

Application Note- Huawei SUN2000MA Inverters Short Current Contribution

Revision History

Version 1.0 March 31, 2022 – Initial release

Application Solution	Application Note- Huawei SUN2000MA Inverters Short Current Contribution																																																																																									
Solution Description	According to IEC60909-0:2016, the definitions of I_p , I''_k and I_k is used for calculation of short-circuits current of power generators.																																																																																									
Solution Diagram	<table border="1"> <thead> <tr> <th>Model</th> <th>Pmax (kVA)</th> <th>Vac (V)</th> <th>I_p (A)</th> <th>I''_k (A)</th> <th>I_k (A)</th> </tr> </thead> <tbody> <tr> <td>SUN2000-3KTL-M1</td> <td>3.3</td> <td>400 Vac</td> <td>38.4</td> <td>7.7</td> <td>5.1</td> </tr> <tr> <td>SUN2000-4KTL-M1</td> <td>4.4</td> <td>400 Vac</td> <td>40.8</td> <td>10.2</td> <td>6.8</td> </tr> <tr> <td>SUN2000-5KTL-M1</td> <td>5.5</td> <td>400 Vac</td> <td>44.0</td> <td>12.8</td> <td>8.5</td> </tr> <tr> <td>SUN2000-6KTL-M1</td> <td>6.6</td> <td>400 Vac</td> <td>46.0</td> <td>15.2</td> <td>10.1</td> </tr> <tr> <td>SUN2000-8KTL-M1</td> <td>8.8</td> <td>400 Vac</td> <td>51.0</td> <td>20.3</td> <td>13.5</td> </tr> <tr> <td>SUN2000-10KTL-M1</td> <td>11</td> <td>400 Vac</td> <td>55.8</td> <td>25.4</td> <td>16.9</td> </tr> <tr> <td>SUN2000-12KTL-M1</td> <td>12</td> <td>400 Vac</td> <td>53.4</td> <td>27.6</td> <td>18.4</td> </tr> <tr> <td>SUN2000-8KTL-M2</td> <td>8.8</td> <td>400 Vac</td> <td>52.2</td> <td>20.1</td> <td>13.4</td> </tr> <tr> <td>SUN2000-10KTL-M2</td> <td>11</td> <td>400 Vac</td> <td>55.8</td> <td>25.5</td> <td>17.0</td> </tr> <tr> <td>SUN2000-12KTL-M2</td> <td>13.2</td> <td>400 Vac</td> <td>55.8</td> <td>30.0</td> <td>20.0</td> </tr> <tr> <td>SUN2000-15KTL-M2</td> <td>16.5</td> <td>400 Vac</td> <td>63.0</td> <td>37.8</td> <td>25.2</td> </tr> <tr> <td>SUN2000-17KTL-M2</td> <td>18.7</td> <td>400 Vac</td> <td>67.8</td> <td>42.8</td> <td>28.5</td> </tr> <tr> <td>SUN2000-20KTL-M2</td> <td>22</td> <td>400 Vac</td> <td>74.4</td> <td>50.3</td> <td>33.5</td> </tr> </tbody> </table>	Model	Pmax (kVA)	Vac (V)	I_p (A)	I''_k (A)	I_k (A)	SUN2000-3KTL-M1	3.3	400 Vac	38.4	7.7	5.1	SUN2000-4KTL-M1	4.4	400 Vac	40.8	10.2	6.8	SUN2000-5KTL-M1	5.5	400 Vac	44.0	12.8	8.5	SUN2000-6KTL-M1	6.6	400 Vac	46.0	15.2	10.1	SUN2000-8KTL-M1	8.8	400 Vac	51.0	20.3	13.5	SUN2000-10KTL-M1	11	400 Vac	55.8	25.4	16.9	SUN2000-12KTL-M1	12	400 Vac	53.4	27.6	18.4	SUN2000-8KTL-M2	8.8	400 Vac	52.2	20.1	13.4	SUN2000-10KTL-M2	11	400 Vac	55.8	25.5	17.0	SUN2000-12KTL-M2	13.2	400 Vac	55.8	30.0	20.0	SUN2000-15KTL-M2	16.5	400 Vac	63.0	37.8	25.2	SUN2000-17KTL-M2	18.7	400 Vac	67.8	42.8	28.5	SUN2000-20KTL-M2	22	400 Vac	74.4	50.3	33.5					
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(Pmax: Max.AC Apparent Power,Vac: Rated Output Voltage(line voltage), I_p : Peak short-circuit current) (I''_k :Initial short circuit current, I_k : Short circuit contribution)																																																																																										
Solution Notes	1. This documents provides short-circuits information of Huawei SUN2000MA inverters.																																																																																									