

M411 Electronic Voltage Burden



Electronic Voltage Burden M411 is a modern programmable device used as a load in the secondary circuits of Voltage Transformers during their verification and calibration.

With the wide programmable burden power range provided, most national and international standard burdens or specific customer values can be set.

FEATURES AND BENEFITS

- Wide range of burden power values for VT in accordance with standards: IEC 61869-3, IEC 61869-5, IEC 60044-2, IEC 60044-5, IEEE C57.13, GOST 23625, GOST 1983
- Standard and non-standard values of burden power with standard and non-standard rated secondary voltages
- Extended range of rated voltage factor F_v up to 2,5
- 100 % and 25 % rated burden power, PF = 0,8 at rated frequency 50 and 60 Hz
- 100 % and 0 % rated burden power, PF = 1 at rated frequency 50 and 60 Hz
- Compensation resistance of the cable used for connect to the secondary winding
- Connection to two branches of a multiple-tapped winding

- Simple use by intuitive user interface
- The ability for the user to create his own range of frequently used burden values
- Possibility of using with automated VT calibration systems
- Small size and low weight

APPLICATIONS

M411 is used by:

- Manufacturer of Voltage Transformers
- On-site testing of Voltage Transformers
- Calibration Laboratories
- Metrology Institutes



TECHNICAL SPECIFICATIONS

Rated burden voltage U _{Sr} , V	Rated voltage factor $F_{_{V}}$	Rated burden power S _r , V·A	Power factor PF	Rated frequency f _R , Hz
100/3 150/3	1,2	1,25 600	0,8	50; 60
	1,9	1,25 500		
	2,5	1,25 100		
		1 10	1	
150/3 200/3 100/√3120/√3	1,2	1,25 1200		
	1,9	1,25 500	0,8	
	2,5	1,25 100		
		1 10	1	
200/3 240/3 120/√3415/√3 100 240	1,2	1,25 1200	0.0	
	1,9	1,25 500	0,8	
		1 10	1	
120/√3 120	1,5	12,5	0,1	
		35	0,2	
		25	0,7	
		75; 200; 400	0,85	

Secondary voltage range U _s	$0.02 \cdot U_{sr} \dots F_{v} \cdot U_{sr}$	
Active and reactive power errors	± 0,03 · S**	
Power mains Rated voltage Rated frequency	110 240 V 50/60 Hz	
Operating temperature Relative humidity	040 °C up to 95 % non-condensing	
Size	460 × 280 × 460 mm	
Weight	34 kg	

^{**} S = $(U_{S}/U_{Sr})^{2} \cdot S_{r}$



ORDERING INFORMATION

No	Item Name	Part no.	
	Scope of supply:		
1	M411 Electronic Voltage Burden	M411.100	MAII = TO THE STATE OF THE STAT
2	Measuring Cable MC (three-wire)	M411.010	
3	Measuring Cable MC (two-wire)	M411.020	
4	Power Cord 10 A EU (CEE 7/XVII - C13)	_	
5	Clip Connector, red	M411.030	
6	Clip Connector, black	M411.040	
7	«O» Connector, red (2 pc.)	LB 4-RKS NI/8.4/RT	
8	«O» Connector, black (1 pc.)	LB 4-RKS NI/8.4/SW	O-
9	«U» Connector, red (2 pc.)	PJADA3034-R	>=-
10	«U» Connector, black (1 pc.)	PJADA3034-R)=-
11	«U» Connector, red (2 pc.)	LB 4-KS NI/9/RT	2)
12	«U» Connector, black (1 pc.)	LB 4-KS NI/9/SW	
13	«I» Connector, red (2 pc.)	ADA86/F/1.8-RT	
14	«I» Connector, black (1 pc.)	ADA86/F/1.8-SW	
15	Operating manual	M411 OM	
16	Passport	M411 P	
17	Transport box	M411.900	

OLTESTILIC

Development and production of measurement devices

POSTAL ADDRESS

OLTEST LLC, PO box 33, Kyiv, 04128, Ukraine

TFL and F-MAII

+38 044 537-08-01 market@oltest.ua