

Setting for grid operator of Chile

SolaX Power Network Technology (Zhe jiang) Co. , Ltd.
hereby confirms that the following inverters fulfill RE_12438:

X3-4.0-T-D X3-4.0-T-N X3-5.0-T-D X3-5.0-T-N
X3-6.0-T-D X3-6.0-T-N X3-7.0-T-D X3-7.0-T-N
X3-8.0-T-D X3-8.0-T-N X3-9.0-T-D X3-9.0-T-N
X3-10.0-T-D X3-10.0-T-N
X3-4.0-S-D X3-4.0-S-N
X3-5.0-S-D X3-5.0-S-N

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1、 over/under frequency and over/under voltage

Protection. Frequency tests						
Function	Limit		Setting		Trip test	
	Frequency	Time	Frequency	Time	Frequency	Time
U/F stage 1	47.5Hz	0.2s	47.5Hz	0.06s	47.50Hz	0.104s
O/F stage 1	51.5Hz	0.2s	51.5Hz	0.06s	51.51Hz	0.096s

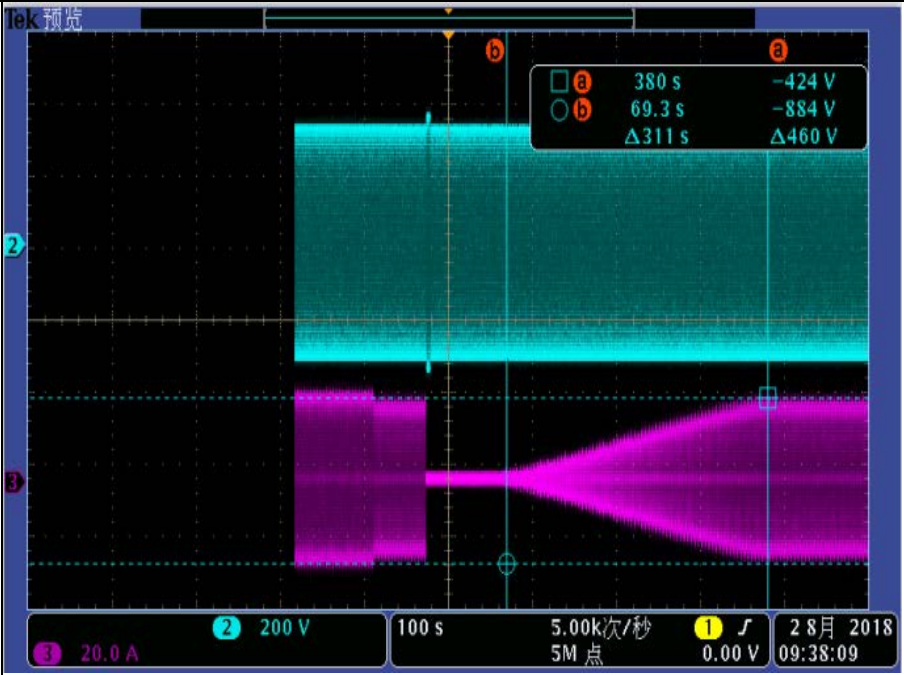
Under voltage

	Under Voltage	
Parameter	Voltage	Time
Protection limit	176.0V	0.2s
Actual Setting	176.0V	0.06s
Trip value(test result)		
L1	176.0V	0.106s
L2	176.2V	0.114s
L3	176.0V	0.106s
ALL	176.2V	0.101s

Over voltage

	Over Voltage			
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)				
L1	242.1V	611s	253.1V	0.113s
L2	242.1V	596s	252.8V	0.115s
L3	242.1V	607s	253.1V	0.108s
ALL	242.1V	604s	252.8V	0.109s

2、Reconnection

Reconnection generate electrical power				
Settingvalue	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(≥60s).....:	60S		
Test:				
Voltageconditions				
c)In voltage range after voltage failure	≥187.0V for twice of setting observation time	≤242.0V for twice of setting observation time		
Reconnection time[s]	187.5V	86.9s	241.8V	86.9s
Limit:	Reconnection after setting observation time(≥60s)			
Frequencyconditions				
f)In frequency range after frequency failure	≥47,5Hz fo rtwice of setting observation time	≤50,2Hz for twice of setting observation time		
Reconnection time[s]	47.51Hz	86.4s	50.2Hz	87.2s
Limit:	Reconnection after setting observation time(≥60s)			
Recover power gradient				

3、Reactive power

Inductive					
P	P	Q	Cosφ	ΔCosφ	Cosφ
Set value	[W]	[Var]			Set value
20%	1980.50	-716.23	0.892	-0.008	0.90 lagging
25%	2445.46	-1230.22	0.893	-0.007	0.90 lagging
50%	5021.79	-2473.09	0.897	-0.003	0.90 lagging
100%	9729.92	-4813.88	0.896	-0.004	0.90 lagging

Capacitive					
P	P	Q	Cosφ	ΔCosφ	Cosφ
Set value	[W]	[Var]			Set value
20%	1983.45	969.74	0.898	-0.002	0.90 leading
25%	2448.72	1187.88	0.900	0.000	0.90 leading
50%	5029.52	2386.05	0.903	0.003	0.90 leading
100%	9751.17	4616.31	0.904	0.004	0.90 leading