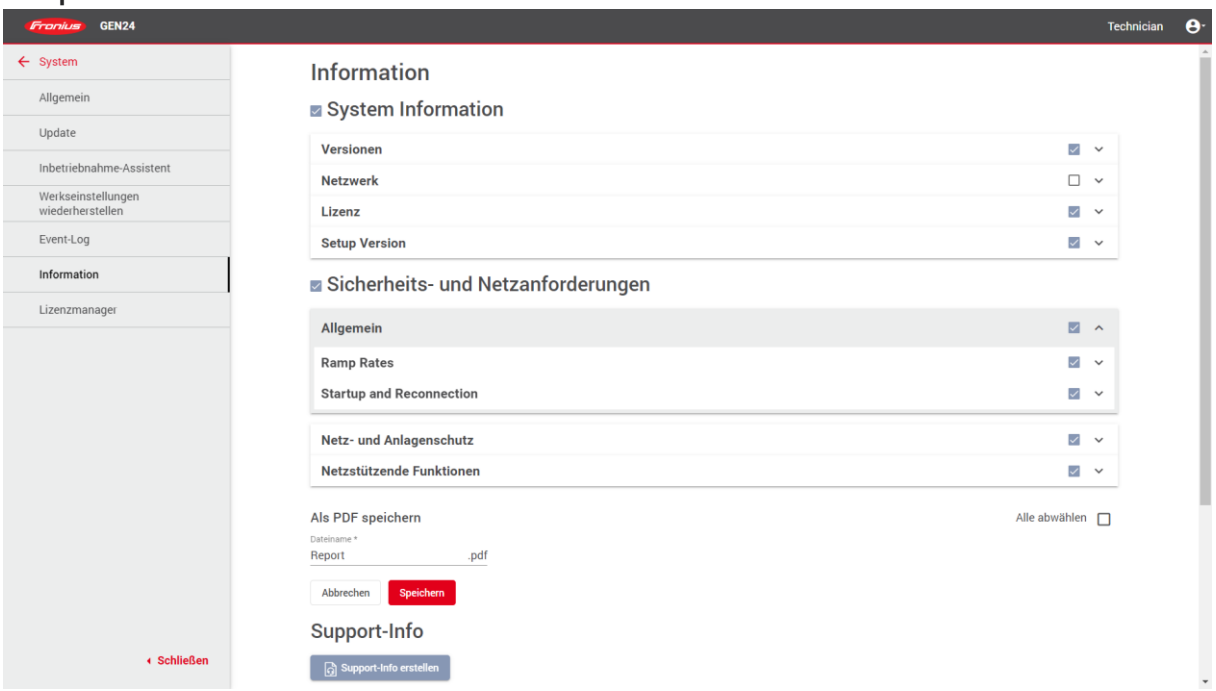
Fronius Gen24 Musterreport TOR Erzeuger Typ A

Report erstellen:



Auf folgenden Seiten befindet sich der Musterreport

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System Information

Versionen

Gerätename	Symo GEN24 6.0
Hardware ID	pilot-0.5e-580808035822140126
WebUI	1.6.5-0
User Agent	Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/86.0.4240.183 Safari/537.36

Software-Revisionen

CoyoteControl	0.6.3-1
CoyoteCore	1.6.6-1
DEVICEGROUP	1.9.7-0
GEN24	1.9.7-0
GEN24ROW	1.9.7-0
GEN24SYMO	1.9.7-0
Kronos	2.19.2-8857
Rhea	2.6.1-2
S10RW-pilot	1.6.6-1
Zeus	2.12.4-4760
imx6sx-pilot	1.6.6-1

Hardware-Revisionen

3PN10K-31381005318790050	31381005318790050|4,071,594|0.5A__|3PN10K|R|
PILOT-31361000810390043	31361000810390043|4,071,452|0.5E_A|PILOT|R|
ROX-31331000711760165	31331000711760165|4,071,585|0.6E_D|ROX|R|

Lizenz

Seriennummer	31519056
Nennleistung	6000
Sequenznummer	2

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Artikelnummer	4,210,153,002

Aktivierte Features

Artikelnummer	Name
41,300,221	Battery Operation
41,300,222	Full Backup

Setup Version

Grid Code	Austria Q(U)
Region	Austria
Grid Code Id	196647 (0x30027)
Grid Code Version	V 01.00.10.00

Sicherheits- und Netzanforderungen

Allgemein

Ramp Rates

Ramp-Down Irradiation

Option	Limits	Value	Unit
Ramp-Down Irradiation		Aus	
Ramp-Down Irradiation Rate	[0 - 200]	0.167	%/s

Ramp-Up Irradiation

Option	Limits	Value	Unit
Ramp-Up Irradiation		Aus	
Ramp-Up Irradiation Rate	[0 - 200]	0.167	%/s

Ramp-Down Communication

Option	Limits	Value	Unit
Ramp-Down Communication		Aus	
Ramp-Down Communication Rate	[0 - 100]	0.3	%/s

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Ramp-Up Communication

Option	Limits	Value	Unit
Ramp-Up Communication		**Aus**	
Ramp-Up Communication Rate	[0 - 100]	**0.3**	%/s

Ramp-Up at Startup and Reconnection

Option	Limits	Value	Unit
Ramp-Up at Startup and Reconnection		**Ein**	
Ramp-Up at Startup and Reconnection Rate	[0.001 - 100]	**0.16**	%/s

Startup and Reconnection

Option	Limits	Value	Unit
Grid Monitoring Time Startup	[1 - 900]	**60**	s
Grid Monitoring Time Reconnection	[1 - 900]	**300**	s

Netz- und Anlagenschutz

DC Injection

Inner Limit

Option	Limits	Value	Unit
DC Current Relative Value	[0 - 10]	**0.5**	%A
DC Current Absolute Value	[0 - 10]	**0.9**	A
Mode		**Aus**	
DC Injection Time	[0 - 10]	**0.2**	s

Outer Limit

Option	Limits	Value	Unit
DC Current Relative Value	[0 - 10]	**0.5**	%A
DC Current Absolute Value	[0 - 10]	**0.9**	A
Mode		**Absolute Value**	
DC Injection Time	[0 - 10]	**0.18000000000000002**	s

Frequency

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Alternative Limits

Option	Limits	Value	Unit
Overfrequency f>	[45 - 66]	**50.5**	Hz
Underfrequency f<	[45 - 66]	**49.5**	Hz
Frequency Alternative Limits		**Aus**	
Overfrequency Time f>	[0 - 1000]	**0.1**	s
Underfrequency Time f<	[0 - 1000]	**0.1**	s

Inner Limits

Option	Limits	Value	Unit
Overfrequency f>	[45 - 66]	**51.5**	Hz
Underfrequency f<	[45 - 66]	**47.5**	Hz
Overfrequency Time f>	[0 - 1000]	**0.060000000000000005**	s
Underfrequency Time f<	[0 - 1000]	**0.060000000000000005**	s

Outer Limits

Option	Limits	Value	Unit
Overfrequency f>>	[45 - 66]	**51.5**	Hz
Underfrequency f<<	[45 - 66]	**47.5**	Hz
Frequency Outer Limits		**Ein**	
Overfrequency Time f>>	[0 - 1000]	**0.060000000000000005**	s
Underfrequency Time f<<	[0 - 1000]	**0.060000000000000005**	s

Startup and Reconnection

Option	Limits	Value	Unit
Reconnection Maximum Frequency	[45 - 66]	**50.1**	Hz
Reconnection Minimum Frequency	[45 - 66]	**47.5**	Hz
Startup Maximum Frequency	[45 - 66]	**50.1**	Hz
Startup Minimum Frequency	[45 - 66]	**47.5**	Hz
Mode		**Startup Values are used for Startup and Reconnection**	

Rate of Change of Frequency (RoCoF) Protection

Option	Limits	Value	Unit
RoCoF Limit	[0.05 - 99]	**2.5**	Hz/s

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Option	Limits	Value	Unit
Rate of Change of Frequency (RoCoF) Protection		Aus	
RoCoF Time	[0.05 - 16]	0.3	s

Grid Type / Voltage Monitoring

Option	Limits	Value	Unit
Grid Type Instance 1		Aus	
Grid Type Instance 2		Aus	

Voltage

Fast Overvoltage Disconnect

Option	Limits	Value	Unit
Fast Overvoltage Disconnect		Ein	
Fast Overvoltage Disconnect Time	[0.0001 - 0.02]	0.0005	s

Inner Limits

Option	Limits	Value	Unit
Overvoltage Time U>	[0 - 1000]	0.060000000000000005	s
Undervoltage Time U<	[0 - 1000]	1.46	s
Overvoltage U>	[0 - 311]	264.5	V
Undervoltage U<	[0 - 311]	184	V

Long Time Average Limit

Option	Limits	Value	Unit
Long Time Average Limit		Ein	
Overvoltage Averaging Time U>	[0 - 15300]	600	s
Overvoltage U>	[0 - 311]	255.3	V

Middle Limits

Option	Limits	Value	Unit
Voltage Middle Limits		Aus	
Overvoltage Time U>	[0 - 1000]	0.18	s
Undervoltage Time U<	[0 - 1000]	0.18	s
Overvoltage U>	[0 - 311]	270	V

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Option	Limits	Value	Unit
Undervoltage U<	[0 - 311]	**190**	V

Outer Limits

Option	Limits	Value	Unit
Voltage Outer Limits		**Ein**	
Overvoltage Time U>>	[0 - 1000]	**0.060000000000000005**	s
Undervoltage Time U<<	[0 - 1000]	**0.46**	s
Overvoltage U>>	[0 - 311]	**264.5**	V
Undervoltage U<<	[0 - 311]	**57.5**	V

Startup and Reconnection

Option	Limits	Value	Unit
Mode		**Startup Values are used for Startup and Reconnection**	
Reconnection Maximum Voltage	[0 - 311]	**250.7**	V
Reconnection Minimum Voltage	[0 - 311]	**195.5**	V
Startup Maximum Voltage	[0 - 311]	**250.7**	V
Startup Minimum Voltage	[0 - 311]	**195.5**	V

Netzstützende Funktionen

Wirkleistung

General - Active Power

Option	Limits	Value	Unit
Priority		**Priority on Manual Power Limitation**	

Frequency-dependent Power Control

Option	Limits	Value	Unit
Configuration Method		**Use Gradient**	
Mode		**On (without Hysteresis)**	

Frequency-dependent Power Control - Battery SoC Limitation for Grid Support

Option	Limits	Value	Unit

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Option	Limits	Value	Unit
Battery SoC Upper Limit	[0 - 100]	**90**	%
Battery SoC Lower Limit	[0 - 100]	**10**	%
Batterie SoC Limit AGF Valid Flag		**Aus**	

Frequency-dependent Power Control - General - Frequency-dependent Power Control

Option	Limits	Value	Unit
Return Gradient 2 Mode		**Off**	
Return Gradient 1	[0.01 - 100]	**0.16**	%/s
Return Gradient 1 Alternative	[0.01 - 100]	**5**	%/s
Return Gradient 2	[0.01 - 100]	**5**	%/s
Return Gradient 1 Alternative Threshold	[0 - 100]	**100**	%W
Time Constant (τ)	[0 - 60]	**0**	s
Initial Delay	[0 - 60]	**0**	s
Deactivation Time	[0 - 600]	**0**	s

Frequency-dependent Power Control - Overfrequency

Option	Limits	Value	Unit
Upper Deactivation Threshold Overfrequency	[45 - 66]	**50.2**	Hz
Lower Deactivation Threshold Overfrequency	[45 - 66]	**45**	Hz
Activation Threshold Overfrequency	[45 - 66]	**50.2**	Hz
Stop Frequency Overvoltage	[45 - 66]	**52**	Hz
Calculation Mode Overfrequency		**Pmax = Pm-Pm(k*df)**	
Power at Stop Frequency Overvoltage	[-100 - 0]	**0**	%
Gradient Overfrequency	[0.01 - 300]	**40**	%/Hz

Frequency-dependent Power Control - Underfrequency

Option	Limits	Value	Unit
Upper Deactivation Threshold Underfrequency	[45 - 66]	**52.5**	Hz
Lower Deactivation Threshold Underfrequency	[45 - 66]	**49.95**	Hz
Activation Threshold Underfrequency	[45 - 66]	**48.8**	Hz
Stop Frequency Undervoltage	[45 - 66]	**48**	Hz
Calculation Mode Underfrequency		**Pmax = Pm-Pm(k*df)**	
Power at Stop Frequency Undervoltage	[0 - 100]	**0**	%

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Option	Limits	Value	Unit
Gradient Underfrequency	[0 - 100]	40	%/Hz
Active Grid Support Underfrequency		Aus	

Voltage-dependent Power Control

Option	Limits	Value	Unit
Gradient Undervoltage	[0 - 100]	0	%/V
Activation Threshold Undervoltage	[0 - 311]	0	V
Active Grid Support Undervoltage		Aus	
Calculation Mode		Pmax = Pn-Pn(k*dV)	
Mode		On (without Hysteresis)	
Gradient Overvoltage	[0.01 - 100]	21.74	%/V
Time Constant (τ)	[0 - 600]	5	s
Activation Threshold Overvoltage	[208 - 311]	253	V

Reactive Power

Option	Limits	Value	Unit
Cos φ Minimum	[0 - 1]	0.4	
P/Q Priority		Q Priority	
Mode		Q(U) - Voltage-dependent Reactive Power Characteristic	

Cos φ(P) - Power-dependent Power Factor Characteristic

Cos φ(P) - Power-dependent Power Factor Characteristic - General

Option	Limits	Value	Unit
Lock-Out P-Dependent (% of Nominal Apparent Power)	[0 - 100]	0	%W
Time Constant (τ)	[0.01 - 60]	1	s
Lock-In Voltage-Dependent (% of Nominal Voltage)	[0 - 120]	0	%V
Lock-Out Voltage-Dependent (% of Nominal Voltage)	[0 - 120]	0	%V

Cos φ(P) - Power-dependent Power Factor Characteristic - Point 1

Option	Limits	Value	Unit
cos φ - Power Factor	[0 - 1]	1	
Direction / Excitation		Injection / OverExcited / Capacitive	
Active Power (% of Nominal Apparent Power)	[0 - 100]	0	%W

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Cos φ(P) - Power-dependent Power Factor Characteristic - Point 2

Option	Limits	Value	Unit
cos φ - Power Factor	[0 - 1]	**1**	
Direction / Excitation		**Injection / OverExcited / Capacitive**	
Active Power (% of Nominal Apparent Power)	[0 - 100]	**0**	%W

Cos φ(P) - Power-dependent Power Factor Characteristic - Point 3

Option	Limits	Value	Unit
cos φ - Power Factor	[0 - 1]	**1**	
Direction / Excitation		**Injection / OverExcited / Capacitive**	
Active Power (% of Nominal Apparent Power)	[0 - 100]	**50**	%W

Cos φ(P) - Power-dependent Power Factor Characteristic - Point 4

Option	Limits	Value	Unit
cos φ - Power Factor	[0 - 1]	**0.9**	
Direction / Excitation		**Absorption / UnderExcited / Inductive**	
Active Power (% of Nominal Apparent Power)	[0 - 100]	**100**	%W

const cos φ

Option	Limits	Value	Unit
cos φ - Power Factor	[0 - 1]	**1**	
Direction / Excitation		**Capacitive (outdated setup, re-select your setup)**	
Time Constant (τ)	[0.01 - 60]	**0.1**	s

Q Absolute - Constant Reactive Power

Option	Limits	Value	Unit
Q - Reactive Power (Var)	[-200000 - 200000]	**0**	var
Time Constant (τ)	[0.01 - 60]	**0.1**	s

Q Relative - Constant Reactive Power

Option	Limits	Value	Unit
Q - Reactive Power (% of Nominal Apparent Power)	[-100 - 100]	**0**	%var
Time Constant (τ)	[0.01 - 60]	**0.1**	s

Q(P) - Power-dependent Reactive Power Characteristic

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Q(P) - Power-dependent Reactive Power Characteristic - General

Option	Limits	Value	Unit
Lock-Out P-Dependent (% of Nominal Apparent Power)	[0 - 100]	0	%W
Time Constant (τ)	[0.01 - 60]	1	s
Lock-In Voltage-Dependent (% of Nominal Voltage)	[80 - 120]	120	%V
Lock-Out Voltage-Dependent (% of Nominal Voltage)	[80 - 120]	80	%V

Q(P) - Power-dependent Reactive Power Characteristic - Point 1

Option	Limits	Value	Unit
Reactive Power (% of Nominal Apparent Power)	[-100 - 100]	0	%var
Active Power (% of Nominal Apparent Power)	[0 - 100]	0	%W

Q(P) - Power-dependent Reactive Power Characteristic - Point 2

Option	Limits	Value	Unit
Reactive Power (% of Nominal Apparent Power)	[-100 - 100]	0	%var
Active Power (% of Nominal Apparent Power)	[0 - 100]	25	%W

Q(P) - Power-dependent Reactive Power Characteristic - Point 3

Option	Limits	Value	Unit
Reactive Power (% of Nominal Apparent Power)	[-100 - 100]	0	%var
Active Power (% of Nominal Apparent Power)	[0 - 100]	25	%W

Q(P) - Power-dependent Reactive Power Characteristic - Point 4

Option	Limits	Value	Unit
Reactive Power (% of Nominal Apparent Power)	[-100 - 100]	0	%var
Active Power (% of Nominal Apparent Power)	[0 - 100]	100	%W

Q(U) - Voltage-dependent Reactive Power Characteristic

Q(U) - Voltage-dependent Reactive Power Characteristic - General

Option	Limits	Value	Unit
Q Offset Factor	[-1 - 1]	0	
Lock-In P-Dependent (% of Nominal Apparent Power)	[0 - 100]	0	%W
Lock-Out P-Dependent (% of Nominal Apparent Power)	[0 - 100]	0	%W

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Option	Limits	Value	Unit
Initial Delay Time	[0 - 60]	0	s
Time Constant (τ)	[0.01 - 60]	5	s

Q(U) - Voltage-dependent Reactive Power Characteristic - Point 1

Option	Limits	Value	Unit
Reactive Power (% of Nominal Apparent Power)	[-100 - 100]	43.6	%var
Voltage (% of Nominal Voltage)	[50 - 150]	92	%V

Q(U) - Voltage-dependent Reactive Power Characteristic - Point 2

Option	Limits	Value	Unit
Reactive Power (% of Nominal Apparent Power)	[-100 - 100]	0	%var
Voltage (% of Nominal Voltage)	[50 - 150]	96	%V

Q(U) - Voltage-dependent Reactive Power Characteristic - Point 3

Option	Limits	Value	Unit
Reactive Power (% of Nominal Apparent Power)	[-100 - 100]	0	%var
Voltage (% of Nominal Voltage)	[50 - 150]	105	%V

Q(U) - Voltage-dependent Reactive Power Characteristic - Point 4

Option	Limits	Value	Unit
Reactive Power (% of Nominal Apparent Power)	[-100 - 100]	-43.6	%var
Voltage (% of Nominal Voltage)	[50 - 150]	108	%V

Voltage Fault Ride Through

Option	Limits	Value	Unit
Mode		Ein	

Region 1

Option	Limits	Value	Unit
k-factor Negative Sequence	[0 - 10]	0	
k-factor Positive Sequence	[0 - 10]	0	
Current Calc Mode		Zero Current	
Detection Mode		Norm Mode	
Threshold Static	[0 - 200]	80	%V

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Region 2

Option	Limits	Value	Unit
k-factor Negative Sequence	[0 - 10]	**0**	
k-factor Positive Sequence	[0 - 10]	**0**	
Current Calc Mode		**Passive**	
Detection Mode		**Mode 1**	
Threshold Static	[0 - 200]	**0**	%V

Region 3

Option	Limits	Value	Unit
k-factor Negative Sequence	[0 - 10]	**0**	
k-factor Positive Sequence	[0 - 10]	**0**	
Current Calc Mode		**Passive**	
Detection Mode		**Mode 1**	
Threshold Static	[0 - 200]	**0**	%V