

# SABS EMC/CoC

## Product Guideline

Standards and products under scope

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Marketing, Communications, PR and Events

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### ***Electrical Components that Emit Noise***

**Electronic equipment which contain the following components have electromagnetic emissions and therefore must receive Conformance Assessment.**

- 1) **Electronic Circuit Board** – If a product, including the IC (Integrated Circuit), uses DC to control the product, electromagnetic waves are generated. DC products also emit noise, therefore it requires conformance assessment.
  - 2) **Motor** – A motor that uses an Electrical Motor Coil generates electromagnetic waves while operating. Any kind of motor generates electromagnetic waves.
  - 3) **Driver/Rectifier** – Simple lighting (Bulb) do not generate electromagnetic waves, however if it uses a driver or a rectifier to operate it, it generates noise, therefore it requires conformance assessment.
  - 4) **Commutator Motor** – If a product has a Commutator Motor, it generates noise, therefore it requires conformance assessment.
  - 5) **Oscillator Clock** – If a product has a Oscillator Clock, it generates noise, therefore it requires conformance assessment
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Electric Circuit Board



Motor



LED Driver



Commutator Motor

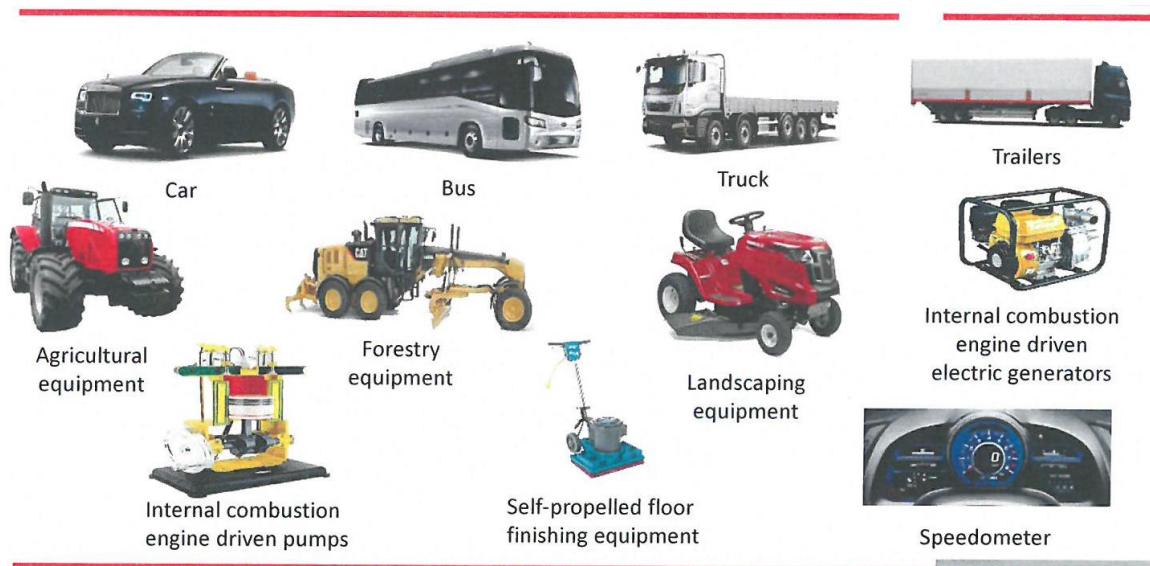


Oscillator Clock

Classification of equipment	Emission Standard	Immunity Standard
Industrial, Scientific and Medical (ISM) equipment, excluding telecommunications equipment operating in the ISM bands mandated by ITU-R	SANS 211 (CISPR 11)	SANS 224 (CISPR 24)



Classification of equipment	Emission Standard	Immunity Standard
Vehicles, boats and internal combustion engine driven devices	SANS 212 (CISPR 12)	None



Classification of equipment	Emission Standard	Immunity Standard
Sound and television broadcast receivers and associated equipment, terrestrial and/or satellite	SANS 213 / SANS 2332 (CISPR 13) / (CISPR 32)	SANS 2200 / SANS 2335 (CISPR 20) / (CISPR 35)







Image processor



Image receiver and converter



Video game machines



Image recorder



CCTV camera



Editing machine



Compressor gate



Video recorder



Receiver for A/V signal



Turntable



AD/DC converter



Receiver for CATV

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Classification of equipment	Emission Standard	Immunity Standard
Household appliances, electric tools and similar apparatus	SANS 214-1 (CISPR 14-1)	SANS 14-2 (CISPR 14-2)



Household refrigerators



Motor Compressor



Electric iron



Air-conditioner



Vacuum cleaner



Water suction cleaner



Electric fan



washing machine



Electrical floor cleaner



Food freezers



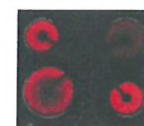
dryer



Dehumidifier



Cooking range



Electric hob



Oven



Electric installation grill



Range hoods



Microwave oven



Ice Maker



Dispensing Machines



Thermostats









Automatic self-clean toilet



Electric boiler



Air-pressure injection grinder



Electric Blanket



Liquid maker



Electric chair for hair care



Electric bed



Electric heating chair



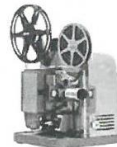
Slide Projector



Film strip Projector



Electric clock



Film Projector



Insect Eradicator



Electric fountain



Oxygen and ion generator



Dust collector



Nap cutter



OHP



Luggage container



Bill exchanger



Coin exchange



Fumigating insect killer



Water purifier



Heater to prevent freezing of the water pipe



Fruit cleaner



Ultrasonic washing device



Motor-operated roll screen



single phase motor



3 phase induction motor



Electric air-curtain



Fan coil unit



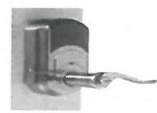
Driving simulator



Shoots and bean sprouts grower



Ion water generator



Electric door-lock



Electric vibrator



Electric plane



Laser shooter



Electric lawn mower



Electric grinder



Polisher



Electric sander



Electric round-shaped saw



Electric nail gun



Electric chain saw



Electric taper



Electric reciprocating saw



Oral cleaner



Electric hammer



Electric toothbrush



Other Power tools including trimmer



Electric steel scissors



Electric drill

Classification of equipment	Emission Standard	Immunity Standard
Electrical lighting and similar equipment	SANS 215 (CISPR 15)	SANS 61547 (IEC 61547)



Neon transformer



Electric transformer



Chandelier



Rechargeable lantern



Self-ballasted lamp



Emergency luminaire



Sodium lamp



Illuminating light



Halogen lamp



Fluorescent lamp holder



Starter holder for fluorescent light



fluorescent luminaire



PLS luminaire



Magnetic ballast for lamp



High-voltage luminaire

Classification of equipment	Emission Standard	Immunity Standard
Information Technology Equipment (ITE)	SANS 222 / SANS 2332 (CISPR22) / (CISPR 32)	SANS 224 / SANS 2335 (CISPR 24) / (CISPR 35)



Classification of equipment	Emission Standard	Immunity Standard
Alarm systems --fire, intruder and social alarm systems	SANS 222 (CISPR 22)	EN 50130-4



Detectors for Intruder  
Alarm System



Fire Sprinkler



Smoke Detector



Fire Alarm

Classification of equipment	Emission Standard	Immunity Standard
Alternating-current watt-hour meters Class 0,5, 1 and 2	SANS 222 (CISPR 22) (Contained in SABS 1524)	SANS 224 (CISPR 24)



Kwh meter



Classification of equipment	Emission Standard	Immunity Standard
Low-voltage switchgear and controlgear assemblies - Part 1: Type-tested and partially type-tested assemblies	SANS 60439-1 (IEC 60439-1)	SANS 60439-2 (IEC 60439-2)



Time Delay Switch



Remote Control Switch



Voltage Regulator



Electric Welding Equipment



Cable Reel



Temperature Regulator



Circuit Breaker



Dimmer



Electronic Switch



Timer and Time Switch

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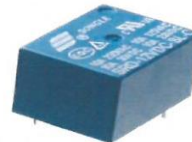
Classification of equipment	Emission Standard	Immunity Standard
Low voltage power supplies, d.c. output	SANS 61204-3 (IEC 61204-3)	SANS 61204-3 (IEC 61204-3)



Circuit Breaker



Switch



Relay



Fuse

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Classification of equipment	Emission Standard	Immunity Standard
Electrical equipment for measurement, control and laboratory use	SANS 61326 (IEC 61326)	SANS 61326 (IEC 61326)



Oscilloscope



field strength meter



Spectrum analyzers



network analyzers



Portable car diagnostic

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Classification of equipment	Emission Standard	Immunity Standard
Adjustable speed electrical power drive systems	SANS 61800-3 (IEC 61800-3)	SANS 61800-3 (IEC 61800-3)



AVR

Classification of equipment	Emission Standard	Immunity Standard
Uninterruptible power systems (UPS)	SANS 62040-2 (IEC 62040-2)	SANS 62040-2 (IEC 62040-2)



UPS