SMA Core 2 Musterreport Typ B TOR Erzeuger / VDE4110/ VDE4105

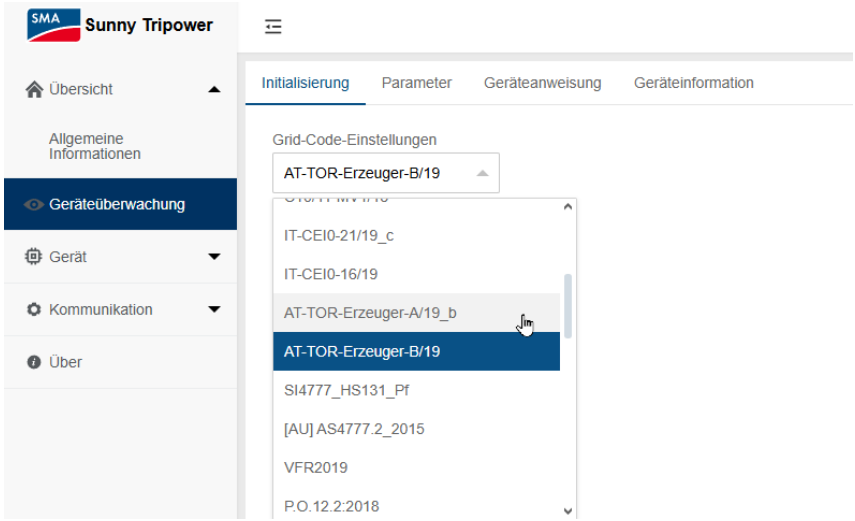
Die Parameter werden wie folgt in der Bedienoberfläche des Gerätes parametriert. Hierzu wurden alle anzupassenden Parameter farblich gekennzeichnet. Der Report wird anschließend als .xlsx (Excel) exportiert, diese Datei muss als Original uns zur Verfügung gestellt werden.

Um Sicherzustellen, dass die Seriennummer im Excel nicht verändert wurde, verlangen wir zusätzlich ein Bild des Wechselrichter Typenschildes! (In entsprechender Auflösung, damit die Zahlen und Buchstaben eindeutig erkennbar sind!)

Zu einem vollständigen Report gehören:

- **ein Screenshot des Ländersettings mit Zeitstempel (z.B Taskleiste mit Zeitangabe, …)**
- **der Report selbst Originale Exceldatei**
- **Bilder der Typenschilder**

Einstellen des Ländercodes: **AT-TOR-Erzeuger-B** (Ländercode wird für die e-netze allgäu auch so gesetzt!!)



Nameplate

Parametername	Aktueller Wert	Veranschaulichen
ID	1	
Length	66	
Manufacturer	SMA	
Device Type	STP 110-60	
Firmware version	**1.01.03.R**	
Serial Number	xxxxxxxx	
Device Address	1	[1~246]

Instant. Values

Parametername	Aktueller Wert	Veranschaulichen
ID	103	
Length	50	
Grid current phase L1	44.3	A
Grid current phase L2	44.4	A
Grid current phase L3	44.3	A
Grid voltage phase L1 against L2	405.0	V
Grid voltage phase L2 against L3	403.8	V
Grid voltage phase L3 against L1	404.8	V
Grid voltage phase L1	234.0	V
Grid voltage phase L2	233.5	V
Grid voltage phase L3	233.3	V
Power	30930	W
Grid frequency	50.00	Hz
Apparent Power	30930	VA
Reactive Power	80	var

Alle Angaben zum Wechselrichter müssen in der Übersicht vorhanden sein!!
Die Seriennummer muss auch darin enthalten sein!!

Mindestsoftwarestand des Wechselrichters (höher auch ok)

EEI displacement power factor	1.000	Pct
Internal temperature	39.4	℃
Operating status	5	
Evt1	0	

Electr. Ratings

Parametername	**Aktueller Wert**	**Veranschaulichen**
ID	120	
Length	26	
Device type	4	
Maximum active power device	110000	W
Maximum apparent power device	110000	VA
Maximum achievable reactive power quadrant 1	66000	var
Maximum achievable reactive power quadrant 4	-66000	var
Nominal current of all phases	360.0	A
Minimum achievable cos(phi) quadrant 1	-0.800	
Minimum achievable cos(phi) quadrant 4	0.800	

Power settings

Parametername	Aktueller Wert	Veranschaulichen
ID	121	
Length	30	
Set active power limit	110000	[55000~110000]W
Reference voltage, PV system control	400	[0~1000]V
Reference correction voltage, PV system control	0	[-50~50]V
Currently set apparent power limit	110000	[55000~110000]VA
Active power gradient	100.0	[0.0~100.0]%WMax/sec
Active power gradient in feeding operation	10000	[1~10000]WGra
Nominal frequency	50	[1~65]Hz

Wenn die Trafoübersetzung nicht der Standardübersetzung entspricht, muss der Wert hier angepasst werden (kommt selten vor)

Feed-in status

Parametername	Aktueller Wert	Veranschaulichen
ID	122	
Length	44	
Grid relay/contactor	7	
Total yield	1460500	Wh
Insulation resistance	1011000	ohms(Ω)

Ext. Controls

Parametername	Aktueller Wert	Veranschaulichen
ID	123	
Length	24	
Fast shut-down	1	[0~1]
Normalized active power limitation	100.0	[0.0~100.0]%WMax
Activate normalized active power limitation	1	[0~1]
Setpoint cos(phi) as per EEI convention	1.000	[-1.000~-0.800],[0.800~1.000]
Activate fixed power factor control	0	[0~1]
Normalized reactive power limitation	0.0	[-100.0~100.0]VArMax
Activation of normalized reactive power limitation	1	[0~1]
Timeout for active commands	60	[0~36000]
Timeout for cos(phi) commands	0	[0~36000]
Timeout for reactive power commands	60	[0~36000]

Netzgebiet vorarlberg netz: 1
Netzgebiet e-netze allgäu: 0

React. Power Q(V)

Parametername	Aktueller Wert	Veranschaulichen
ID	126	
Length	172	
Characteristic curve number	1	[0~3]
Activation of the characteristic curve	0	[0~1]
No. of charac. pt.s to be used (Curve1)	8	[1~8]
Y-axis ref. characteristic (Curve1)	1	
Voltage value 1 (Curve1)	92.0	[80.0~120.0]%VRef
Reactive power value 1 (Curve1)	48.4	[-60.0~60.0]

Voltage value 2 (Curve1)	96.0	[80.0~120.0]%VRef
Reactive power value 2 (Curve1)	0.0	[-60.0~60.0]
Voltage value 3 (Curve1)	105.0	[80.0~120.0]%VRef
Reactive power value 3 (Curve1)	0.0	[-60.0~60.0]
Voltage value 4 (Curve1)	108.0	[80.0~120.0]%VRef
Reactive power value 4 (Curve1)	-48.4	[-60.0~60.0]
Voltage value 5 (Curve1)	108.0	[80.0~120.0]%VRef
Reactive power value 5 (Curve1)	-48.4	[-60.0~60.0]
Voltage value 6 (Curve1)	105.0	[80.0~120.0]%VRef
Reactive power value 6 (Curve1)	0.0	[-60.0~60.0]
Voltage value 7 (Curve1)	96.0	[80.0~120.0]%VRef
Reactive power value 7 (Curve1)	0.0	[-60.0~60.0]
Voltage value 8 (Curve1)	92.0	[80.0~120.0]%VRef
Reactive power value 8 (Curve1)	48.4	[-60.0~60.0]
No. of charac. pt.s to be used (Curve2)	8	[1~8]
Y-axis ref. characteristic (Curve2)	1	
Voltage value 1 (Curve2)	90.0	[80.0~120.0]%VRef
Reactive power value 1 (Curve2)	45.0	[-60.0~60.0]
Voltage value 2 (Curve2)	92.0	[80.0~120.0]%VRef
Reactive power value 2 (Curve2)	45.0	[-60.0~60.0]
Voltage value 3 (Curve2)	108.0	[80.0~120.0]%VRef
Reactive power value 3 (Curve2)	-45.0	[-60.0~60.0]
Voltage value 4 (Curve2)	110.0	[80.0~120.0]%VRef
Reactive power value 4 (Curve2)	-45.0	[-60.0~60.0]
Voltage value 5 (Curve2)	110.0	[80.0~120.0]%VRef
Reactive power value 5 (Curve2)	-45.0	[-60.0~60.0]
Voltage value 6 (Curve2)	110.0	[80.0~120.0]%VRef
Reactive power value 6 (Curve2)	-45.0	[-60.0~60.0]
Voltage value 7 (Curve2)	110.0	[80.0~120.0]%VRef

Reactive power value 7 (Curve2)	-45.0	[-60.0~60.0]
Voltage value 8 (Curve2)	110.0	[80.0~120.0]%VRef
Reactive power value 8 (Curve2)	-45.0	[-60.0~60.0]
No. of charac. pt.s to be used (Curve3)	8	[1~8]
Y-axis ref. characteristic (Curve3)	1	
Voltage value 1 (Curve3)	92.0	[80.0~120.0]%VRef
Reactive power value 1 (Curve3)	48.4	[-60.0~60.0]
Voltage value 2 (Curve3)	96.0	[80.0~120.0]%VRef
Reactive power value 2 (Curve3)	0.0	[-60.0~60.0]
Voltage value 3 (Curve3)	105.0	[80.0~120.0]%VRef
Reactive power value 3 (Curve3)	0.0	[-60.0~60.0]
Voltage value 4 (Curve3)	108.0	[80.0~120.0]%VRef
Reactive power value 4 (Curve3)	-48.4	[-60.0~60.0]
Voltage value 5 (Curve3)	108.0	[80.0~120.0]%VRef
Reactive power value 5 (Curve3)	-48.4	[-60.0~60.0]
Voltage value 6 (Curve3)	105.0	[80.0~120.0]%VRef
Reactive power value 6 (Curve3)	0.0	[-60.0~60.0]
Voltage value 7 (Curve3)	96.0	[80.0~120.0]%VRef
Reactive power value 7 (Curve3)	0.0	[-60.0~60.0]
Voltage value 8 (Curve3)	92.0	[80.0~120.0]%VRef
Reactive power value 8 (Curve3)	48.4	[-60.0~60.0]

Active powe P(f)-param

Parametername	Aktueller Wert	Veranschaulichen
ID	127	
Length	10	
Active power gradient	40	[0~100]PM/Hz
Difference between starting frequency and grid frequency	0.20	[0.00~5.00]Hz
Difference between reset frequency and grid frequency	0.05	[0.00~5.00]Hz
Activation of stay-set indicator function	1	[0~1]
Activation of active power reduction in case of overfrequency P(f)	0	[0~1]
Active power gradient after reset frequency	10	[8~30000]%WMax/min

Undervolt. Trip

Parametername	Aktueller Wert	Veranschaulichen
ID	129	
Length	60	
No. of charac. pt.s to be used	5	[1~5]
Undervoltage trip time 1	1.50	[0.01~600.00]Secs
Undervoltage threshold 1	80.0	[0.0~100.0]%VRef
Undervoltage trip time 2	0.50	[0.01~600.00]Secs
Undervoltage threshold 2	30.0	[0.0~100.0]%VRef
Undervoltage trip time 3	0.50	[0.01~600.00]Secs
Undervoltage threshold 3	30.0	[0.0~100.0]%VRef

Undervoltage trip time 4	0.50	[0.01~600.00]Secs
Undervoltage threshold 4	30.0	[0.0~100.00]%VRef
Undervoltage trip time 5	0.50	[0.01~600.00]Secs
Undervoltage threshold 5	30.0	[0.0~100.0]%VRef

Overvolt. Trip

Parametername	**Aktueller Wert**	**Veranschaulichen**
ID	130	
Length	60	
No. of charac. pt.s to be used	5	[1~5]
Overvoltage trip time 1	0.10	[0.01~600.00]Secs
Overvoltage threshold 1	115.0	[100.0~140.0]%VRef
Overvoltage trip time 2	0.10	[0.01~600.00]Secs
Overvoltage threshold 2	115.0	[100.0~140.0]%VRef
Overvoltage trip time 3	0.10	[0.01~600.00]Secs
Overvoltage threshold 3	115.0	[100.0~140.0]%VRef
Overvoltage trip time 4	0.10	[0.01~600.00]Secs
Overvoltage threshold 4	115.0	[100.0~140.0]%VRef
Overvoltage trip time 5	0.10	[0.01~600.00]Secs
Overvoltage threshold 5	115.0	[100.0~140.0]%VRef

React. Power cos(phi)(P)

Parametername	Aktueller Wert	Veranschaulichen
ID	131	
Length	172	
Characteristic curve number, configuration of characteristic curve mode	1	[0~3]
Activation of Power factor depending on active power	0	[0~1]
No. of charac. pt.s to be used (Curve1)	10	[1~10]
Active power value 1 (Curve1)	20.0	[0.0~100.0]%WMax
Power factor (EEI) value1 (Curve1)	-1.000	[-0.600~0.600],[-1.000~-0.800],[0.800~1.000]
Active power value 2 (Curve1)	50.0	[20.0~100.0]%WMax
Power factor (EEI) value2 (Curve1)	-1.000	[-0.600~0.600],[-1.000~-0.800],[0.800~1.000]
Active power value 3 (Curve1)	100.0	[20.0~100.0]%WMax
Power factor (EEI) value3 (Curve1)	-0.900	[-0.600~0.600],[-1.000~-0.800],[0.800~1.000]
Active power value 4 (Curve1)	100.0	[20.0~100.0]%WMax
Power factor (EEI) value4 (Curve1)	-0.900	[-0.600~0.600],[-1.000~-0.800],[0.800~1.000]
Active power value 5 (Curve1)	100.0	[20.0~100.0]%WMax
Power factor (EEI) value5 (Curve1)	-0.900	[-0.600~0.600],[-1.000~-0.800],[0.800~1.000]
Active power value 6 (Curve1)	100.0	[20.0~100.0]%WMax
Power factor (EEI) value6 (Curve1)	-0.900	[-0.600~0.600],[-1.000~-0.800],[0.800~1.000]
Active power value 7 (Curve1)	100.0	[20.0~100.0]%WMax
Power factor (EEI) value7 (Curve1)	-0.900	[-0.600~0.600],[-1.000~-0.800],[0.800~1.000]

Active power value 8 (Curve1)	100.0	[20.0~100.0]%WMax
Power factor (EEI) value8 (Curve1)	-0.900	[-0.600~0.600],[-1.000~-0.800],[0.800~1.000]
Active power value 9 (Curve1)	100.0	[20.0~100.0]%WMax
Power factor (EEI) value9 (Curve1)	-0.900	[-0.600~0.600],[-1.000~-0.800],[0.800~1.000]
Active power value 10 (Curve1)	100.0	[20.0~100.0]%WMax
Power factor (EEI) value10 (Curve1)	-0.900	[-0.600~0.600],[-1.000~-0.800],[0.800~1.000]
No. of charac. pt.s to be used (Curve2)	10	[1~10]
Active power value 1 (Curve2)	20.0	[0.0~100.0]%WMax
Power factor (EEI) value1 (Curve2)	0.000	[-0.600~0.600],[-1.000~-0.800],[0.800~1.000]
Active power value 2 (Curve2)	50.0	[20.0~100.0]%WMax
Power factor (EEI) value2 (Curve2)	-0.050	[-0.600~0.600],[-1.000~-0.800],[0.800~1.000]
Active power value 3 (Curve2)	100.0	[20.0~100.0]%WMax
Power factor (EEI) value3 (Curve2)	-0.330	[-0.600~0.600],[-1.000~-0.800],[0.800~1.000]
Active power value 4 (Curve2)	100.0	[20.0~100.0]%WMax
Power factor (EEI) value4 (Curve2)	-0.330	[-0.600~0.600],[-1.000~-0.800],[0.800~1.000]
Active power value 5 (Curve2)	100.0	[20.0~100.0]%WMax
Power factor (EEI) value5 (Curve2)	-0.330	[-0.600~0.600],[-1.000~-0.800],[0.800~1.000]
Active power value 6 (Curve2)	100.0	[20.0~100.0]%WMax
Power factor (EEI) value6 (Curve2)	-0.330	[-0.600~0.600],[-1.000~-0.800],[0.800~1.000]
Active power value 7 (Curve2)	100.0	[20.0~100.0]%WMax
Power factor (EEI) value7 (Curve2)	-0.330	[-0.600~0.600],[-1.000~-0.800],[0.800~1.000]

Active power value 8 (Curve2)	100.0	[20.0~100.0]%WMax
Power factor (EEI) value8 (Curve2)	-0.330	[-0.600~0.600],[-1.000~-0.800],[0.800~1.000]
Active power value 9 (Curve2)	100.0	[20.0~100.0]%WMax
Power factor (EEI) value9 (Curve2)	-0.330	[-0.600~0.600],[-1.000~-0.800],[0.800~1.000]
Active power value 10 (Curve2)	100.0	[20.0~100.0]%WMax
Power factor (EEI) value10 (Curve2)	-0.330	[-0.600~0.600],[-1.000~-0.800],[0.800~1.000]
No. of charac. pt.s to be used (Curve3)	10	[1~10]
Active power value 1 (Curve3)	20.0	[0.0~100.0]%WMax
Power factor (EEI) value1 (Curve3)	-1.000	[-0.600~0.600],[-1.000~-0.800],[0.800~1.000]
Active power value 2 (Curve3)	50.0	[20.0~100.0]%WMax
Power factor (EEI) value2 (Curve3)	-1.000	[-0.600~0.600],[-1.000~-0.800],[0.800~1.000]
Active power value 3 (Curve3)	100.0	[20.0~100.0]%WMax
Power factor (EEI) value3 (Curve3)	-0.900	[-0.600~0.600],[-1.000~-0.800],[0.800~1.000]
Active power value 4 (Curve3)	100.0	[20.0~100.0]%WMax
Power factor (EEI) value4 (Curve3)	-0.900	[-0.600~0.600],[-1.000~-0.800],[0.800~1.000]
Active power value 5 (Curve3)	100.0	[20.0~100.0]%WMax
Power factor (EEI) value5 (Curve3)	-0.900	[-0.600~0.600],[-1.000~-0.800],[0.800~1.000]
Active power value 6 (Curve3)	100.0	[20.0~100.0]%WMax
Power factor (EEI) value6 (Curve3)	-0.900	[-0.600~0.600],[-1.000~-0.800],[0.800~1.000]
Active power value 7 (Curve3)	100.0	[20.0~100.0]%WMax
Power factor (EEI) value7 (Curve3)	-0.900	[-0.600~0.600],[-1.000~-0.800],[0.800~1.000]

Active power value 8 (Curve3)	100.0	[20.0~100.0]%WMax
Power factor (EEI) value8 (Curve3)	-0.900	[-0.600~0.600],[-1.000~-0.800],[0.800~1.000]
Active power value 9 (Curve3)	100.0	[20.0~100.0]%WMax
Power factor (EEI) value9 (Curve3)	-0.900	[-0.600~0.600],[-1.000~-0.800],[0.800~1.000]
Active power value 10 (Curve3)	100.0	[20.0~100.0]%WMax
Power factor (EEI) value10 (Curve3)	-0.900	[-0.600~0.600],[-1.000~-0.800],[0.800~1.000]

Active power P(U)

Parametername	**Aktueller Wert**	**Veranschaulichen**
ID	132	
Length	64	
Activation of active power reduction dependent on voltage	0	[0~1]
No. of charac. pt.s to be used	8	[1~8]
Y-axis ref. characteristic	0.1	
Voltage value 1	106.0	[80.0~140.0]%VRef
Active power value 1	100.0	[0.0~100.0]%WRef
Voltage value 2	110.0	[80.0~140.0]%VRef
Active power value 2	0.0	[0.0~100.0]%WRef
Voltage value 3	110.0	[80.0~140.0]%VRef
Active power value 3	0.0	[0.0~100.0]%WRef
Voltage value 4	110.0	[80.0~140.0]%VRef
Active power value 4	0.0	[0.0~100.0]%WRef
Voltage value 5	110.0	[80.0~140.0]%VRef

Active power value 5	0.0	[0.0~100.0]%WRef
Voltage value 6	110.0	[80.0~140.0]%VRef
Active power value 6	0.0	[0.0~100.0]%WRef
Voltage value 7	110.0	[80.0~140.0]%VRef
Active power value 7	0.0	[0.0~100.0]%WRef
Voltage value 8	110.0	[80.0~140.0]%VRef
Active power value 8	0.0	[0.0~100.0]%WRef

Active power P(f)-curve

Parametername	**Aktueller Wert**	**Veranschaulichen**
ID	134	
Length	358	
Index of active curve. 0=no active curve.	1	[0~6]
Activation of active power limitation in case of overfrequency	1	[0~1]
No. of charac. pt.s to be used (Curve1)	8	[1~8]
Frequency value 1 (Curve1)	47.500	[45.000~49.980],[55.000~59.980]Hz
Active power value 1 (Curve1)	100.0	[0.0~100.0]%WRef
Frequency value 2 (Curve1)	47.500	[45.000~49.980],[55.000~59.980]Hz
Active power value 2 (Curve1)	100.0	[0.0~100.0]%WRef
Frequency value 3 (Curve1)	49.800	[45.000~49.980],[55.000~59.980]Hz
Active power value 3 (Curve1)	100.0	[0.0~100.0]%WRef
Frequency value 4 (Curve1)	49.800	[45.000~49.980],[55.000~59.980]Hz
Active power value 4 (Curve1)	100.0	[0.0~100.0]%WRef
Frequency value 5 (Curve1)	50.200	[50.020~55.000],[60.020~65.000]Hz
Active power value 5 (Curve1)	100.0	[0.0~100.0]%WRef
Frequency value 6 (Curve1)	51.500	[50.020~55.000],[60.020~65.000]Hz

Active power value 6 (Curve1)	48.0	[0.0~100.0]%WRef
Frequency value 7 (Curve1)	51.550	[50.020~55.000],[60.020~65.000]Hz
Active power value 7 (Curve1)	0.0	[0.0~100.0]%WRef
Frequency value 8 (Curve1)	51.550	[50.020~55.000],[60.020~65.000]Hz
Active power value 8 (Curve1)	0.0	[0.0~100.0]%WRef
P change rate after fault end for f curve 1	6000	[1~12000]%WMax/min
Enable snapshot / capture mode (Curve1)	0	[0~1]
No. of charac. pt.s to be used (Curve2)	8	[1~8]
ssFrequency value 1 (Curve2)	47.500	[45.000~49.980],[55.000~59.980]Hz
Active power value 1 (Curve2)	100.0	[0.0~100.0]%WRef
Frequency value 2 (Curve2)	47.500	[45.000~49.980],[55.000~59.980]Hz
Active power value 2 (Curve2)	100.0	[0.0~100.0]%WRef
Frequency value 3 (Curve2)	49.800	[45.000~49.980],[55.000~59.980]Hz
Active power value 3 (Curve2)	100.0	[0.0~100.0]%WRef
Frequency value 4 (Curve2)	49.800	[45.000~49.980],[55.000~59.980]Hz
Active power value 4 (Curve2)	100.0	[0.0~100.0]%WRef
Frequency value 5 (Curve2)	50.200	[50.020~55.000],[60.020~65.000]Hz
Active power value 5 (Curve2)	100.0	[0.0~100.0]%WRef
Frequency value 6 (Curve2)	51.500	[50.020~55.000],[60.020~65.000]Hz
Active power value 6 (Curve2)	48.0	[0.0~100.0]%WRef
Frequency value 7 (Curve2)	51.550	[50.020~55.000],[60.020~65.000]Hz
Active power value 7 (Curve2)	0.0	[0.0~100.0]%WRef
Frequency value 8 (Curve2)	51.550	[50.020~55.000],[60.020~65.000]Hz
Active power value 8 (Curve2)	0.0	[0.0~100.0]%WRef
P change rate after fault end for f curve 2	6000	[1~12000]%WMax/min
Enable snapshot / capture mode (Curve2)	0	[0~1]
No. of charac. pt.s to be used (Curve3)	8	[1~8]
Frequency value 1 (Curve3)	47.500	[45.000~49.980],[55.000~59.980]Hz
Active power value 1 (Curve3)	100.0	[0.0~100.0]%WRef

Frequency value 2 (Curve3)	47.500	[45.000~49.980],[55.000~59.980]Hz
Active power value 2 (Curve3)	100.0	[0.0~100.0]%WRef
Frequency value 3 (Curve3)	49.800	[45.000~49.980],[55.000~59.980]Hz
Active power value 3 (Curve3)	100.0	[0.0~100.0]%WRef
Frequency value 4 (Curve3)	49.800	[45.000~49.980],[55.000~59.980]Hz
Active power value 4 (Curve3)	100.0	[0.0~100.0]%WRef
Frequency value 5 (Curve3)	50.200	[50.020~55.000],[60.020~65.000]Hz
Active power value 5 (Curve3)	100.0	[0.0~100.0]%WRef
Frequency value 6 (Curve3)	51.500	[50.020~55.000],[60.020~65.000]Hz
Active power value 6 (Curve3)	48.0	[0.0~100.0]%WRef
Frequency value 7 (Curve3)	51.550	[50.020~55.000],[60.020~65.000]Hz
Active power value 7 (Curve3)	0.0	[0.0~100.0]%WRef
Frequency value 8 (Curve3)	51.550	[50.020~55.000],[60.020~65.000]Hz
Active power value 8 (Curve3)	0.0	[0.0~100.0]%WRef
P change rate after fault end for f curve 3	9	[1~12000]%WMax/min
Enable snapshot / capture mode (Curve3)	0	[0~1]
No. of charac. pt.s to be used (Curve4)	8	[1~8]
Frequency value 1 (Curve4)	47.500	[45.000~49.980],[55.000~59.980]Hz
Active power value 1 (Curve4)	100.0	[0.0~100.0]%WRef
Frequency value 2 (Curve4)	47.500	[45.000~49.980],[55.000~59.980]Hz
Active power value 2 (Curve4)	100.0	[0.0~100.0]%WRef
Frequency value 3 (Curve4)	49.800	[45.000~49.980],[55.000~59.980]Hz
Active power value 3 (Curve4)	100.0	[0.0~100.0]%WRef
Frequency value 4 (Curve4)	49.800	[45.000~49.980],[55.000~59.980]Hz
Active power value 4 (Curve4)	100.0	[0.0~100.0]%WRef
Frequency value 5 (Curve4)	50.200	[50.020~55.000],[60.020~65.000]Hz
Active power value 5 (Curve4)	100.0	[0.0~100.0]%WRef
Frequency value 6 (Curve4)	51.500	[50.020~55.000],[60.020~65.000]Hz
Active power value 6 (Curve4)	48.0	[0.0~100.0]%WRef

Frequency value 7 (Curve4)	51.550	[50.020~55.000],[60.020~65.000]Hz
Active power value 7 (Curve4)	0.0	[0.0~100.0]%WRef
Frequency value 8 (Curve4)	51.550	[50.020~55.000],[60.020~65.000]Hz
Active power value 8 (Curve4)	0.0	[0.0~100.0]%WRef
P change rate after fault end for f curve 4	9	[1~12000]%WMax/min
Enable snapshot / capture mode (Curve4)	0	[0~1]
No. of charac. pt.s to be used (Curve5)	8	[1~8]
Frequency value 1 (Curve5)	47.500	[45.000~49.980],[55.000~59.980]Hz
Active power value 1 (Curve5)	100.0	[0.0~100.0]%WRef
Frequency value 2 (Curve5)	47.500	[45.000~49.980],[55.000~59.980]Hz
Active power value 2 (Curve5)	100.0	[0.0~100.0]%WRef
Frequency value 3 (Curve5)	49.800	[45.000~49.980],[55.000~59.980]Hz
Active power value 3 (Curve5)	100.0	[0.0~100.0]%WRef
Frequency value 4 (Curve5)	49.800	[45.000~49.980],[55.000~59.980]Hz
Active power value 4 (Curve5)	100.0	[0.0~100.0]%WRef
Frequency value 5 (Curve5)	50.200	[50.020~55.000],[60.020~65.000]Hz
Active power value 5 (Curve5)	100.0	[0.0~100.0]%WRef
Frequency value 6 (Curve5)	51.500	[50.020~55.000],[60.020~65.000]Hz
Active power value 6 (Curve5)	48.0	[0.0~100.0]%WRef
Frequency value 7 (Curve5)	51.550	[50.020~55.000],[60.020~65.000]Hz
Active power value 7 (Curve5)	0.0	[0.0~100.0]%WRef
Frequency value 8 (Curve5)	51.550	[50.020~55.000],[60.020~65.000]Hz
Active power value 8 (Curve5)	0.0	[0.0~100.0]%WRef
P change rate after fault end for f curve 5	6000	[1~12000]%WMax/min
Enable snapshot / capture mode (Curve5)	0	[0~1]
No. of charac. pt.s to be used (Curve6)	8	[1~8]
Frequency value 1 (Curve6)	47.500	[45.000~49.980],[55.000~59.980]Hz
Active power value 1 (Curve6)	100.0	[0.0~100.0]%WRef
Frequency value 2 (Curve6)	47.500	[45.000~49.980],[55.000~59.980]Hz

Active power value 2 (Curve6)	100.0	[0.0~100.0]%WRef
Frequency value 3 (Curve6)	49.800	[45.000~49.980],[55.000~59.980]Hz
Active power value 3 (Curve6)	100.0	[0.0~100.0]%WRef
Frequency value 4 (Curve6)	49.800	[45.000~49.980],[55.000~59.980]Hz
Active power value 4 (Curve6)	100.0	[0.0~100.0]%WRef
Frequency value 5 (Curve6)	50.200	[50.020~55.000],[60.020~65.000]Hz
Active power value 5 (Curve6)	100.0	[0.0~100.0]%WRef
Frequency value 6 (Curve6)	51.500	[50.020~55.000],[60.020~65.000]Hz
Active power value 6 (Curve6)	48.0	[0.0~100.0]%WRef
Frequency value 7 (Curve6)	51.550	[50.020~55.000],[60.020~65.000]Hz
Active power value 7 (Curve6)	0.0	[0.0~100.0]%WRef
Frequency value 8 (Curve6)	51.550	[50.020~55.000],[60.020~65.000]Hz
Active power value 8 (Curve6)	0.0	[0.0~100.0]%WRef
P change rate after fault end for f curve 6	6000	[1~12000]%WMax/min
Enable snapshot / capture mode (Curve6)	0	[0~1]

Underfreq. Trip

Parametername	**Aktueller Wert**	**Veranschaulichen**
ID	135	
Length	60	
No. of charac. pt.s to be used	5	[1~5]
Underfrequency trip time 1	0.10	[0.01~600.00]Secs
Underfrequency threshold 1	47.50	[45.00~49.96],[55.00~59.96]Hz
Underfrequency trip time 2	0.10	[0.01~600.00]Secs
Underfrequency threshold 2	47.50	[45.00~49.96],[55.00~59.96]Hz
Underfrequency trip time 3	0.10	[0.01~600.00]Secs

Underfrequency threshold 3	47.50	[45.00~49.96],[55.00~59.96]Hz
Underfrequency trip time 4	0.10	[0.01~600.00]Secs
Underfrequency threshold 4	47.50	[45.00~49.96],[55.00~59.96]Hz
Underfrequency trip time 5	0.10	[0.01~600.00]Secs
Underfrequency threshold 5	47.50	[45.00~49.96],[55.00~59.96]Hz

PV inst. Values

Parametername	Aktueller Wert	Veranschaulichen
ID	160	
Length	248	
Global Events	0	
Number of Modules	12	
Input ID 1	1	
DC current input 1	20.6	A
DC voltage input 1	771.9	V
DC power input 1	15901	W
DC Side Event 1	0	
Input ID 2	2	
DC current input 2	0.0	A
DC voltage input 2	192.3	V
DC power input 2	0	W
DC Side Event 2	0	
Input ID 3	3	
DC current input 3	20.5	A
DC voltage input 3	778.6	V
DC power input 3	15961	W
DC Side Event 3	0	
Input ID 4	4	
DC current input 4	0.0	A
DC voltage input 4	192.3	V
DC power input 4	0	W
DC Side Event 4	0	

Input ID 5	5	
DC current input 5	0.0	A
DC voltage input 5	191.6	V
DC power input 5	0	W
DC Side Event 5	0	
Input ID 6	6	
DC current input 6	0.0	A
DC voltage input 6	192.0	V
DC power input 6	0	W
DC Side Event 6	0	
Input ID 7	7	
DC current input 7	0.0	A
DC voltage input 7	191.7	V
DC power input 7	0	W
DC Side Event 7	0	
Input ID 8	8	
DC current input 8	0.0	A
DC voltage input 8	192.2	V
DC power input 8	0	W
DC Side Event 8	0	
Input ID 9	9	
DC current input 9	0.0	A
DC voltage input 9	191.8	V
DC power input 9	0	W
DC Side Event 9	0	
Input ID 10	10	
DC current input 10	0.0	A
DC voltage input 10	189.8	V
DC power input 10	0	W

DC Side Event 10	0	
Input ID 11	11	
DC current input 11	0.0	A
DC voltage input 11	191.9	V
DC power input 11	0	W
DC Side Event 11	0	
Input ID 12	12	
DC current input 12	0.0	A
DC voltage input 12	192.2	V
DC power input 12	0	W
DC Side Event 12	0	

Extended Model 1 RO

Parametername	**Aktueller Wert**	**Veranschaulichen**
ID	64901	
Length	406	
Running State	On-grid Operation	
Fault/Alarm Code	0	
Daily Power Generation	141.4	kWh
Monthly Power Generation	141.4	kWh
Annual Power Generation	866.1	kWh
Total On-Grid Operation Time	100	h
Daily On-Grid Operation Time	342	min
DRM State	NO DRM	
Reactive Power Mode	Stable Qt Mode	
Power Limitation Mode	No	

Bus Voltage	804.9	V
Positive Bus Voltage	403.1	V
Negative Bus voltage	401.8	V
Residual current	39	mA
States of fans	127	
Module1 Temperture	41.0	℃
Module2 Temperture	29.0	℃
Module3 Temperture	47.0	℃
Module4 Temperture	-0.1	℃
Module5 Temperture	-0.1	℃
Module6 Temperture	-0.1	℃
MPPT1 Mode	4	
MPPT2 Mode	4	
MPPT3 Mode	4	
MPPT4 Mode	4	
MPPT5 Mode	4	
MPPT6 Mode	4	
MPPT7 Mode	4	
MPPT8 Mode	4	
MPPT9 Mode	4	
MPPT10 Mode	4	
MPPT11 Mode	4	
MPPT12 Mode	4	
Display information 1	0	
Display information 2	0	
Display information 3	0	
Display information 4	0	
Display information 5	401	
Display information 6	450	

Display information 7	8192	
Display information 8	8049	
Display information 9	0	
Display information 10	85	
Display information 11	2	
Display information 12	380	
Display information 13	400	
Display information 14	0	
Display information 15	0	
Display information 16	0	
Display information 17	0	
Display information 18	0	
Display information 19	3112	
Display information 20	0	
Display information 21	-1	
Display information 22	-1	
Display information 23	-1	
Display information 24	-1	
Display information 25	-1	
Display information 26	-1	
Display information 27	-1	
Display information 28	-1	
Display information 29	-1	
Display information 30	-1	
Display information 31	-1	
Display information 32	-1	
String 1 Current	10.52	A
String 2 Current	10.19	A
String 3 Current	0.00	A

String 4 Current	0.00	A
String 5 Current	10.33	A
String 6 Current	10.25	A
String 7 Current	0.00	A
String 8 Current	0.00	A
String 9 Current	0.00	A
String 10 Current	0.00	A
String 11 Current	0.00	A
String 12 Current	0.00	A
String 13 Current	0.00	A
String 14 Current	0.00	A
String 15 Current	0.00	A
String 16 Current	0.00	A
String 17 Current	0.00	A
String 18 Current	0.00	A
String 19 Current	0.00	A
String 20 Current	0.00	A
String 21 Current	0.00	A
String 22 Current	0.00	A
String 23 Current	0.00	A
String 24 Current	0.00	A

Extended Model 2-1 RW

Parametername	Aktueller Wert	Veranschaulichen
ID	64900	
Length	1350	
DIEmShutd	On	
TPGComp	0	kWh
TStand	20	[10~900]s
TFaultRec	300	[0~3600]s
MPPTConMod	Independent	
FsDiConfig	Off	
GVSEna	Off	
VoltVar	440.0	[400.0~560.0]V
VoltW	457.4	[400.0~560.0]V
VoltUnbalEna	On	
VoltUnbalValue	20	[2~50]%
VoltUnbalTime	5.00	[0.10~600.00]s
10minVoltEna	On	
10minVoltValue	444.0	[400.1~560.0]V
10minVoltRec	442.0	[400.0~559.9]V
StrDetectResEna	Off	
StrDetectEna	On	
StrReverseAlarm	3	[1~30]A
StrReverseFault	5	[1~30]A
IslandStrategy	Off	
IslandFreChange	0.200	[0.100~10.000]Hz/s
IslandPhaChange	12	[3~18]°

Bei einem Niederspannungs-Hausanschluss muss die Inselnetzerkennung aktiviert

IslandTime	0.50	[0.12~300.00]s
PassiveIsland	On	
PassiveIslandPha	12	[3~18]°
FaultRecAutoEna	On	
FaultRecSoftStartEna	On	
FaultRecSoftStartTime	600	[1~1200]s
ActPowSpeedEna	On	
ActPowDel	6000	[3~6000]%/min
ActPowRis	6000	[3~6000]%/min
WSetComHoldEna	Off	
WLimitShutdownEna	Off	
Baud	9600	
Check	NO	
Stop	1bit	
RS485Confir	Unconfirmed	
ComFailDetectEna	Off	
ComFailDetectTime	180	[1~36000]s
ComFailRecEna	Off	
ComFailRecTime	1	[1~36000]s
PreWLimit	0.0	[0.0~100.0]%
PreVarMod	off	
PreVarValue	0.0	[-100.0~100.0]%
PrePF	1.000	[-1.000~-0.800],[0.800~1.000]
PreQuCurve	Curve A	
PreHysRatio	0.0	[0.0~5.0]%
PreQu_V1	92.0	[80.0~100.0]%
PreQU_K1	48.4	[-60.0~60.0]%
PreQu_V2	96.0	[80.0~100.0]%
PreQU_K2	0.0	[-60.0~60.0]%

PreQu_V3	105.0	[100.0~120.0]%
PreQU_K3	0.0	[-60.0~60.0]%
PreQu_V4	108.0	[100.0~120.0]%
PreQU_K4	-48.4	[-60.0~60.0]%
PreQU_Pin	20.0	[20.0~100.0]%
PreQU_Pout	9.0	[1.0~20.0]%
PreQU_Mod	Yes,Limited by PF	
PreQU_PF	0.40	[0.00~0.95]
PreQPCurve	Curve A	
PreQP_P1	20.0	[0.0~100.0]%
PreQP_P2	50.0	[20.0~100.0]%
PreQP_P3	100.0	[20.0~100.0]%
PreQP_K1	-1.000	[-0.600~0.600],[-1.000~-0.800],[0.800~1.000]
PreQP_K2	-1.000	[-0.600~0.600],[-1.000~-0.800],[0.800~1.000]
PreQP_K3	-0.900	[-0.600~0.600],[-1.000~-0.800],[0.800~1.000]
PreQP_Vin	105.0	[100.0~110.0]%
PreQP_Vout	100.0	[90.0~100.0]%
PreQP_Pout	10.0	[1.0~100.0]%
PreQP_Mod	On	
MPPShdwEn	On	
MPPShdwTime	6	[6~180]min
FanSilentMode	Off	

Extended Model 2-2 RW

Parametername	Aktueller Wert	Veranschaulichen
SVGEna	Off	
VarSetComHoldEna	On	
SVG_VarValue	0.0	[-100.0~100.0]%
OverVoltRecValue	418.0	[400.1~559.9]V
UnderVoltRecValue	340.0	[40.1~400.0]V
OverFreRecValue	50.10	[50.02~54.98],[60.02~64.98]Hz
UnderFreRecValue	47.52	[45.02~49.98],[55.02~59.98]Hz
GridDetectEna	On	
GridFreMin	47.50	[45.00~49.98],[55.00~59.98]Hz
GridFreMax	50.10	[50.02~55.00],[60.02~65.00]Hz
GridVoltMin	85.0	[50.0~100.0]%
GridVoltMax	109.0	[100.0~120.0]%
GridDetectTime	60	[10~900]s
InitPowerGra	10	[3~6000]%/min
ActiveResponsTime	5.0	[0.1~600.0]s
ReactiveRespEna	On	
ReActiveResponsTime	3.0	[0.1~600.0]s
FanSelfcheckEna	Off	
ISOEna	On	
ISOValue	40	[20~3000]kΩ
AIEna	On	
WaveRecordEna	Off	
PfMod	Normal PF	
QU_Pin	20.0	[20.0~100.0]%

QU_Pout	9.0	[1.0~20.0]%
QU_Mod	Yes,Limited by PF	
QU_PFLimit	0.40	[0.00~0.95]
LVRT_UnbalEna	On	
LVRT_ZeroPEna	Off	
LVRT_K	2.0	[0.0~10.0]
LVRT_PMod	Reactive Priority	
LVRT_VarLimitEna	Off	
LVRT_VarMax	100.0	[0.0~100.0]%
LVRT_ZeroCurrEna	Off	
LVRT_ZeroCurrValue	70.0	[0.0~100.0]%
LVRT_VarAdd	On	
LVRT_VoltMutaEna	Off	
LVRT_VoltMutaValue	5.0	[0.0~15.0]%
LVRT_ExitModEna	Off	
LVRT_ExitTime	5	[0~100]s
HVRT_UnbalEna	Off	
HVRT_ZeroPEna	Off	
HVRT_K	1.0	[0.0~10.0]
HVRT_PMod	Close	
HVRT_VarLimitEna	Off	
HVRT_VarMax	100.0	[0.0~100.0]%
HVRT_ZeroCurrEna	Off	
HVRT_ZeroCurrValue	120.0	[100.0~150.0]%
HVRT_VarAdd	Off	
HVRT_VoltMutaEna	Off	
HVRT_VoltMutaValue	5.0	[0.0~15.0]%
HVRT_ExitModEna	Off	
HVRT_ExitTime	5	[0~100]s

QP_Vin	105.0	[100.0~110.0]%
QP_Vout	100.0	[90.0~100.0]%
QP_Pout	10.0	[1.0~100.0]%
QP_Mod	On	
OverFreRecDelayTime	0.1	[0.0~1200.0]s
OverFreRespTime	1.00	[0.00~2.00]s
LowFreRecDelayTime	300.0	[0.0~1200.0]s
LowFreRespTime	1.00	[0.00~2.00]s
LVRT_Ena	On	
LVRT_V1	340.0	[0.0~400.0]v
LVRT_T1	1.500	[0.040~14400.000]s
HVRT_Ena	Off	
HVRT_V1	440.0	[400.0~560.0]v
HVRT_T1	1.000	[0.040~14400.000]s