

# Pulse generator for automotive tests

The PESD-12K-EQ-IC09 generator is designed for testing the immunity of automotive equipment to disturbances caused by high voltage ignition systems, according to the Renault 36-00-808 /--M product specification. The test applies to equipment and its associated harness installed in the engine compartment and passing at less than 200 mm from the high voltage ignition system.



## SPECIFICATIONS

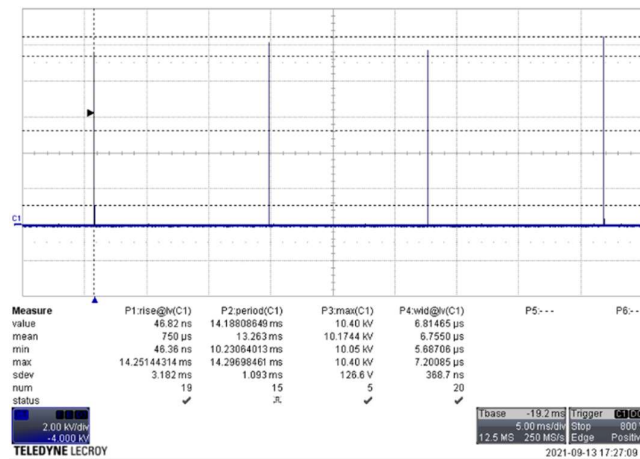
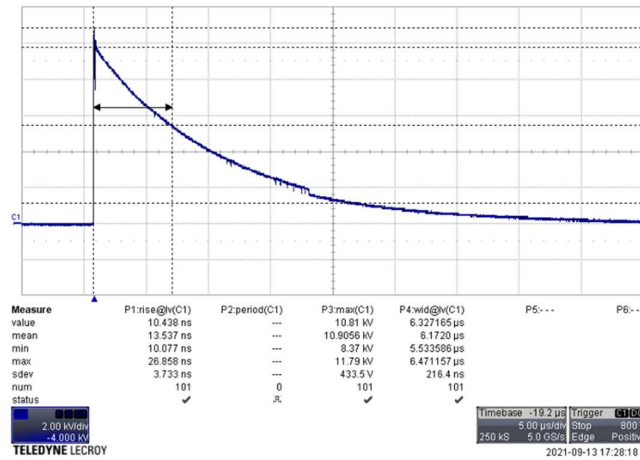
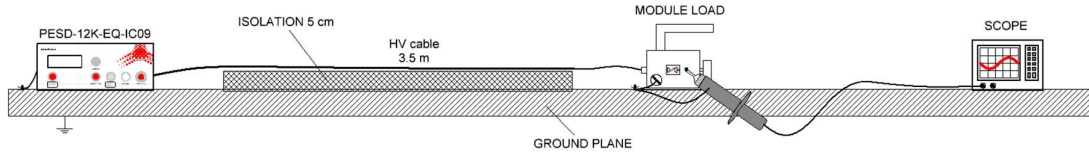
Type	<b>PESD-12K-EQ-IC09</b>
Standard	Renault 36-00-808 /--M , paragraph EQ/IC 09
Generator type	direct discharge with external spark gap
Output voltage	0 - 12 kV, positive and negative polarities
Pulse rise time (10 - 90 %)	5 - 40 ns
Pulse duration (50 - 50 %)	≥ 5 μs
Pulse repetition rate	≥ 5 ms
HV cable length	3.5 m
HV cable connector	Lemo
Load module spark gap	adjustable from 0.5 to 5 mm
Load module discharge resistor	15 kΩ
Test duration	adjustable
Power rating	85 - 264 Vac / 50 - 60 Hz / 150 VA
Remote control interface	RS232 and USB
Electrical safety	complies with EN61010-1. Safety circuit loop 24 Vdc / 500 mA max
Storage / operation temperature	-10 to +60 °C / 0 to 45 °C
Dimensions	56 x 45 x 19 cm (L x W x H)
Weight	16 kg

## Ordering information

TYPE	DESCRIPTION
<b>PESD-12K-EQ-IC09</b>	Pulse generator according to Renault 36-00-808 /--M, para. EQ/IC 09

## Typical calibration setup

Montena's spark discharge&load module is connected to the high voltage generator through the supplied 3.5 meters long HV cable. A high voltage probe connected to an oscilloscope measures the pulse waveform on the spark gap switch.



	TARGET VALUE	MEASURED (TYP.)
Pulse amplitude	+10 kV	10.25 kV
Pulse duration (FWHM)	≥ 5 µs	6.8 µs
Pulse repetition rate	≥ 5 ms	13.3 ms