDRESS IF DIFFERENT FROM MANUFACTURERS

Country of origin. As postal address

Declaration

I declare that as the authorised representative, the above information in relation to the supply/manufacture of this product is in conformity with the stated standards and other related documents following the provisions of the Low Voltage Directive **73/23/EEC /2006/95/EC**
Authorised Representative

Name of the manufacture, Product manager and address that supplies tools and spares for TE to badge and re-sale.

Marc DOUBLET

Manager projet-Produits séries

+33 (0)6 46 49 37 79

marc.doublet@sef-touraine.fr



ZI Les Poujeaux - 10 bd de l'avenir - 37530 NAZELLES NEGRON - FRANCE

Product	Pack QTY	TE DESCRIPTION	PCN	Drawing number.	RoHS Compliant sign off
Equipment	1	ED-7-CONT-230/110V-MK4	CF0026-000	TAE/057/0000	Don A
				Complete dns drawing list ref required.metal work /pcb boards	
	1	IR1759-MK4-AT3130-EDCont	CF0024-000		Don A
				Complete dns drawing list ref required.metal work /pcb boards	

1	IR-1759-MK4/A	CF0025-000	TAE/050/1	DNB
			Complete dns drawing list ref required.metal work /pcb boards	
1	IR-3104-MK4/A	CF5497-000	TAE/050/2	DNB
			Complete dns drawing list ref required.metal work /pcb boards	
1	ED-7-001-MK4-230V-50HZ	CF0199-000	TAE/057/1	DNB
			Complete dns drawing list ref required.metal work /pcb boards	
1	ED-7-002-MK4-110V-60HZ	CF0201-000		DNB
			Complete dns drawing list ref required.metal work /pcb boards	
1	ED-7-BATTBOX-MK4-230/110V	CF0200-000	TAE/111/1	DNB
			Complete dns drawing list ref required.metal work /pcb boards	

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



TE part number

CF0024-000
CF0025-000
CF5497-000
CF0199-000
CF0201-000
CF0026-000
CF0200-000

Spares:

AT-3130 988299-000

Vee Block
Linear Reflector
Vee casting

Vee block machining

AT-3131 988300-000
AT-3132 988301-000
AT-3147 988328-000
AT-3191 588701-000
AE-897 966953-000
IR1759/3104 spares.

1 PCN 585643-000 1759/3104
2. PCN 988285-000 3104
3. PCN 547918-000 1759
4. PCN 277774-000 1759
5. PCN 988208-000 1759/3104
6. PCN 431468-000

CF5497-000

Complete 29 Pages

CF0200-000

Metal work Assemble 5 pages.

Metal work 43 Pages.

Electrical/Electronic. (2pages)Parts List

Electrical/Electronic. (3pages)Parts List

Electrical/Electronic. (4pages)Parts List

Electrical/Electronic. (1page)Layout

Electrical wiring

Circuit Board soldering

Componet layout

Circuit Board

Instructions

CF0025-000

Componet list and pdf drawings

Electrical/Electronic.

CF0026-000

Electrical



CF0199-000
CF0201-000















ED-7-001	NAE-108-5/C	HAND OPELE
	TAE/050/013	VIS CBLZ M3
	TAE/057/009	PIED ENCLIQ
	TAE/057/023	RONDELLE A

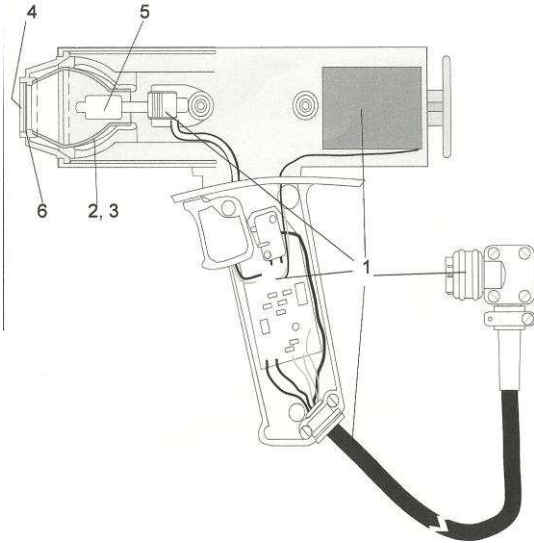
	TAE/057/022	VIS CBLZ M3
	TAE/057/021	BARETTE DE
	TAE/057/020	RONDELLE A
	TAE/057/014	RONDELLE M
	TAE/057/013	RONDELLE W
	TAE/057/012	VIS CBLZ M5
	TAE/057/011	COLLIER COI
	TAE/057/010	VIS FZ M3x6
	TAE/057/001	ALPHA TEST
	TAE/057/005	TOP SHELL
	TAE/057/004	IDENTIFICATI
	TAE/057/003	BOTTOM SHE
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	TAE/057/030	FAÇADE AVA
ED-7-002	NAE-108-5/C	HAND FUL OF
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	TAE/056/001	ELECTRONIQ

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	TAE/057/009	PIED ENCLIQ
	TAE/057/023	RONDELLE A
	TAE/057/022	VIS CBLZ M3
	TAE/057/021	BARETTE DE
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	TAE/057/014	RONDELLE M
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	TAE/057/012	VIS CBLZ M5
	TAE/057/011	COLLIER COI
	TAE/057/010	VIS FZ M3x6
	TAE/057/005	TOP SHELL
	TAE/057/003	BOTTOM SHE
	TAE/057/002	FAÇADE ARR
	TAE/057/030	FAÇADE AVA

Electrical.

IDENTIFICATION

MATERIALS	SUPPLIERS
part description	supplier name
IR1759-MK4-AT3130-EDCont Handtool/Reflector/Control Box	SEF
IR-1759-MK4/A Handtool, standard aperture	SEF
IR-3104-MK4/A Handtool, large aperture	SEF
ED-7-001-MK4-230V-50HZ Control Box with time control-230 V	SEF
ED-7-002-MK4-110V-60HZ Control Box with time control-110 V	SEF
ED-7-CONT-230/110V-MK4 Control Box manual control 110/230	SEF
ED-7-BATTBOX-MK4-230/110V Battery Box	SEF
Reflector to fit standard aperture standard Vee block	SEF
 Adobe Acrobat Document	SEF
 Adobe Acrobat Document	SEF
 Adobe Acrobat Document	SEF
Reflector to fit standard aperture for Soldertact	SEF
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Reflector to fit standard aperture for Soldertact	SEF
 Adobe Acrobat Document  Adobe Acrobat Document  Adobe Acrobat Document  Adobe Acrobat Document	SEF
Reflector to fit large aperture with clamps	SEF
 Adobe Acrobat Document  Adobe Acrobat Document	SEF
Reflector to fit standard aperture special vee block	SEF
 Adobe Acrobat Document  Adobe Acrobat Document	SEF
Conversion kit for standard to Large aperture	SEF
	SEF



IR-1759/3104-CABLE-ASY	SEF
AE-153 Inner reflector for large aperture	SEF
AE-424 Inner reflector for standard aperture	SEF
AE-900 Filter Spring IR-1759	SEF
NAE-143-3 Bulb 250W 24V	SEF
AES-IR1759-100-FILTER-DUL Filter for standard aperture for IR 1759	SEF

Drawing Sets.

IR-3104-MK4/A Handtool, large aperture

SEF



ED-7-BATTBOX-MK4-230/110V Battery Box

SEF



SEF



SEF

ED-7-BATTBOX-MK4-230/110V Battery Box Electrical /Electronic



SEF



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SEF






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IR-1759-MK4/A Handtool, standard aperture

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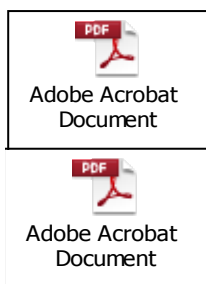
ED-7-001-MK4-230V-50HZ Control Box with time control-230 V

ED-7-002-MK4-110V-60HZ Control Box with time control-110 V

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TEST RESULTS AVAILABLE ?

yes = no RA(*)
no = RA needed

NO
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RISK ASSESSMENT (RA)

material risk	supplier risk	CONCLUSION	
		PIR-index	required technical document

HIGH	LOW	LOW	supplier FMD
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