

Page 1 of 25

RELAY, ELECTROMAGNETIC, NON-LATCHING, 28VDC, 1A, 2PDT, 1/6 CRYSTAL CAN

ESCC Detail Specification No. 3601/012

Issue 8	September 2024



Document Custodian: European Space Agency - see https://escies.org



PAGE 2

ISSUE 8

LEGAL DISCLAIMER AND COPYRIGHT

European Space Agency, Copyright © 2024. All rights reserved.

The European Space Agency disclaims any liability or responsibility, to any person or entity, with respect to any loss or damage caused, or alleged to be caused, directly or indirectly by the use and application of this ESCC publication.

This publication, without the prior permission of the European Space Agency and provided that it is not used for a commercial purpose, may be:

- copied in whole, in any medium, without alteration or modification.
- copied in part, in any medium, provided that the ESCC document identification, comprising the ESCC symbol, document number and document issue, is removed.



No. 3601/012

ISSUE 8

DOCUMENTATION CHANGE NOTICE

(Refer to https://escies.org for ESCC DCR content)

DCR No.	CHANGE DESCRIPTION
1656	Specification updated to incorporate changes per DCR.



TABLE OF CONTENTS

1	GENERAL	5
1.1	SCOPE	5
1.2	APPLICABLE DOCUMENTS	5
1.3	TERMS, DEFINITIONS, ABBREVIATIONS, SYMBOLS AND UNITS	5
1.4	THE ESCC COMPONENT NUMBER AND COMPONENT TYPE VARIANTS	5
1.4.1	The ESCC Component Number	5
1.4.1.1	Characteristics and/or Ratings Codes	5
1.4.2	Component Type Variants and Range of Components	6
1.5	MAXIMUM RATINGS	7
1.6	PHYSICAL DIMENSIONS AND TERMINAL IDENTIFICATION	8
1.6.1	Plain Case (No Mount) and Solder Pin Terminals (Variant 01)	8
1.6.2	Plain Case (No Mount) and Long Lead Terminals (Variant 02)	9
1.6.3	Raised Vertical Flange Mount and Solder Pin Terminals (Variant 04)	10
1.6.4	Raised Vertical Flange Mount and Long Lead Terminals (Variant 05)	11
1.6.5	Raised Vertical Flange Mount and Solder Hook Terminals (Variant 06)	12
1.6.6	Flush Vertical Flange Mount and Solder Pin Terminals (Variant 07)	13
1.6.7	Horizontal Flange Mount and Long Lead Terminals (Variant 10)	14
1.6.8	Horizontal Flange Mount and Solder Hook Terminals (Variant 11)	15
1.7	FUNCTIONAL DIAGRAM	16
1.8	MATERIALS AND FINISHES	16
1.8.1	Case	16
1.8.2	Terminals	16
2	REQUIREMENTS	16
2.1	GENERAL	16
2.1.1	Deviations from the Generic Specification	16
2.2	MARKING	16
2.3	TERMINAL STRENGTH	17
2.4	ELECTRICAL MEASUREMENTS AT ROOM, HIGH AND LOW TEMPERATURES	17
2.4.1	Room Temperature Electrical Measurements	17
2.4.2	High and Low Temperatures Electrical Measurements	18
2.5	PARAMETER DRIFT VALUES	19
2.6	INTERMEDIATE AND END-POINT ELECTRICAL MEASUREMENTS	19
2.7	RUN-IN CONDITIONS	24
APPEND	IX A	25



ISSUE 8

1 <u>GENERAL</u>

1.1 <u>SCOPE</u>

This specification details the ratings, physical and electrical characteristics, and test and inspection data for the component type variants and/or the range of components specified below. It supplements the requirements of, and shall be read in conjunction with, the ESCC Generic Specification listed under Applicable Documents.

1.2 <u>APPLICABLE DOCUMENTS</u>

The following documents form part of this specification and shall be read in conjunction with it:

(a) ESCC Generic Specification No. 3601.

<u>TERMS, DEFINITIONS, ABBREVIATIONS, SYMBOLS AND UNITS</u> For the purpose of this specification, the terms, definitions, abbreviations, symbols and units specified in ESCC Basic Specification No. 21300 shall apply.

1.4 THE ESCC COMPONENT NUMBER AND COMPONENT TYPE VARIANTS

1.4.1 <u>The ESCC Component Number</u> The ESCC Component Number shall be constituted as follows:

Example: 36010120126V

- Detail Specification Reference: 3601012
- Component Type Variant Number: 01 (as required)
- Characteristic code: Rated Coil Voltage (26.5Vdc): 26V (as required)

1.4.1.1 Characteristics and/or Ratings Codes

Characteristics and/or ratings to be codified as part of the ESCC Component Number shall be as follows:

(a) Rated Coil Voltage expressed by means of the following codes:

Rated Coil Voltage (Vdc)	Code
26.5	26V
12	12V
6	6V



No. 3601/012

ISSUE 8

1.4.2 Component Type Variants and Range of Components

The component type variants and range of components applicable to this specification are as follows:

Variant Number	Case and Terminal Description (Note 1)	Rated Coil Voltage (Vdc)	Weight max (g)
01	Plain Case (No Mount) Solder Pin Terminals	26.5, 12, 6	2.9
02	Plain Case (No Mount) Long Lead Terminals	26.5, 12, 6	3.7
04	Raised Vertical Flange Mount Solder Pin Terminals	26.5, 12, 6	3.1
05	Raised Vertical Flange Mount Long Lead Terminals	26.5, 12, 6	4
06	Raised Vertical Flange Mount Solder Hook Terminals	26.5, 12, 6	3.3
07	Flush Vertical Flange Mount Solder Pin Terminals	26.5, 12, 6	3.1
10	Horizontal Flange Mount Long Lead Terminals	26.5, 12, 6	4
11	Horizontal Flange Mount Solder Hook Terminals	26.5, 12, 6	3.3

NOTES:

1. See Para. 1.6.



No. 3601/012

ISSUE 8

1.5 MAXIMUM RATINGS

The maximum ratings shall not be exceeded at any time during use or storage.

Maximum ratings shall only be exceeded during testing to the extent specified in this specification and when stipulated in Test Methods and Procedures of the ESCC Generic Specification.

Characteristics	Symbols	Maximum Ratings	Units	Remarks
Coil Voltage Range	V _{CR}	26.5 to 32 11 to 15 5.5 to 7.5	Vdc	Rated Coil Voltage: 26.5Vdc Rated Coil Voltage: 12Vdc Rated Coil Voltage: 6Vdc
Rated Resistive Load Contact Current	Icr	1	A	28Vdc resistive Note 1
Overload Current	IOVERLOAD	2	А	28Vdc resistive
Operating Temperature Range	T _{op}	-65 to +125	°C	T _{amb}
Storage Temperature Range	T _{stg}	-65 to +125	°C	T _{amb}
Soldering Temperature	T _{sol}	+260	°C	Note 2

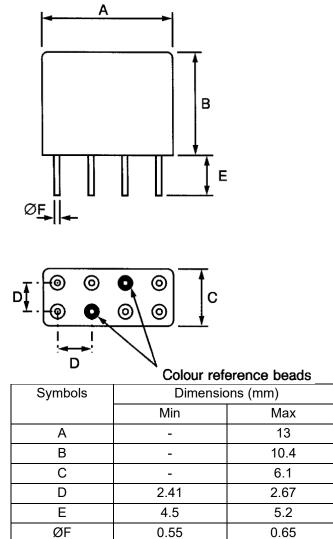
NOTES:

- 1. Relays should not be used in change-over mode where the potential difference between stationary contacts is greater than 10V and the switched current is greater than 100mA.
- 2. Duration 10 seconds maximum at a distance not less than 1.5mm from the device body. The same terminal shall not be resoldered until 3 minutes have elapsed.



1.6 PHYSICAL DIMENSIONS AND TERMINAL IDENTIFICATION

1.6.1 <u>Plain Case (No Mount) and Solder Pin Terminals (Variant 01)</u>

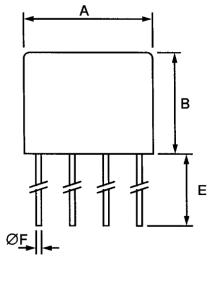


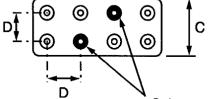
NOTES:

1. Terminal identification is specified by reference to the colour reference beads. See Para. 1.7.



1.6.2 Plain Case (No Mount) and Long Lead Terminals (Variant 02)





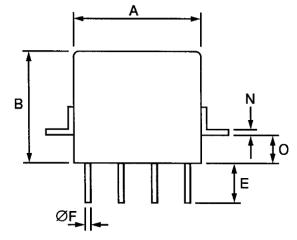
Colour reference beads

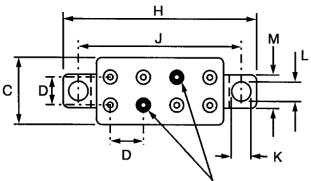
Symbols	Dimensions (mm)	
	Min	Max
A	-	13
В	-	10.4
С	-	6.1
D	2.41	2.67
E	37	39
ØF	0.55	0.65

<u>NOTES:</u> 1. Te Terminal identification is specified by reference to the colour reference beads. See Para. 1.7.



Raised Vertical Flange Mount and Solder Pin Terminals (Variant 04) 1.6.3





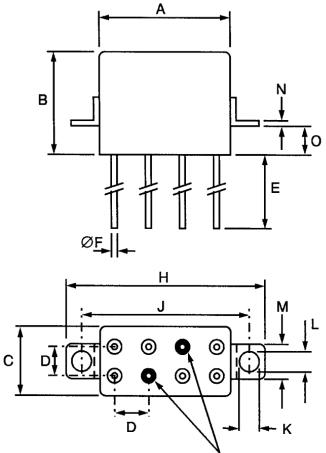
Colour reference beads

Symbols	Dimensions (mm)	
	Min	Max
A	-	13
В	-	10.4
С	-	6.1
D	2.41	2.67
E	4.5	5.2
ØF	0.55	0.65
Н	-	22.85
J	17.35	18.35
K	3.1	3.3
L	2.15	2.65
М	4.5	4.9
N	0.3	0.5
0	3	3.4

<u>NOTES:</u> 1. Terminal identification is specified by reference to the colour reference beads. See Para. 1.7.



1.6.4 <u>Raised Vertical Flange Mount and Long Lead Terminals (Variant 05)</u>



Colour reference beads

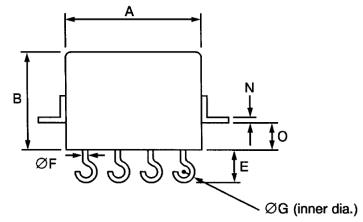
Symbols	Dimensions (mm)	
	Min	Max
A	-	13
В	-	10.4
С	-	6.1
D	2.41	2.67
E	37	39
ØF	0.55	0.65
Н	-	22.85
J	17.35	18.35
K	3.1	3.3
L	2.15	2.65
М	4.5	4.9
N	0.3	0.5
0	3	3.4

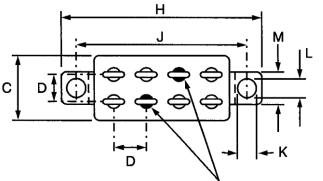
<u>NOTES:</u> 1. Tei

1. Terminal identification is specified by reference to the colour reference beads. See Para. 1.7.



1.6.5 Raised Vertical Flange Mount and Solder Hook Terminals (Variant 06)





Colour reference beads

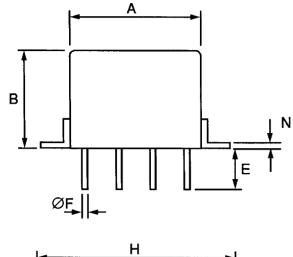
Symbols	Dimensions (mm)	
	Min	Max
A	-	13
В	-	10.4
С	-	6.1
D	2.41	2.67
E	2.9	3.9
ØF	0.55	0.65
ØG	-	1.1
Н	-	22.85
J	17.35	18.35
K	3.1	3.3
L	2.15	2.65
М	4.5	4.9
N	0.3	0.5
0	3	3.4

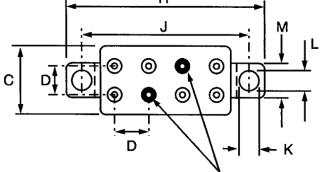
NOTES:

1. Terminal identification is specified by reference to the colour reference beads. See Para. 1.7.



Flush Vertical Flange Mount and Solder Pin Terminals (Variant 07) 1.6.6





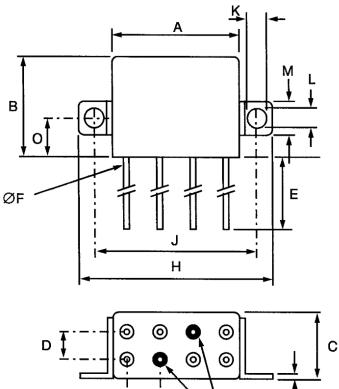
Colour reference beads

Symbols	Dimensions (mm)	
	Min	Max
A	-	13
В	-	10.4
С	-	6.1
D	2.41	2.67
E	4.5	5.2
ØF	0.55	0.65
Н	-	22.85
J	17.35	18.35
K	3.1	3.3
L	2.15	2.65
М	4.5	4.9
N	0.3	0.5

NOTES: 1. Terminal identification is specified by reference to the colour reference beads. See Para. 1.7.



Horizontal Flange Mount and Long Lead Terminals (Variant 10) 1.6.7



Colour reference beads

Ν

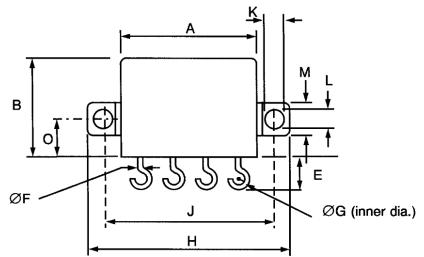
Dimensions (mm)	
Min	Max
-	13
-	10.4
-	6.1
2.41	2.67
37	39
0.55	0.65
-	22.85
17.35	18.35
3.1	3.3
2.15	2.65
4.5	4.9
0.3	0.5
5.2	5.6
	Min - - 2.41 37 0.55 - 17.35 3.1 2.15 4.5 0.3

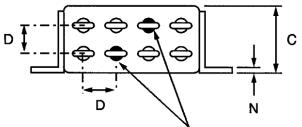
D

NOTES: 1. Terminal identification is specified by reference to the colour reference beads. See Para. 1.7.



1.6.8 Horizontal Flange Mount and Solder Hook Terminals (Variant 11)





Colour reference beads

Symbols	Dimensions (mm)			
	Min	Max		
A	-	13		
В	-	10.4		
С	-	6.1		
D	2.41	2.67		
E	2.9	3.9		
ØF	0.55	0.65		
ØG	-	1.1		
Н	-	22.85		
J	17.35	18.35		
K	3.1	3.3		
L	2.15	2.65		
М	4.5	4.9		
N	0.3	0.5		
0	5.2	5.6		

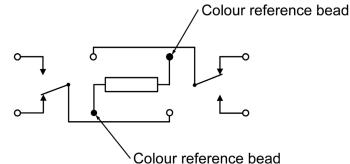
<u>NOTES:</u> 1. Tei

1. Terminal identification is specified by reference to the colour reference beads. See Para. 1.7.



ISSUE 8

1.7 FUNCTIONAL DIAGRAM



NOTES:

- 1. As viewed from the terminal side with coil de-energised.
- 2. Individual terminal designations are for reference purposes only.

1.8 MATERIALS AND FINISHES

1.8.1 <u>Case</u>

Copper nickel, hermetically sealed. Tin-lead alloy plating may be used.

1.8.2 <u>Terminals</u>

The lead material and finish shall by type D3, D4 or D19 in accordance with the requirements of ESCC Basic Specification No. 23500.

2 <u>REQUIREMENTS</u>

2.1 <u>GENERAL</u>

The complete requirements for procurement of the components specified herein are as stated in this specification and the ESCC Generic Specification. Permitted deviations from the Generic Specification, applicable to this specification only, are listed below.

Permitted deviations from the Generic Specification and this Detail Specification, formally agreed with specific Manufacturers on the basis that the alternative requirements are equivalent to the ESCC requirement and do not affect the component's reliability, are listed in the appendices attached to this specification.

2.1.1 <u>Deviations from the Generic Specification</u> None.

2.2 MARKING

The marking shall be in accordance with the requirements of ESCC Basic Specification No. 21700 and as follows.

The information to be marked on the component shall be:

- (a) The ESCC qualified components symbol (for ESCC qualified components only).
- (b) The ESCC Component Number (se Para. 1.4.1).
- (c) Traceability information.



No. 3601/012

ISSUE 8

2.3 <u>TERMINAL STRENGTH</u>

The terminals of all Variants are defined as rigid.

The test conditions for Terminal Strength, tested as specified in the ESCC Generic Specification, shall be as follows:

- (a) Pull TestApplied Force: 10N
- (b) Bend Test (Test Condition C)
 - Load: 5N
- 2.4 <u>ELECTRICAL MEASUREMENTS AT ROOM, HIGH AND LOW TEMPERATURES</u> Electrical measurements shall be performed at room, high and low temperatures.

2.4.1 Room Temperature Electrical Measurements

The measurements shall be performed at T_{amb} = +22 ±3°C.

Characteristics	Symbols	Test Method and Conditions	Rated Coil Voltage	L	imits	Units
			(Vdc)	Min	Max	
Pick-up Voltage	Uc	ESCC No. 3601				V
			26.5	-	13.5	
			12	-	6.4	
			6	-	3.2	
Drop-out Voltage	UD	ESCC No. 3601				V
			26.5	1.5	8	
			12	1	4	
			6	0.5	1.6	
Operate Time	t⊨	ESCC No. 3601	All	-	3	ms
Release Time	t _D	ESCC No. 3601	All	-	3	ms
Bounce Time	t _B	ESCC No. 3601	All	-	1.5	ms
Insulation Resistance	Rı	ESCC No. <u>3601</u> V _{TEST} = 100Vdc	All	10	-	GΩ
Voltage Proof	VP	ESCC No. 3601	All	500	-	Vrms
(Test Voltage)		Maximum Leakage Current I _{LVP} = 1mA		350 (Note 1)	-	
Voltage Proof Leakage Current	ILVP	ESCC No. 3601 Note 2	All	-	1	mA
Contact Voltage Drop	VD	ESCC No. <u>3601</u> I _{TEST} = 100mA max	All	-	0.1 x Itest	V
Coil Resistance	R _B	ESCC No. 3601				Ω
			26.5	1350	1650	
			12	297	363	
			6	81	99	

ISSUE 8

NOTES:

1. Points of application (350V):

- Between open contacts, coil de-energised.
- Between open contacts, coil energised with Rated Coil Voltage.
- 2. Measured during Voltage Proof test.

2.4.2 <u>High and Low Temperatures Electrical Measurements</u>

Characteristics	Symbols Test Method and Conditions		Rated Coil		Limits	Units
		Conditions	Voltage (Vdc)	Min	Max	
Pick-up Voltage	Uc	ESCC No. 3601 T _{amb} = +125 (+0 -5)°C and -65 (+5 -0)°C	26.5 12 6	- - -	19.8 9.9 4.5	V
Drop-out Voltage	UD	ESCC No. 3601 T _{amb} = +125 (+0 -5)°C and -65 (+5 -0)°C	26.5 12 6	1.2 0.8 0.4	14 6.5 3.2	V
Operate Time	t _E	ESCC No. 3601 T _{amb} = +125 (+0 -5)°C and -65 (+5 -0)°C	All	-	3	ms
Release Time	t⊳	ESCC No. 3601 T _{amb} = +125 (+0 -5)°C and -65 (+5 -0)°C	All	-	3	ms
Bounce Time	tΒ	ESCC No. 3601 T _{amb} = +125 (+0 -5)°C and -65 (+5 -0)°C	All	-	1.5	ms
Insulation Resistance	Rı	ESCC No. 3601 T _{amb} = +125 (+0 -5)°C V _{TEST} = 100Vdc	All	100	-	MΩ
Contact Voltage Drop	VD	ESCC No. 3601 T _{amb} = +125 (+0 -5)°C and -65 (+5 -0)°C I _{TEST} = 100mA max	All	-	0.1 x I _{test}	V



PAGE 19

ISSUE 8

2.5 PARAMETER DRIFT VALUES

Parameter Drift Values shall be measured as specified in the ESCC Generic Specification.

Unless otherwise specified, the measurements shall be performed at T_{amb} = +22 ±3°C.

The test methods and test conditions shall be as per the corresponding test defined in Para. 2.4.1 Room Temperature Electrical Measurements.

The corresponding absolute limit values for each characteristic shall not be exceeded.

Characteristics	Symbols		Units		
		Drift Value	Abso	olute	
		Δ	Min	Max	
Pick-up Voltage	Uc	Note 1	Note 2	Note 2	V
Drop-out Voltage	UD	Note 1	Note 2	Note 2	V

NOTES:

- 1. Drift Value (Δ) limits are not specified. Drift Values shall be recorded for information purposes only.
- 2. The limit specified in Para. 2.4.1 shall apply.

2.6 INTERMEDIATE AND END-POINT ELECTRICAL MEASUREMENTS

Unless otherwise specified, the measurements shall be performed at T_{amb} = +22 ±3°C.

Unless otherwise specified the test methods and test conditions shall be as per the corresponding test defined in Para. 2.4.1 Room Temperature Electrical Measurements.

Test Reference per	Characteristics	Symbols	L	imits	Units
ESCC No. 3601	(Note 1)		Min	Max	
Thermal Shock	During 5th Cycle				
	Pick-up Voltage	Uc	Ν	ote 2	V
	Drop-out Voltage	UD	Ν	ote 2	V
	Operate Time	t⊨	Ν	ote 2	ms
	Release Time	t⊳	Ν	ote 2	ms
	Final Measurements				
	Voltage Proof	VP	Ν	ote 3	Vrms
	Voltage Proof Leakage Current	ILVP	Ν	ote 3	mA



Test Reference per

ISSUE 8

Units

Limits

Characteristics

Pick-up Voltage

Drop-out Voltage

Voltage Proof

Pick-up Voltage Drift

Drop-out Voltage Drift

Voltage Proof Leakage Current

	Characteristics	Symbols		Linnis	UTIILS
ESCC No. 3601	(Note 1)		Min	Max	
Low Level Sine	Final Measurements				
Vibration	Pick-up Voltage	Uc	1	Note 3	V
	Pick-up Voltage Drift	$\Delta U_{C}/U_{C}$	1	Note 1	%
	Drop-out Voltage	UD	1	Note 3	V
	Drop-out Voltage Drift	$\Delta U_D/U_D$	1	Note 1	%
Random Vibration	Final Measurements				
	Pick-up Voltage	Uc	1	Note 3	V
	Pick-up Voltage Drift	$\Delta U_{C}/U_{C}$	1	Note 1	%
	Drop-out Voltage	UD	1	Note 3	V
	Drop-out Voltage Drift	$\Delta U_D/U_D$	1	Note 1	%
High Level Sine	Final Measurements				
Vibration	Pick-up Voltage	Uc	1	Note 3	V
	Pick-up Voltage Drift	$\Delta U_{c}/U_{c}$	1	Note 1	%
	Drop-out Voltage	UD	١	Note 3	V
	Drop-out Voltage Drift	$\Delta U_D/U_D$	١	Note 1	%
Low Level Mechanical	Final Measurements				
Shock	Contact Voltage Drop	VD	1	Note 3	V
	Pick-up Voltage	Uc	1	Note 3	V
	Pick-up Voltage Drift	∆Uc/Uc	1	Note 1	%
	Drop-out Voltage	UD	1	Note 3	V
	Drop-out Voltage Drift	$\Delta U_D/U_D$	1	Note 1	%
	Voltage Proof	VP	1	Note 3	Vrms
	Voltage Proof Leakage Current	ILVP	1	Note 3	mA
High Level	Final Measurements				
Mechanical Shock	Contact Voltage Drop	VD	1	Note 3	V
		1	_		1

Uc

 $\Delta Uc/Uc$

 U_{D}

 $\Delta U_D/U_D$

VP

ILVP

Note 3

Note 1

Note 3

Note 1

Note 3

Note 3

V

%

V

%

Vrms

mΑ

Symbols



PAGE 21

ISSUE 8

Test Reference per	Characteristics	Symbols	L	imits	Units
ESCC No. 3601	(Note 1)		Min	Max	
Resistance to	Final Measurements				
Soldering Heat	Insulation Resistance	Ri	Ν	lote 3	GΩ
	Contact Voltage Drop	VD	Ν	lote 3	V
	Pick-up Voltage	Uc	Ν	lote 3	V
	Drop-out Voltage	UD	Ν	lote 3	V
	Coil Resistance	R _B	Ν	lote 3	Ω
Low Level Life	Final Measurements				
	Contact Voltage Drop	VD	-	0.2 x Itest	V
	Insulation Resistance	Ri	5000	-	MΩ
	Voltage Proof	VP	Ν	lote 3	Vrms
	Voltage Proof Leakage Current	ILVP	Ν	lote 3	mA
	Pick-up Voltage	Uc	Ν	lote 3	V
	Pick-up Voltage Drift	∆Uc/Uc	Ν	lote 1	%
	Drop-out Voltage	UD	Ν	lote 3	V
	Drop-out Voltage Drift	$\Delta U_D/U_D$	Ν	lote 1	%
	Operate Time	t⊨	Ν	lote 3	ms
	Release Time	tD	Ν	lote 3	ms
	Bounce Time	tΒ	Ν	lote 3	ms
	Coil Resistance	R _B	Ν	lote 3	Ω
Resistive Life	During Monitoring				
	Contact Voltage Drop	VD	-	2.8	V
	Final Measurements				
	Contact Voltage Drop	VD	-	0.2 x I _{test}	v
	Insulation Resistance	R	5000	-	MΩ
	Voltage Proof	VP		lote 3	Vrms
	Voltage Proof Leakage Current	ILVP		lote 3	mA
	Pick-up Voltage	Uc		lote 3	v
	Pick-up Voltage Drift	∆Uc/Uc		lote 1	%
	Drop-out Voltage	UD		lote 3	v
	Drop-out Voltage Drift	ΔU _D /U _D		lote 1	%
	Operate Time	tE		lote 3	ms
	Release Time	tD		lote 3	ms
	Bounce Time	tB		lote 3	ms
	Coil Resistance	RB		lote 3	Ω



ISSUE 8

No.	3601/012
-----	----------

Test Reference per	Characteristics	Symbols	l	_imits	Units
ESCC No. 3601	(Note 1)		Min	Max	
Coil Life	During Step 1 of each Cycle			•	
	Contact Voltage Drop	VD	Ν	Note 3	V
	Coil Resistance	R _β	٢	Note 3	Ω
	During Step 3 of 1st Cycle				
	Contact Voltage Drop	VD	Ν	lote 2	V
	Operate Time	t⊨	Ν	lote 2	ms
	Release Time	t⊳	٢	Note 2	ms
	During Steps 4 & 5 of 4th Cycle				
	Pick-up Voltage	Uc	Ν	lote 2	V
	Drop-out Voltage	UD	Ν	Note 2	V
	Final Measurements				
	Voltage Proof	VP	Ν	Note 3	Vrms
	Voltage Proof Leakage Current	ILVP	Ν	Note 3	mA
	Insulation Resistance	Rı	Ν	Note 3	GΩ
	Contact Voltage Drop	VD	Ν	Note 3	V
	Coil Resistance	R _B	Ν	Note 3	Ω
	Operate Time	t⊨	Ν	Note 3	ms
	Release Time	t⊳	Ν	Note 3	ms
	Bounce Time	t _B	Ν	Note 3	ms



PAGE 23

ISSUE 8

Test Reference per	Characteristics	Symbols	l	imits	Units
ESCC No. 3601	(Note 1)		Min	Max	
Intermediate Current	During Monitoring				
	Contact Voltage Drop	VD	-	300	mV
	Final Measurements			I	
	Insulation Resistance	Rı	5000	-	MΩ
	Voltage Proof	VP	Ν	lote 3	Vrms
	Voltage Proof Leakage Current	ILVP	Ν	lote 3	mA
	Pick-up Voltage	Uc	Ν	lote 3	V
	Pick-up Voltage Drift	$\Delta U_{c}/U_{c}$	Ν	lote 1	%
	Drop-out Voltage	UD	Ν	lote 3	V
	Drop-out Voltage Drift	$\Delta U_D/U_D$	Ν	lote 1	%
	Operate Time	t⊨	Ν	lote 3	ms
	Release Time	t _D	Ν	lote 3	ms
	Bounce Time	tв	Ν	lote 3	ms
	Coil Resistance	R _B	Ν	lote 3	Ω
	Contact Voltage Drop	VD	-	0.2 x Itest	V
Overload	During Monitoring				
	Contact Voltage Drop	VD	-	1.4	V
	Final Measurements			ļ	
	Contact Voltage Drop	VD	-	0.2 x Itest	V
	Insulation Resistance	R	5000	-	MΩ
	Voltage Proof	VP	Ν	lote 3	Vrms
	Voltage Proof Leakage Current	ILVP	Ν	lote 3	mA
	Pick-up Voltage	Uc	Ν	lote 3	V
	Pick-up Voltage Drift	∆Uc/Uc	Ν	lote 1	%
	Drop-out Voltage	UD	Ν	lote 3	V
	Drop-out Voltage Drift	$\Delta U_D/U_D$	Ν	lote 1	%
	Operate Time	t⊨	Ν	lote 3	ms
	Release Time	tD	Ν	lote 3	ms
	Bounce Time	tв	Ν	lote 3	ms
	Coil Resistance	R _B	Ν	lote 3	Ω



PAGE 24

ISSUE 8

NOTES:

- 1. Parameter Drift shall be calculated referenced to the measurement immediately prior to the test in question. An additional initial measurement may be performed prior to the test in question if considered necessary. Drift limits are not specified. Drift Values shall be recorded for information purposes only.
- 2. The limits specified in Para. 2.4.2, as applicable to the same test temperature, shall apply.
- 3. The limits specified in Para. 2.4.1 shall apply.

2.7 <u>RUN-IN CONDITIONS</u>

The test conditions for Run-in, tested as specified in the ESCC Generic Specification, shall be as follows:

(a) Test Temperature: +22 ±3°C.



PAGE 25

No. 3601/012

ISSUE 8

APPENDIX A

AGREED DEVIATIONS FOR LEACH INTERNATIONAL EUROPE (F)

ITEMS AFFECTED	DESCRIPTION OF DEVIATIONS
Para. 2.1.1 Deviations from the	High Level Sine Vibration: Not Applicable
Generic Specification: Lot Validation Testing – Chart F4	High Level Mechanical Shock: Not Applicable