

# Declaration of Conformity

## Harmonic Currents

Inverter: **SolarMax 15MT2 / 15MT3**

Company: SolarMax Produktions GmbH  
Zur Schönhalde 10  
D-89352 Ellzee

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

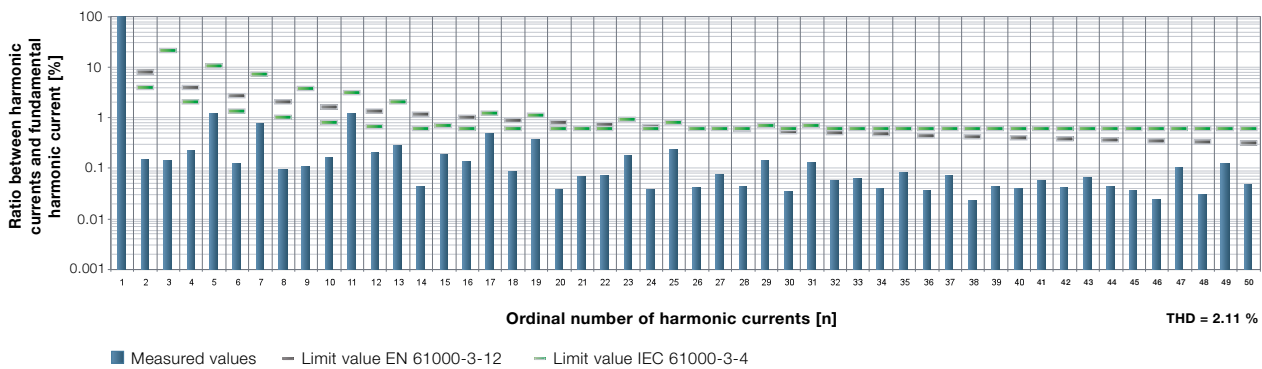
**Measured values:**  
(Measurements recorded by Sputnik Engineering AG)

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

Ordinal number [n]	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>
$I_n/I_1$ [%]	0.149	0.144	0.229	1.234	0.125	0.749	0.094	0.106	0.161	1.205	0.207	0.279	0.044
Ordinal number [n]	<b>15</b>	<b>16</b>	<b>17</b>	<b>18</b>	<b>19</b>	<b>20</b>	<b>21</b>	<b>22</b>	<b>23</b>	<b>24</b>	<b>25</b>	<b>26</b>	<b>27</b>
$I_n/I_1$ [%]	0.189	0.133	0.481	0.085	0.362	0.039	0.066	0.070	0.182	0.039	0.236	0.043	0.075
Ordinal number [n]	<b>28</b>	<b>29</b>	<b>30</b>	<b>31</b>	<b>32</b>	<b>33</b>	<b>34</b>	<b>35</b>	<b>36</b>	<b>37</b>	<b>38</b>	<b>39</b>	<b>40</b>
$I_n/I_1$ [%]	0.044	0.139	0.034	0.129	0.055	0.061	0.039	0.081	0.037	0.071	0.023	0.044	0.040
Ordinal number [n]	<b>41</b>	<b>42</b>	<b>43</b>	<b>44</b>	<b>45</b>	<b>46</b>	<b>47</b>	<b>48</b>	<b>49</b>	<b>50</b>			
$I_n/I_1$ [%]	0.056	0.043	0.063	0.044	0.036	0.024	0.103	0.030	0.124	0.049			

Reference current  $I_1$ : 20.07A

Harmonic currents at rated output power  
SolarMax 15MT2 / 15MT3



### 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 [%]	0.114	0.127	0.154	0.394	0.160	0.099	0.074	0.078	0.068	0.074	0.065	0.073	0.074
Frequency [Hz]	4700	4900	5100	5300	5500	5700	5900	6100	6300	6500	6700	6900	7100
Ratio between harmonic currents and fundamental harmonic current [%]	0.077	0.082	0.092	0.086	0.087	0.072	0.056	0.071	0.070	0.068	0.080	0.079	0.074
Frequency [Hz]	7300	7500	7700	7900	8100	8300	8500	8700	8900				
Ratio between harmonic currents and fundamental harmonic current [%]	0.073	0.083	0.061	0.077	0.081	0.070	0.059	0.075	0.074				

### Interharmonics

Frequency [Hz]	75	125	175	225	275	325	375	425	475	525	575	625	675
Ratio between harmonic currents and fundamental harmonic current [%]	0.238	0.112	0.056	0.127	0.058	0.076	0.100	0.075	0.061	0.070	0.109	0.024	0.070
Frequency [Hz]	725	775	825	875	925	975	1025	1075	1125	1175	1225	1275	1325
Ratio between harmonic currents and fundamental harmonic current [%]	0.042	0.031	0.040	0.068	0.055	0.016	0.020	0.034	0.028	0.031	0.029	0.024	0.011
Frequency [Hz]	1375	1425	1475	1525	1575	1625	1675	1725	1775	1825	1875	1925	1975
Ratio between harmonic currents and fundamental harmonic current [%]	0.022	0.020	0.029	0.020	0.039	0.033	0.038	0.018	0.021	0.030	0.028	0.018	0.025

Elzee, 15/10/2015

SolarMax Produktions GmbH



Anton Spengler

