

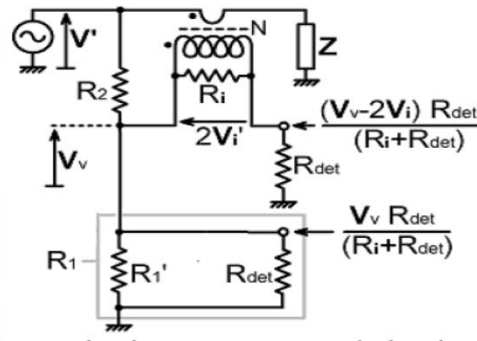
USE EXCEL SHEET: Phase Bridge F1FRV, to calculate transformers inductance, and know voltages present on R2 and Z2 resistors connected to input of bridges (High Voltage resistors to be used)

**Nota. Ri value MUST be accurately measured with an Ohmmeter BEFORE calculation !!**

## RESISTANCE BRIDGE

Z	50 Ohms	Puissance	5 000 W
I	10,00 A	I @ Ri	1,667 A
V'	500,00 V	2Vi'	3,333 V
R2/R1'	309,33313		
N	6		
Ri	2,000 Ohms	P @ Ri	5,556 W
R2	1 000 000 Ohms	P @ R2	0,248 W
Rdet	100 000 Ohms	Vv	1,611 V
R1'	3 233 Ohms	P @ R1'	0,001 W

R1': Fixed value + Variable resistor VR R1' (low value 12 turns)

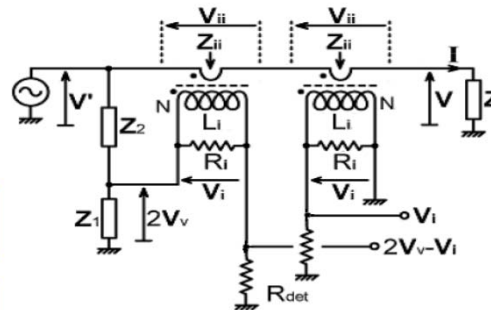


DC V	BAL V	MINIMUM R BAL k OHM
-2,11	0,16	46,6
1,96		

## CONDUCTANCE BRIDGE WITH 2 SEPARATE TOROIDS

Z	50 Ohms	Puissance	5 000 W
I	10,00 A	I @ Ri	1,667 A
V'	500,00 V	Vi	3,333 V
N	6		
Ri	2,000 Ohms	P @ Ri	5,556 W
Z2	100 000 Ohms	P @ Z2	2,434 W
Rdet	1 000 000 Ohms	Vv	3,326 V
Z1	1 348 Ohms	P @ Z1	0,033 W

Z1: Fixed value + Variable resistor VR Z1 (low value 12 turns)

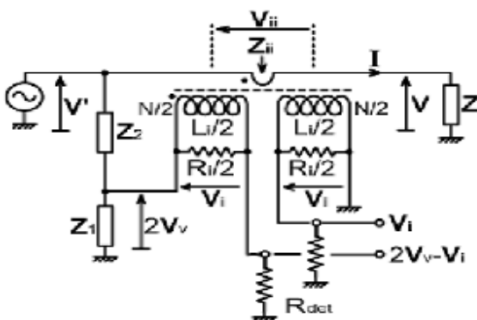


DC V	BAL V	MINIMUM R BAL k OHM
4,37	0,01	15,5
4,36		

## CONDUCTANCE BRIDGE WITH 1 TOROID

Z	50 Ohms	Puissance	5 000 W
I	10,00 A	I @ Ri	1,667 A
V'	500,00 V	Vi	3,333 V
N/2	6		
Ri/2	2,000 Ohms	P @ Ri/2	5,556 W
Z2	1 000 000 Ohms	P @ Z2	0,245 W
Rdet	100 000 Ohms	Vv	3,327 V
Z1	9 501 Ohms	P @ Z1	0,002 W

Z1: Fixed value + Variable resistor VR Z1 (low value 12 turns)



DC V	BAL V	MINIMUM R BAL k OHM
4,37	0,01	1,3
4,36		