

INTERNATIONAL ELECTROTECHNICAL COMMISSION
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Medical electrical equipment –

**Part 2-26: Particular requirements for the basic
safety and essential performance
of electroencephalographs**

Appareils électromédicaux –

**Partie 2-26: Exigences particulières pour la
sécurité de base et les performances
essentielles des électroencéphalographes**

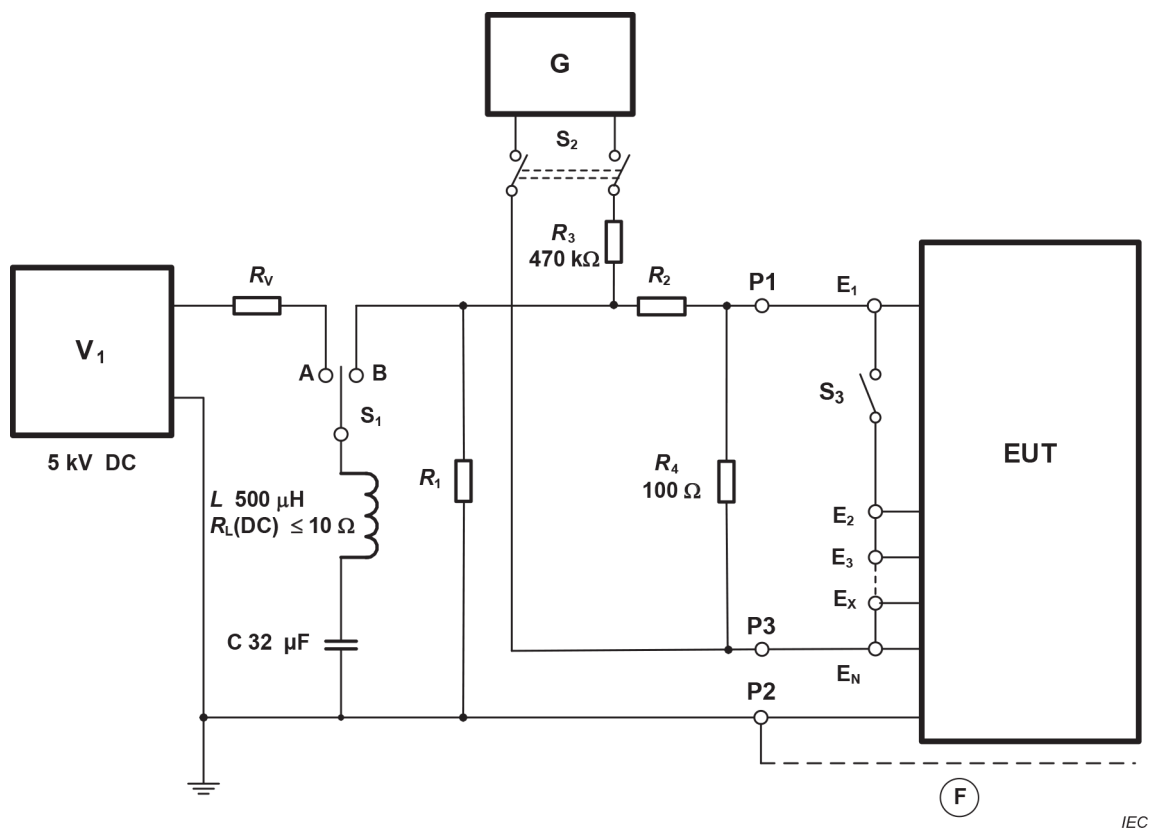
C O R R I G E N D U M 1

Corrections to the French version appear after the English text.

Les corrections à la version française sont données après le texte anglais.

Figure 201.101 – Test of protection against the effects of defibrillation (common mode)

Replace the existing figure with the following new figure:



Components

G	sine wave generator 10 Hz
V ₁	high voltage source 5 kV DC
ⓕ	foil, simulating capacitance for CLASS II or INTERNALLY POWERED ELECTROENCEPHALOGRAPHS
S ₁	switch; max. load 60 A, 5 kV
S ₂	switch activating the signal source
S ₃	switch connecting LEAD WIRE E ₁ to remaining LEAD WIRES
R ₁	100 Ω ±10 %, 5 kV dielectric strength, 400 J pulse energy dissipation capability, low inductance
R ₂	50 Ω ±10 %, 5 kV dielectric strength, 400 J pulse energy dissipation capability, low inductance
R _L	DC resistance of inductance L
R _V	current limiting resistor
P1, P2, P3	connecting points for EUT (includes PATIENT CABLE and LEAD WIRES)

Figure 201.101 – Test of protection against the effects of defibrillation (common mode)

Figure 201.101 – Essai de protection contre les chocs de défibrillation (mode commun)

The diagram illustrates the electrical circuit of an electroencephalograph (EEG). The power source is a 5 kV DC voltage V_1 . The circuit includes a series resistor R_V , a switch S_1 , an inductor L with inductance $500 \mu\text{H}$ and DC resistance $R_L(\text{DC}) \leq 10 \Omega$, and a capacitor C with capacitance $32 \mu\text{F}$. The circuit is connected to a load resistor R_1 . A switch S_2 is connected to a generator G . A resistor R_3 with value $470 \text{ k}\Omega$ is in series with R_2 (value 100Ω). The output is connected to a series of electrodes $E_1, E_2, E_3, \dots, E_N$, with a switch S_3 between E_1 and E_2 . The electrodes are connected to a common ground P_2 . A feedback resistor R_4 with value 100Ω is connected between P_2 and the output. A switch S_3 is also connected between P_1 and E_1 . The output is connected to an electroencephalograph (EEG) unit labeled "ÉLECTROENCÉPHALOPHRE en essai".

IEC

G	générateur d'ondes sinusoïdales de 10 Hz
V ₁	source haute tension 5 kV courant continu
Ⓢ	feuille, simulant la capacité des ELECTROENCEPHALOGRAPHES DE CLASSE II OU ALIMENTES DE MANIERE INTERNE
S ₁	interrupteur; charge maximale 60 A, 5 kV
S ₂	interrupteur activant la source des signaux
S ₃	interrupteur reliant le CABLE DE DERIVATION E ₁ aux CABLES DE DERIVATION restants
R ₁	rigidité diélectrique 100 Ω ± 10 %, 5 kV, capacité de dissipation d'énergie d'impulsion 400 J, faible inductance
R ₂	rigidité diélectrique 50 Ω ± 10 %, 5 kV, capacité de dissipation d'énergie d'impulsion 400 J, faible inductance
R _L	résistance en courant continu de l'inductance L
R _V	résistance de limitation du courant
P1, P2, P3	points de connexion de l'ELECTROENCEPHALOGAPHE en essai (EUT) (comprend les CABLES PATIENT et les CABLES DE DERIVATION)

Figure 201.101 – Essai de protection contre les chocs de défibrillation (mode commun)