Comparison of multi-function meters

Comparison of fault loop impedance meters

						
	MPI-540-PV / MPI-540 / MPI-536 / MPI-535	**MPI-530-IT / MPI-530**	**MPI-525**	**MPI-520**	**MPI-507 / MPI-506**	**MPI-502**
Display	7" LCD touchscreen	LCD graphic	LCD graphic	LCD graphic	segmented LCD	segmented LCD
Network parameters recorder	three-phase / three-phase / – / –	single-phase	–	–	–	–
Autotests	√	–	–	–	–	–
Energy losses calculator	√ / √ / – / –	–	–	–	–	–
Fault loop impedance resolution [Ω]	0...1999	0...1999	0...1999	0...1999	0...1999	0...1999
Maximum resolution of fault loop impedance measurement [Ω]	0.001	0.001	0.01	0.01	0.01	0.01
Measurement voltages [V]	95...440	95...440	95...440	95...440	180...460	180...460
Resolution of fault loop impedance measurement without RCD tripping [Ω]	0,01	0,01	0,01	0,01	0.01	0,01
Calculation of fault current according to rated voltage	√	√	√	√	√	√
Calculation of fault current according to measured voltage	√	√	√	√	√	–
Automatic measurement in socket	√	√	√	√	√	√
Residual current device measurements	AC, A, F, B, B+, EV ☐ G S	AC, A, F, B, B+ ☐ G S	AC, A, F, B, B+ ☐ G S	AC, A, F, B, B+ ☐ G S	AC, A ☐ G S	AC, A ☐ G S
Automatic measurement of the full set of RCD parameters - RCD Auto	√	√	√	√	√	√
Measurement of tripping current I_A with rising current	10, 30, 100, 300, 500, 1000	10, 30, 100, 300, 500, 1000	10, 30, 100, 300, 500, 1000	10, 30, 100, 300, 500, 1000	10, 15, 30, 100, 300, 500	10, 30, 100, 300, 500
Simultaneous measurement of I_A and t_A in one RCD trip	√	√	√	√	√	√
Measurement of tripping time for factor of rated current	$^1/_2$, 1, 2, 5	$^1/_2$, 1, 2, 5	$^1/_2$, 1, 2, 5	$^1/_2$, 1, 2, 5	$^1/_2$, 1, 2, 5	$^1/_2$, 1, 2, 5
Measurement of touch voltage UB	√	√	√	√	√	√
Detection of L and N swapping	√	√	√	√	√	√
Measurement of insulation resistance	√	√	√	√	√	–
Measurement voltages [V]	**MPI-536** | 10 50, 100, 250, 500, 1000 **MPI-536** | 1500, 2500	50, 100, 250, 500, 1000	50,100,250,500,1000,2500	50, 100, 250, 500, 1000	100, 250, 500	–
Measuring range [Ω]	5G / 5G / 5G / 10G	10G	10G	3G	600M	–
Protection against appearance of voltage	√	√	√	√	√	–
Automatic discharging of object after measurement	√	√	√	√	√	–
Automatic measurement of multi-core cords with AutoISO-1000C adapter	√ / √ / –	√	√	√	–	–
Automatic measurement of multi-core cables with AutoISO-2500 adapter	– / – / √	–	√	–	–	–
Sound signalling of time intervals for characteristics	√	√	√	√	–	–
Calculation of absorption coefficients	–	–	√	–	–	–
Continuity testing with current ≥ 200mA	√	√	√	√	√	√
Low-voltage resistance measurement	√	√	√	√	√	√
Earth resistance measurement	3p, 4p, 3p+clamps, double-clamp	3p, 4p, 3p+clamps, double-clamp	3p	3p	3p / –	–
Capability of setting limit for every function	√	√	–	–	–	–
Quick check of PE connection	√	√	√	√	√	√
Voltage measurement [V]	0...500	0...500	0...500	0...500	0...500	0...500
Frequency measurement [Hz]	√	√	√	√	√	√
Alternating current measurement [A]	optionally 0...3000	optionally 0...3000	–	optionally 0...400	–	–
Power and cosφ measurement	√ / √ / – / –	√	–	√	–	–
Measurement of U harmonics: I up to the 40th	√ / √ / – / –	√	–	–	–	–
THD measurement for U and I	√ / √ / – / –	√	–	–	–	–
Phase sequence check [V]	95...500	95...500	95...500	95...500	100...440	–
Memory (records)	unlimited	10 000 for every measurement type	990	990	990	990
Power supply	rechargeable battery	rechargeable battery / batteries	rechargeable battery / batteries	batteries / rechargeable battery	batteries / rechargeable batteries	batteries / rechargeable batteries
Built-in quick charger	√	√	√	√	–	–
Data transmission	USB, Bluetooth, Wi-Fi	USB, Bluetooth	USB	USB	Bluetooth	Bluetooth
Dimensions [mm]	288 x 223 x 75	288 x 223 x 75	288 x 223 x 75	288 x 223 x 75	220x98x58	220x98x58
Weight [kg]	2.5	2.2	2.2	2.2	0.8	0.6