

PCI - Short Pulse Decoupling boxes

The decoupling boxes are used for the conducted susceptibility testing according to MIL-STD-188-125 short pulse generator.

The aim of the decoupling boxes is to protect the connected auxiliary devices from the injected current pulse during PCI verification tests. The plastic cabinets of the decoupling boxes are particularly rugged and safe to use.



SPECIFICATIONS

| Type | DS3 | DL3 |
|-------------------------------|---|-----------------|
| Standard | MIL-STD188-125-1 and -2 / Pulse Current Injection | |
| Type of signal | Signal | Main supply |
| Nominal voltage (DC - 400 Hz) | 230 V (voltage between ground and phase) | |
| Nominal current (DC - 400 Hz) | 10 A | 60 A |
| Number of lines | 4 | 2 |
| Peak voltage (20/500 ns) | Up to 80 kV (to earth) | |
| Maximum current (20/500 ns) | Up to 5 kA | |
| Signal cut-off frequency | 3 kHz (-3 dB) | |
| Output connectors | Connecting bars with M6 screws | |
| Dimensions (L x W x H) | 56 x 50 x 25 cm | 56 x 50 x 25 cm |
| Weight | 17 kg | 14.5 kg |

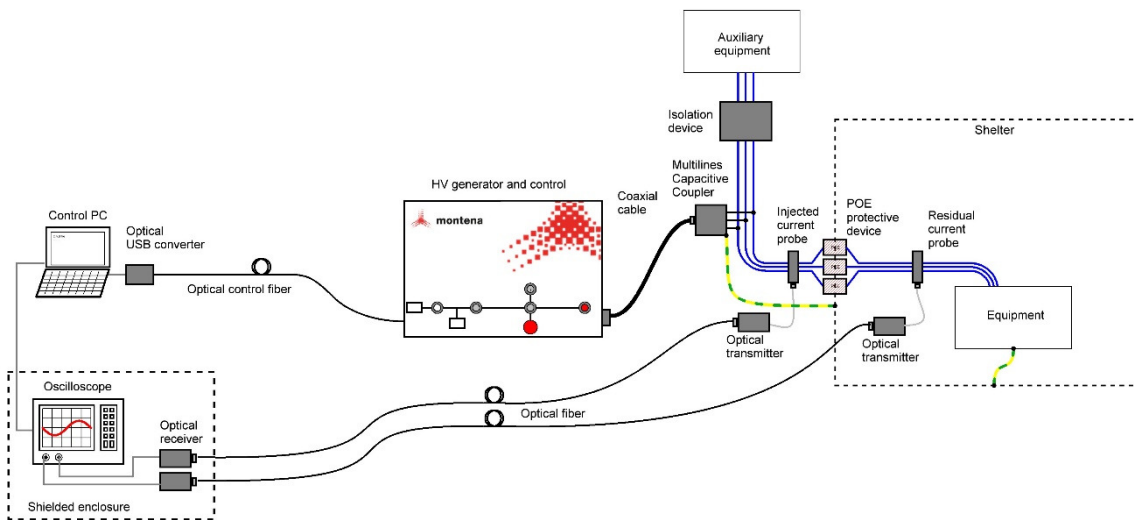
Typical test setup

Common mode verification setup

The pulse generator delivers the high current pulses into the cable under test in a common mode through the inductive couplers. An insulation device (decoupling box) protects the external auxiliary equipment.

A current sensor measures the injected current pulse before the protecting devices and another probe measures the residual current behind the protecting devices.

In order to ensure a correct measurement, the current probes are connected with fiber optic links and the measurement equipment is installed in a shielded enclosure.



Ordering information

| TYPE | ECCN | DESCRIPTION |
|------|-------|--|
| DS3 | EAR99 | MIL-STD 188-125, E1 (early time) decoupling box, 4 lines, 10 A |
| DL3 | EAR99 | MIL-STD 188-125, E1 (early time) decoupling box, 2 lines, 60 A |