

Declaration of Conformity

Harmonic Currents

Inverter: **SolarMax 13MT2 / 13MT3**

Company: Sputnik Engineering AG
Länggasse 85
CH-2504 Biel-Bienne

Relevant standard: EN 61000-3-12 / IEC 61000-3-4

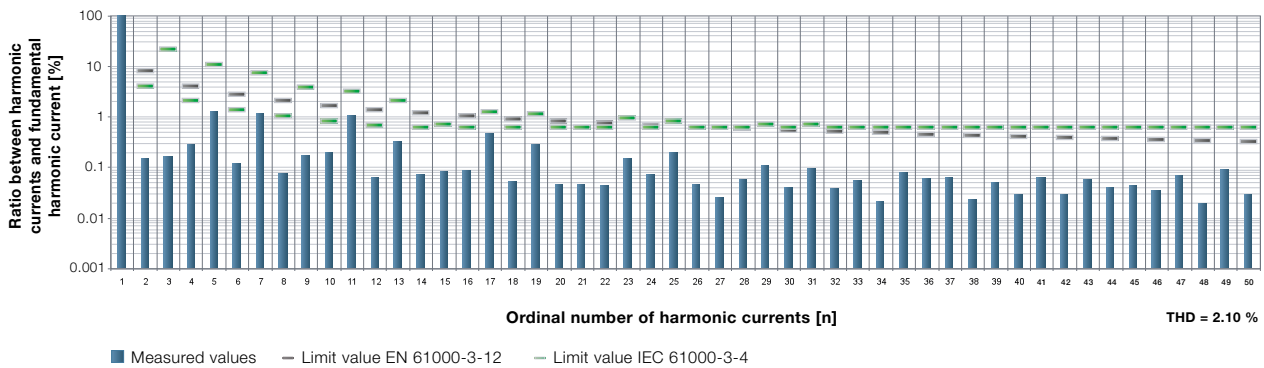
Measured values:

Ratio between harmonic currents (I_n) and fundamental harmonic current (I_1):

Ordinal number [n]	2	3	4	5	6	7	8	9	10	11	12	13	14
I_n/I_1 [%]	0.140	0.158	0.272	1.199	0.119	1.098	0.074	0.160	0.188	1.009	0.061	0.310	0.071
Ordinal number [n]	15	16	17	18	19	20	21	22	23	24	25	26	27
I_n/I_1 [%]	0.082	0.086	0.465	0.051	0.267	0.043	0.045	0.042	0.144	0.071	0.190	0.044	0.025
Ordinal number [n]	28	29	30	31	32	33	34	35	36	37	38	39	40
I_n/I_1 [%]	0.054	0.109	0.039	0.095	0.037	0.053	0.021	0.076	0.058	0.062	0.023	0.048	0.027
Ordinal number [n]	41	42	43	44	45	46	47	48	49	50			
I_n/I_1 [%]	0.062	0.027	0.056	0.037	0.042	0.034	0.065	0.019	0.091	0.028			

Reference current I_1 : 18.01A

Harmonic currents at rated output power
SolarMax 13MT2 / 13MT3



Higher Frequencies

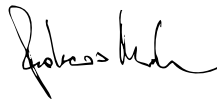
Frequency [Hz]	2100	2300	2500	2700	2900	3100	3300	3500	3700	3900	4100	4300	4500
Ratio between harmonic currents and fundamental harmonic current [%]	0.108	0.095	0.142	0.380	0.120	0.109	0.094	0.085	0.080	0.086	0.089	0.085	0.077
Frequency [Hz]	4700	4900	5100	5300	5500	5700	5900	6100	6300	6500	6700	6900	7100
Ratio between harmonic currents and fundamental harmonic current [%]	0.069	0.090	0.088	0.103	0.079	0.095	0.090	0.091	0.077	0.067	0.079	0.086	0.082
Frequency [Hz]	7300	7500	7700	7900	8100	8300	8500	8700	8900				
Ratio between harmonic currents and fundamental harmonic current [%]	0.079	0.081	0.090	0.078	0.076	0.069	0.072	0.082	0.063				

Interharmonics

Frequency [Hz]	75	125	175	225	275	325	375	425	475	525	575	625	675
Ratio between harmonic currents and fundamental harmonic current [%]	0.068	0.047	0.044	0.031	0.032	0.050	0.020	0.029	0.029	0.033	0.029	0.033	0.023
Frequency [Hz]	725	775	825	875	925	975	1025	1075	1125	1175	1225	1275	1325
Ratio between harmonic currents and fundamental harmonic current [%]	0.021	0.038	0.036	0.015	0.027	0.029	0.024	0.039	0.036	0.052	0.027	0.031	0.022
Frequency [Hz]	1375	1425	1475	1525	1575	1625	1675	1725	1775	1825	1875	1925	1975
Ratio between harmonic currents and fundamental harmonic current [%]	0.016	0.037	0.022	0.031	0.011	0.017	0.031	0.021	0.017	0.022	0.026	0.020	0.034

Biel/Bienne, 28.01.2013

Sputnik Engineering AG



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