

CN16-22-7D for use with TRA3000 C, EXT-TRA3000 C-SHORT and PS3 Power Supply PN: 105841

Revised: 14.May 2012

1 General Information

To generator | CN16-22-7D | To EUT



1.1 Technical data

Serial impedance	100 Ohm	± 5%
Serial capacitance	0.047uF	± 5%
Serial capacitance	0.1uF	± 5%
Maximum Test Voltage	150V	± 10%
Standard	IEC60255-22-7	

For further information see „Verification Protocol“.

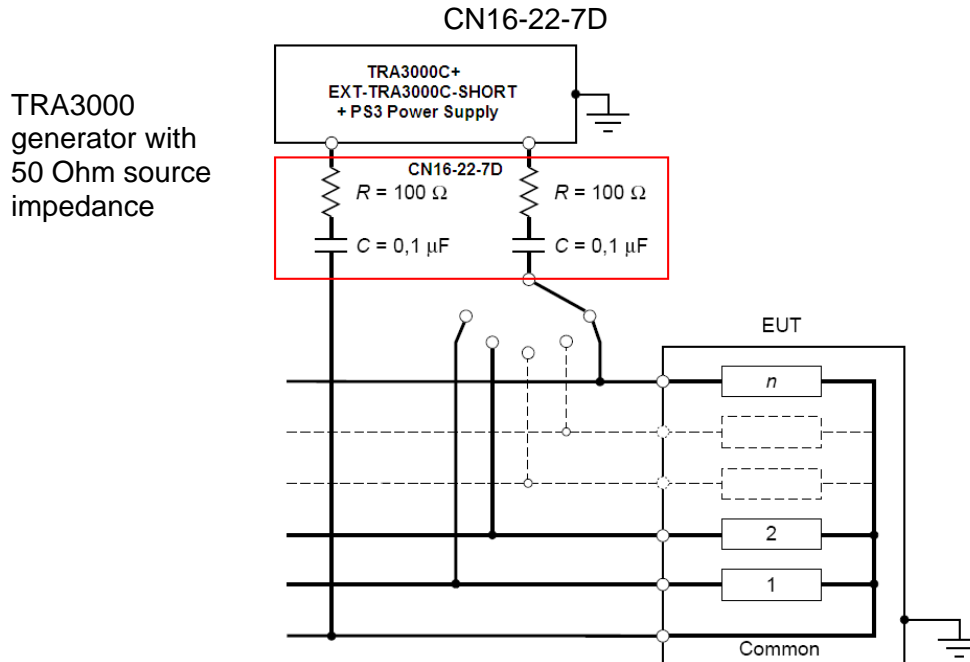
2 Application of the CN16-22-7D:

- The coupler is used together with the TRA3000C or EXT-TRA3000C-SHORT and PS3 Power supply to perform Common mode tests according to IEC60255-22-7 for Measuring relays and Protection equipment in power sub stations.
- A voltage source (PS3) used to generate the 300V output shall be connected to the CN16-22-7C black and blue terminals..
- For each of the voltages of Class A and Class B the level is set on TRA3000 and generated by EXT-TRA3000C-SHORT.

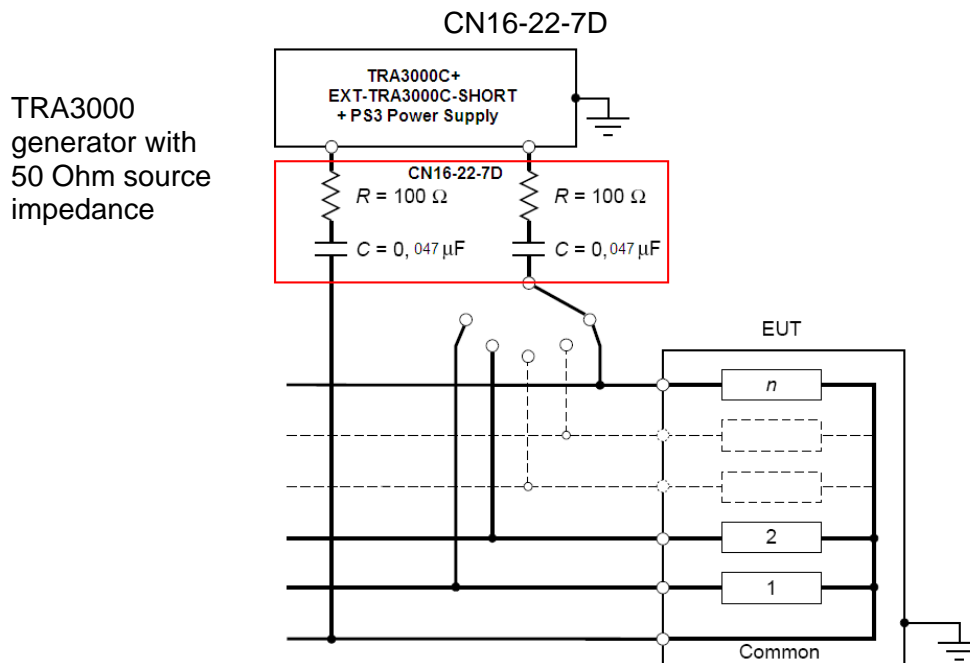
Test level	Differential mode tests			Common mode tests		
	Open circuit test voltage ± 10 % V r.m.s.	Coupling network		Open circuit test voltage ± 10 % V r.m.s.	Coupling network	
		R ± 5 % Ω	C ± 5 % μF		R ± 5 % Ω	C ± 5 % μF
Class A	150	100	0,1	300	220	0,47
Class B	100	100	0,047	300	220	0,47

2.1 Application of the CN16-22-7D:

Setup diagram for Differential mode tests according to Figure 2 of IEC60255-22-7. Test voltage is 150V.



Setup diagram for Differential mode tests according to Figure 3 of IEC60255-22-7. Test voltage is 100V.



Connections between the CN16-22-7D and the EUT should be less than 2m.

3 Standard accessory, dimensions

3.1 Included articles, dimensions

CN16-22-7D (Article No. 105841)

Mechanical Dimensions

Unit Height: B
Length: 28 cm
Width: 18 cm
Height: 11 cm
Net Weight: 3 kg

Included Articles

According to STL-Variante 20, STL-Version 1

Qty	PN	Description
1	104801	Brochure TRANSIENT 3000
1	104802	Standard calibration certificate
1	103191	Standard accessories pack
1	103194	CD-UM-IN-ALL includes all User Manuals and Instruction sheets of all EMC PARTNER AG sales products.

3.2 Standard Accessories

Accessories to CN16-22-7D (Article No. 105841)

Qty	PN	Description	Weight (kg)	Length (cm)	Width (cm)	Height (cm)
1	100261	MC protected banana plug, yellow/green	0	0	0	0
1	100280	MC protected banana plug, yellow	0	0	0	0
2	100283	MC protected banana plug, red	0	0	0	0
2	100284	MC bridge black	0	3.8	2.8	0.8
1	103026	Plastic pack small	0.01	25	15	0
1	103063	MC safety cable with protected banana plug, blue	0	25	0	0
1	103067	MC safety cable with protected banana plug, black	0	25	0	0
1	103089	MC safety cable with protected banana plug, yellow/green	0	50	0	0

4 Recycling / Disposal

4.1 RoHS directive 2002/95/EG

The CN16-22-7D complies with the directive 2002/95/EG (RoHS - Restriction of certain Hazardous Substances).

From December 2005, all EMC Partner products either hand soldered or by machine are produced using lead-free solder.

4.2 WEEE directive 2002/96/EG

The EMC Partner CN16-22-7D, is exempted from the directive 2002/96/EG (WEEE) under category 9.

The product should be recycled through a professional organisation with appropriate experience for the disposal and recycling of electronic products. EMC Partner are also available to help with questions relating to the recycling of this product.

4.3 Information for dismantling



Remove always power cord fist.

There is no special danger involved in dismantling the CN16-22-7D.

4.4 Parts which can be recycled

The CN16-22-7D contains parts made from steel, aluminium, PVC, two-component sealing compound. The impulse capacitors are filled with non-poisonous mineral oil. The various parts can be separated and recycled.

4.5 Parts which can not be recycled

All parts in the CN16-22-7D can be recycled.

5 Service Information

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Montageanleitung

Sicherheitsverbindungsleitungen SLK425-K, SLK425-K Sil, SLK410-K Sil

Bei der Benutzung von anderen als von MC[®] angegebenen Einzelteilen und Werkzeugen, kann bei der Selbstkonfektionierung weder die Sicherheit, noch die Einhaltung der technischen Daten gewährleistet werden. Silikonleitungen sollten nach Möglichkeit konfektioniert bei MC[®] bezogen werden.

Assembly Instructions

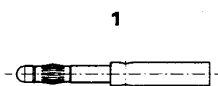
Safety Connecting Leads SLK425-K, SLK425-K Sil, SLK410-K Sil

The use of parts and tools other than those stated by MC[®] can have an effect on the safety and quality of the do-it-yourself leads and therefore the technical data cannot be guaranteed. When possible, leads made with silicon cable should be ordered ready-made from MC[®].

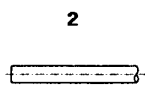
Instructions de montage

Cordons de sécurité SLK425-K, SLK425-K Sil, SLK410-K Sil

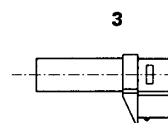
Ni la sécurité, ni les données techniques ne sont garanties, si lors de la conception personnelle, des pièces et outillages autre que MC[®] sont utilisés. Les cordons en silicone devront dans la mesure du possible être acheté, confectionné par MC[®].



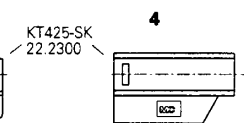
LS425-SK
22.1022



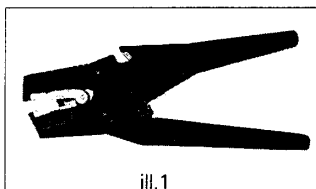
HK2,5-D HK2,5-Sil
22.0130 22.0080
HK1 Sil/1000
22.0170



VI-KT425-SK
22.5620



HI-KT425-SK
22.5630



ill. 1

Notwendiges Werkzeug

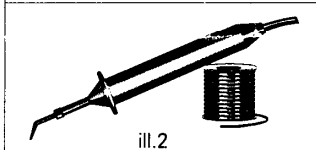
(ill. 1)
 Abisolierzange "Stripax"
 Bestellnr. 25.0015

Tools required

(ill. 1)
 Cable stripper "Stripax"
 Order No. 25.0015

Outillage nécessaire

(ill. 1)
 Pince à dénuder "Stripax"
 No. de Cde 25.0015

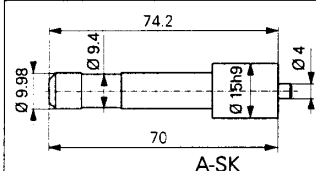


ill. 2

(ill. 2)
 - LötKolben 60 VA
 - Lötdraht
 z.B. Elsold Ø 1,5 mm
 DIN 8516 (L-Sn60PbCuZ)

(ill. 2)
 - Soldering iron 60 VA
 - Solder
 e.g. Elsold Ø 1,5 mm
 DIN 8516 (L-Sn60PbCuZ)

(ill. 2)
 - Fers à souder 60 VA
 - Fil de soudure
 p.e. Elsod Ø 1,5 mm
 DIN 8516 (L-Sn60PbCuZ)

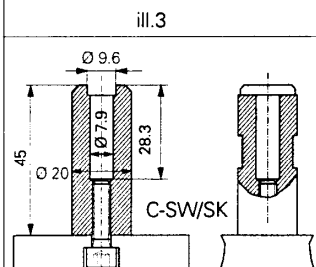


ill. 3

(ill. 3)
 Hilfswerkzeug A-SK
 Empfohlenes Material:
 Stahl.

(ill. 3)
 Auxiliary tool A-SK
 Recommended material:
 Steel.

(ill. 3)
 L'outil A-SK
 Matériel recommandé:
 Acier.

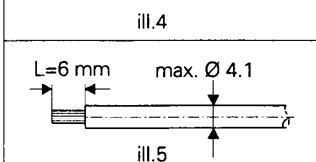


ill. 4

(ill. 4)
 Hilfswerkzeug C-SW/SK
 Empfohlenes Material:
 Messing.

(ill. 4)
 Auxiliary tool C-SW/SK
 Recommended material:
 Brass.

(ill. 4)
 L'outil C-SW/SK
 Matériel recommandé:
 Laiton.



ill. 5

Vorbereitung der Leitung

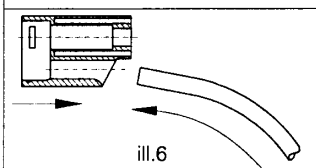
(ill. 5)
 Leitung 2 auf gewünschte
 Nennlänge ablängen.

Preparation of the cable

(ill. 5)
 Cut the cable 2 to the
 desired nominal length

Préparation du câble

(ill. 5)
 Couper le câble 2 à la
 longueur prévue.

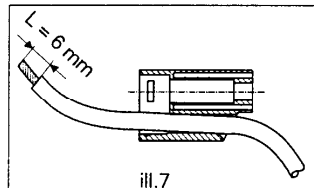


ill. 6

(ill. 6)
 Leitung 2 durch Isolierteil 4
 schieben.

(ill. 6)
 Feed cable 2 through
 insulator 4.

(ill. 6)
 Glisser le câble 2 à travers
 l'isolant 4.

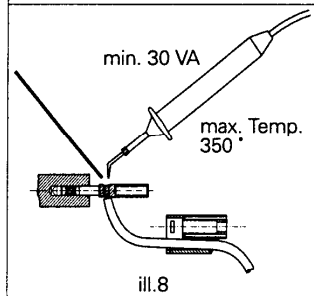


ill. 7

(ILL. 7)
Leitung mittels Abisolierzange
auf Länge L = 6 mm
abisolieren.

(ILL. 7)
Strip cable insulation to
length L = 6 mm with cable
stripper.

(ILL. 7)
Dénuder le câble sur la
longueur L = 6 mm avec la
pince à dénuder.



ill. 8

(ILL. 8)
Leitung 2 in Stecker 1 löten.
Beim Löten darf der Stecker
wegen dem Kunststoffkopf
nicht zu heiss werden.
Ideale Löttemperatur:
ca. +350° C.

(ILL. 8)
Solder cable 2 in plug 1.
When soldering the plug
should not get too hot
because of the plastic head.
Ideal soldering temperature:
approx. + 350° C.

(ILL. 8)
Souder le câble 2 dans la
fiche 1. Lors de la soudure la
température ne doit pas être
excessive à cause de la tête
en plastique. Température
idéale de soudure: env. +350°

Stecker und Lötstelle müssen
frei von austretendem Lötzinn
sein.

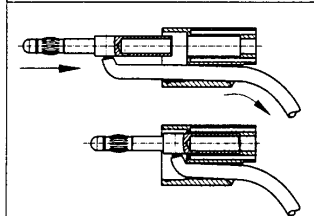
Plug and solder area should
be free from excess solder.

La fiche et l'endroit de
soudure doivent être
exempt de coulure de
soudure.

MC[®]-Empfehlung:
Ein Block mit Bohrung
Ø 4,2 mm hält den Stecker 1
beim Löten fest.

MC[®]-Recommendation:
For soldering purposes a
block with a drilled hole
Ø 4,2 mm should be used to
hold the plug 1 in position.

Recommandation MC[®]:
Utiliser un bloc avec un
perçage Ø 4,2 mm pour
maintenir la fiche 1 lors de la
soudure.

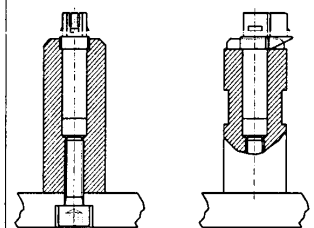


ill. 9

(ILL. 9)
Stecker 1 zurück in Isolierteil 4
einschieben und gleichzeitig
die Leitung leicht nachziehen.

(ILL. 9)
Push plug 1 back into insu-
lator 4 and at the same time
take-up the wire.

ILL. 9)
Insérer la fiche 1 dans
l'isolant 4 et en même temps
tirer légèrement le câble.

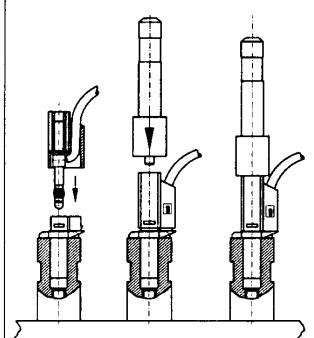


ill. 10

(ILL. 10)
Isolierteil 3 in Hilfswerkzeug
C-SW/SK einlegen.

(ILL. 10)
Place insulator 3 into the
auxiliary tool C-SW/SK.

ILL. 10)
Mettre l'isolant 3 dans l'outil
C-SW/SK.

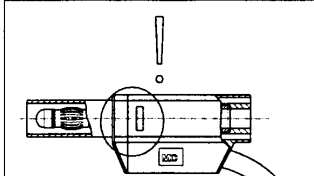


ill. 11

(ILL. 11)
Isolierteil 4 (+2+1) in Isolier-
teil 3 einschieben und mittels
Hilfswerkzeug A-SK und einer
Tischbohrmaschine oder Knie-
hebelpresse bis zum Einras-
ten einpressen.

(ILL. 11)
Insert insulator 4 (+2+1)
into insulator 3 and with
auxiliary tool A-SK mounted
in a lever press or bench
drilling machine, press and
snap into position.

(ILL. 11)
Insérer l'isolant 4 (+2+1) dans
l'isolant 3 et presser jusqu'au
point d'arrêt avec l'outil A-SK
à l'aide d'une perceuse ou
d'une petite presse.



ill. 12

ILL. 12)
Einrasten kontrollieren.

(ILL. 12)
Control snap in.

(ILL. 12)
Contrôler l'enclenchement

MA 105

Änderungen vorbehalten/Subject to alterations/Modifications sous réserve.
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