

Decoupling set DC-S17CL for voltage spike testing

Revised: 30.August 2011

1 General information DC-S17CL

The de-coupling set is used for voltage spike tests to protect the supply sources or auxiliary equipment.

The DC-S17CL can be used for testing to the following standards:

DO-160 Section 17

MIL-STD-461 test CS106

EURO Fighter SPE-J-000-E-1000 test CS-EFA-4



The DC-S17CL consists of: 2 de-coupling boxes "PARALLEL INJECTION" and two boxes "SERIAL INJECTION".

The set covers the frequency range: d.c., 50, 60, 400 Hz.

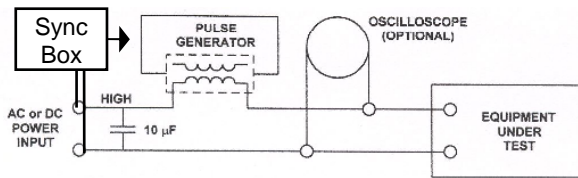
1.1 Technical data

"PARALLEL INJECTION" Module	2 boxes	De-coupling at parallel injection
Maximum rated current	10A	
Voltage	Max 230V dc, 50, 60Hz depending on the protection path	1 box 1.8mH
Voltage	Max 115V 400Hz	2 boxes parallel 0.9mH
SURGE 1.2/50 μ s	6000V	

"SERIAL INJECTION" Modules	2 boxes 2 x 10 μ F per box	De-coupling at serial injection
Voltage	Max 230V dc, 50, 60Hz	Max. 115V 400Hz
Single phase	1 x 10 μ F	
Three phase	3 x 10 μ F	

2 Application of the DC-S17CL

2.1 Test set-up „serial injection with CN-MIG-BT”



NOTE: FOR EQUIPMENTS DRAWING HIGH CURRENTS, ALTERNATE TEST METHODS MAY BE REQUIRED (To avoid saturating transformer etc.).

Figure 17-2 Voltage Spike Test Setup

MIG2000-6 De-coupling “SERIAL INJECTION”



The power cable must be wired three times onto the coupler similar the calibration loop

Coupling CN-BT

Sync Adapter (option)



To comply with CS-EFA-4 testing a „Synch Adapter“ must be installed between decoupling “SERIAL INJECTION” and power source.

2.2 Test set-up „parallel injection“

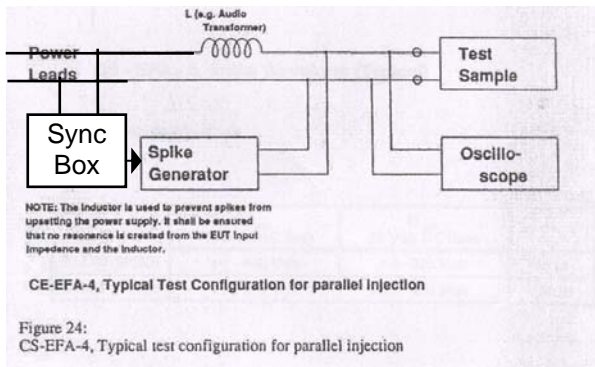
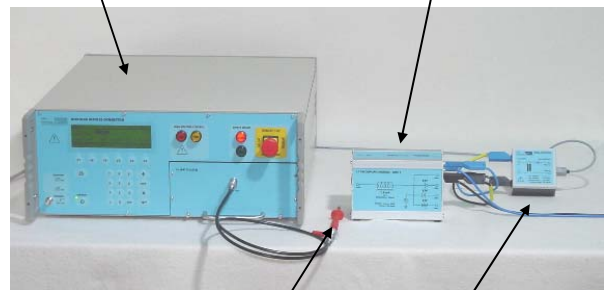


Figure 24: CS-EFA-4, Typical test configuration for parallel injection

MIG2000-6 De-coupling “PARALLEL INJECTION”



Test Tip

Sync Adapter (option)

Special units available on request.



To comply with CS-EFA-4 testing a „Synch Adapter“ must be installed between decoupling “PARALLEL INJECTION” and power source.

3 Standard accessory, dimensions

3.1 Included articles, dimensions

DC-S17CL (Article No. 103674)

Mechanical Dimensions

Unit Height: B
Length: 0 cm
Width: 0 cm
Height: 0 cm
Net Weight: 7 kg

Included Articles

According to STL-Variante 20, STL-Version 1

Qty	PN	Description
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.
1	104802	Standard calibration report
1	104839	Broschure Military Test System

3.2 Standard accessories:

Accessories to DC-S17CL (Article No. 103674)

According to OP-Variante 1, OP-Version 1

Qty	PN	Description	Weight (kg)	Length (cm)	Width (cm)	Height (cm)
4	100279	MC protected banana plug, blue	0	0	0	0
6	100281	MC protected banana plug, black	0	0	0	0
4	103101	MC earth cable with banana plug 90°	0	75	0	0
4	103171	MC safety cable with protected banana plug, black	0	0	0	0
4	103180	MC safety cable with protected banana plug, blue	0	15	0	0

4 Recycling / Disposal

4.1 RoHS directive 2002/95/EG

The DC-S17CL 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 DC-S17CL, 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 DC-S17CL.

4.4 Parts which can be recycled

The DC-S17CL 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 DC-S17CL can be recycled.

5 Service Information

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