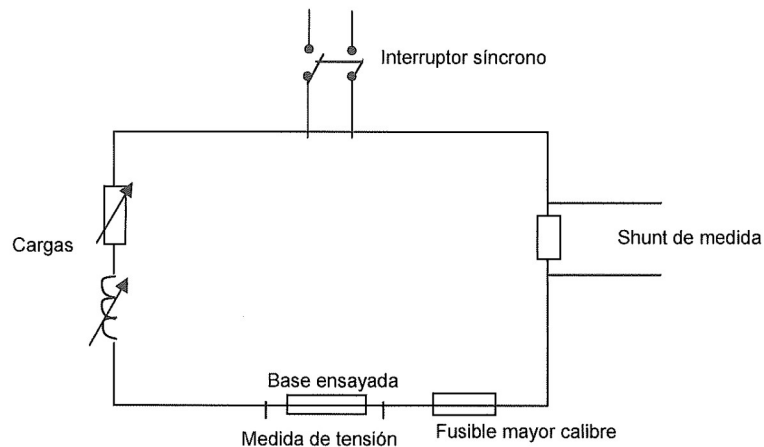


5. VERIFICACIÓN DEL VALOR DE CRESTA DE LA CORRIENTE ADMISIBLE

5.1. Disposición de ensayo

La base ensayada se monta en posición vertical en condiciones similares a las de servicio. En serie con la base portafusibles ensayada se monta otra base con un fusible de mayor tamaño e intensidad nominal.

El circuito de ensayo es el siguiente:



5.2. Método de ensayo

Con objeto de conseguir el valor de corriente de cresta exigido se ha colocado una barra de neutro en la base ensayada y se ha montado otra base en serie con un fusible de mayor corriente asignada.

Para una base de tamaño 10 x 38 mm el valor de cresta de la corriente de ensayo debe estar entre los límites 5 a 6 kA.

El comienzo del arco deberá presentarse entre 65° y 90° después del paso por cero de la tensión.

Durante el ensayo no deberán producirse ni arco, ni soldado de los contactos, ni cualquier otro daño que impida el uso posterior de la base. La barra de neutro no deberá ser expulsada.

5.3. Resultados

Los valores registrados han sido los siguientes (Véase oscilograma en el anexo):

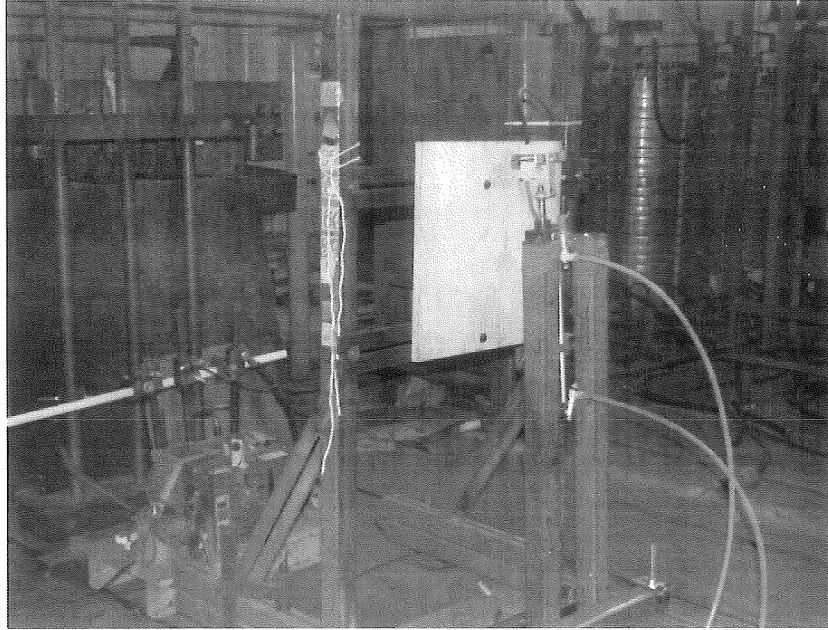
Nº Oscilograma	30
Intensidad máxima de corte (kA)	6,3
Tiempo de paso de corriente (ms)	4,3
Energía total ($A^2s \cdot 10^4$)	2,80

Resultado: **CORRECTO**

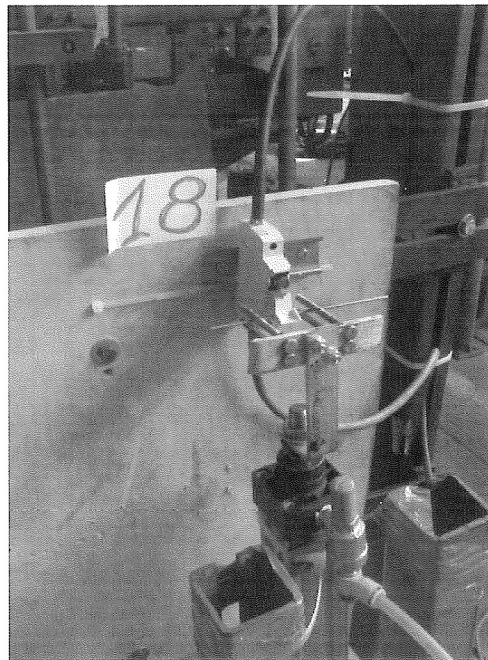
No se observan signos de arco ni cebado durante el ensayo.

La barra de neutro no es expulsada durante el ensayo.

6. ANEXO 1. FOTOGRAFÍAS



Disposición de ensayo de poder de corte



Objeto de ensayo tras poder de corte (AC-22B)

[Handwritten signature]

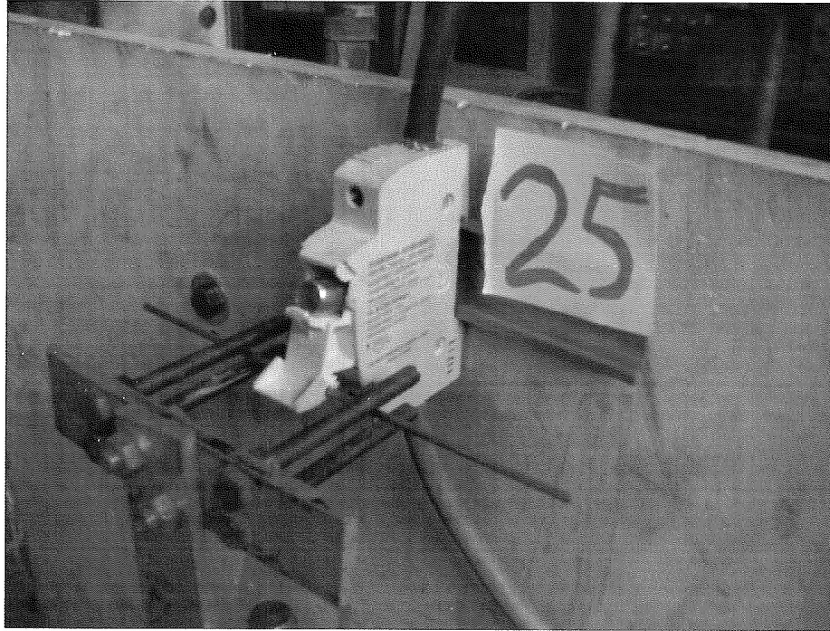
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[Handwritten signature]

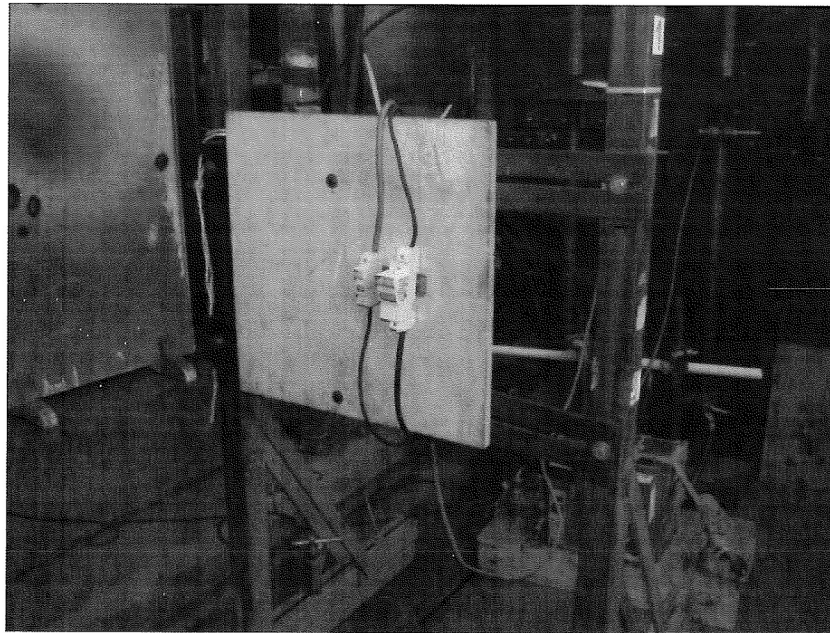
38788
OPITEVALI



383



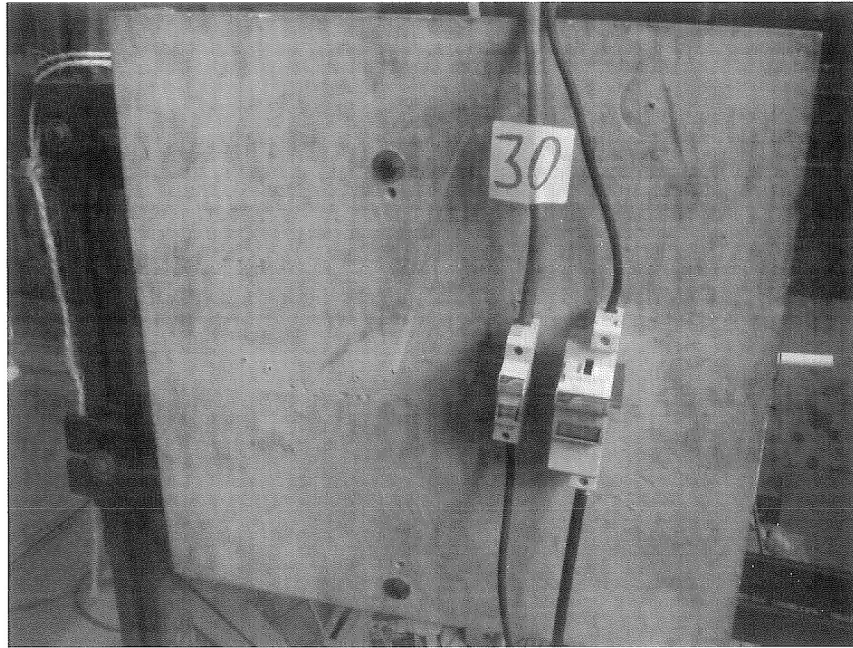
Objeto de ensayo tras poder de corte (AC-21B)



Disposición de ensayo de verificación del valor de cresta

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Objeto de ensayo tras la verificación del valor de cresta

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314

7. ANEXO 2. OSCILOGRAMAS

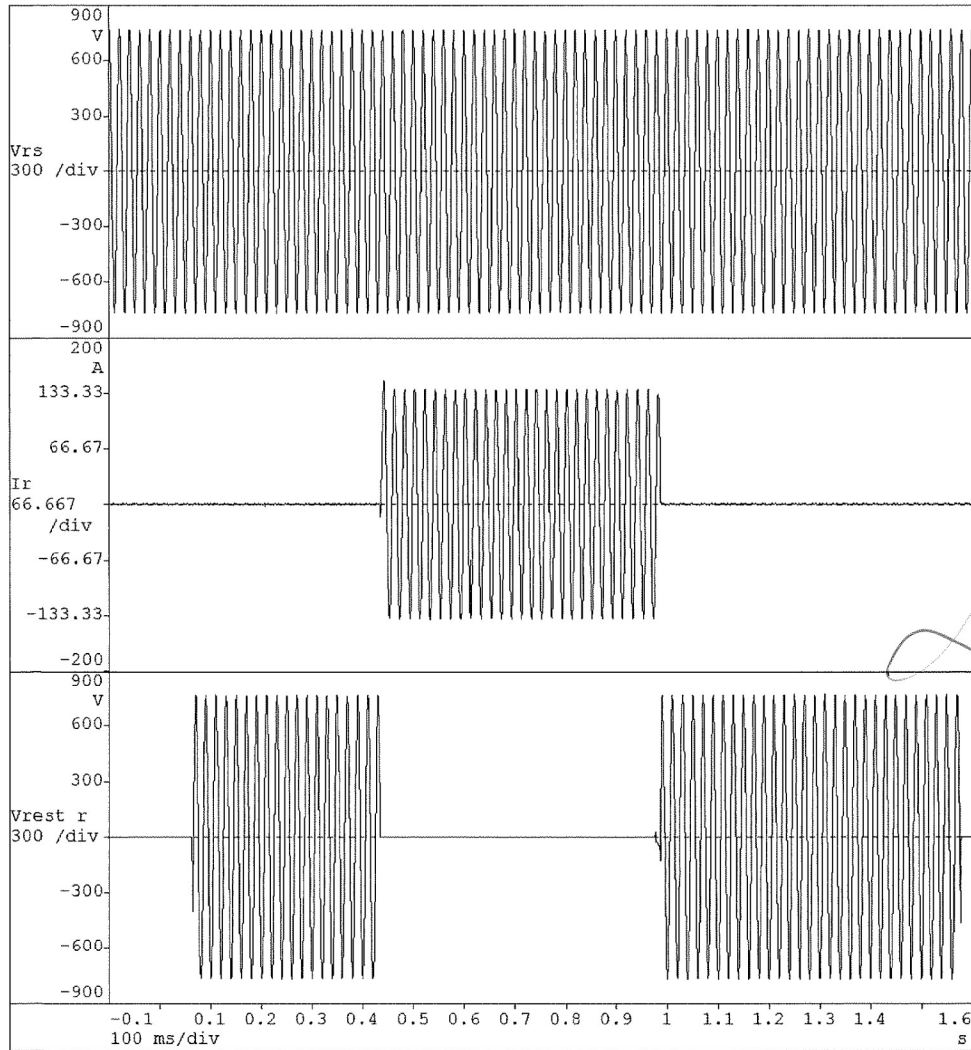


V_{RS} (eficaz/RMS)	538.3 V
$V_{Rest/Recov R}$ (eficaz/RMS)	538.1 V
I_R (eficaz/RMS)	97.46 A

Fecha / Date: 28/05/12

Nº EXPEDIENTE: B125-12-BB

Nº OSCILOGRAMA: 14



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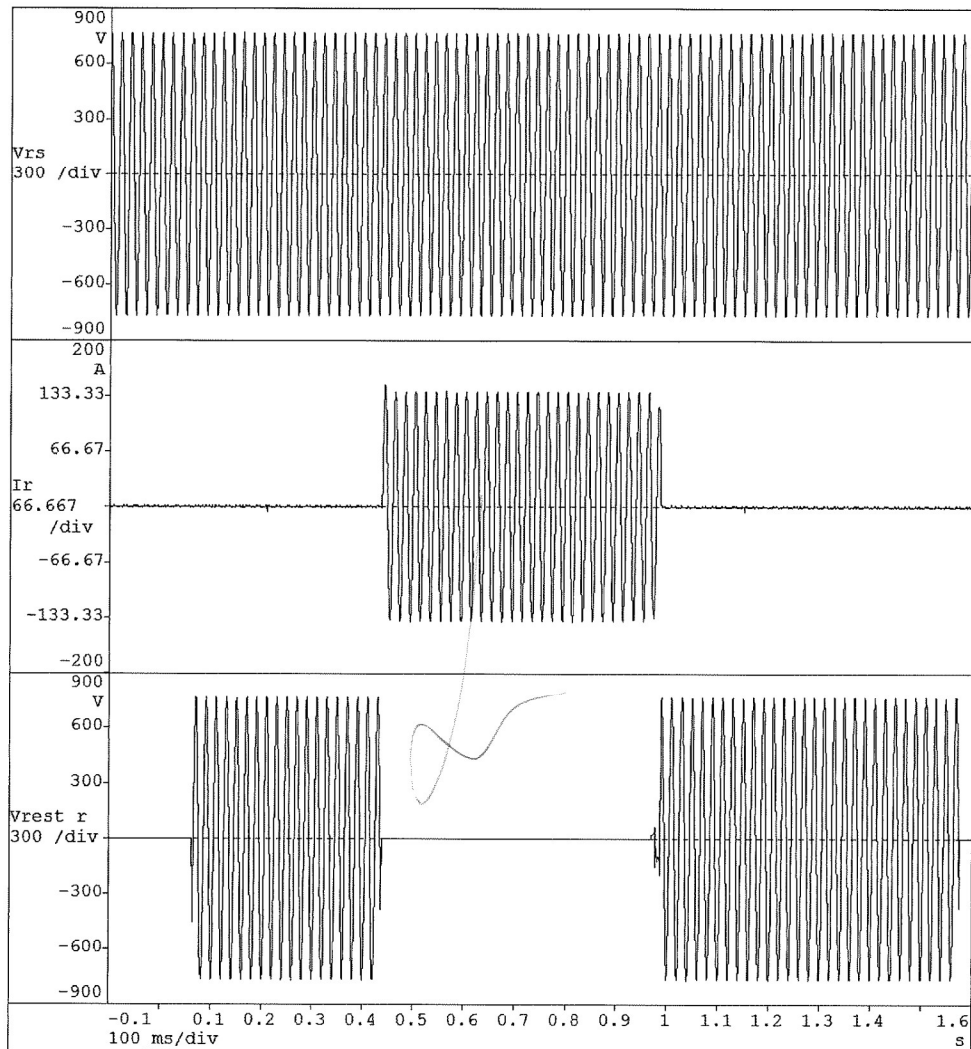
[Handwritten number] 375

V_{RS} (eficaz/RMS)	540.6 V
$V_{Rest/Recov R}$ (eficaz/RMS)	540.5 V
I_R (eficaz/RMS)	97.30 A

Fecha / Date: 28/05/12

Nº EXPEDIENTE: B125-12-BB

Nº OSCILOGRAMA: 15

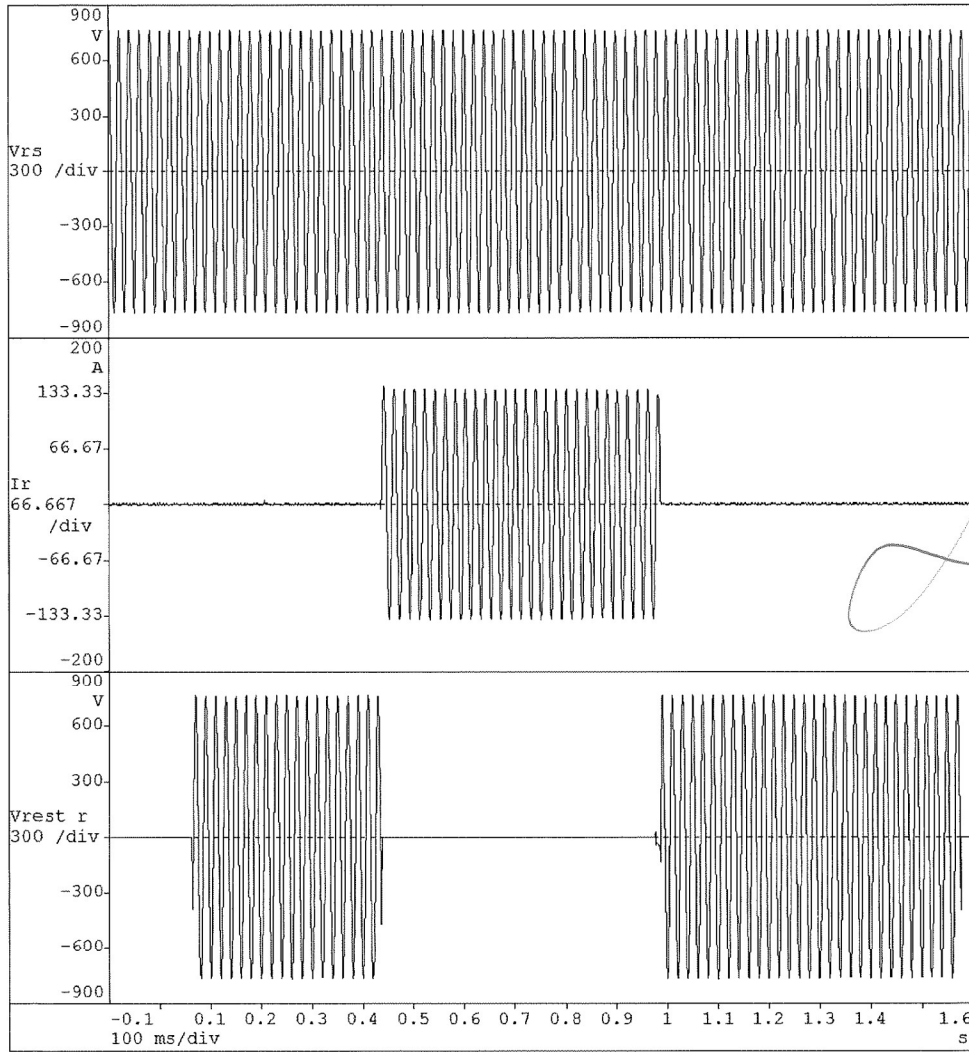


V_{RS} (eficaz/RMS)	538.0 V
$V_{Rest/Recov R}$ (eficaz/RMS)	537.9 V
I_R (eficaz/RMS)	97.22 A

Fecha / Date: 28/05/12

N° EXPEDIENTE: B125-12-BB

N° OSCILOGRAMA: 16

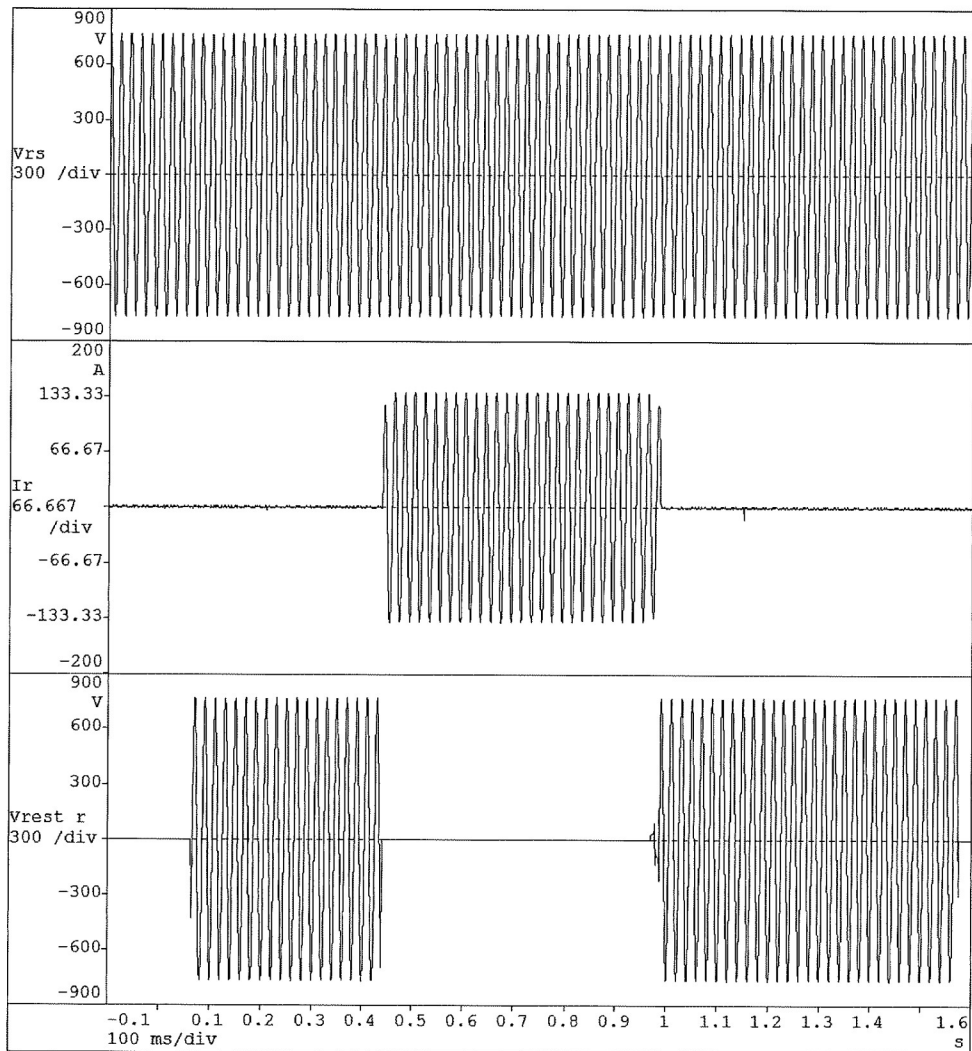


V_{RS} (eficaz/RMS)	539.5 V
$V_{Rest/Recov R}$ (eficaz/RMS)	539.3 V
I_R (eficaz/RMS)	97.47 A

Fecha / Date: 28/05/12

Nº EXPEDIENTE: B125-12-BB

Nº OSCILOGRAMA: 17

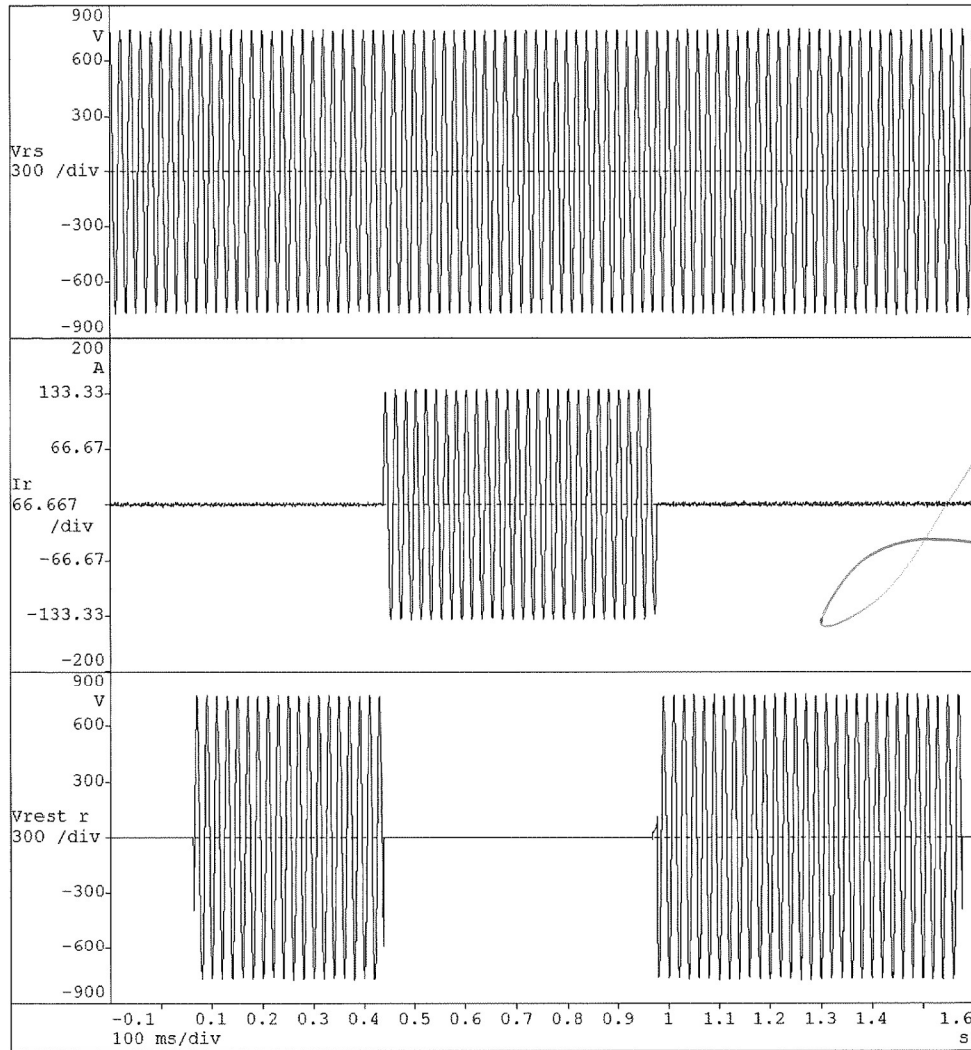


V_{RS} (eficaz/RMS)	533.7 V
$V_{Rest/Recov R}$ (eficaz/RMS)	533.5 V
I_R (eficaz/RMS)	97.47 A

Fecha / Date: 28/05/12

N° EXPEDIENTE: B125-12-BB

N° OSCILOGRAMA: 18



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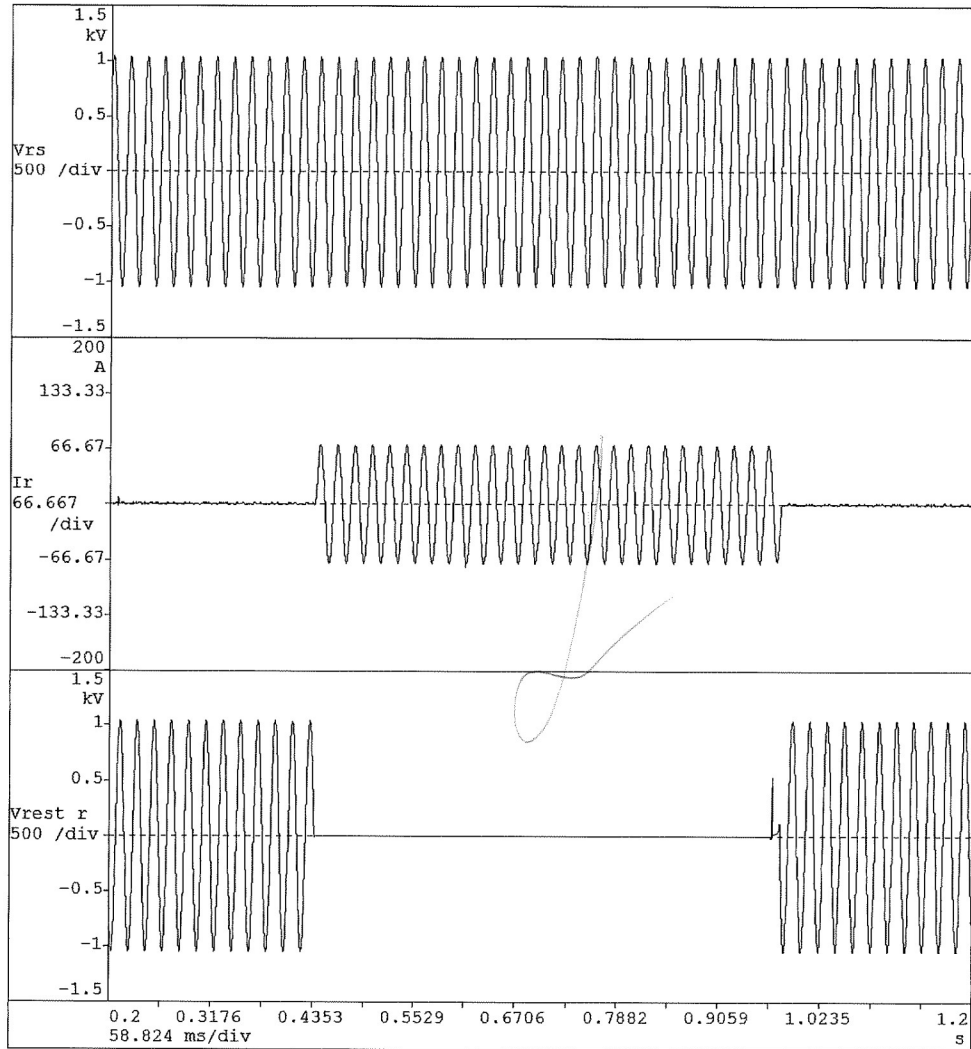
377

V _{RS} (eficaz/RMS)	737.4 V
V _{Rest/Recov R} (eficaz/RMS)	737.8 V
I _R (eficaz/RMS)	50.1 A

Fecha / Date: 28/05/12

Nº EXPEDIENTE: B125-12-BB

Nº OSCILOGRAMA: 21

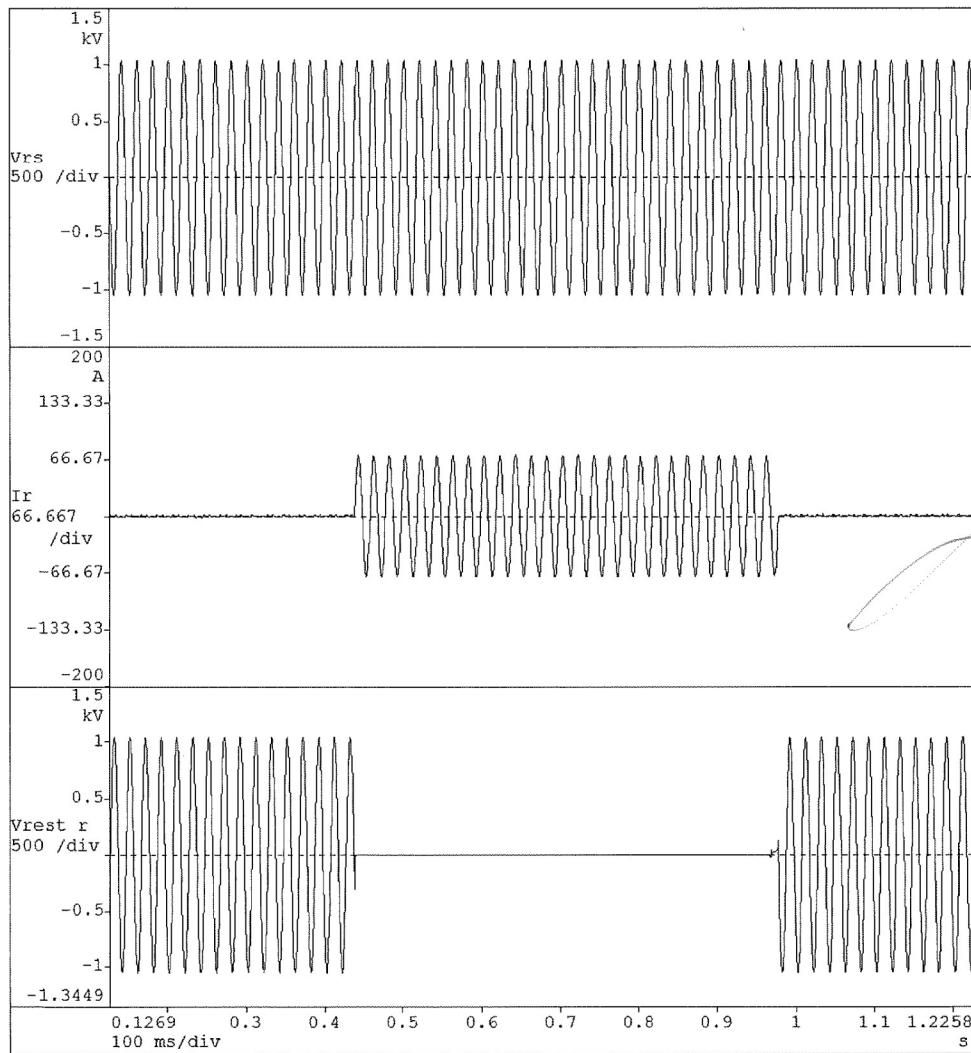


V_{RS} (eficaz/RMS)	735.5 V
$V_{Rest/Recov R}$ (eficaz/RMS)	735.7 V
I_R (eficaz/RMS)	50.30 A

Fecha / Date: 28/05/12

Nº EXPEDIENTE: B125-12-BB

Nº OSCILOGRAMA: 22



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ΣΤΡΩΣ
ΣΥΣΤΗΜΑ



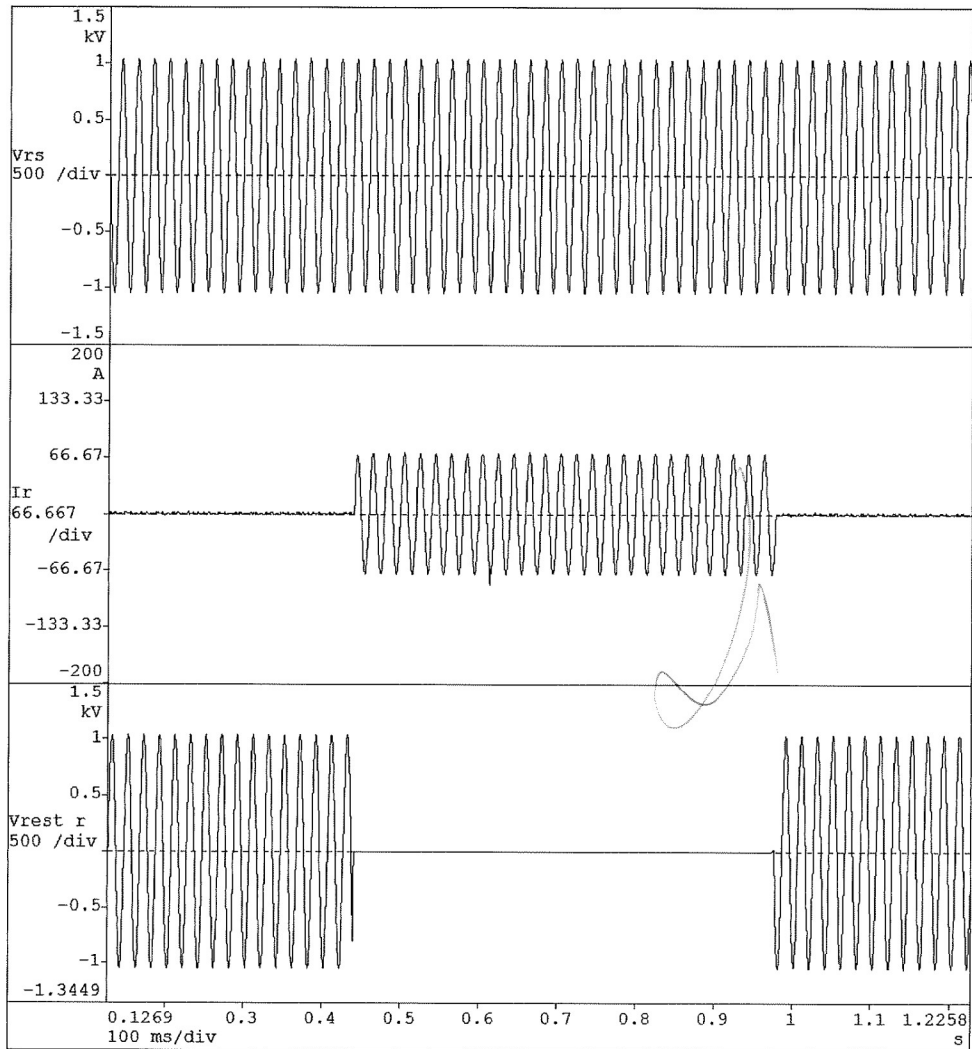
378

V _{RS} (eficaz/RMS)	733.1 V
V _{Rest/Recov R} (eficaz/RMS)	733.3 V
I _R (eficaz/RMS)	50.12 A

Fecha / Date: 28/05/12

Nº EXPEDIENTE: B125-12-BB

Nº OSCILOGRAMA: 23

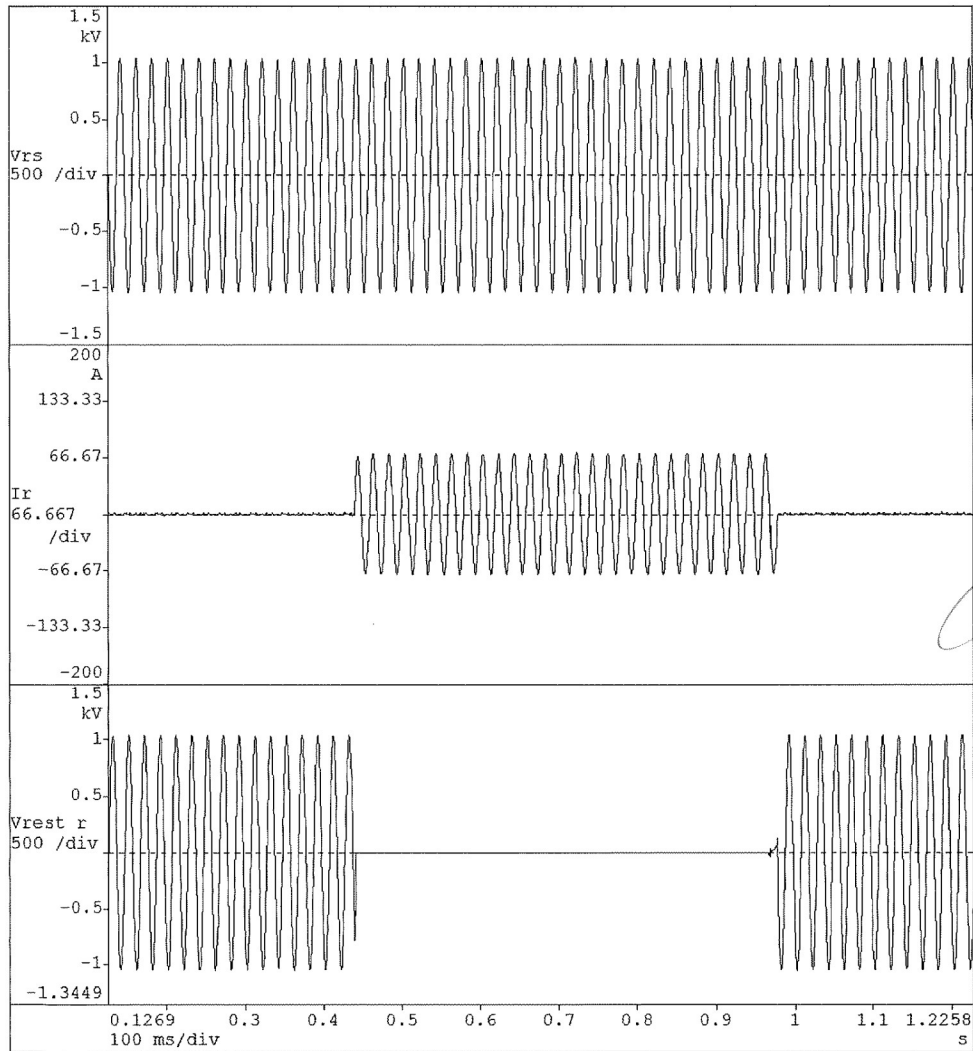


V_{RS} (eficaz/RMS)	733.0 V
$V_{Rest/Recov R}$ (eficaz/RMS)	733.2 V
I_R (eficaz/RMS)	50.26 A

Fecha / Date: 28/05/12

N° EXPEDIENTE: B125-12-BB

N° OSCILOGRAMA: 24



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ИНТЕРКОМПЛЕКС
ООН-ВНЕШНЕГО
СЪЮЗА



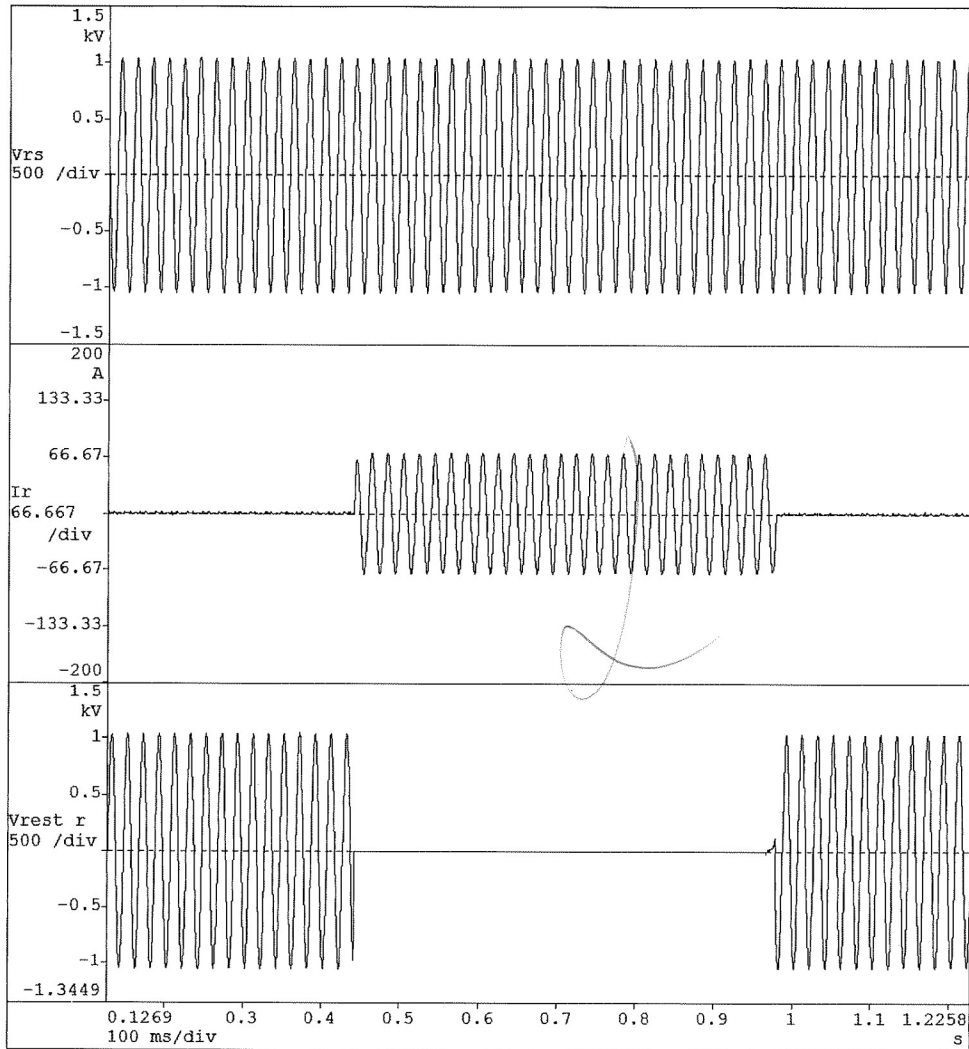
379

V _{RS} (eficaz/RMS)	736.0 V
V _{Rest/Recov R} (eficaz/RMS)	736.2 V
I _R (eficaz/RMS)	50.06 A

Fecha / Date: 28/05/12

Nº EXPEDIENTE: B125-12-BB

Nº OSCILOGRAMA: 25

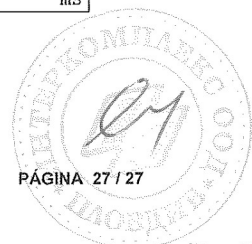
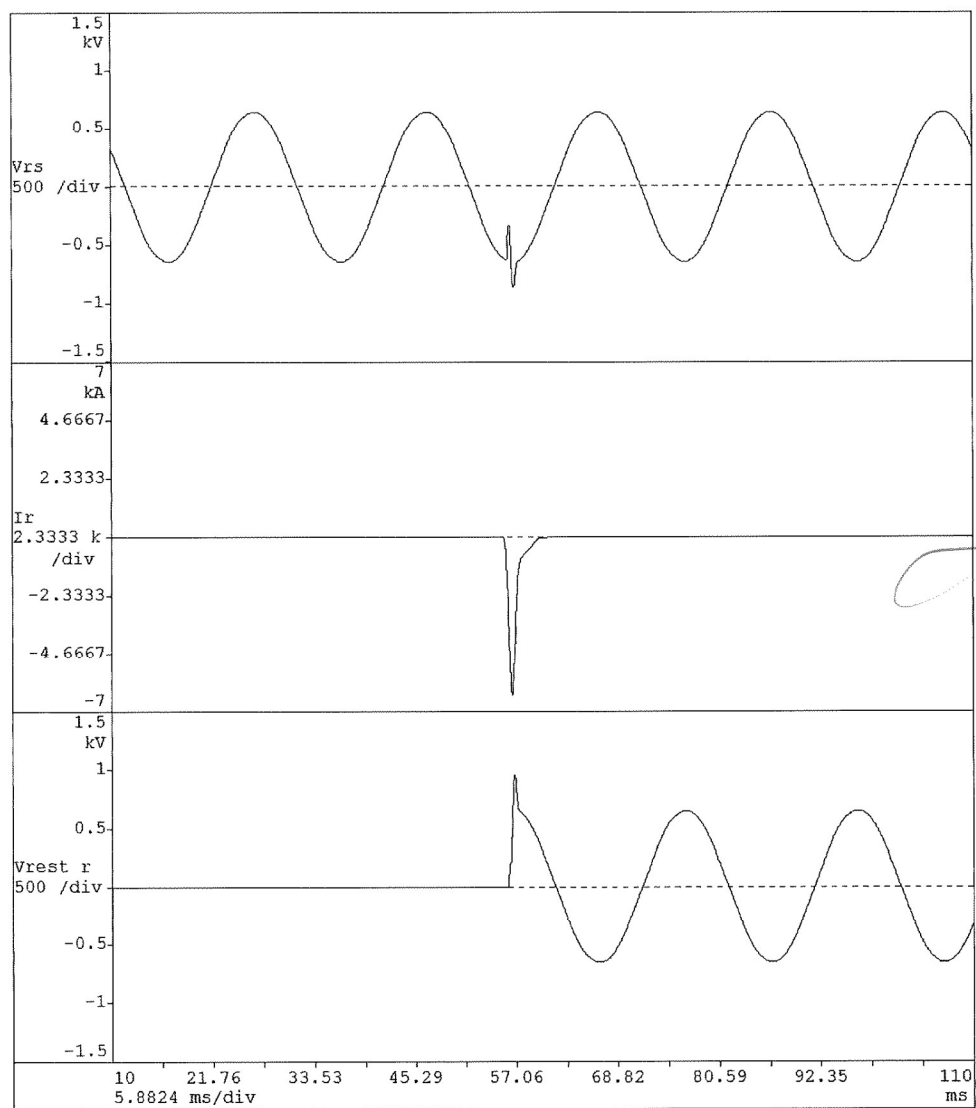


V_{RS} (eficaz/RMS)	455.8 V
$V_{Rest/Recov R}$ (eficaz/RMS)	459.4 V
I_R (eficaz/RMS)	--
I_R (cresta)	6347.36 A
t_{ir}	0.0043 s
E_R	27957.76A

Fecha / Date: 29/05/12

N° EXPEDIENTE: B125-12-BB

N° OSCILOGRAMA: 30



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	LABORATORY	
	Doc	04.04.0016E
	Date:	2005/12/20
	Sheet:	1/3

TEST REPORT

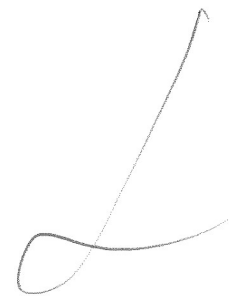
OBJECT: *Conformity with the requirements of standards
IEC60269 / EN60269*

DEVICE CHARACTERISTICS

Type:	Characteristics:
420006	Fuse link 10x38 6 A gG 500V ~
420106	Fuse link 10x38 6 A gG 500V ~ with indicating device

TESTS:

Subclause	Test
6	Marking
8.1.4	Dimensions
8.3	Power dissipation
8.4.3.1a	Conventional non-fusing current
8.4.3.1b	Conventional fusing current
8.4.3.2	Rated current
8.4.3.3	Gates
8.4.3.4	Overload
8.4.3.5	Conventional cable overload protection
8.4.3.6	Indicating device / striker
8.5	Breaking capacity



CONCLUSION:

According to the performed test, the samples of the products comply with the standards requirements.

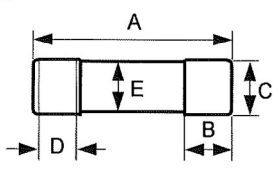
Report by:

Reviewed

На основании чл.36а ал.3 от ЗОП

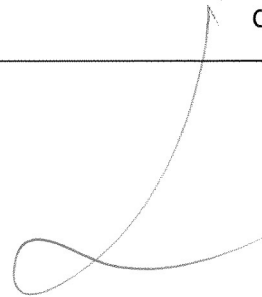




SUBCLAUSE	TEST		RESULTS		
6	<p><u>MARKING</u></p> <ul style="list-style-type: none"> - Name of manufacturer or trade mark - Reference - Rated voltage - Rated current - Breaking range and utilization category - Kind of current - Rated breaking capacity (kA) 		Without indicator	With indicator	
			DF 420006 500 V 6 A gG ~ 120	DF 420106 500 V 6 A gG ~ 120	
8.1.4	<p><u>DIMENSIONS</u></p> <div style="text-align: center;">  </div> <p style="margin-left: 40px;"> $A = 38 \pm 0,6 \text{ mm}$ $B \leq 10,5 \text{ mm}$ $C = 10,3 \pm 0,1 \text{ mm}$ $D \geq 6,0 \text{ mm}$ $E < C$ </p>		C	C	C
8.3	<p><u>POWER DISSIPATION</u></p> <ul style="list-style-type: none"> - At I_n (6 A) 	$P_d \leq 3 \text{ W}$	0,83 W	0,84 W	0,85 W
8.4.3.1 a)	<p><u>CONVENTIONAL NON-FUSING CURRENT</u></p> <ul style="list-style-type: none"> - Non-fusing at $1,5 \cdot I_n = 9 \text{ A}$ 	$t > 1 \text{ h}$	> 1 h	> 1 h	> 1 h
8.4.3.1 b)	<p><u>CONVENTIONAL FUSING CURRENT</u></p> <ul style="list-style-type: none"> - Fusing at $1,9 \cdot I_n = 11,4 \text{ A}$ 	$t < 1 \text{ h}$	490 s	569 s	461 s
8.4.3.2	<p><u>RATED CURRENT</u></p> <p>Cyclical test 100h On: 60 min at $1,05 \cdot I_n = 6,3 \text{ A}$ Off: 6 min - Non-fusing at $1,5 \cdot I_n = 9 \text{ A}$</p>	$t > 1 \text{ h}$		> 1h	
8.4.3.3	<p><u>GATES</u></p> <ul style="list-style-type: none"> a) I_{MIN} (10s) at 11 A b) I_{MAX} (5s) at 28 A c) I_{MIN} (0,1s) at 26 A d) I_{MAX} (0,1s) at 72 A 	$t \geq 10 \text{ s}$ $t \leq 5 \text{ s}$ $t \geq 0,1 \text{ s}$ $t \leq 0,1 \text{ s}$	> 10 s	0,355 s	> 0,1 s 0,035 s



SUBCLAUSE	TEST		RESULTS
8.4.3.4	<p><u>OVERLOAD</u></p> <p>50 pulses 5 s at 13,2 A - Fusing at 13,2 A</p>	Values within the limits	C C C
8.4.3.5	<p><u>CONVENTIONAL CABLE OVERLOAD PROTECTION</u></p> <p>- 1,45 · I_z = -- A</p>	t < 1h	NA
8.4.3.6	<p><u>INDICATING DEVICE / STRIKER</u></p> <p>- Indicating device - Striker</p>		C C NA NA
8.5	<p><u>BREAKING CAPACITY</u></p> <p>Test n°1 at 120 kA / 550 V ~ Test n°2 at 440 A / 550 V ~ Test n°3 at 36 A / 550 V ~ Test n°4 at 23 A / 550 V ~ Test n°5 at 14 A / 550 V ~</p>		C C C C C C C C C



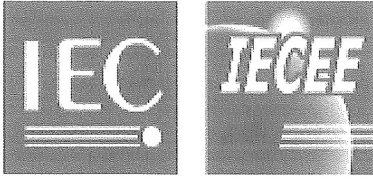

ABBREVIATIONS: C=Conform, NC=Non-conform, NA=Non-applicable



ЗАПИСЬ
ОБЪЕКТА



382



Test Report issued under the responsibility of:



**TEST REPORT
IEC 60269-1
Low-voltage fuses
Part 1: General requirements**

Report Number: 2.03.02619.1.0/DF-S.A/60269-1/PMX-10
Date of issue: 16.01.2014
Total number of pages..... 36

Applicant's name: DF S.A
Address: Silici, 67-69
08940 CORNELLA DE LLOBREGAT (Barcelona)
SPAIN

Test specification:

Standard: IEC 60269-1:2006 (Fourth edition)+ A1:2009
Test procedure.....: CB Scheme
Non-standard test method.....: N/A


Test Report Form No.....: IEC60269_1B
Test Report Form(s) Originator.....: EZU
Master TRF: Dated 2010-08

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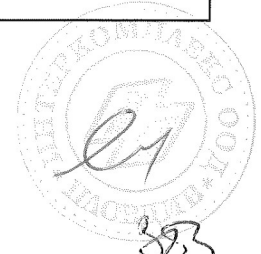
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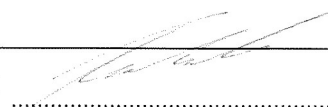

If this Test Report Form is used by non-IECEE members, the IECEE/IEC logo and the reference to the CB Scheme procedure shall be removed.

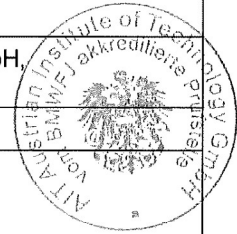
This report is not valid as a CB Test Report unless signed by an approved CB Testing Laboratory and appended to a CB Test Certificate issued by an NCB in accordance with IECEE 02.

Test item description: Low-voltage fuse-holders for cylindrical fuse-links
Trade Mark: 
Manufacturer.....: DF S.A
Model/Type reference: PMX-10 (For 10x38 fuse-links)
Ratings: 690V a.c. and 24V d.c./ 32A/ 50Hz and DC/
1-pole; N-pole; 1+N-pole; 2-pole; 3-pole; 3+N-pole; 4-pole

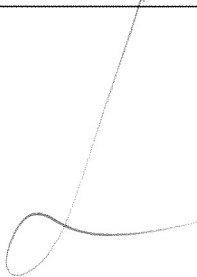
ВЕРИТЕЛНИ
ЦЕНТЪР
ОУН



Testing procedure and testing location:		
<input checked="" type="checkbox"/>	CB Testing Laboratory:	
Testing location/ address		AIT Austrian Institute of Technology GmbH, A-1210, Vienna, Giefinggase 2
<input type="checkbox"/>	Associated CB Laboratory:	
Testing location/ address		---
Tested by (name + signature)		Raheb Hanna, MSc 
Approved by (name + signature)		Ing.J.Ainetter 
<input type="checkbox"/>	Testing procedure: TMP	
Testing location/ address		---
Tested by (name + signature)		---
Approved by (name + signature)		---
<input type="checkbox"/>	Testing procedure: WMT	
Testing location/ address		---
Tested by (name + signature)		---
Witnessed by (name + signature)		---
Approved by (name + signature)		---
<input type="checkbox"/>	Testing procedure: SMT	
Testing location/ address		---
Tested by (name + signature)		---
Approved by (name + signature)		---
Supervised by (name + signature)		---
<input type="checkbox"/>	Testing procedure: RMT	
Testing location/ address		---
Tested by (name + signature)		---
Approved by (name + signature)		---
Supervised by (name + signature)		---



List of Attachments (including a total number of pages in each attachment): ---	
Summary of testing:	
Tests performed (name of test and test clause): A type test was performed according to <ul style="list-style-type: none">Table 14 and according to <ul style="list-style-type: none">IEC 60269-1:2009, Edition 4.1 The low-voltage fuse-holders for cylindrical fuse-links <ul style="list-style-type: none">PMX-10 have passed the type test successfully.	Testing location: AIT Austrian Institute of Technology GmbH Business Unit Electric Energy Systems Power Service Center Giefinggasse 2 1210 Vienna The AIT Austrian Institute of Technology GmbH is a recognized CB Testing Laboratory under the responsibility of OVE as the National Certification Body.
Summary of compliance with National Differences ---	

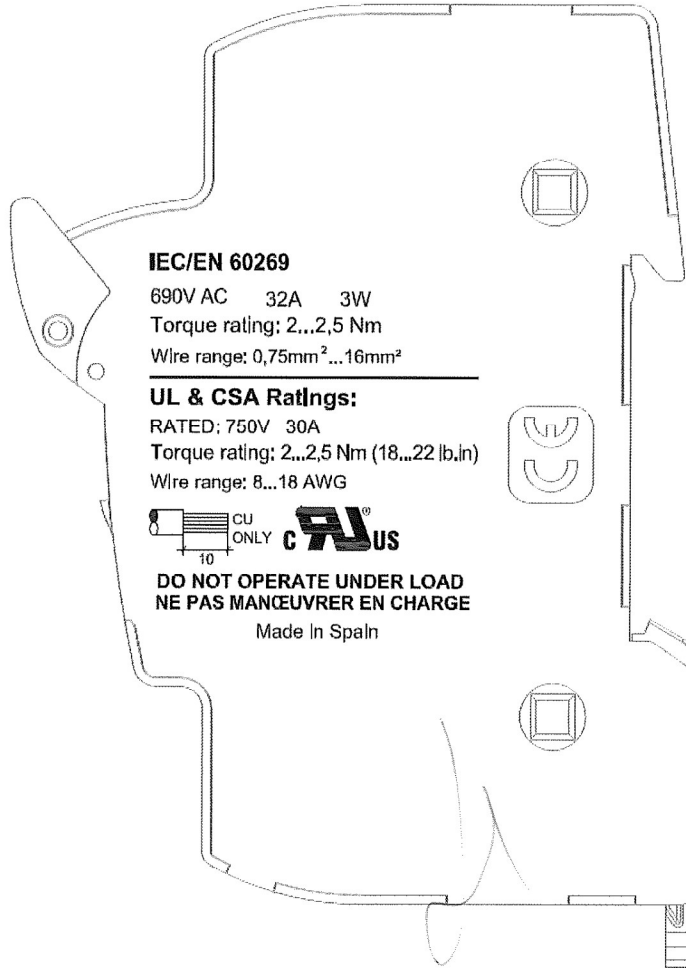
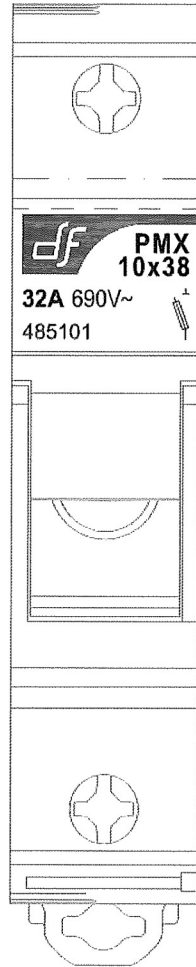


14779 C
14779 B



384

Copy of marking plate:



The catalogue number (and voltage as appropriate) changes according to the specific version.



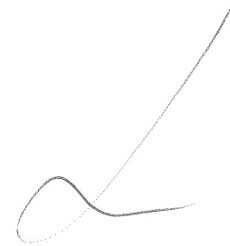
Remark for use of the fuse-holders:

The maximum power dissipation of the fuse-links suitable for use with the fuse-holders is 3W.
Fuse-links with rated voltage 690V of the appropriate size (10x38) may have a power dissipation exceeding this value.

It has to be taken into consideration that the maximum power dissipation of

3W

will not be exceeded for use in uninterrupted duty.



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Remark to test performance:

The low-voltage fuse-holders for cylindrical fuse-links PMX-10 single phase and multi-pole are identical in the type of construction, dimensions and in any other manner, except marking.
(Multi-pole units can be made of connection accessories)

Some tests are covered by performing the appropriate tests under more severe conditions.

Catalogue number		485101	485102	485103	485104	485105	485106	485107
Test according to subclause		1-pole	N-pole	1+N-pole	2-pole	3-pole	3+N-pole	4-pole
8.1.4	Dimesions	Covered	Covered	Covered	Covered	Covered	Covered	Tested
8.2	Insulating properties	Tested	Covered	Covered	Covered	Covered	Covered	Tested
8.3	Temperature rise and acceptable power dissipation	Covered	Covered	Covered	Tested	Covered	Tested	Covered
8.5	Peak withstand current	Tested	Covered	Covered	Tested	Covered	Covered	Tested
8.8	Degree of Protection	Covered	Covered	Covered	Covered	Covered	Covered	Tested
8.9	Resistance to heat	Covered acc. sub clause 8.3,8.4, 8.5, 8.10	Covered acc. sub clause 8.3,8.4, 8.5, 8.10	Covered acc. sub clause 8.3,8.4, 8.5, 8.10	Covered acc. sub clause 8.3,8.4, 8.5, 8.10	Covered acc. sub clause 8.3,8.4, 8.5, 8.10	Covered acc. sub clause 8.3,8.4, 8.5, 8.10	Covered acc. sub clause 8.3,8.4, 8.5, 8.10
8.10	Non-deterioration of contacts	Covered	Tested	Covered	Tested	Covered	Tested	Covered
8.11.1	Mechanical strength	Covered acc. sub clause 8.5	Covered acc. sub clause 8.5	Covered acc. sub clause 8.5	Covered acc. sub clause 8.5	Covered acc. sub clause 8,5	Covered acc. sub clause 8.5	Covered acc. sub clause 8.5
8.11.2.1	Freedom from season cracking	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8.11.2.2	Resistance to abnormal heat and fire	Covered	Covered	Tested	Covered	Covered	Covered	Covered
8.11.2.3	Resistance to rusting	Covered	Covered	Covered	Tested	Covered	Covered	Covered

Auxiliary components:

Cat. No.	485108	485109	485110	485111	485112	485113	485114	485116
	1-pole with indicator	1+N-pole with indicator	2-pole with indicator	3-pole with indicator	3+N-pole with indicator	4-pole with indicator	1-pole with 24 VDC indicator	2-pole with 24 VDC indicator

Auxiliary components are not part of the type test but PMX10 with indicator for 690Va.c and 24Vd.c. were tested of functioning. Furthermore they were tested 1h at 1,05*Un to check, if the diode or the resistor of the indicator were still working over a longer time.


Test item particulars:	
Classification of installation and use.....	Acc. to IEC/EN 60269-1 and IEC/HD 60269-2
Supply Connection	Acc. to IEC/HD 60269-2
Possible test case verdicts:	
- test case does not apply to the test object	N/A
- test object does meet the requirement.....	P (Pass)
- test object does not meet the requirement.....	F (Fail)
Testing:	
Date of receipt of test item	04/2013
Date (s) of performance of tests	04/2013 to 10/2013
General remarks:	
<p>The test results presented in this report relate only to the object tested. This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory. "(see Enclosure #)" refers to additional information appended to the report. "(see appended table)" refers to a table appended to the report.</p> <p>Throughout this report a <input checked="" type="checkbox"/> comma / <input type="checkbox"/> point is used as the decimal separator.</p>	
Manufacturer's Declaration per sub-clause 6.2.5 of IEC 60269-1:	
<p>The application for obtaining a CB Test Certificate <input type="checkbox"/> Yes includes more than one factory location and a <input checked="" type="checkbox"/> Not applicable declaration from the Manufacturer stating that the sample(s) submitted for evaluation is (are) representative of the products from each factory has been provided</p>	
When differences exist; they shall be identified in the General product information section.	
Name and address of factory (ies)	DF S.A Silici, 67-69 08940 CORNELLA DE LLOBREGAT (Barcelona) SPAIN
General product information:	
<p>Low-voltage fuse-holders for cylindrical fuse-links</p> <p>for use by authorized persons</p> <p>type</p> <p>PMX-10</p>	

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Clause	Requirement + Test	Result - Remark	Verdict
5	CHARACTERISTICS OF FUSES		
5.2	Rated voltage (V) as specified	690Va.c. or 24Vd.c.	P
5.3.1	Rated current (A) of the fuse-link in accordance with specified values	-	N/A
5.3.2	Rated current (A) of the fuse-holder	32A	P
5.4	Rated frequency (Hz)	50Hz or DC	P
5.5	Max. rated power dissipation (VA) of fuse-link	-	N/A
	Rated acceptable power dissipation (VA) of fuse-holder	3W	P
5.6	Limits of time-current characteristics based on reference ambient air temperature T_a of +20°C		N/A
5.6.1	Time-current zones deviated from standardized, or available in manufacturers documentation (with tolerances)	-	N/A
5.6.2	Conventional times and currents see Table 2	-	N/A
5.6.3	Gates.....	-	N/A
5.7	Breaking range and breaking capacity		N/A
5.7.1	Breaking range and utilization category	-	N/A
5.7.2	Rated breaking capacity (A) of fuse-link corresponds to the rated voltage (V), and is equal or higher than given minimum (A) in subsequent part of this standard	-	N/A
5.8	Cut-off current and I^2t characteristics are referred to the values of voltage, frequency and power factor		N/A
5.8.1	Cut-off current characteristics, if required, given by the manufacturer according to Figure 4	-	N/A
5.8.2	Pre-arcing I^2t characteristics for pre-arcing times of less than 0,1 s down to a time corresponding to the rated breaking capacity given by the manufacturer :	-	N/A
	The operating I^2t characteristics with specified voltages as parameter for pre-arcing times less than 0,1 s given by the manufacturer	-	N/A




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Clause	Requirement + Test	Result - Remark	Verdict
6	MARKINGS		
	Markings are durable and easily legible		P
6.1	Fuse-holders marked by:		P
	- name of manufacturer or trade mark which enable identification of fuse-holder		P
	- manufacturer's identification reference enabling to find all characteristics listed in 5.1.1	PMX-10x38	P
	- rated voltage (V)	690Va.c. or 24Vd.c.	P
	- rated current (A)	32A	P
	- kind of current and rated frequency (Hz)	50Hz or DC	P
6.2	Fuse-link(s) except small fuse-link(s) marked by:		N/A
	- name of manufacturer or trade mark which enable identification of fuse-links	-	N/A
	- manufacturer's identification reference enabling to find all characteristics listed in 5.1.2	-	N/A
	- rated voltage (V)	-	N/A
	- rated current (A)	-	N/A
	- breaking range and utilization category (if applicable) (5.7.1)	-	N/A
	- kind of current	-	N/A
	- rated frequency (Hz), if applicable (5.4)		N/A
	Small fuse-links marked by:		N/A
	- trademark	-	N/A
	- list reference of manufacturer	-	N/A
	- rated voltage (V)	-	N/A
	- rated current (A)	-	N/A
6.3	Symbols for the kind of current and frequency in accordance with IEC 60417		P



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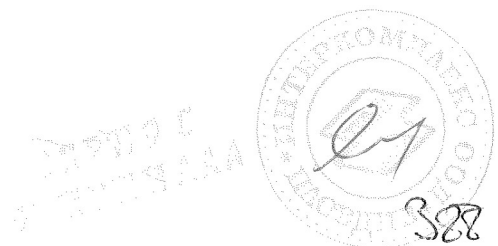


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Clause	Requirement + Test	Result - Remark	Verdict
7	STANDARD CONDITIONS FOR CONSTRUCTION		
7.1	Mechanical design		P
7.1.1	Replacement of fuse-links easily and safely		P
7.1.2	Connections, including terminals		P
	Contact force is not transmitted through insulating material other than ceramic or other material with characteristics not less suitable, unless		P
	there is sufficient resilience in the metallic parts to compensate any possible shrinkage or other deformation of the insulating material		P
	Terminals cannot turn or be displaced when the connecting screws are tightened		P
	Terminals shall be such, that the conductors cannot be displaced		P
	Parts gripping the conductors are of metal		P
	Gripping parts cannot unduly damage conductors		P
	Terminals readily accessible under the intended conditions of installation		P
7.1.3	Fuse-contacts		P
	Fuse-contacts are such that necessary contact force is maintained under the conditions of service and operation		P
	Contact is such that electromagnetic forces occurring during operation under conditions in accordance with 7.5 not impair electrical connections between		P
	a) fuse-base and fuse-carrier		P
	b) fuse-carrier and fuse-link		P
	c) fuse-link and fuse-base		P
	Fuse contacts are so constructed and of such material that, when fuse is properly installed and service conditions are normal, adequate contact is maintained		P
	a) after repeated engagement and disengagement		P
	b) after being left undisturbed in service for long period		P
7.1.4	Construction of a gauge-piece		P
	Gauge-piece is so designed that it withstands normal stresses occurring during use		P
7.1.5	Mechanical strength of fuse-link		N/A

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Clause	Requirement + Test	Result - Remark	Verdict

	Fuse-link have adequate mechanical strength and its contacts are securely fixed		N/A
7.2	Insulating properties and suitability for isolation		P
	Fuses are such that they do not lose insulating properties at voltages to which they are subjected in normal service		P
	Fuse passes the tests for verification of insulating properties and suitability for isolation in accordance with 8.2		P
7.3	Temperature rise, power dissipation of the fuse-link and acceptable power dissipation of the fuse-holder	Tested with 32A	P
	See Table 5	Terminals (Silver-plated)	P
	Requirements are verified by tests according to 8.3		P
7.4	Operation		N/A
	Fuse-link is so designed and proportioned that, when tested in its appropriate test arrangement at rated frequency and ambient air temperature of (20±5)°C		N/A
	- is able to carry continuously any current not exceeding its rated current		N/A
	- is able to withstand overload conditions as they may occur in normal service (see 8.4.3.4)		N/A
	Fuse-link satisfy these conditions if it passes the tests prescribed in 8.4		N/A
7.5	Breaking capacity		N/A
	Fuse is capable of breaking, at rated frequency and at voltage not exceeding the recovery voltage specified in 8.5, any circuit having prospective current between		N/A
	- current I_f (for "g" fuse-links)	-	N/A
	- current $k_2 I_n$ (for "a" fuse-links)	-	N/A
	- for a.c., rated breaking capacity at power factors not lower than those in Table 20	-	N/A
	- for d.c., rated breaking capacity at time constants not greater than those limits in Table 21	-	N/A
	Arc voltage not exceed values given in Table 6.....	-	N/A
	Fuse satisfy these conditions if it passes the tests prescribed in 8.5		N/A
7.6	Cut-off current characteristic		N/A



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Clause	Requirement + Test	Result - Remark	Verdict
	Values of cut-off current measured as specified in 8.6 are less than, or equal to, the values corresponding to cut-off current characteristics assigned by the manufacturer		N/A
7.7	I^2t characteristics		N/A
	Pre-arcing I^2t values verified according to 8.7 (Table 7)	-	N/A
	Operating I^2t values verified according to 8.7	-	N/A
7.8	Overcurrent discrimination of fuse-links	-	N/A
7.9	Protection against electric shock		P
	The degree of protection when the fuse is under normal service conditions:	IP 20	P
	The degree of protection when replacing the fuse-link:	IP 20	P
	The degree of protection when the fuse-link and fuse-carrier is removed:	IP 20	P
7.9.1	Clearances and creepage distances		P
	Clearances are not less than the values given in Table 9	> 5,5mm	P
	Creepage distances correspond to material group, as defined in 2.7.1.3 of IEC 60664-1, corresponding with rated voltage given in Table 10	Overvoltage category: III Pollution degree: 3 > 10mm	P
7.9.2	Leakage currents of fuses suitable for isolation		P
	Value of leakage current (mA) not exceed		P
	- 0,5 mA per pole for fuses in new conditions	<0,1	P
	- 2 mA per pole for fuses having been submitted to test according to 8.5	<1	P
7.9.3	Additional constructional requirements for fuses for linked fuse-carriers, suitable for isolation		P
	Fuse-holder are marked with the symbol IEC 60617-S00369		P
	When fuse is in open position, with fuse-link remaining inside the fuse-carrier, isolating distance between the fuse contacts in accordance with the isolating function are provided		P
	Indication of this position is provided by the position of the fuse-carrier		P

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Clause	Requirement + Test	Result - Remark	Verdict
	There exists a locking means in order to lock the fuses in the isolated position, locking is possible only in this position		N/A
	Fuses are designed so that the fuse-carrier remains attached to the fuse-base giving correct indication of the open position, and of locking		P
7.10	Resistance to heat		P
	All components are sufficiently resistant to heat which may occur in normal use (see 8.9 and 8.10)		P
7.11	Mechanical strength		P
	All components of fuse are sufficiently resistant to mechanical stresses which may occur in normal use (see 8.3 to 8.5 and 8.11.1)		P
7.12	Resistance to corrosion		P
	All metallic components of fuse are resistant to corrosive influences which may occur in normal use		P
7.12.1	Resistance to rusting		P
	Ferrous components are so protected that they meet relevant tests (see 8.2.2.3.2 and 8.11.2.3)		P
7.12.2	Resistance to season cracking		N/A
	Current-carrying parts are sufficiently resistant to season cracking (see 8.2.2.3.2 and 8.11.2.1)		N/A
7.13	Resistance to abnormal heat and fire		P
	All components of fuse are sufficiently resistant to abnormal heat and fire (see 8.11.2.2)		P
7.14	Electromagnetic compatibility		P
	Fuses within the scope of this standard are not sensitive to normal electromagnetic disturbances		N/A
	No immunity tests are required		P

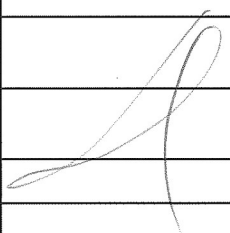
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Clause	Requirement + Test	Result - Remark	Verdict
8	TESTS		
8.1.2	At the beginning of each test, the fuse is approximately at the ambient temperature		N/A
8.1.3	Tests made on fuses in clean and dry condition		N/A
8.1.4	Arrangement of the fuse and dimensions		P
	Except for degree of protection test (see 8.8), fuse are mounted in free air in draught-free surroundings in the normal operation position and on insulating material of sufficient rigidity		P
	Before tests are started, specified external dimensions are measured and results compared with dimensions specified in the relevant data sheet of the manufacturer or specified in subsequent parts	Part 2	P
8.1.5	Testing of fuse-links		N/A
	Fuse-links tested with the kind(s) of current for which they are rated		N/A
	Fuse-links tested for a.c. with frequency for which they are rated		N/A
8.1.5.1	Complete tests		N/A
	Internal resistance R measured by a current $\leq 0,1 I_n$		N/A
	Measuring current (A) : -		N/A
	Ambient air temperature in range of $20 \pm 5 \text{ }^\circ\text{C}$		N/A
	The values of resistance		N/A
8.1.5.2	Testing of fuse-links of a homogeneous series		N/A
	Fuse-links tested like a homogeneous series : -		N/A
	If yes: fuse-links have identical enclosures in form and construction (except of fuse-elements and contacts)		N/A
	- the same arc-extinguishing medium and same completeness of filling		N/A
	- fuse-elements of identical materials		N/A
	- their cross-section of fuse-elements not exceed the cross-section of fuse-links having the highest rated current		N/A
	- number of fuse-elements do not exceed number of fuse-elements of fuse-links with the highest rated current		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	- minimum distances between adjacent fuse-elements and between the fuse-elements and the inner surface of the cartridge is not less than those in the fuse-link with the highest rated current		N/A
	- fuse-links used with a given fuse-holder, or		N/A
	- fuse-links intended to be used in an arrangement identical for all rated currents of the homogeneous series		N/A
	- value of $RI_n^{3/2}$ does not exceed the value for the fuse-link with largest rated current of the homogeneous series (R measured as indicated in 8.1.5.1)		N/A
	the rated breaking capacity of fuse-links not greater than that of the fuse-link with the largest rated current within the homogeneous series		N/A
	- if not, the fuse-links with greater breaking capacity subjected to tests no. 1 and no. 2		N/A
	The fuse-link having the largest rated current tested completely according to Table 11		N/A
	The fuse-link having the smallest rated current tested only according to Table 12		N/A
	The fuse-links between the largest and smallest rated current tested according to Table 13		N/A
8.1.6	Testing of fuse-holders		N/A
	The fuse-holders are subjected to the tests according to Table 14		N/A
8.2	Verification of the insulating properties and of the suitability for isolation		P
8.2.1	Arrangement of the fuse-holder		P
	The fuse-holder fitted with a fuse-links of the largest dimensions for the type of fuse-holder concerned		P
	The fuse-base fixed to a metal plate, unless otherwise specified		P
	Fuse-link is replace a while live - surfaces of fuse-link, of device for replacing it or of fuse-carrier, if of insulating material, are provided with metal coverings connected during tests to the frame of the apparatus; if of metal, they are connected direct to the frame		P



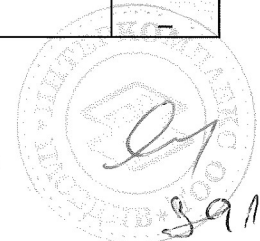


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Clause	Requirement + Test	Result - Remark	Verdict
8.2.2	Verification of the insulating properties		P
	Points of application of the test voltage		P
	The test voltage is applied between:		P
	a) live parts and the frame with the fuse-link and the device for replacing it, or		P
	the fuse-carrier, if any, in position		P
	no breakdown of insulation or flashover during 1 min of the applying test voltage		P
	b) the terminals without fuse-link, device for replacing or the fuse-carrier		P
	no breakdown of insulation or flashover during 1 min of the applying test voltage		P
	c) live parts of different polarity in the case of multipole fuse-holder with fuse-links, fuse-carrier(s) or device(s) for replacing the fuse-links		P
	no breakdown of insulation or flashover during 1 min of the applying test voltage		P
	d) live parts which in the case of a multipole fuse-holder reach different potential after the fuse-link operates (equipped by fuse-carrier or device for replacing without fuse-link)		P
	no breakdown of insulation or flashover during 1 min of the applying test voltage		P
	The values of test voltage (V) as specified in Table 15	1890	P
8.2.2.3.2	Fuse-holder is subjected to humid atmospheric conditions		P
	Relative humidity of ambient air (%)	92	P
	Ambient air temperature (°C)	23	P
	Duration of treatment (h)	48	P
	Insulation resistance is measured between the points prescribed in 8.2.2.1 by applying d.c. voltage of approximately 500 V		P
	Points of measuring:		P
	a) min. measured value (MΩ)	> 100	P
	b) min. measured value (MΩ)	> 100	P
	c) min. measured value (MΩ)	> 100	P
	d) min. measured value (MΩ)	> 100	P
	The insulation resistance not less than MΩ	Yes	P

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Clause	Requirement + Test	Result - Remark	Verdict
8.2.3	Verification of the suitability for isolation		P
	Clearances and creepage distances are verified by dimensional measurement and by voltage test		P
	Points of application of the test voltage		P
	The test voltage is applied between:		P
	- terminals when the fuse-link and device for replacing it, are removed		P
	Test voltage (kV) for verification of the rated impulse withstand voltage is given in Table 16	9,8	P
	The 1,2/50 μ s impulse voltage applied 5 times for each polarity at intervals of 1 s minimum		P
	no breakdown of insulation or flashover during of the applying test voltage		P
	no disruptive discharge during the test		P
8.2.4.2	Fuse-holder is subjected to humid atmospheric conditions		P
	Relative humidity of ambient air (%)	92	P
	Ambient air temperature ($^{\circ}$ C)	23	P
	Duration of treatment (h)	48	P
	Insulation resistance is measured between the points prescribed in 8.2.2.1 by applying d.c. voltage of approximately 500 V		P
	Points of measuring:		P
	a) min. measured value (M Ω)	> 100	P
	b) min. measured value (M Ω)	> 100	P
	c) min. measured value (M Ω)	> 100	P
	d) min. measured value (M Ω)	> 100	P
	The insulation resistance not less than 1 M Ω	Yes	P
8.3	Verification of temperature rise and power dissipation		P
8.3.1	One fuse used for test (unless otherwise stated by the manufacturer) mounted in free air		N/A
	Test performed at an ambient air temperature of (20 \pm 5) $^{\circ}$ C		P
	Ambient air temperature during the test ($^{\circ}$ C)	20	P
	Cross-sectional area (see Table17) (mm ² or mm x mm)	6mm ²	-
	Tightened by torque; torque (Nm)	2,5	-

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Clause	Requirement + Test	Result - Remark	Verdict
8.3.2	The temperature of the fuse measured by method of measuring	thermocouples	P
8.3.3	Measurement of the power dissipation of the fuse-link		N/A
	One fuse used for test (unless otherwise stated by the manufacturer) mounted in free air		N/A
	Test performed at an ambient air temperature of (20±5) °C		N/A
	Ambient air temperature during the test (°C)	-	N/A
	Cross-sectional area (see Table17) (mm ² or mm x mm)	-	-
	Tightened by torque; torque (Nm)	-	-
8.3.4.1	Temperature rise of the fuse-holder		P
	Applied a.c. current (A) for test equal to the rated current of the fuse-holder	32	P
	Test made with fuse-link (A), or	Dummy fuse	P
	with a dummy fuse-link specified in subsequent parts	Part 2	P
	Temperature rise limits T for contacts and terminals (Table 5):		P
	spring loaded contacts; limit (K)	Limited only by the necessity of not causing any damage to adjacent parts Silver-plated unenclosed / enclosed	P
	bolted contacts; limit (K)	-	N/A
	terminals; limit (K)	Upper = 63K _{max} ; limit 70K Lower = 65K _{max} ; limit 70K Silver-plated unenclosed / enclosed	P
8.3.4.2	Power dissipation of a fuse-link		P
	The test made with a.c. at the current (A) equal to the rated current of the fuse-link	32	P
	The points of measuring	S	P
	Measured value of power (W) dissipation in limits (W) specified in subsequent parts	Part 2	P
8.3.5	The acceptable power dissipation (W) of fuse-holder not less than the rated power dissipation of the corresponding fuse-links	3	P




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Clause	Requirement + Test	Result - Remark	Verdict
	After the tests prescribed in 8.3, the insulating parts of the fuse-holders cooled down to ambient temperature withstood the test voltage according to 8.2	Yes	P
	No deformation after tests of 8.3		P
8.4	Verification of operation		N/A
8.4.1	The test arrangement as specified in 8.1.4		N/A
	Length (m) of conductors (see 8.3.1)	-	N/A
	their cross-sectional area (mm ²) as specified in Table 17	-	N/A
8.4.2	Ambient air temperature during test within (20±5) °C		N/A
8.4.3.1	Verification of conventional non-fusing and fusing current		N/A
	a) the fuse-link subjected to the conventional non-fusing current (I _{nf}) (see Table 2)	-	-
	the fuse-link did not operate within the conventional time of (h) (Table 2)	-	N/A
	b) the same fuse-link, after cooled down to ambient temperature, subjected to the conventional fusing current (I _f) (see Table 2)	-	-
	the fuse-link operated within the conventional time of (minutes) (Table 2)	-	N/A
8.4.3.2	Verification of rated current of "g" fuse-links		N/A
	One fuse-link submitted to a pulse test for 100 h		N/A
	On-period equal to conventional time (h)	-	N/A
	Off-period of 0,1 of the conventional time	-	N/A
	Test current (A) equal to 1,05 of the rated current ..	-	N/A
	After the test, the fuse-link not have changed its characteristics		N/A
8.4.3.1	a) the fuse-link subjected to the conventional non-fusing current (I _{nf}) (see Table 2)	-	-
	the fuse-link did not operate within the conventional time of (h) (Table 2)	-	N/A
8.4.3.3	Verification of time-current characteristics and gates		N/A
8.4.3.3.1	The time-current characteristics verified on the basis of the test according to 8.5		N/A
	Values of pre-arcing and operating times within the time-current zones:		N/A
	- indicated by the manufacturer		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	- specified in subsequent parts	-	N/A
	Verification for smaller current ratings, if only one largest rated current fuse-link is subjected to the test according to 8.5 (in case of homogeneous series):		N/A
	"g" fuse-links (except "gD", "gG" and "gM")		N/A
	Tests made in connection with verification of the gates (see 8.4.3.3.2)		N/A
	Ambient air temperature within (20±5) °C		N/A
	rated current I _n (A) of the fuse-link		-
	test performed at voltage (V)		-
	test 3a) prospective current (A) equal to kI _n (10 ≤ k ≤ 20)		N/A
	pre-arcing time (s)	-	-
	specified pre-arcing time (s) max./min.	-	N/A
	test 4a) prospective current (A) equal to kI _n (5 ≤ k ≤ 8)		N/A
	pre-arcing time (s)	-	-
	specified pre-arcing time (s) max./min.	-	N/A
	test 5a) prospective current (A) equal to kI _n (2,5 ≤ k ≤ 4)		N/A
	pre-arcing time (s)	-	-
	specified pre-arcing time (s) max./min.	-	N/A
	Verification for smaller current ratings, if only one largest rated current fuse-link is subjected to the test according to 8.5 (in case of homogeneous series):		N/A
	"a" fuse-links		N/A
	Ambient air temperature within (20±5) °C	-	N/A
	rated current I _n (A) of the fuse-link	-	-
	test performed at voltage (V)	-	-
	test 3a) prospective current (A) equal to nk ₂ I _n (5 ≤ n ≤ 8)		N/A
	pre-arcing time (s)	-	-
	specified pre-arcing time (s) max./min.	-	N/A
	test 4a) prospective current (A) equal to nk ₂ I _n (2 ≤ n ≤ 3)		N/A
	pre-arcing time (s)	-	-
	specified pre-arcing time (s) max./min.	-	N/A
	test 5a) prospective current (A) equal to nk ₂ I _n (1 ≤ n ≤ 1,5)		N/A

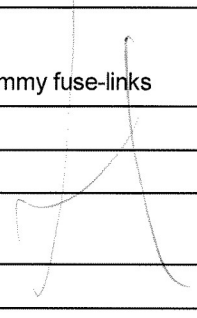
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Clause	Requirement + Test	Result - Remark	Verdict
	pre-arcing time (s)	-	-
	specified pre-arcing time (s) max./min.	-	N/A
8.4.3.3.2	Verification of gates		N/A
	"gG" and "gM" fuse-links		N/A
	rated current of the fuse-link (A).....	-	-
	test performed at voltage (V)	-	-
	a) testing current (A); pre-arcing time (s) higher than 10 s	-	N/A
	b) testing current (A); pre-arcing time (s) less than 5 s	-	N/A
	c) testing current (A); pre-arcing time (s) higher than 0,1 s	-	N/A
	d) testing current (A); pre-arcing time (s) less than 0,1 s	-	N/A
	"aM" fuse-links		N/A
	rated current of the fuse-link (A).....	-	-
	test performed at voltage (V)	-	-
	Cross-sectional area (see Table18) (mm ² or mm x mm)	-	-
	e) testing current (A); pre-arcing time (s) higher than 60 s	-	N/A
	f) testing current (A); pre-arcing time (s) less than 60 s	-	N/A
	g) testing current (A); pre-arcing time (s) higher than 0,2 s	-	N/A
	h) testing current (A); pre-arcing time (s) less than 0,10 s	-	N/A
8.4.3.4	Overload		N/A
	The test arrangement is same as that for the temperature rise test (see 8.3.1)		N/A
	Three fuse-links submitted to 50 pulses having the same duration and test current	-	N/A
	test performed at voltage (V)	-	-
	"g" fuse-links:		N/A
	test current (A) equal to 0,8 times the current stated for a pre-arcing time of 5 s	-	N/A
	duration of each pulse 5 s		N/A

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Clause	Requirement + Test	Result - Remark	Verdict

	time (s) interval between pulses equal to 20 % of the conventional time (s) specified in Table 2	-	N/A
	"a" fuse-links:		N/A
	rated current I_n (A) of fuse-link	-	N/A
	test current (A) equal to $k_1 I_n \pm 2\%$	-	N/A
	the pulse duration (s) corresponds to that indicated on the overload curve for $k_1 I_n$ stated by manufacturer	-	N/A
	time (s) intervals between pulses equal to 30 times the pulse duration	-	N/A
	fuse-links having ambient air temperature subjected to a current (A) equal to current for the overload test		N/A
	pre-arcing time (s) of sample lies within the manufacturers time-current zone	-	N/A
8.4.3.5	Conventional cable overload protection test (for "g" fuse-links only)		N/A
	fuse-link mounted as specified in 8.4.1		N/A
	provided with PVC insulated copper conductors of cross-sectional area (mm^2) (see Table 19)	-	N/A
	fuse and conductor connected to it, preheated with rated current (A) of fuse-link	-	N/A
	for a time (h) equal to the conventional time	-	N/A
	test current increased to $1,45 I_z$ (A) (I_z specified in Table 19)	-	N/A
	the fuse-link operated in time (s) less than the conventional time (s)	-	N/A
8.4.3.6	Operation of indicating devices and strikers, if any		N/A
	Operation of indicating device verified in combination with the verification of breaking capacity (see 8.5.5)		N/A
	The verification of striker operation:		N/A
	"g" fuse-link tested at current (A) equal to current I_4 (see Table 20 and 21)	-	N/A
	recovery voltage (V)	-	N/A
	stated recovery voltage (V)	-	N/A
	"a" fuse-link tested at current (A) equal to current $2k_1 I_n$ (A) (see Figure 2)	-	N/A
	recovery voltage (V)	-	N/A
	stated recovery voltage (V)	-	N/A




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Clause	Requirement + Test	Result - Remark	Verdict
	Striker operate during all tests made at recovery voltage of at least 20 V		N/A
	No failure of indicating device or striker		N/A
8.5	Verification of the breaking capacity		P
8.5.1	The test arrangements as specified in 8.1.4		P
8.5.2	Characteristics of the test circuit as specified		P
	Scheme of test circuit (see Figure 5)		P
	Deviations form specified characteristics of test circuit : -		N/A
8.5.3	Measuring instruments		P
8.5.4	Calibration of test circuit		P
	Calibration oscillograms and their evaluation		P
8.5.6	The breaking-capacity tests made at an ambient air temperature of $(20 \pm 5) ^\circ\text{C}$	23°C	P
	Breaking-capacity tests on a.c. fuses		P
8.5.5.1	Table 20, test No. 1 for "g" and "a" fuse-links	acc. 8.5.5.1 only peak withstand current of a fuse-holder, test no. 1 shall be made. NH fuse-link connected in series to achieve 5kA ... 6kA cut-off current acc. IEC 60269-2 table 614. Test specimen equipped with dummy fuse-links correspond to the dimension given in Figure 601 acc. IEC 60269-2 (Fuse System F)	P
	Rated breaking capacity of the fuse-links (kA), at voltage (V) :	65kA at 690V (only 50kA are required IEC 60269-2)	-
	Rated current (A) of the fuse-links :	100A	P
	Prospective current I_1 (kA) equal to rated breaking capacity within a tolerance of + 10%, - 0% :	65850	P
	Power factor :	0,18	P
	Initiation of arcing after voltage zero: within $40^\circ - 65^\circ$ for sample 1 and within $65^\circ - 90^\circ$ for sample 2 and 3, or :	for fuse-holder only $65^\circ - 90^\circ$ is required	P
	for sample 1) arcing after voltage zero within $0^\circ + 10^\circ, - 0^\circ$:	-	N/A

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Clause	Requirement + Test	Result - Remark	Verdict						
	Power-frequency recovery voltage: voltage (V) i.e (%) of rated voltage within 105% + 5%, - 0% of the rated voltage or 110% + 5%, - 0% of the rated voltage	725V	P						
	Cut-off current (A)	<table border="1"> <tr> <td>PMX-10 1P</td> <td>PMX-10 2P</td> <td>PMX-10 4P</td> </tr> <tr> <td>6,52kA_{max}</td> <td>7,20kA_{max}</td> <td>10,29kA_{max}</td> </tr> </table>	PMX-10 1P	PMX-10 2P	PMX-10 4P	6,52kA _{max}	7,20kA _{max}	10,29kA _{max}	P
PMX-10 1P	PMX-10 2P	PMX-10 4P							
6,52kA _{max}	7,20kA _{max}	10,29kA _{max}							
8.5.8	Acceptability of No. 1 test results	The fuse-links are not ejected. There is no sign of arcing or welding or other damage likely to prevent further use of the fuse-base	P						
	a) max. arc voltage (V) did not exceed stated values of 7.5 (Table 6)	dummy fuse-links	N/A						
	b) fuse-links operated without external effects or damage to the components of the complete fuse	dummy fuse-links	N/A						
	c) no permanent arcing, flashover or ejection of dangerous flames	dummy fuse-links	N/A						
	d) no damage of fuse components hindering from their further use	dummy fuse-links	N/A						
	e) no damage of fuse-link such, that it is difficult or dangerous to replace them	dummy fuse-links	N/A						
	f) fuse-link remains in one piece before its removal from the fuse- carrier	dummy fuse-links	N/A						
	g) resistance (MΩ) between contacts of fuse-links after test not less than 50 000 Ω for the rated voltage of fuse-links to 250 V, 100 000 Ω in all other cases :	dummy fuse-links	N/A						
8.5.5.1	Table 20, test No. 2 for "g" and "a" fuse-links		N/A						
	Prospective current I ₂ (kA)	-	N/A						
	Test made under conditions which approximate those giving maximum arc energy		N/A						
	Power factor	-	N/A						
	Making angle after voltage zero: within tolerance 0° + 20°, - 0°	-	N/A						
	Power-frequency recovery voltage: voltage (V) i.e (%) of rated voltage within 105% + 5%, - 0% of the rated voltage or 110% + 5%, - 0% of the rated voltage	-	N/A						
	Recovery voltage maintained at a value (V); duration (s) for sample (No.)	-	N/A						
	For other samples duration 15 s (8.5.5.2)		N/A						




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Clause	Requirement + Test	Result - Remark	Verdict
8.5.8	Acceptability of No. 2 test results		N/A
	a) max. arc voltage (V) did not exceed stated values of 7.5 (Table 6)	-	N/A
	b) fuse-links operated without external effects or damage to the components of the complete fuse		N/A
	c) no permanent arcing, flashover or ejection of dangerous flames		N/A
	d) no damage of fuse components hindering from their further use		N/A
	e) no damage of fuse-link such, that it is difficult or dangerous to replace them		N/A
	f) fuse-link remains in one piece before its removal from the fuse- carrier		N/A
	g) resistance (MΩ) between contacts of fuse-links after test not less than 50 000 Ω for the rated voltage of fuse-links to 250 V, 100 000 Ω in all other cases :	-	N/A
8.5.5.1	Table 20, test No. 2* for "g" and "a" fuse-links, for $I_2 \geq I_1$		N/A
	Prospective current I_2 (kA) for test No. 2 greater than the rated breaking capacity (kA)	-	N/A
	Test made on six samples replacing tests of Nos. 1 and 2. Test made with current I_1 (kA)	-	N/A
	Making angels differ approximately 30° between each test		N/A
	Power factor	-	N/A
8.5.8	Acceptability of No. 2 test results		N/A
	a) max. arc voltage (V) did not exceed stated values of 7.5 (Table 6)	-	N/A
	b) fuse-links operated without external effects or damage to the components of the complete fuse		N/A
	c) no permanent arcing, flashover or ejection of dangerous flames		N/A
	d) no damage of fuse components hindering from their further use		N/A
	e) no damage of fuse-link such, that it is difficult or dangerous to replace them		N/A
	f) fuse-link remains in one piece before its removal from the fuse- carrier		N/A



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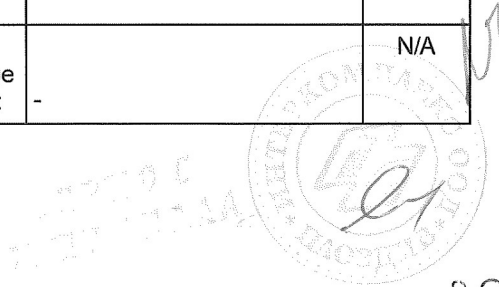
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Clause	Requirement + Test	Result - Remark	Verdict
8.5.5.1	Table 20, test No. 3 for "g" and "a" fuse-links		N/A
	Prospective current for "g" fuse-link I_3 (A) equal to $3,2 I_f$		N/A
	Prospective current for "a" fuse-link I_3 (A) equal to $2,5 k_2 I_n$		N/A
	Power factor		N/A
	Tolerance on current $\pm 20\%$		N/A
	Recovery voltage (V) maintained for 15 s (8.5.5.2)		N/A
8.5.8	Acceptability of No. 3 test results		N/A
	a) max. arc voltage (V) did not exceed stated values of 7.5 (Table 6)		N/A
	b) fuse-links operated without external effects or damage to the components of the complete fuse		N/A
	c) no permanent arcing, flashover or ejection of dangerous flames		N/A
	d) no damage of fuse components hindering from their further use		N/A
	e) no damage of fuse-link such, that it is difficult or dangerous to replace them		N/A
	f) fuse-link remains in one piece before its removal from the fuse- carrier		N/A
	g) resistance (M Ω) between contacts of fuse-links after test not less than 50 000 Ω for the rated voltage of fuse-links to 250 V, 100 000 Ω in all other cases : -		N/A
8.5.5.1	Table 20, test No. 4 for "g" and "a" fuse-links		N/A
	Prospective current for "g" fuse-link I_4 (A) equal to $2,0 I_f$		N/A
	Prospective current for "a" fuse-link I_4 (A) equal to $1,6 k_2 I_n$		N/A
	Power factor		N/A
	Tolerance on current + 20%, - 0%		N/A
	Recovery voltage (V) maintained for 15 s (8.5.5.2) : -		N/A
8.5.8	Acceptability of No. 4 test results		N/A
	a) max. arc voltage (V) did not exceed stated values of 7.5 (Table 6)		N/A
	b) fuse-links operated without external effects or damage to the components of the complete fuse		N/A
	c) no permanent arcing, flashover or ejection of dangerous flames		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	d) no damage of fuse components hindering from their further use		N/A
	e) no damage of fuse-link such, that it is difficult or dangerous to replace them		N/A
	f) fuse-link remains in one piece before its removal from the fuse- carrier		N/A
	g) resistance (M Ω) between contacts of fuse-links after test not less than 50 000 Ω for the rated voltage of fuse-links to 250 V, 100 000 Ω in all other cases :	-	N/A
8.5.5.1	Table 20, test No. 5 for "g" and "a" fuse-links		N/A
	Prospective current for "g" fuse-link I_5 (A) equal to $1,25 I_f$	-	N/A
	Prospective current for "a" fuse-link I_5 (A) equal to $k_2 I_n$	-	N/A
	Power factor	-	N/A
	Tolerance on current + 20%, - 0%		N/A
	Recovery voltage (V) maintained for 15 s (8.5.5.2) :	-	N/A
8.5.8	Acceptability of No. 5 test results		N/A
	a) max. arc voltage (V) did not exceed stated values of 7.5 (Table 6)	-	N/A
	b) fuse-links operated without external effects or damage to the components of the complete fuse		N/A
	c) no permanent arcing, flashover or ejection of dangerous flames		N/A
	d) no damage of fuse components hindering from their further use		N/A
	e) no damage of fuse-link such, that it is difficult or dangerous to replace them		N/A
	f) fuse-link remains in one piece before its removal from the fuse- carrier		N/A
	g) resistance (M Ω) between contacts of fuse-links after test not less than 50 000 Ω for the rated voltage of fuse-links to 250 V, 100 000 Ω in all other cases :	-	N/A
	Breaking-capacity tests on d.c. fuses	DC covered by ac tests because acc. 8.5.5.1 only peak withstand current of a fuse-holder, test no. 1 shall be made.	P



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Clause	Requirement + Test	Result - Remark	Verdict
8.5.5.1	Table 21, d.c.test No. 1 for "g" and "a" fuse-links		N/A
	Rated breaking d.c. capacity of the fuse-links (kA), at voltage (V)	-	-
	Rated current (A) of the fuse-links	-	N/A
	Rated voltage (V) of the fuse-links	-	N/A
	Prospective current I_1 (kA) equal to rated breaking capacity within a tolerance of + 10%, - 0%	-	N/A
	Time constant	-	N/A
	Arcing commences at current (A)	-	-
	Value of recovery voltage: voltage (V) within tolerances 115 + 5%, - 9% of the rated voltage	-	N/A
8.5.8	Acceptability of No. 1 test results		N/A
	a) max. arc voltage (V) did not exceed stated values of 7.5 (Table 6)	-	N/A
	b) fuse-links operated without external effects or damage to the components of the complete fuse		N/A
	c) no permanent arcing, flashover or ejection of dangerous flames		N/A
	d) no damage of fuse components hindering from their further use		N/A
	e) no damage of fuse-link such, that it is difficult or dangerous to replace them		N/A
	f) fuse-link remains in one piece before its removal from the fuse- carrier		N/A
	g) resistance (M Ω) between contacts of fuse-links after test not less than 50 000 Ω for the rated voltage of fuse-links to 250 V, 100 000 Ω in all other cases :	-	N/A
8.5.5.1	Table 21, d.c.test No. 2 for "g" and "a" fuse-links		N/A
	a) During test No. 1 arcing commences at a current $\geq 0,5 I_1$, test No. 2 was not performed		N/A
	b) Prospective current I_2 (A). Test made under conditions which approximate those giving maximum arc energy	-	N/A
	Time constant	-	N/A
	Arcing commences at current (A)	-	-
	Value of recovery voltage: voltage (V) within tolerances 115 + 5%, - 9% of the rated voltage	-	N/A

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Clause	Requirement + Test	Result - Remark	Verdict
8.5.8	Acceptability of No. 2 test results		N/A
	a) max. arc voltage (V) did not exceed stated values of 7.5 (Table 6)	-	N/A
	b) fuse-links operated without external effects or damage to the components of the complete fuse		N/A
	c) no permanent arcing, flashover or ejection of dangerous flames		N/A
	d) no damage of fuse components hindering from their further use		N/A
	e) no damage of fuse-link such, that it is difficult or dangerous to replace them		N/A
	f) fuse-link remains in one piece before its removal from the fuse- carrier		N/A
	g) resistance (MΩ) between contacts of fuse-links after test not less than 50 000 Ω for the rated voltage of fuse-links to 250 V, 100 000 Ω in all other cases :	-	N/A
8.5.5.1	Table 21, d.c.test No. 3 for "g" and "a" fuse-links		N/A
	Conventional fusing current (A)	-	-
	Prospective current I ₃ (A) equal to 3,2 I _f	-	N/A
	Tolerance on current (%) ± 20%	-	N/A
	Time constant	-	N/A
	Arcing commences at current (A)	-	-
	Value of recovery voltage: voltage (V) within tolerances 115 + 5%, - 9% of the rated voltage	-	N/A
8.5.8	Acceptability of No. 3 test results		N/A
	a) max. arc voltage (V) did not exceed stated values of 7.5 (Table 6)	-	N/A
	b) fuse-links operated without external effects or damage to the components of the complete fuse		N/A
	c) no permanent arcing, flashover or ejection of dangerous flames		N/A
	d) no damage of fuse components hindering from their further use		N/A
	e) no damage of fuse-link such, that it is difficult or dangerous to replace them		N/A
	f) fuse-link remains in one piece before its removal from the fuse- carrier		N/A
	g) resistance (MΩ) between contacts of fuse-links after test not less than 50 000 Ω for the rated voltage of fuse-links to 250 V, 100 000 Ω in all other cases :	-	N/A



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Clause	Requirement + Test	Result - Remark	Verdict
8.5.5.1	Table 21, d.c.test No. 4 for "g" and "a" fuse-links		N/A
	Conventional fusing current (A)	-	-
	Prospective current I_4 (A) equal to $2,0 I_f$	-	N/A
	Tolerance on current (%) + 20%, - 0%	-	N/A
	Time constant	-	N/A
	Arcing commences at current (A)	-	-
	Value of recovery voltage: voltage (V) within tolerances 115 + 5%, - 9% of the rated voltage	-	N/A
8.5.8	Acceptability of No. 4 test results		N/A
	a) max. arc voltage (V) did not exceed stated values of 7.5 (Table 6)	-	N/A
	b) fuse-links operated without external effects or damage to the components of the complete fuse		N/A
	c) no permanent arcing, flashover or ejection of dangerous flames		N/A
	d) no damage of fuse components hindering from their further use		N/A
	e) no damage of fuse-link such, that it is difficult or dangerous to replace them		N/A
	f) fuse-link remains in one piece before its removal from the fuse- carrier		N/A
	g) resistance (M Ω) between contacts of fuse-links after test not less than 50 000 Ω for the rated voltage of fuse-links to 250 V, 100 000 Ω in all other cases :	-	N/A
8.5.5.1	Table 21, d.c.test No. 5 for "g" and "a" fuse-links		N/A
	Conventional fusing current (A)	-	-
	Prospective current I_5 (A) equal to $1,25 I_f$	-	N/A
	Tolerance on current (%) + 20%, - 0%	-	N/A
	Time constant	-	N/A
	Arcing commences at current (A)	-	-
	Value of recovery voltage: voltage (V) within tolerances 115 + 5%, - 9% of the rated voltage	-	N/A
8.5.8	Acceptability of No. 5 test results		N/A
	a) max. arc voltage (V) did not exceed stated values of 7.5 (Table 6)	-	N/A
	b) fuse-links operated without external effects or damage to the components of the complete fuse		N/A




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Clause	Requirement + Test	Result - Remark	Verdict
	c) no permanent arcing, flashover or ejection of dangerous flames		N/A
	d) no damage of fuse components hindering from their further use		N/A
	e) no damage of fuse-link such, that it is difficult or dangerous to replace them		N/A
	f) fuse-link remains in one piece before its removal from the fuse- carrier		N/A
	g) resistance (M Ω) between contacts of fuse-links after test not less than 50 000 Ω for the rated voltage of fuse-links to 250 V, 100 000 Ω in all other cases :	-	N/A
8.6	Verification of the cut-off current characteristics		N/A
8.6.2	The values measured did not exceed cut-off characteristics indicated by the manufacturer (see 5.8.1)		N/A
8.7	Verification of I ² t characteristics and overcurrent discrimination		N/A
8.7.2	The operating I ² t values measured not exceed the values indicated by the manufacturer, or		N/A
	those specified in subsequent parts		N/A
	The pre-arcing I ² t values not less than minimum pre-arcing values given by the manufacturer, or		N/A
	they lie within the limits indicated in Table 7		N/A
8.7.3	Verification of compliance for fuse-links at 0,01 s		N/A
	"gG" and "gM" fuse-links at 0,01 s comply with Table 7		N/A
8.7.4	Verification of overcurrent discrimination		N/A
	The discrimination of the fuse-links verified by means of the time-current characteristics and the pre-arcing and operating I ² t values		N/A
8.8	Verification of the degree of protection of enclosures		P
	Degree of protection IP : IP 20		P
	Verification by test under conditions specified in IEC 60529 : Yes		P
8.9	Verification of resistance to heat		P
	No damage impaired by heat during the previous tests (in particular with respect to 8.3, 8.4, 8.5 and 8.10)		P



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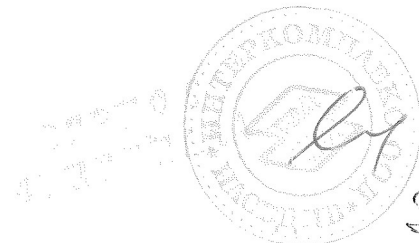


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Clause	Requirement + Test	Result - Remark	Verdict
8.10	Verification of non-deterioration of contacts	The measurement was made at the terminals.	P
8.10.1	Three samples provided with standardized dummy fuse-links of the highest current rating (A) intended to be used in the fuse-holder (see subsequent parts) :	Part 2 fuse system F	P
8.10.2	Test current (A) for load period	40A	P
	Duration (s) of load period	1h * 0,25 = 15min = 900s	P
	Duration (s) of no-load period	1h * 0,10 = 6min = 360s	P
	a) Test of 250 cycles, measured values not exceed the limits given in subsequent parts		P
	b) Test of 750 cycles, measured values not exceed the limits given in subsequent parts		N/A
8.11	Mechanical and miscellaneous tests		P
8.11.1	Mechanical strength		P
	Mechanical characteristics of fuse and its parts judged in the context of normal handling and mounting as well as with results shown after breaking-capacity test (see 8.5), if not otherwise specified in the subsequent parts		P
8.11.2	Miscellaneous tests		P
8.11.2.1	Verification of freedom from season cracking		N/A
	Current-carrying parts made of rolled copper alloy with less than 83% copper content and with all grease removed, placed for 4 h in test cabinet having temperature of (30 ± 10) °C		N/A
	After this, samples placed for 8 h in test cabinet, on the bottom of which is ammonium chloride solution having pH value 10 - 11		N/A
	After test no cracks visible to the unaided eye		N/A
8.11.2.2	Verification of resistance to abnormal heat and fire		P
8.11.2.2.1	Parts of insulating material, except ceramic, have a limited duration of burning without spreading fire by flames or burning droplets or glowing particles falling from the specimen		P
8.11.2.2.5	Glow-wire test: (650 ± 10) °C		P
	Parts of insulating materials not necessary to retain current-carrying parts in position even though they are in contact with them, made the glow-wire test (650 ± 10) °C		P



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Clause	Requirement + Test	Result - Remark	Verdict
	No visible flame, or burning or glowing of the specimen extinguish within max. (s) after removal of the glow-wire. Limit (30 ± 1) s	Extinguishing within 3s after removal of the glow-wire	P
	No burning of the tissue paper		P
	No scorching of the pinewood board		P
	Glow-wire test: (960 ± 10) °C		P
	Parts of insulating materials necessary to retain current-carrying parts and parts of the earthing circuit, if any, in position , made the glow-wire test (960 ± 10) °C		P
	No visible flame, or burning or glowing of the specimen extinguish within max. (s) after removal of the glow-wire. Limit (30 ± 1) s	Extinguishing within 3s after removal of the glow-wire	P
	No burning of the tissue paper		P
	No scorching of the pinewood board		P
8.11.2.3	Verification of resistance to rusting		P
	Tested parts after degreasing (10 min in specified solution) placed for 10 min in air saturated with moisture and after that dried 10 min in an ambient temperature (100 ± 5) °C		P
	Surface of tested parts show no signs of rust		P

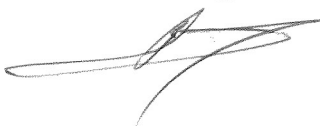
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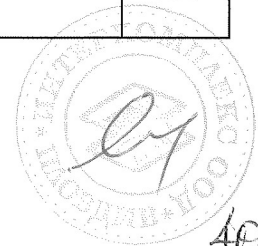
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Clause	Requirement + Test	Result - Remark	Verdict

Annex E	Particular requirements for fuse-bases with screwless-type terminals for external cooper conductors		
E.6	MARKING		N/A
	In addition to cl.6, following requirement apply :	-	N/A
	universal terminals – no marking		N/A
	non-universal terminals	-	N/A
	Markings appeared on fuse-base or on the smallest package or in technical information		N/A
	Marking indicating the length of insulation to be removed before insertion of the conductor into terminal is shown on the fuse-base		N/A
	Maximum number of conductors which may be clamped		N/A
E.7.	STANDARD CONDITIONS FOR CONSTRUCTION		N/A
	Clause 7 applies with the following modifications ... :	-	N/A
E.7.1	Fixed connections including terminals		N/A
	Terminals resisted the mechanical loads that occur when equipment is used in accordance with its intended purpose		N/A
	Connection or disconnection of conductors are made		N/A
	- by the use of general purpose tool or by convenient device integral with terminal		N/A
	- by simple insertion (for rigid conductors). For disconnection of conductors an operation other than a pull only is necessary		N/A
	Universal terminals accepted rigid (solid or stranded) and flexible unprepared conductors		N/A
	Non-universal terminals accepted the types of conductors declared by the manufacturer		N/A
E.7.2	Dimensions of connectable conductors are given in table E.1		N/A
E.7.3	Nominal cross-sections to be clamped are defined in table E.2		N/A
E.7.4	Insertion and disconnecting of conductors are made in accordance with the manufacturers instructions		N/A
E.7.5	Design and construction of terminals		N/A
	Terminals are designed and constructed so that.... :	-	N/A
	- each conductor is clamped individually		N/A
	- during operation of connection or disconnection conductors can be connected or disconnected either at the same time or separately		N/A



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Clause	Requirement + Test	Result - Remark	Verdict
	- inadequate insertion of the conductor is avoided		N/A
	It is possible to clamp securely any number of conductors up to maximum provided for		N/A
E.7.6	Resistance to ageing		N/A
	Terminals are resistant to ageing		N/A
E.8	TESTS		N/A
E.8.1	Test of reliability of terminals		N/A
E.8.1.1	Reliability of screwless system		N/A
	smallest diameter of conductor (mm) : -		-
	Connection and subsequent disconnection are made 5 times		N/A
	largest diameter of conductor (mm) : -		-
	Connection and subsequent disconnection are made 5 times		N/A
	After tests the terminal not be damaged in such a way as to impair its further use		N/A
E.8.1.2	Test of reliability of connection		N/A
	Conductor is either pushed as far as possible into the terminal or is inserted so that adequate connection is obvious		N/A
	After test no wire of conductor escaped outside the terminal		N/A
E.8.2	Tests of reliability of terminals for external conductors: mechanical strength		N/A
	Pull force (N) : -		-
	minimum and maximum cross-sectional area (mm ²): -		-
	Pull is applied without jerks for 1 min		N/A
	During test the conductor not slip out of the terminal		N/A
E.8.3	Cycling test		N/A
	new copper conductors with cross section according to table 17 (mm ²) : -		-
	number of samples : -		N/A
	rated current of the fuse-base (A) : -		N/A
	192 temperature cycles (duration of each cycle is approximately 1h)		N/A
	Air temperature in the cabinet is raised to 40°C in approximately 20 min. It is maintained of this value for approximately 10 min		N/A

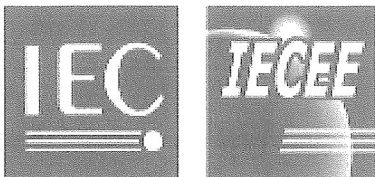
2023.03.07



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IEC 60269-1			
Clause	Requirement + Test	Result - Remark	Verdict

	Samples are then allowed to cool down in approximately 20 min to temperature of approximately 30°C. They are kept at this temperature for approximately 10 min.		N/A
	for measuring the voltage drop, allowed to cool down further, to temperature of 20°C		N/A
	Maximum voltage drop not exceed smaller of two following values :	-	N/A
	- either 22,5 mV :	-	N/A
	- or 1,5 times value measured after 24 th cycle :	-	N/A
	After test an inspection with naked eye, by normal or corrected vision, show no changes evidently impairing further use, such as cracks, deformations or the like		N/A

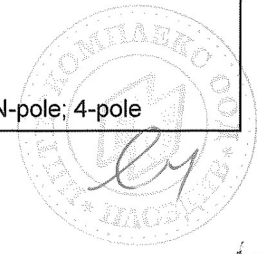


Test Report issued under the responsibility of:



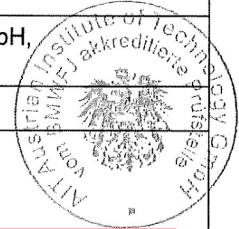
TEST REPORT IEC 60269-2 Low-voltage fuses Part 2: Supplementary requirements for fuses for use by authorized persons (fuses mainly for industrial application) - Examples of standardized systems of fuses A to J	
Report Number	2.03.02619.1.0/DF-S.A/60269-2/PMX-10
Date of issue	16.01.2014
Total number of pages	75
Applicant's name	DF S.A
Address	Silici, 67-69 08940 CORNELLA DE LLOBREGAT (Barcelona) SPAIN
Test specification:	
Standard	IEC 60269-2 (Fourth edition): 2010 see also IEC 60269 – 1:2006 (fourth edition)+A1:2009
Test procedure	CB Scheme
Non-standard test method	N/A
Test Report Form No.	IEC60269_2B
Test Report Form(s) Originator	EZU
Master TRF	Dated 2011-04
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Test item description	Low-voltage fuse-holders for cylindrical fuse-links
Trade Mark	
Manufacturer	DF S.A
Model/Type reference	PMX-10 (For 10x38 fuse-links)
Ratings	690V a.c. and 24V d.c./ 32A/ 50Hz and DC/ 1-pole; N-pole; 1+N-pole; 2-pole; 3-pole; 3+N-pole; 4-pole

0.77



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Testing procedure and testing location:		
<input checked="" type="checkbox"/>	CB Testing Laboratory:	
Testing location/ address		AIT Austrian Institute of Technology GmbH, A-1210, Vienna, Giefinggase 2
<input type="checkbox"/>	Associated CB Laboratory:	
Testing location/ address		---
Tested by (name + signature)		Raheb Hanna, MSc
Approved by (name + signature)		Ing.J.Ainetter
<input type="checkbox"/>	Testing procedure: TMP	
Testing location/ address		---
Tested by (name + signature)		---
Approved by (name + signature)		---
<input type="checkbox"/>	Testing procedure: WMT	
Testing location/ address		---
Tested by (name + signature)		---
Witnessed by (name + signature)		---
Approved by (name + signature)		---
<input type="checkbox"/>	Testing procedure: SMT	
Testing location/ address		---
Tested by (name + signature)		---
Approved by (name + signature)		---
Supervised by (name + signature)		---
<input type="checkbox"/>	Testing procedure: RMT	
Testing location/ address		---
Tested by (name + signature)		---
Approved by (name + signature)		---
Supervised by (name + signature)		---



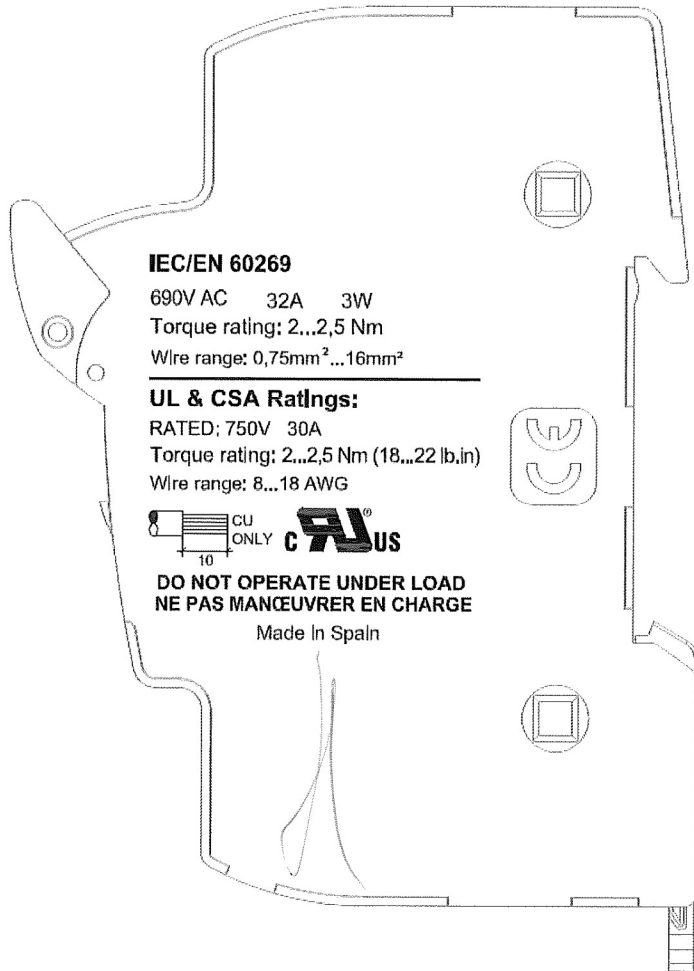
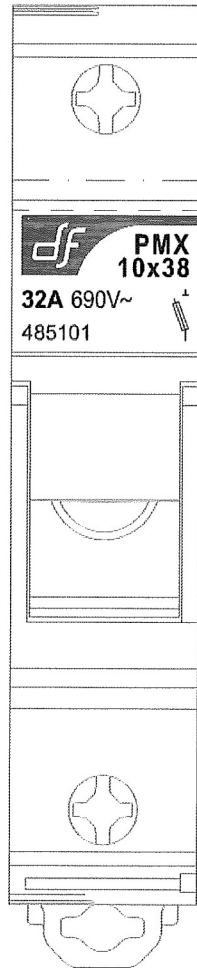
На основание чл.36а ал.3 от ЗОП

List of Attachments (including a total number of pages in each attachment): ---	
Summary of testing:	
Tests performed (name of test and test clause): A type test was performed according to <ul style="list-style-type: none"> ▪ Table 612 of IEC 60269-2 fulfilling the requirements of both of the following editions of IEC 60269-2: <ul style="list-style-type: none"> ▪ IEC 60269-2:2010, Edition 4.0 and ▪ IEC 60269-2:2013, Edition 5.0 	Testing location: AIT Austrian Institute of Technology GmbH Business Unit Electric Energy Systems Power Service Center Giefinggasse 2 1210 Vienna
The low-voltage fuse-holders for cylindrical fuse-links <ul style="list-style-type: none"> ▪ PMX-10 have passed the type test successfully.	The AIT Austrian Institute of Technology GmbH is a recognized CB Testing Laboratory under the responsibility of OVE as the National Certification Body.
Summary of compliance with National Differences ---	

2020
11/11/2020



Copy of marking plate



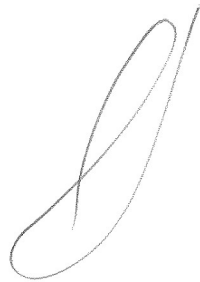
The catalogue number (and voltage as appropriate) changes according to the specific version.



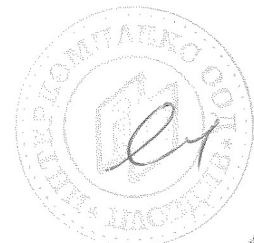
Remark for use of the fuse-holders:

The maximum power dissipation of the fuse-links suitable for use with the fuse-holders is 3W.
Fuse-links with rated voltage 690V of the appropriate size (10x38) may have a power dissipation exceeding this value.

It has to be taken into consideration that the maximum power dissipation of
3W
will not be exceeded for use in uninterrupted duty.



6. 3. 2019



Remark to test performance:

The low-voltage fuse-holders for cylindrical fuse-links PMX-10 single phase and multi-pole are identical in the type of construction, dimensions and in any other manner, except marking.
(Multi-pole units can be made of connection accessories)

Some tests are covered by performing the appropriate tests under more severe conditions.

Catalogue number	485101	485102	485103	485104	485105	485106	485107	
Test according to subclause	1-pole	N-pole	1+N-pole	2-pole	3-pole	3+N-pole	4-pole	
8.5.5.1	Peak withstand current of a fuse-base	Tested	Covered	Covered	Tested	Covered	Covered	Tested
8.9	Resistance to heat	Tested	Covered	Covered	Tested	Covered	Covered	Tested
8.10	Non-deterioration of contacts	Covered	Tested	Covered	Tested	Covered	Tested	Covered
8.11.1.1	Mechanical strength of fuse-holders	Tested	Covered	Covered	Tested	Covered	Covered	Covered

Auxiliary components:

Cat. No.	485108	485109	485110	485111	485112	485113	485114	485116
	1-pole with indicator	1+N-pole with indicator	2-pole with indicator	3-pole with indicator	3+N-pole with indicator	4-pole with indicator	1-pole with 24 VDC indicator	2-pole with 24 VDC indicator

Auxiliary components are not part of the type test but PMX10 with indicator for 690Va.c and 24Vd.c. were tested of functioning. Furthermore they were tested 1h at 1,05*Un to check, if the diode or the resistor of the indicator were still working over a longer time.

Test item particulars:	
Classification of installation and use.....:	Acc. to IEC 60269-1 and IEC 60269-2
Supply Connection.....:	Acc. to IEC 60269-2
Fuse system.....:	F
Possible test case verdicts:	
- test case does not apply to the test object.....:	N/A
- test object does meet the requirement.....:	P (Pass)
- test object does not meet the requirement.....:	F (Fail)
Testing:	
Date of receipt of test item.....:	04/2013
Date (s) of performance of tests.....:	04/2013 to 10/2013
General remarks:	
<p>The test results presented in this report relate only to the object tested. This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory. "(see Enclosure #)" refers to additional information appended to the report. "(see appended table)" refers to a table appended to the report.</p>	
Throughout this report a <input checked="" type="checkbox"/> comma / <input type="checkbox"/> point is used as the decimal separator.	
Manufacturer's Declaration per sub-clause 6.2.5 of IEC 60269-2:	
The application for obtaining a CB Test Certificate includes more than one factory location and a declaration from the Manufacturer stating that the sample(s) submitted for evaluation is (are) representative of the products from each factory has been provided.....:	
	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> Not applicable
When differences exist; they shall be identified in the General product information section.	
Name and address of factory (ies).....:	DF S.A Silici, 67-69 08940 CORNELLA DE LLOBREGAT (Barcelona) SPAIN

TRF No. IEC60269_2B



12/03/2013



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General product information:

Low-voltage fuse-holders for cylindrical fuse-links

for use by authorized persons

type

PMX-10

