

## Setting for grid operator of Chile

**SolaX Power Network Technology (Zhe jiang) Co. , Ltd.**

hereby confirms that the following inverters fulfill RE\_12438:

**SK-SU5000E, SK-SU5000C, SK-TL5000E, SK-TL5000C, SK-TL5000R  
SK-SU3700E, SK-SU3700C, SK-TL3700E, SK-TL3700C, SK-TL3700R  
SK-SU3000E, SK-SU3000C, SK-TL3000E, SK-TL3000C, SK-TL3000R**

**SolaX power Co., Ltd.**

Room 220, West Buliding A, National University Science and Technology Park of Zhejiang University 525, Xixi Rd, Hangzhou, Zhejiang Province, China, 310007

*Guo Huawei*

Technical manager

2018.09.12

**1、 over/under frequency and over/under voltage**

<b>Protection. Frequency tests</b>						
Function	Limit		Setting		Trip test	
	Frequency	Time	Frequency	Time	Frequency	Time
U/F stage 1	47.5Hz	0.2s	47.5Hz	0.06s	47.49Hz	0.126s
O/F stage 1	51.5Hz	0.2s	51.5Hz	0.06s	51.5Hz	0.131s

**Under voltage**

<b>Under Voltage</b>		
Parameter	Voltage	Time
Protection limit	176.0V	0.200s
Actual Setting	176.0V	0.060s
Trip value(test result)	175.8V	0.128s

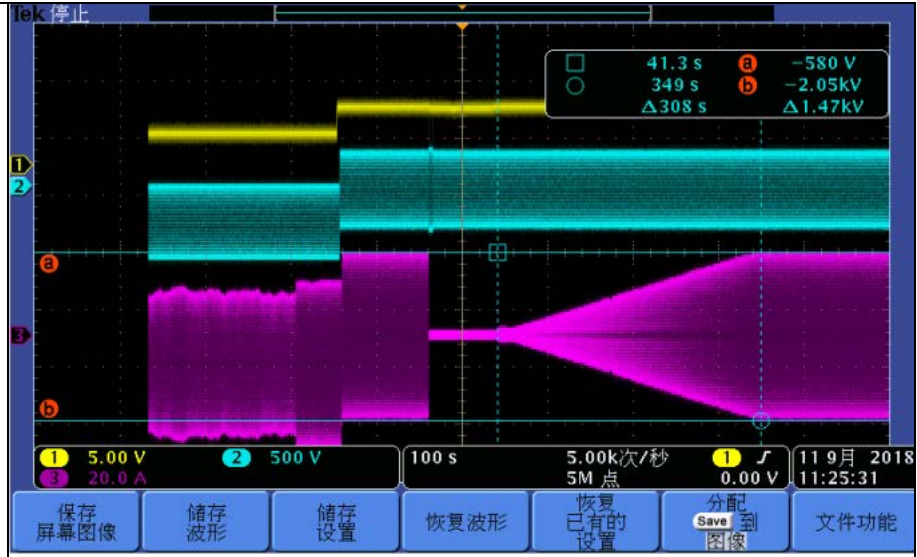
**Over voltage**

<b>Over Voltage</b>				
Parameter	Voltage	Time	Voltage	Time
Protection limit	242.0V	600s(3s)	253.0V	0.2s
Actual Setting	242.0V	600s (3s)	253.0V	0.06s
Trip value(test result)	242.0V	588s	253.0V	0.128s

**2、 Reconnection**

<b>Reconnection generate electrical power</b>				
Setting value	Min.voltage for connected to grid.....:	187.0V		
	Max.voltage for connected to grid.....:	242.0 V		
	Min.Frequency for connected to grid.....:	47.50Hz		
	Max.Frequency for connected to grid.....:	50.20Hz		
	Observation time( $\geq 60s$ ).....:	60S		
<b>Test:</b>				
<b>Voltage conditons</b>				
In voltage range after voltage failure	$\geq 187.0V$ for twice of setting observation time		$\leq 242.0V$ for twice of setting observation time	
Reconnection time[s]	187.2V	76.4s	241.5V	78.8s
Limit:	Reconnection after setting observation time( $\geq 60s$ )			
<b>Frequency conditions</b>				
In frequency range after frequency failure	$\geq 47,5Hz$ for twice of setting observation time		$\leq 50,2Hz$ for twice of setting observation time	
Reconnection time[s]	47.51Hz	78.3s	50.18Hz	76.2s
Limit:	Reconnection after setting observation time( $\geq 60s$ )			

Recover power gradient



### 3、Reactive power

Inductive					
P	P	Q	Cosφ	ΔCosφ	Cosφ
Set value	[W]	[Var]			Set value
20%	927.60	-697.00	0.797	-0.003	0.80 lagging
30%	1426.20	-1054.60	0.803	0.003	0.80 lagging
50%	2350.20	-1709.90	0.806	0.006	0.80 lagging
100%	3638.80	-2559.20	0.808	0.008	0.80 lagging

Capacitive					
P	P	Q	Cosφ	ΔCosφ	Cosφ
Set value	[W]	[Var]			Set value
20%	905.50	686.60	0.797	-0.003	0.80 leading
30%	1350.40	1030.50	0.796	-0.004	0.80 leading
50%	2266.00	1745.70	0.793	-0.007	0.80 leading
100%	3693.30	2863.80	0.791	-0.009	0.80 leading