

ESD NX30

ELECTROSTATIC DISCHARGE SIMULATOR UP TO 30 KV



FOR TESTS ACCORDING TO ...

- › BMW 600 13.0 (Part 2)
- › BMW GS 95002 (2010)
- › DaimlerChrysler DC-10613
- › DaimlerChrysler DC-10614
- › DaimlerChrysler DC-11224
- › EN 61000-4-2
- › Ford EMC-CS-2009.1
- › Ford ES-XW7T-1A278-AC
- › Ford FMC1278
- › GMW 3097
- › GMW 3097 (2001)
- › GMW 3097 (2004)
- › GMW 3097 (2006)
- › GMW 3100
- › GMW 3100 (2001)
- › Hyundai/Kia ES 96100-02 (2006)
- › IEC 61000-4-2
- › IEC 61326
- › ISO 10605
- › JASO D001-94
- › Mazda MES PW 67600
- › ...











ESD NX30 - GENERATES ESD PULSES ABOVE EN/IEC 61000-4-2 TEST LEVELS

Electrostatic discharges either from a human body to any other part or between two different objects can cause persistent disturbances or even destruction to sensitive electronics or controls. esd NX30 is an ESD tester to simulate ESD pulses at higher voltages up to 30 kV in both air and contact discharge mode. It therefore satisfies requirements exceeding the EN/IEC 61000-4-2 test levels and complies to automotive test applications.

HIGHLIGHTS

- › Test voltage up to 30 kV for air and contact discharge
- › Color touch display
- › Discharges up to 25 Hz
- › 80 easy-to-change R/C-networks and tips
- › Switchable Bleed-Off function
- › Built-in activity log
- › AC mains supply and DC supply
- › Battery tested to 30,000 pulses @30 kV

APPLICATION AREAS

- | | |
|---|--|
|  AUTOMOTIVE |  COMPONENTS |
|  INDUSTRY |  TELECOM |
|  MEDICAL |  RENEWABLE ENERGY |
|  BROADCAST |  MILITARY |
|  RESIDENTIAL |  AVIONICS |

TECHNICAL DETAILS

MODEL OVERVIEW

AVAILABLE ESD NX30-MODELS

| | |
|----------|--|
| ESD NX30 | <ul style="list-style-type: none"> - high voltage base unit with - built-in battery pack - discharge gun - Interface, Interlock - self calibration - carrying case |
|----------|--|

| | |
|------------|---|
| ESD NX30.1 | <ul style="list-style-type: none"> - high voltage base unit - discharge gun |
|------------|---|

TECHNICAL DETAILS

TEST LEVEL

| | |
|-------------------|----------------------------|
| contact discharge | 200 V - 30,000 V \pm 5 % |
| Air discharge | 200 V - 30,000 V \pm 5 % |
| Resolution | 100 V steps |
| Holding time (AD) | More than 5 s |

TRIGGER

| | |
|-----------------|---|
| Single pulse | Release of a single pulse |
| Multiple pulses | Continuous air discharge up to 25 Hz, contact discharges up to 20 Hz, random discharges |
| Counter | 0 - 9,999 for discharge pre-selection |

OUTPUT

| | |
|--------------------------|--|
| Contact Discharge Pulse | As per EN/IEC 61000-4-2 Ed.2, 150 pF/330 ohm |
| Rise time | 0.8 ns +/- 25% |
| First peak current value | 7.5 A \pm 15 % @2 kV 15 A \pm 15 % @4 kV 22.5 A \pm 15 % @6 kV 30 A \pm 15 % @8 kV |
| Current value at 30ns | 4.0 A \pm 30 % @2 kV 8.0 A \pm 30 % @4 kV 12.0 A \pm 30 % @6 kV 16.0 A \pm 30 % @8 kV |
| Current value at 60ns | 2.0 A \pm 30 % @2 kV 4.0 A \pm 30 % @4 kV 6.0 A \pm 30 % @6kV 8.0 A \pm 30 % @8 kV |

BASE STATION

ESD NX30

| | |
|------------------|---|
| HV power supply | Up to 30 kV DC |
| Built-in Battery | Approx. 30 k discharges; Battery is automatically recharged when connected to AC mains supply |
| Interface | Optical and interlock |
| Self calibration | after power on, by user any time |

ESD NX30.1

| | |
|------------------|----------------|
| HV power supply | Up to 30 kV DC |
| Self calibration | after power on |

DISCHARGE GUN

DISCHARGE GUN

| | |
|----------------|---|
| Controls | Color touch display |
| Test level | 200 V to 30,000 V |
| Polarity | Positive, negative, alternating, selectable |
| Discharge mode | Air or Contact discharge, selectable |
| Discharge tip | Point and ball type |

ACCESSORIES

ACCESSORIES (INCLUDED)

| |
|------------------------------|
| Discharge tips for AD and CD |
| 25 mm discharge sphere |
| Grounding lead 2 m |
| Test certificate |
| user manual |

TECHNICAL DETAILS

GENERAL

| GENERAL | |
|----------------|---------------------------------|
| Weight | Approx. 6.5 kg (Base Station) |
| Weight | Approx. 1,250 g (discharge gun) |
| Supply voltage | AC: 100 V - 240 V, 50/60 Hz |
| Input Power | 130 VA max. |

| ENVIRONMENT | |
|----------------------|---|
| Temperature | 5 °C to 40 °C |
| Humidity | 20 % to 80 %, non condensing |
| Atmospheric pressure | 86 kPa (860 mbar) to 106 kPa (1,060 mbar) |

OPTIONS

| DISCHARGE MODULES | |
|-------------------|--|
| RCN30 150-330 | 150 pF/330 Ohm discharge network |
| RCN30 150-2000 | 150 pF/2000 Ohm discharge network |
| RCN30 100-1500 | 100 pF/1500 Ohm discharge network |
| RCN30 330-330 | 330 pF/330 Ohm discharge network |
| RCN30 330-2000 | 330 pF/2000 Ohm discharge network |
| RCN30 150-150 | 150 pF/150 Ohm discharge network |
| RCN30 x-x | A large range of 80 RC networks, custom networks available from 0 ohm to 20 kohm, up to 2 nF |

| OTHER OPTIONS | |
|---------------|---|
| VCP | Vertical coupling plane |
| EAS30 | Grounding resistors 2 x 470 kOhm |
| CSL 200 | Field coupling plane and field coupling strip as per ISO 10605, Annex F and DC-11224 for ESD powered-up test of electronic modules, |
| OptoLink | Fiber optic link between dito and PC (USB port) fitted with USB A connector, length 3 m or 6 m, max. baud rate of 19,200. |
| Other Tips | H-field and E-field, flexible air and contact discharge tips, extensions for testing in dangerous environments (airbags, etc) and more. |

COMPETENCE WHEREVER YOU ARE



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Information about scope of delivery, visual design and technical data correspond with the state of development at time of release. Subject to change without further notice.