

TYPE : CTH 550

ORDER NR : 91/55425/06

CUSTOMER : BPA

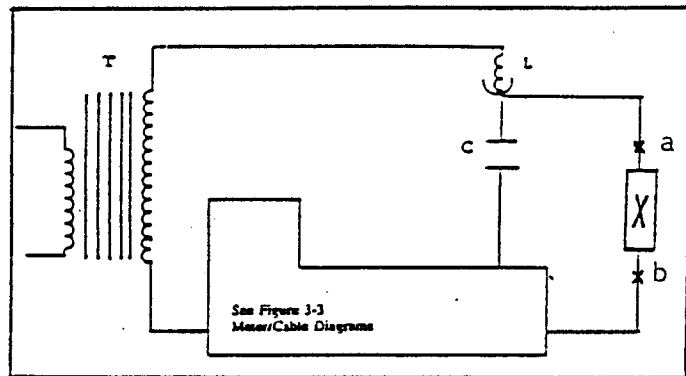
MEASUREMENT OF RADIO INFLUENCE VOLTAGE (RIV)

Temperature : 25°C

Pressure : 746 mm Hg

Humidity : 48 %

Ambient RIV level : 10 µV



(Std. Nema N° 107 - 1987)

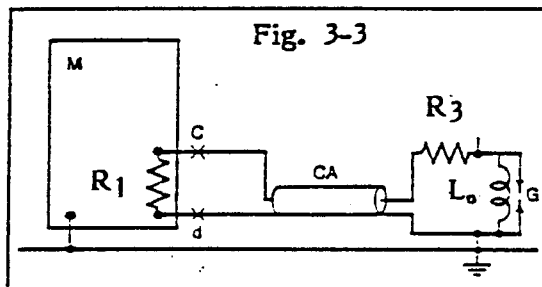


Fig. 3-3

T : HV generator.
L : Radio frequency choke.
C : HV coupling capacitor.
X : apparatus to test.

Measurement frequency : 1 MHz.

$$\text{RIV factor (P)} = \frac{E_{cd}}{E_{ab}}$$

R1 = 50 ohm internal meter impedance.
M = Radio-noise meter (ANSI C 63.2) (NM-21FFT-1 MHz).
R3 = 100 ohm non-inductive resistor.
Lo = drain coil.
CA = 50 ohm cable impedance.

Serie nr	Applied Voltage (50 Hz)	Reading Value		RIV Factor(P)	Read. Value(µV) RIV Level = $\frac{\text{Value}(\mu V)}{P}$
		dB	µV		
06	350 kV	12	4	0,25	16

Relation between the reading value in dB and in µV of the RIV meter NM-21FFT

$$\text{Value (dB)} = 20 \log \frac{\text{Value}(\mu V)}{1}$$

$$\text{Value}(\mu V) = 10 \left(\frac{\text{Value (dB)}}{20} \right)$$

Bogaert

Required RIV level : < 250 µV at 350 kV

M. BOGAERT

QUALITY ASSURANCE Ing.

Date

September 5th, 91