EN

1 Extended technical Data

1.1 KACO blueplanet 3.0 NX3

AC-Power	
Inverter power nominal	3 kVA
Inverter power maximal	3 kVA
Rated current (In)	3*4.6 A [@220V] / 3*4.4 A [@230V] / 3*4.2 A [@240V]
Short circuit current continous (max output fault current)	4,8 A
Power electronics type	IGBT-MLI (self-commutated)
Rated operating voltage	220V / 380V [3/N/PE], 230V / 400V [3/N/PE], 240V / 415V [3/N/PE]
cos phi nominal	≈ 0,8
Grid connection	Three-phase

Operating behaviour in the event of a short circuit at the inverter output	
Contribution to peak short-circuit current (îp)	20,0 A
Contribution to the initial short-circuit alternating current (Ik" first single period effective value)	4,8 A

Flicker				
Grid impedance angle	30°	50°	70°	85°
Flicker step factor	0,13	0,13	0,13	0,13
Short term flicker	0,16	0,16	0,16	0,16
Note: $S_{k,fic}/S_n$ in the fictitious grid was set to	20			

Injection of DC currents
A converter must not feed in more than 0.5% of its rated current or a maximum of 20 mA (whichever is higher) as direct current.

P_{bin} [% P_n]	$P_{bin,\,e\,val}$ [% P_n]	P kW]	$I_{DCcmp\ L1}$ [mA]	$I_{DCcmp\ L2}$ [mA]	$I_{DCcmp\ L3}$ [mA]	$I_{DCcmp\ L1}$ [% I_n]	$I_{DCcmp\ L2}$ [% I_n]	$I_{DCcmp\ L3}$ [% I_n]
30	6,0	6,63	33,9	26,6	48,5	0,12%	0,09%	0,17%
40	8,0	8,08	48,8	31,4	47,7	0,02%	0,17%	0,11%
60	12,0	12,06	51,7	42,7	60,3	0,18%	0,15%	0,21%
70	14,0	13,82	46,5	43	60,8	0,16%	0,15%	0,21%
100	20,0	19,94	63	63,7	89,2	0,22%	0,22%	0,31%
[% von Imax] % rated AC current						0,23%	0,23%	0,22%

Tab. 1: DC-Injection measurement values

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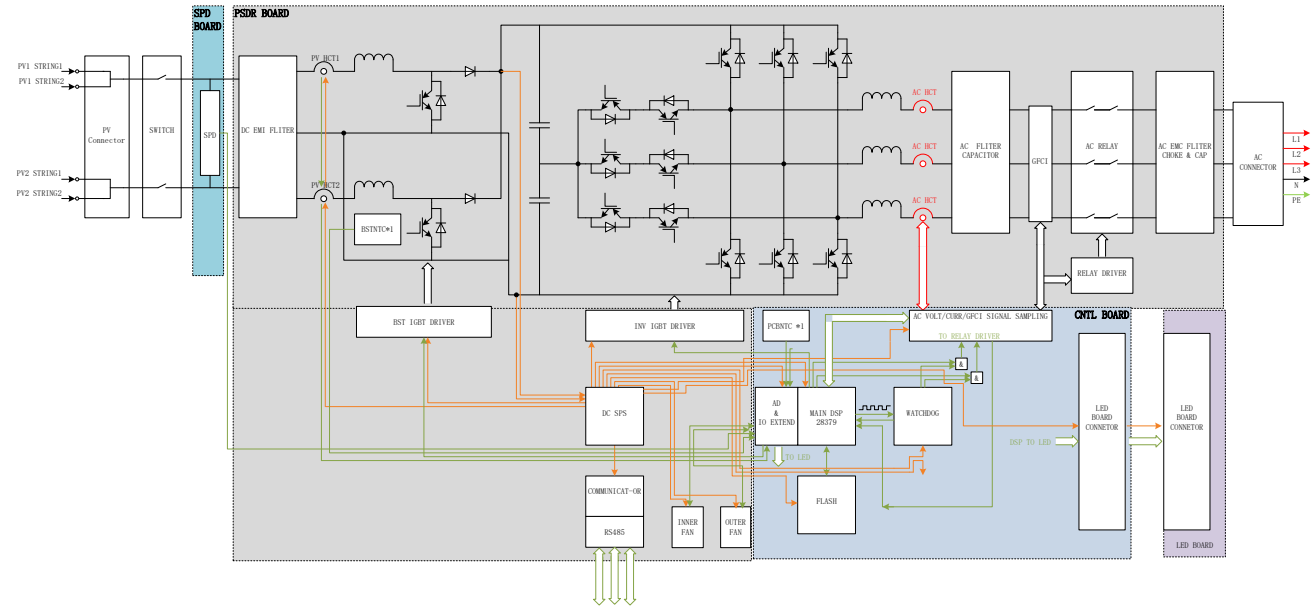


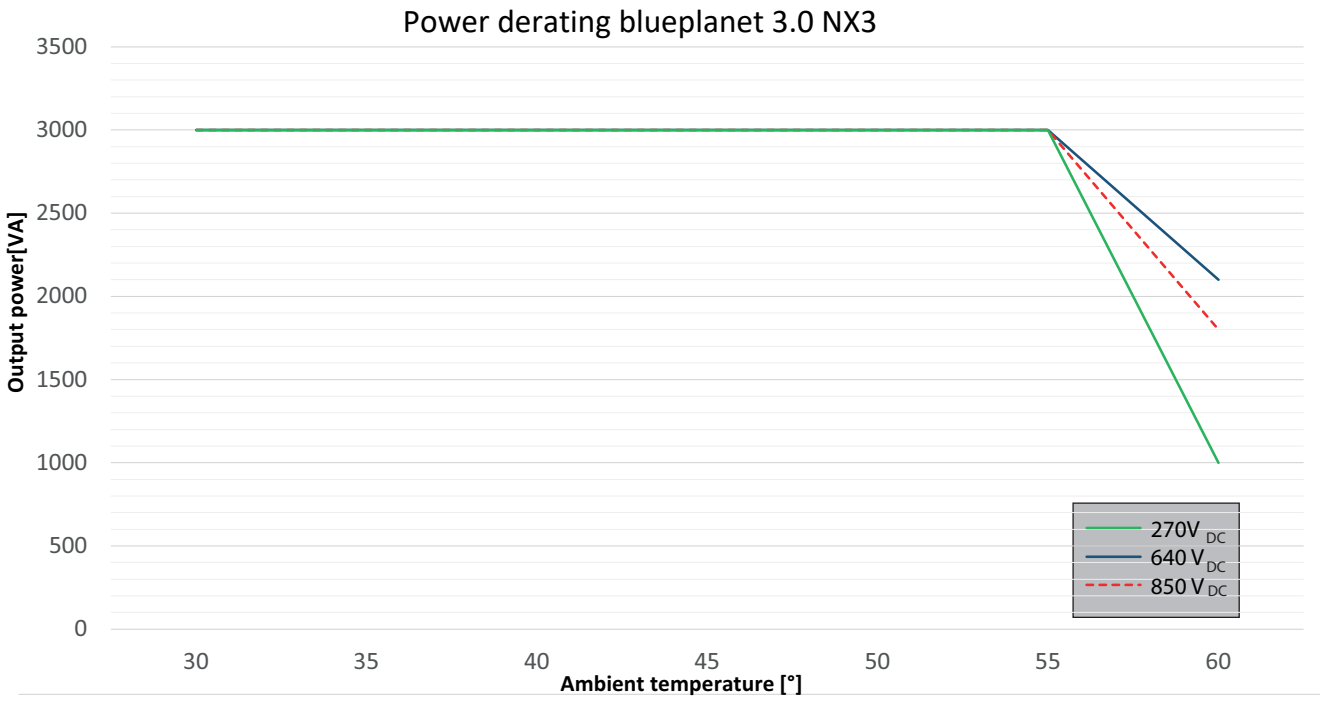
Fig. 1: Block schema blueplanet 3.0-20.0 NX3

Harmonics 50 Hz	**Line 1**		**Line 2**		**Line 3**	
	[A]	**[% In]**	**[A]**	**[% In]**	**[A]**	**[% In]**
1	4,212	99,79	4,265		4,264	
2	0,048	2,960	0,045	2,787	0,041	2,550
3	0,032	0,917	0,026	0,750	0,027	0,788
4	0,022	3,413	0,021	3,261	0,023	3,506
5	0,043	2,501	0,043	2,536	0,041	2,402
6	0,023	5,086	0,024	5,415	0,022	4,969
7	0,020	1,761	0,022	1,923	0,020	1,762
8	0,020	5,874	0,021	6,038	0,020	5,878
9	0,017	2,896	0,018	3,053	0,017	2,8997
10	0,018	6,678	0,018	6,671	0,019	6,762
11	0,016	3,254	0,016	3,159	0,015	3,041
12	0,024	10,577	0,025	10,780	0,023	9,834
13	0,033	10,367	0,032	10,303	0,031	9,966
14	0,023	10,544	0,022	11,326	0,020	10,282
15	0,020	8,817	0,019	8,655	0,020	8,728
16	0,021	11,943	0,022	12,611	0,021	12,046
17	0,023	11,480	0,023	11,707	0,021	10,699
18	0,021	13,843	0,023	14,694	0,021	13,397
19	0,024	13,383	0,024	13,688	0,022	12,461
20	0,021	15,212	0,021	14,992	0,019	14,033
21	0,019	12,036	0,020	12,245	0,019	12,038
22	0,020	15,970	0,020	16,137	0,020	16,182
23	0,021	14,159	0,022	15,294	0,020	13,940
24	0,018	15,578	0,018	15,888	0,017	14,635
25	0,022	16,106	0,023	16,996	0,023	16,859
26	0,018	16,888	0,019	17,528	0,017	16,186
27	0,016	13,044	0,071	13,732	0,017	13,369
28	0,017	17,675	0,018	18,047	0,018	17,956

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Harmonics 50 Hz	Line 1		Line 2		Line 3	
	[A]	[% In]	[A]	[% In]	[A]	[% In]
29	0,021	18,107	0,022	18,697	0,020	16,885
30	0,016	17,667	0,017	18,044	0,016	17,288
31	0,022	20,628	0,022	19,871	0,022	19,818
32	0,015	17,068	0,015	17,756	0,014	16,282
33	0,014	13,372	0,014	13,811	0,013	13,103
34	0,014	17,452	0,014	17,827	0,014	16,766
35	0,019	19,577	0,019	19,929	0,020	20,345
36	0,013	17,158	0,013	17,479	0,013	17,445
37	0,024	26,467	0,024	26,606	0,024	26,149
38	0,012	16,851	0,013	17,698	0,012	17,147
39	0,012	13,317	0,012	13,571	0,011	13,207
40	0,011	15,792	0,011	16,332	0,011	15,798

Tab. 2: Harmonics 50 Hz blueplanet 3.0 NX3



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Efficiency characteristic

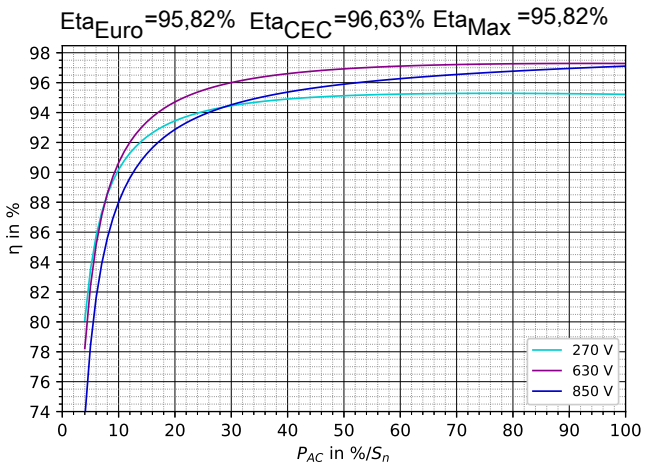


Fig. 2: 2D Diagram blueplanet 3.0 NX3 M2

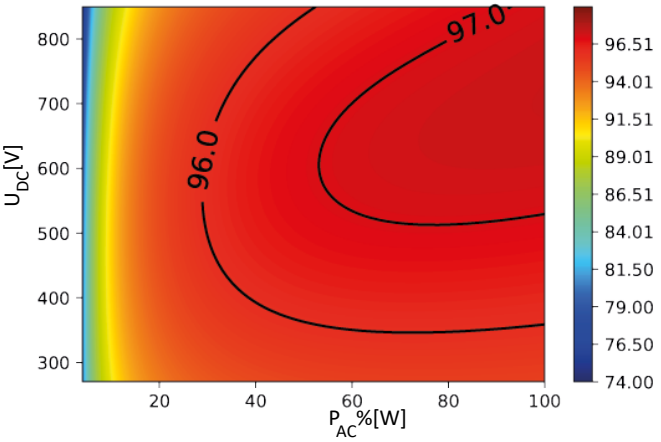


Fig. 3: 3D Diagram blueplanet 3.0 NX3 M2

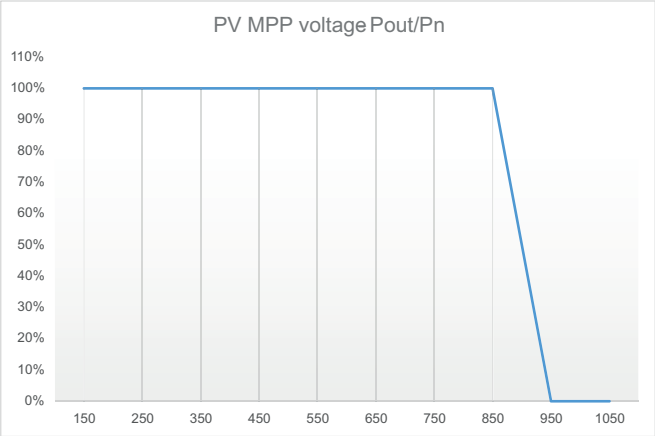


Fig. 4: 2D Diagram %Pout/Pn vs Voltage 3.0 NX3 M2

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1.2 KACO blueplanet 5.0 NX3

AC-Power	
Inverter power nominal	5 kVA
Inverter power maximal	5 kVA
Rated current (In)	3*7.6 A [@220V] / 3*7.3 A [@230V] / 3*7 A [@240V]
Short circuit current continous (max output fault current)	8,0 A
Power electronics type	IGBT-MLI (self-commutated)
Rated operating voltage	220V / 380V [3/N/PE], 230V / 400V [3/N/PE], 240V / 415V [3/N/PE]
cos phi nominal	≈ 0,8
Grid connection	Three-phase

Operating behaviour in the event of a short circuit at the inverter output	
Contribution to peak short-circuit current (îp)	20,0 A
Contribution to the initial short-circuit alternating current (Ik" first single period effective value)	8,0 A

Flicker				
Grid impedance angle	30°	50°	70°	85°
Flicker step factor	0,14	0,14	0,14	0,14
Short term flicker	0,17	0,17	0,17	0,17
Note: $S_{k, fic}/S_n$ in the fictitious grid was set to	20			

Injection of DC currents
A converter must not feed in more than 0.5% of its rated current or a maximum of 20 mA (whichever is higher) as direct current.

P_{bin} [% P_n]	$P_{bin, e\ val}$ [% P_n]	P kW]	$I_{DCcmp\ L1}$ [mA]	$I_{DCcmp\ L2}$ [mA]	$I_{DCcmp\ L3}$ [mA]	$I_{DCcmp\ L1}$ [% I_n]	$I_{DCcmp\ L2}$ [% I_n]	$I_{DCcmp\ L3}$ [% I_n]
30	6,0	6,63	33,9	26,6	48,5	0,12%	0,09%	0,17%
40	8,0	8,08	48,8	31,4	47,7	0,02%	0,17%	0,11%
60	12,0	12,06	51,7	42,7	60,3	0,18%	0,15%	0,21%
70	14,0	13,82	46,5	43	60,8	0,16%	0,15%	0,21%
100	20,0	19,94	63	63,7	89,2	0,22%	0,22%	0,31%
[% von Imax] % rated AC current						0,23%	0,23%	0,22%

Tab. 3: DC-Injection measurement values

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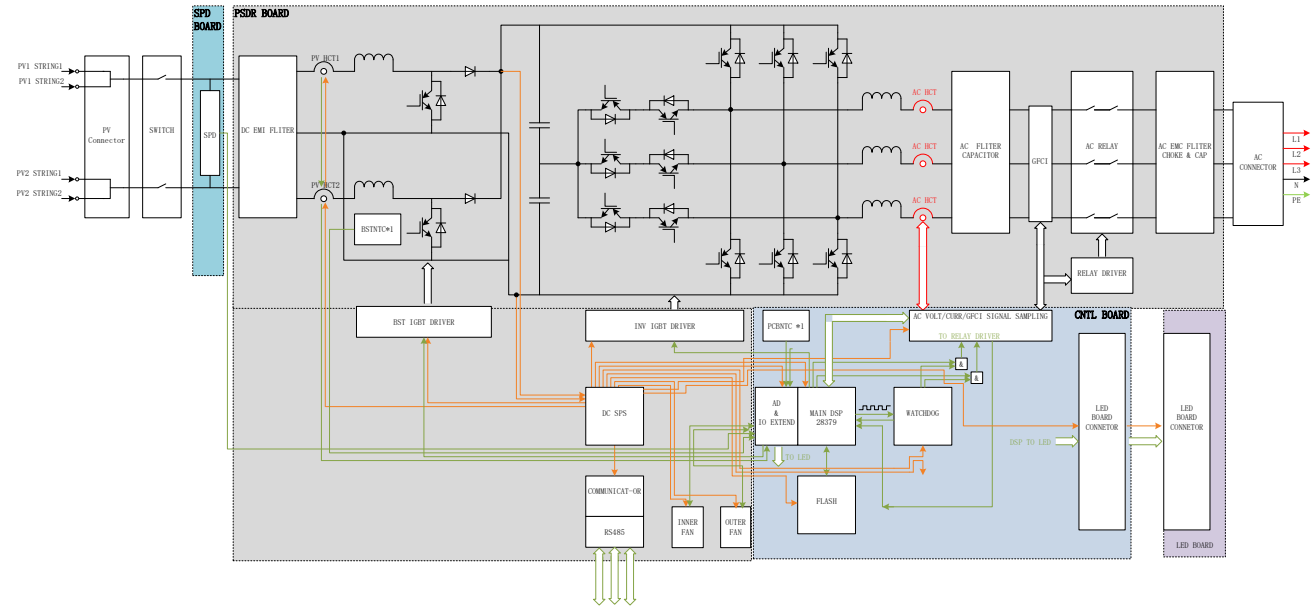


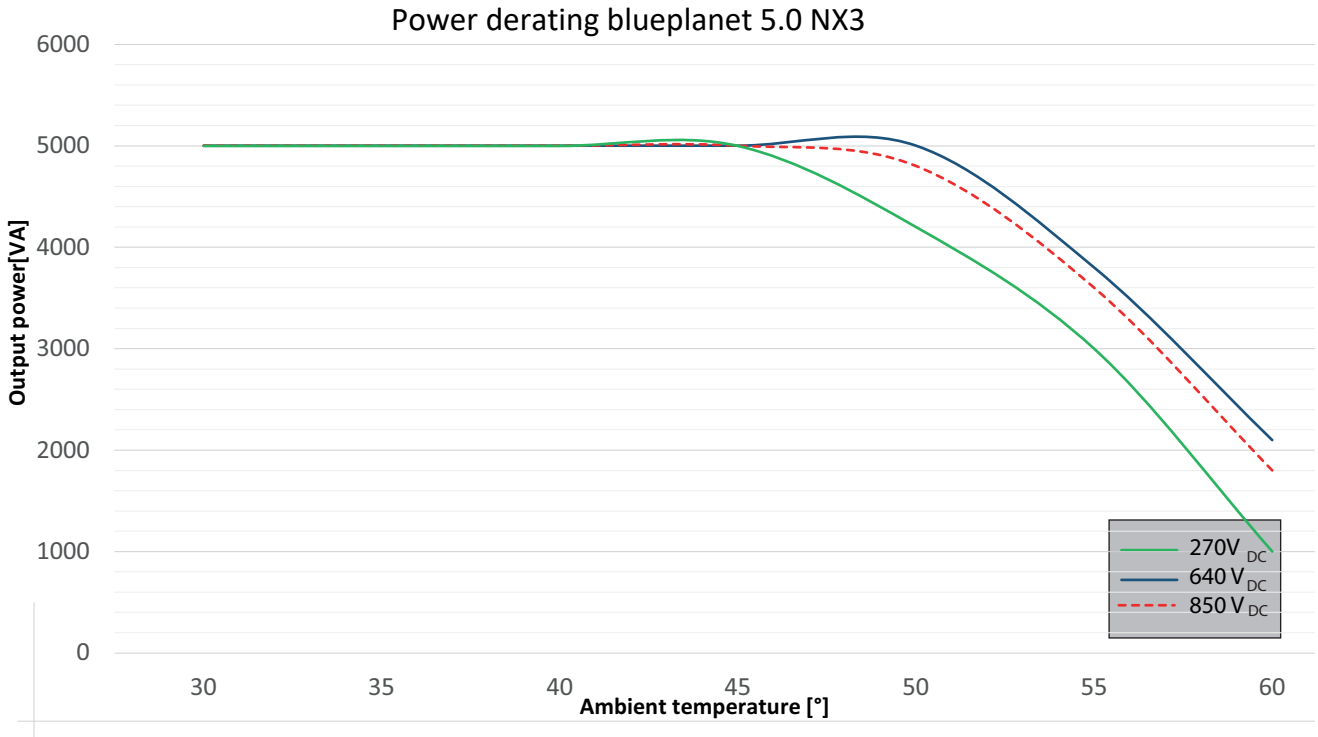
Fig. 5: Block schema blueplanet 3.0-20.0 NX3

Harmonics 50 Hz	[A]	[% In]
1	7,242	99,94
2	0,009	0,13
3	0,002	0,03
4	0,003	0,04
5	0,018	0,25
6	0,002	0,02
7	0,009	0,13
8	0,002	0,02
9	0,001	0,01
10	0,002	0,02
11	0,010	0,14
12	0,001	0,02
13	0,015	0,20
14	0,001	0,02
15	0,001	0,01
16	0,001	0,02
17	0,010	0,14
18	0,001	0,01
19	0,008	0,11
20	0,001	0,02
21	0,001	0,01
22	0,001	0,02
23	0,006	0,09
24	0,001	0,01
25	0,005	0,07
26	0,001	0,01
27	0,001	0,01
28	0,001	0,02
29	0,005	0,07
30	0,001	0,01

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Harmonics 50 Hz	[A]	[% In]
31	0,005	0,07
32	0,001	0,01
33	0,001	0,01
34	0,001	0,01
35	0,005	0,07
36	0,001	0,01
37	0,005	0,07
38	0,001	0,01
39	0,000	0,01
40	0,001	0,01
41	0,005	0,07
42	0,001	0,01
43	0,005	0,06
44	0,001	0,01
45	0,000	0,01
46	0,001	0,01
47	0,005	0,06
48	0,000	0,01
49	0,004	0,06
50	0,001	0,01

Tab. 4: Harmonics 50 Hz blueplanet 5.0 NX3



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Efficiency characteristic

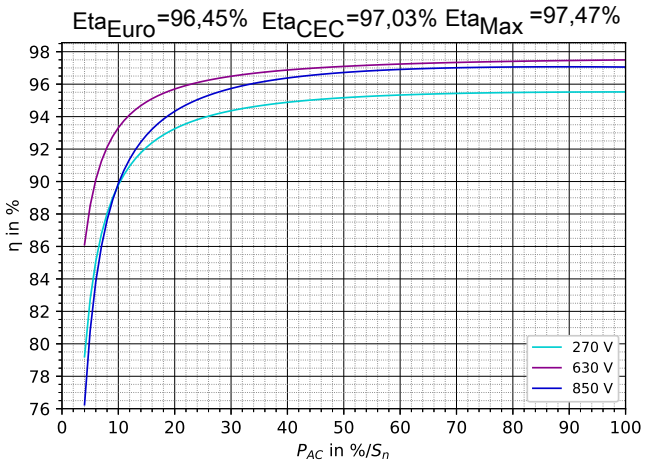


Fig. 6: 2D Diagram blueplanet 5.0 NX3 M2

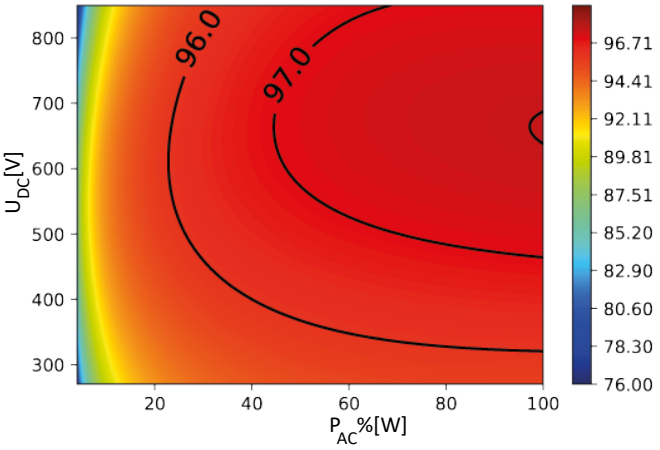


Fig. 7: 3D Diagram blueplanet 5.0 NX3 M2

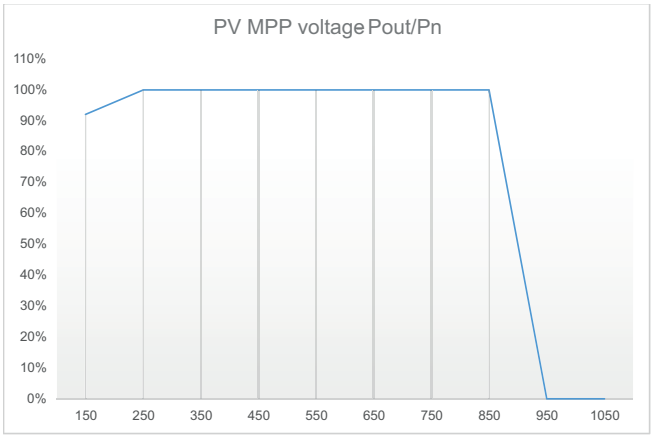


Fig. 8: 2D Diagram %Pout/Pn vs Voltage 5.0 NX3 M2

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1.3 KACO blueplanet 8.0 NX3

AC-Power	
Inverter power nominal	8 kVA
Inverter power maximal	8 kVA
Rated current (In)	3*12.2 A [@220V] / 3*11.6 A [@230V] / 3*11.1 A [@240V]
Short circuit current continous (max output fault current)	12,8 A
Power electronics type	IGBT-MLI (self-commutated)
Rated operating voltage	220V / 380V [3/N/PE], 230V / 400V [3/N/PE], 240V / 415V [3/N/PE]
cos phi nominal	≈ 0,8
Grid connection	Three-phase

Operating behaviour in the event of a short circuit at the inverter output	
Contribution to peak short-circuit current (îp)	35,0 A
Contribution to the initial short-circuit alternating current (Ik" first single period effective value)	12,8 A

Flicker				
Grid impedance angle	30°	50°	70°	85°
Flicker step factor	0,14	0,14	0,14	0,14
Short term flicker	0,16	0,16	0,16	0,16
Note: $S_{k,\,fic}/S_n$ in the fictitious grid was set to	20			

Injection of DC currents
A converter must not feed in more than 0.5% of its rated current or a maximum of 20 mA (whichever is higher) as direct current.

P_{bin} [% P_n]	$P_{bin,\,e\,val}$ [% P_n]	P kW]	$I_{DCcmp\ L1}$ [mA]	$I_{DCcmp\ L2}$ [mA]	$I_{DCcmp\ L3}$ [mA]	$I_{DCcmp\ L1}$ [% I_n]	$I_{DCcmp\ L2}$ [% I_n]	$I_{DCcmp\ L3}$ [% I_n]
30	6,0	6,63	33,9	26,6	48,5	0,12%	0,09%	0,17%
40	8,0	8,08	48,8	31,4	47,7	0,02%	0,17%	0,11%
60	12,0	12,06	51,7	42,7	60,3	0,18%	0,15%	0,21%
70	14,0	13,82	46,5	43	60,8	0,16%	0,15%	0,21%
100	20,0	19,94	63	63,7	89,2	0,22%	0,22%	0,31%
[% von Imax] % rated AC current						0,23%	0,23%	0,22%

Tab. 5: DC-Injection measurement values

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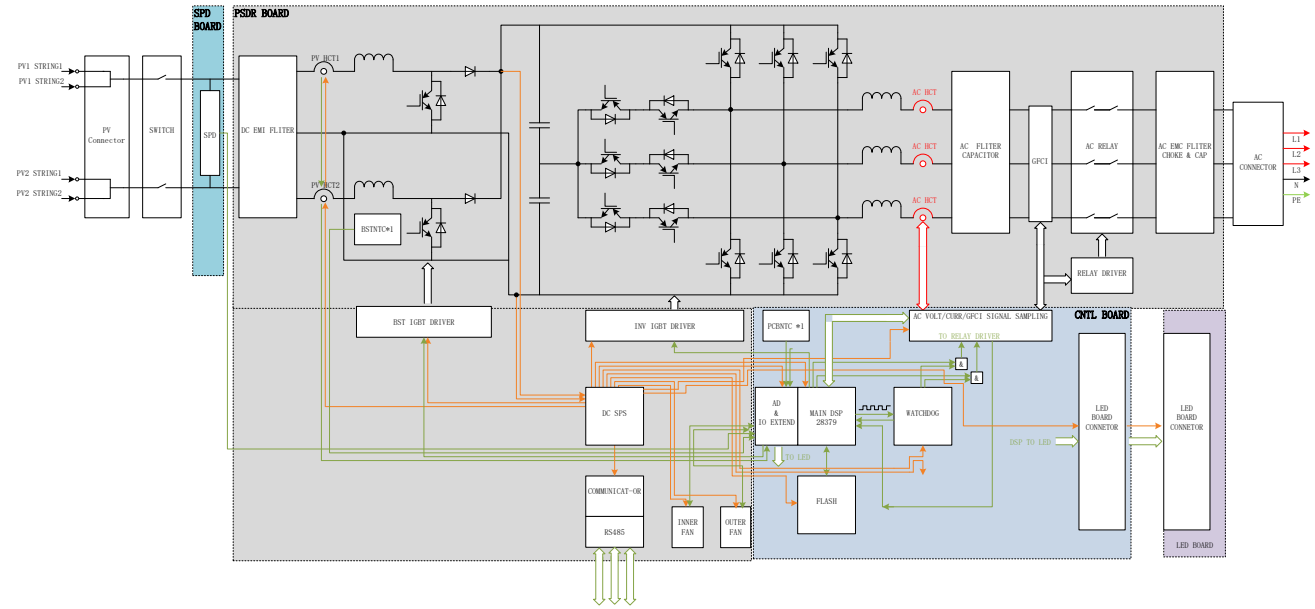


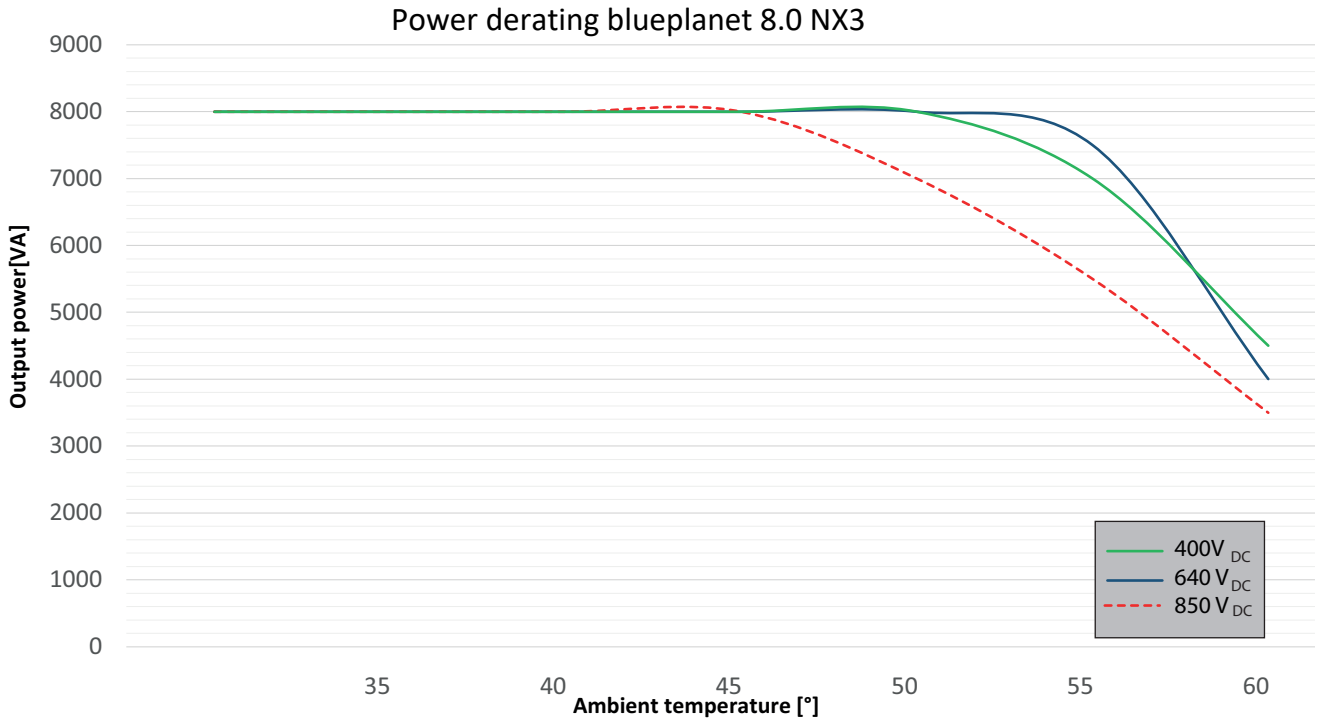
Fig. 9: Block schema blueplanet 3.0-20.0 NX3

Harmonics 50 Hz	[A]	[% In]
1	11,593	99,99
2	0,019	0,17
3	0,005	0,04
4	0,009	0,08
5	0,058	0,50
6	0,002	0,02
7	0,027	0,23
8	0,003	0,03
9	0,005	0,04
10	0,003	0,03
11	0,016	0,14
12	0,002	0,01
13	0,045	0,39
14	0,003	0,03
15	0,004	0,03
16	0,003	0,03
17	0,020	0,17
18	0,001	0,01
19	0,012	0,10
20	0,003	0,03
21	0,003	0,02
22	0,003	0,03
23	0,003	0,03
24	0,001	0,01
25	0,003	0,02
26	0,003	0,03
27	0,002	0,02
28	0,003	0,02
29	0,005	0,05
30	0,001	0,01

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Harmonics 50 Hz	[A]	[% In]
31	0,006	0,05
32	0,003	0,02
33	0,002	0,02
34	0,003	0,02
35	0,005	0,05
36	0,001	0,01
37	0,004	0,04
38	0,002	0,02
39	0,002	0,02
40	0,002	0,02
41	0,003	0,03
42	0,001	0,01
43	0,004	0,03
44	0,002	0,02
45	0,002	0,02
46	0,002	0,02
47	0,006	0,05
48	0,001	0,01
49	0,007	0,06
50	0,002	0,02

Tab. 6: Harmonics 50 Hz blueplanet 8.0 NX3



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Efficiency characteristic

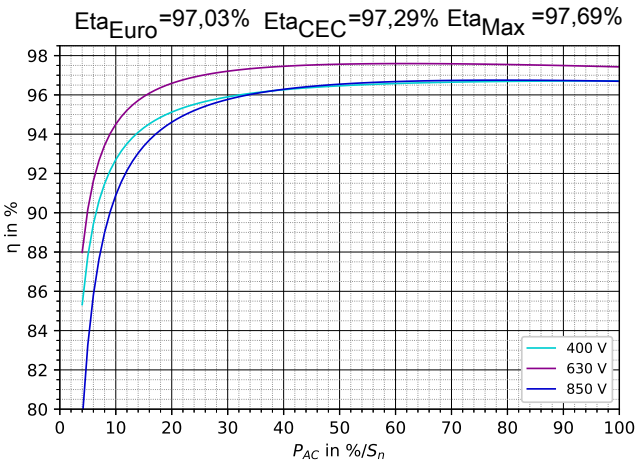


Fig. 10: 2D Diagram blueplanet 8.0 NX3 M2

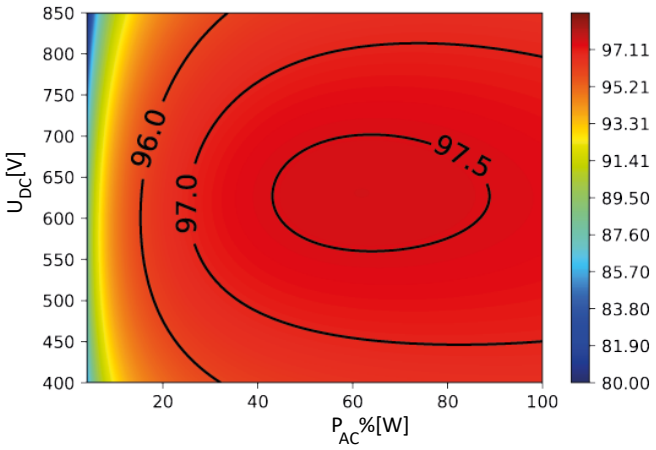


Fig. 11: 3D Diagram blueplanet 8.0 NX3 M2

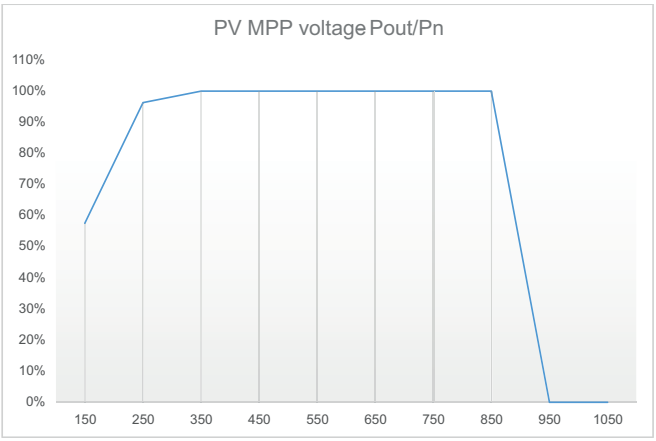


Fig. 12: 2D Diagram %Pout/Pn vs Voltage 8.0 NX3 M2

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1.4 KACO blueplanet 10.0 NX3

AC-Power	
Inverter power nominal	10 kVA
Inverter power maximal	10 kVA
Rated current (In)	3*15.2 A [@220V] / 3*14.5 A [@230V] / 3*13.9 A [@240V]
Short circuit current continous (max output fault current)	16,0 A
Power electronics type	IGBT-MLI (self-commutated)
Rated operating voltage	220V / 380V [3/N/PE], 230V / 400V [3/N/PE], 240V / 415V [3/N/PE]
cos phi nominal	≈ 0.80 ind ...0.80 cap
Grid connection	Three-phase

Operating behaviour in the event of a short circuit at the inverter output	
Contribution to peak short-circuit current (îp)	35,0 A
Contribution to the initial short-circuit alternating current (Ik" first single period effective value)	16,0 A

Flicker				
Grid impedance angle	30°	50°	70°	85°
Flicker step factor	0,16	0,16	0,16	0,16
Short term flicker	0,16	0,16	0,16	0,16
Note: $S_{k,fic}/S_n$ in the fictitious grid was set to	20			

Injection of DC currents
A converter must not feed in more than 0.5% of its rated current or a maximum of 20 mA (whichever is higher) as direct current.

P_{bin} [% P_n]	$P_{bin,\ e\ val}$ [% P_n]	P kW]	$I_{DCcmp\ L1}$ [mA]	$I_{DCcmp\ L2}$ [mA]	$I_{DCcmp\ L3}$ [mA]	$I_{DCcmp\ L1}$ [% I_n]	$I_{DCcmp\ L2}$ [% I_n]	$I_{DCcmp\ L3}$ [% I_n]
30	6,0	6,63	33,9	26,6	48,5	0,12%	0,09%	0,17%
40	8,0	8,08	48,8	31,4	47,7	0,02%	0,17%	0,11%
60	12,0	12,06	51,7	42,7	60,3	0,18%	0,15%	0,21%
70	14,0	13,82	46,5	43	60,8	0,16%	0,15%	0,21%
100	20,0	19,94	63	63,7	89,2	0,22%	0,22%	0,31%
[% von Imax] % rated AC current						0,23%	0,23%	0,22%

Tab. 7: DC-Injection measurement values

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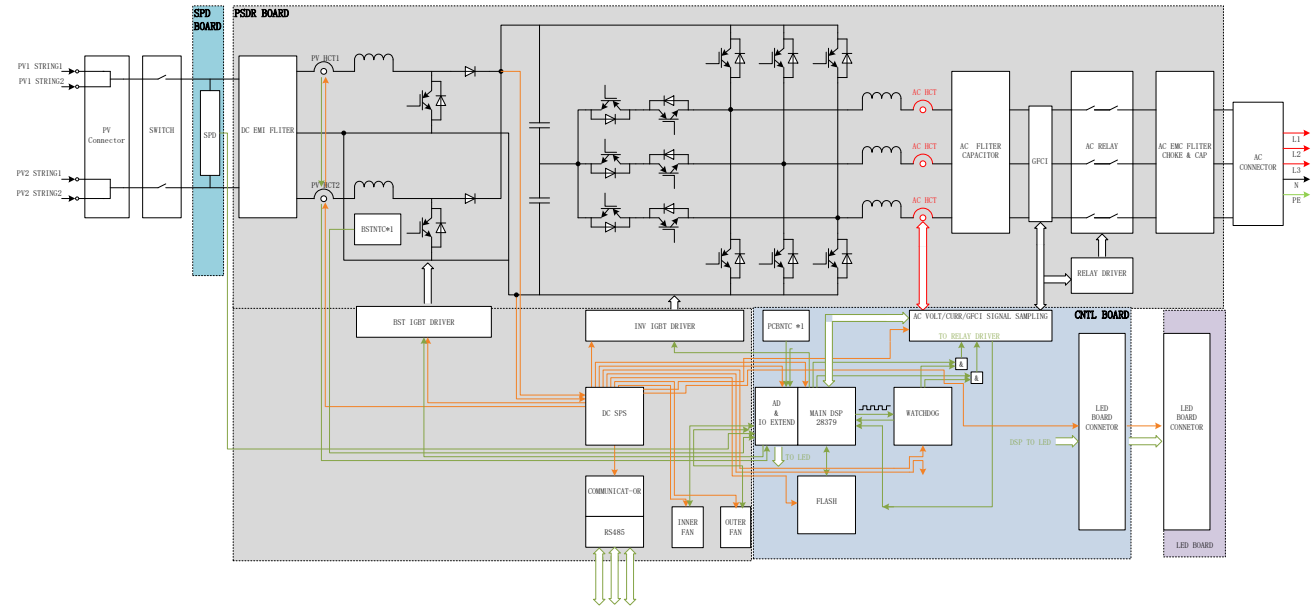


Fig. 13: Block schema blueplanet 3.0-20.0 NX3

Harmonics 50 Hz	**Linie 1**		**Linie 2**		**Linie 3**	
	[A]	**[% In]**	**[A]**	**[% In]**	**[A]**	**[% In]**
1	13,957	99,72	13,983		14,152	
2	0,063	3,919	0,070	4,348	0,064	3,963
3	0,104	3,015	0,096	2,774	0,093	2,687
4	0,037	5,672	0,038	5,887	0,040	6,132
5	0,060	3,509	0,060	3,510	0,062	3,597
6	0,023	5,137	0,022	4,926	0,023	5,100
7	0,027	2,312	0,027	2,370	0,027	2,317
8	0,020	5,758	0,020	5,936	0,020	5,801
9	0,021	3,420	0,023	3,827	0,024	3,932
10	0,019	6,713	0,0211	7,610	0,019	7,064
11	0,024	4,754	0,025	5,065	0,024	4,894
12	0,019	8,361	0,021	8,994	0,018	7,842
13	0,030	9,623	0,028	9,020	0,026	8,341
14	0,016	8,161	0,016	7,867	0,015	7,692
15	0,018	7,812	0,018	7,817	0,018	8,120
16	0,020	11,459	0,018	10,336	0,019	11,066
17	0,022	11,078	0,024	12,123	0,025	12,641
18	0,021	14,018	0,021	13,493	0,023	14,852
19	0,036	20,341	0,033	18,828	0,036	20,238
20	0,019	14,087	0,019	13,611	0,020	14,460
21	0,019	11,864	0,021	12,929	0,020	12,703
22	0,016	13,102	0,018	14,181	0,017	13,779
23	0,032	21,539	0,032	22,036	0,033	22,454
24	0,017	14,790	0,018	15,730	0,016	13,772
25	0,035	26,202	0,034	25,193	0,033	24,536
26	0,015	14,180	0,016	15,483	0,016	14,771
27	0,017	13,865	0,017	13,951	0,016	13,017
28	0,019	19,516	0,017	17,489	0,018	18,513

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Harmonics 50 Hz	Linie 1		Linie 2		Linie 3	
	[A]	[% In]	[A]	[% In]	[A]	[% In]
29	0,025	21,454	0,026	22,587	0,025	21,304
30	0,022	23,430	0,021	22,828	0,022	24,107
31	0,026	24,115	0,026	23,508	0,029	26,418
32	0,022	25,713	0,022	25,583	0,022	25,621
33	0,022	21,197	0,024	23,325	0,025	24,006
34	0,021	26,017	0,023	28,395	0,022	27,451
35	0,029	29,556	0,032	32,836	0,030	31,185
36	0,018	23,389	0,019	24,478	0,018	23,099
37	0,044	48,323	0,039	42,237	0,044	47,807
38	0,019	25,898	0,018	25,467	0,019	26,118
39	0,023	26,357	0,022	25,813	0,022	25,508
40	0,027	38,520	0,026	37,336	0,027	39,243

Tab. 8: Harmonics 50 Hz blueplanet 10.0 NX3

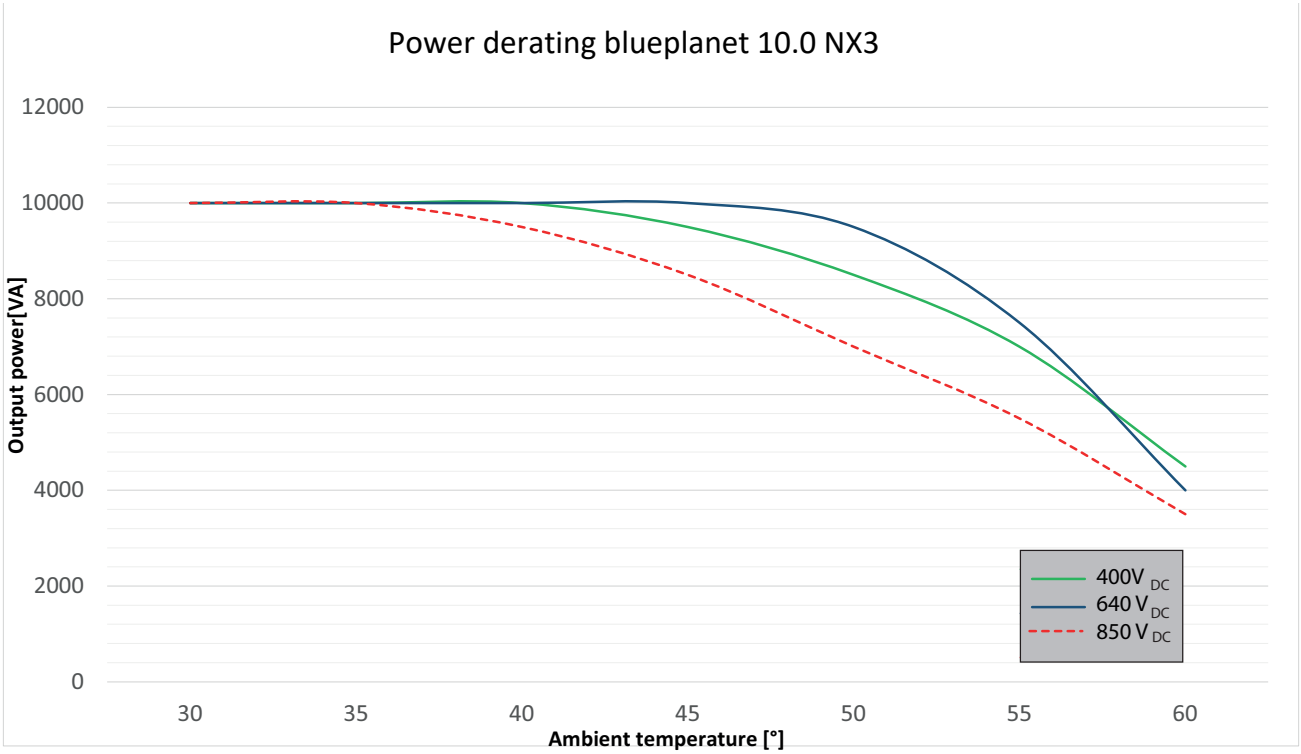


Fig. 14: Power derating blueplanet 10.0 NX3

EN

Efficiency characteristic

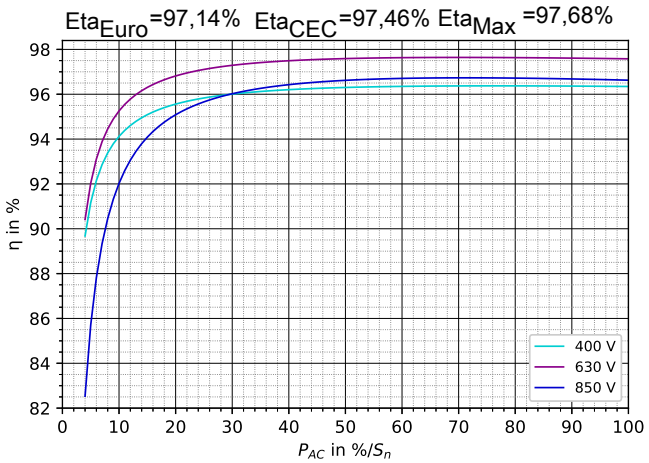


Fig. 15: 2D Diagram blueplanet 10.0 NX3 M2

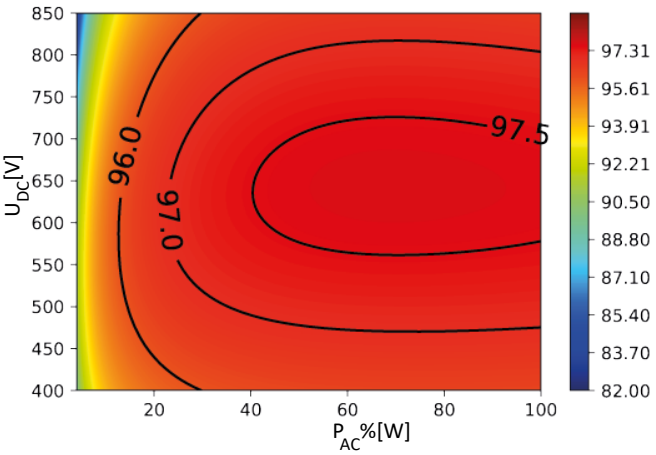


Fig. 16: 3D Diagram blueplanet 10.0 NX3 M2

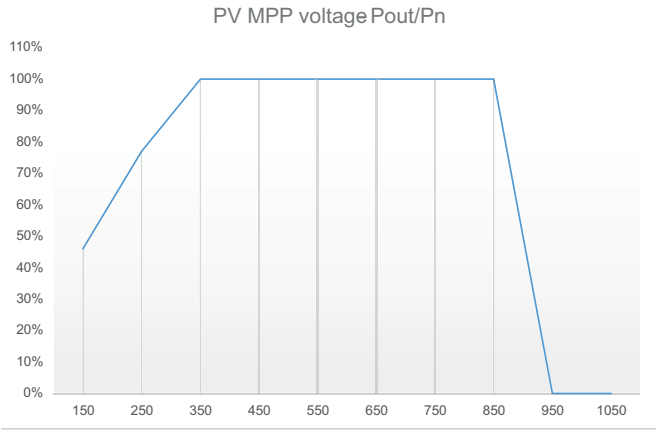


Fig. 17: 2D Diagram %Pout/Pn vs Voltage 10.0 NX3 M2

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1.5 KACO blueplanet 15.0 NX3

AC-Power	
Inverter power nominal	15 kVA
Inverter power maximal	15 kVA
Rated current (In)	3*22.8 A [@220V] / 3*21.8 A [@230V] / 3*20.9 A [@240V]
Short circuit current continous (max output fault current)	24,0 A
Power electronics type	IGBT-MLI (self-commutated)
Rated operating voltage	220V / 380V [3/N/PE], 230V / 400V [3/N/PE], 240V / 415V [3/N/PE]
cos phi nominal	≈ 0.80 ind ...0.80 cap
Grid connection	Three-phase

Operating behaviour in the event of a short circuit at the inverter output	
Contribution to peak short-circuit current (îp)	47,0 A
Contribution to the initial short-circuit alternating current (Ik" first single period effective value)	24,0 A

Flicker				
Grid impedance angle	30°	50°	70°	85°
Flicker step factor	0,18	0,18	0,18	0,18
Short term flicker	0,18	0,18	0,18	0,18
Note: $S_{k,fic}/S_n$ in the fictitious grid was set to	20			

Injection of DC currents
A converter must not feed in more than 0.5% of its rated current or a maximum of 20 mA (whichever is higher) as direct current.

P_{bin} [% P_n]	$P_{bin,\ e\ val}$ [% P_n]	P kW]	$I_{DCcmp\ L1}$ [mA]	$I_{DCcmp\ L2}$ [mA]	$I_{DCcmp\ L3}$ [mA]	$I_{DCcmp\ L1}$ [% I_n]	$I_{DCcmp\ L2}$ [% I_n]	$I_{DCcmp\ L3}$ [% I_n]
30	6,0	6,63	33,9	26,6	48,5	0,12%	0,09%	0,17%
40	8,0	8,08	48,8	31,4	47,7	0,02%	0,17%	0,11%
60	12,0	12,06	51,7	42,7	60,3	0,18%	0,15%	0,21%
70	14,0	13,82	46,5	43	60,8	0,16%	0,15%	0,21%
100	20,0	19,94	63	63,7	89,2	0,22%	0,22%	0,31%
[% von Imax] % rated AC current						0,23%	0,23%	0,22%

Tab. 9: DC-Injection measurement values

EN

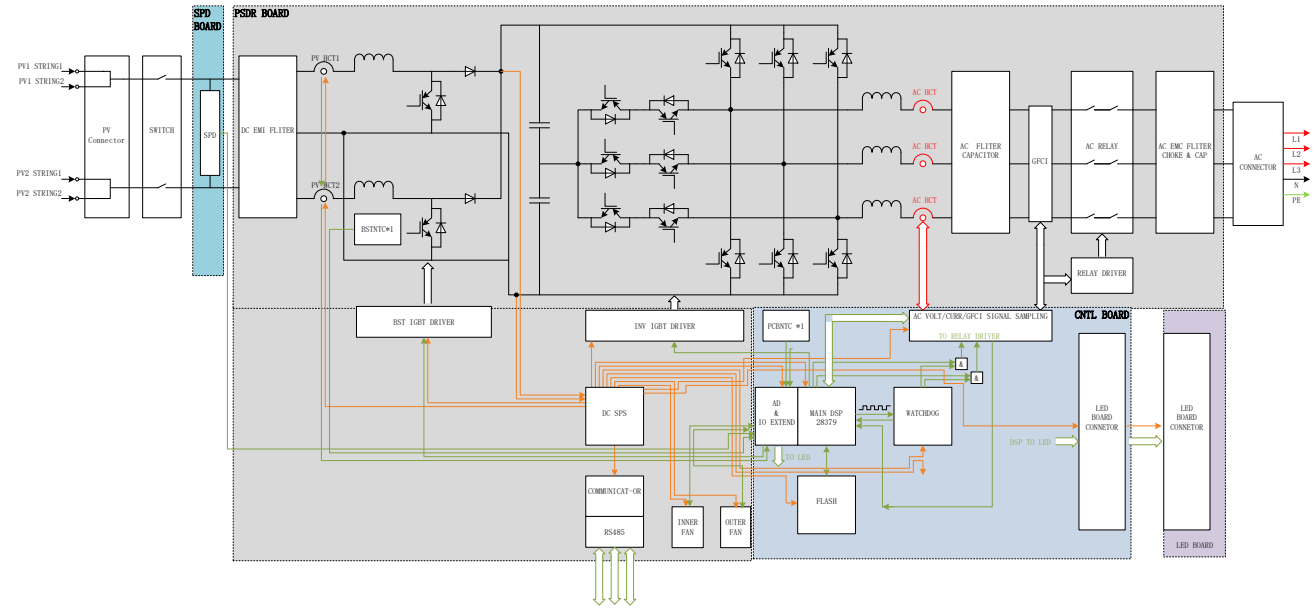


Fig. 18: Block schema blueplanet 3.0-20.0 NX3

Harmonics 50 Hz	[A]	[% In]
1	21,700	99,82
2	0,023	0,11
3	0,008	0,04
4	0,009	0,04
5	0,056	0,26
6	0,002	0,01
7	0,017	0,08
8	0,003	0,01
9	0,003	0,02
10	0,003	0,01
11	0,018	0,08
12	0,002	0,01
13	0,067	0,31
14	0,002	0,01
15	0,003	0,01
16	0,002	0,01
17	0,044	0,20
18	0,001	0,01
19	0,038	0,18
20	0,002	0,01
21	0,003	0,01
22	0,002	0,01
23	0,029	0,13
24	0,001	0,01
25	0,024	0,11
26	0,002	0,01
27	0,003	0,01
28	0,002	0,01
29	0,018	0,08
30	0,001	0,01

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Harmonics 50 Hz	[A]	[% In]
31	0,015	0,07
32	0,002	0,01
33	0,003	0,01
34	0,003	0,01
35	0,010	0,05
36	0,001	0,01
37	0,009	0,04
38	0,002	0,01
39	0,002	0,01
40	0,002	0,01
41	0,007	0,03
42	0,001	0,01
43	0,007	0,03
44	0,002	0,01
45	0,002	0,01
46	0,002	0,01
47	0,007	0,03
48	0,001	0,00
49	0,008	0,04
50	0,002	0,01

Tab. 10: Harmonics 50 Hz blueplanet 15.0 NX3

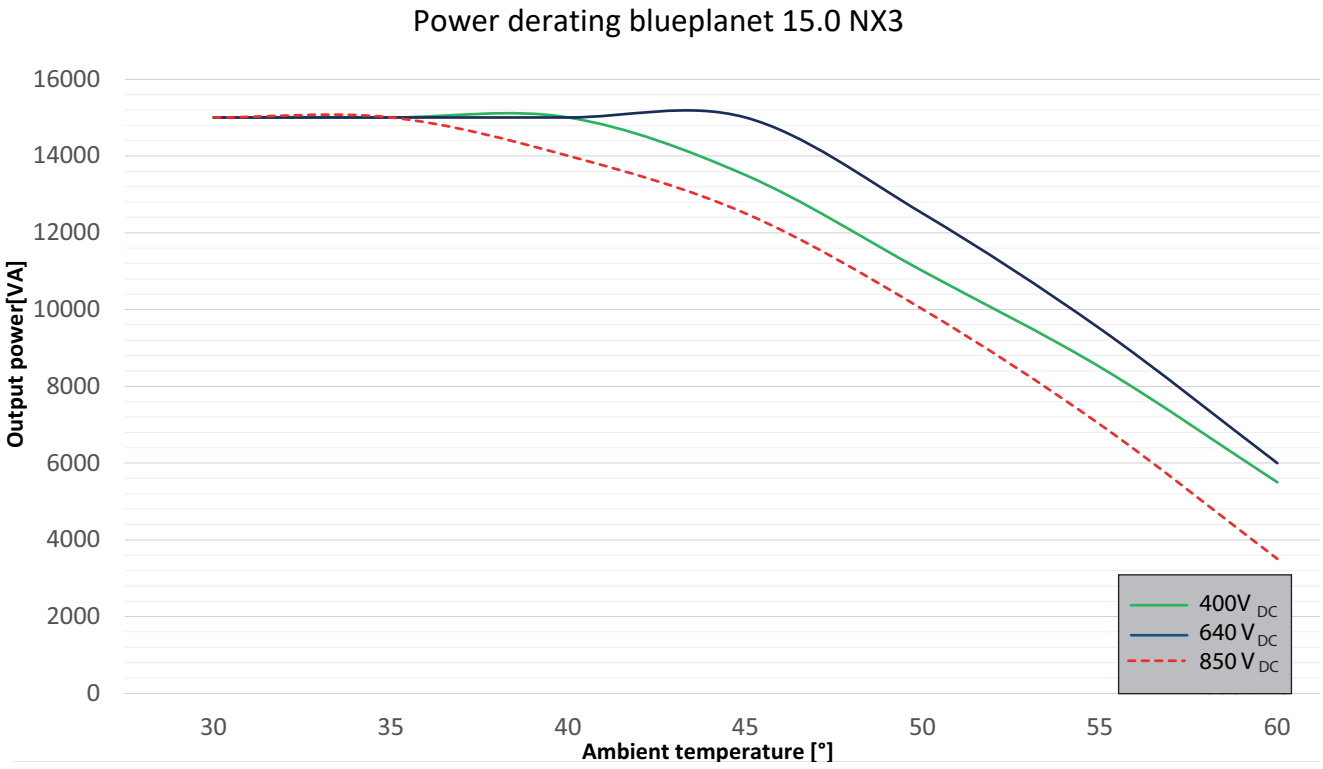


Fig. 19: Power derating blueplanet 15.0 NX3

EN

Efficiency characteristic

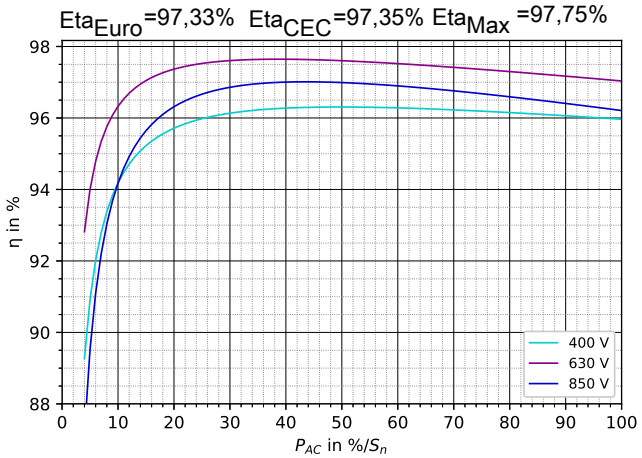


Fig. 20: 2D Diagram blueplanet 15.0 NX3 M2

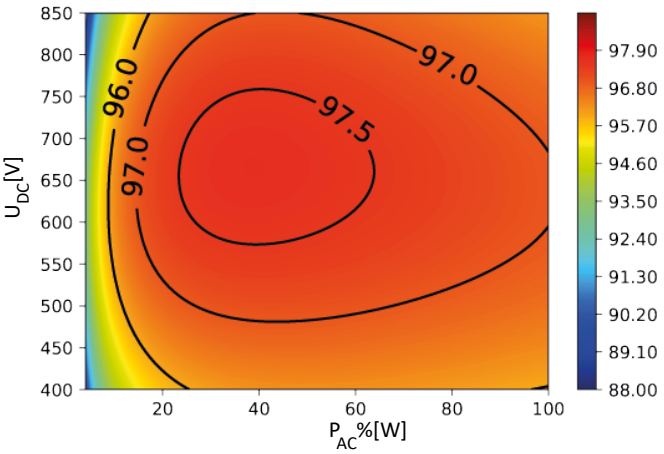


Fig. 21: 3D Diagram blueplanet 15.0 NX3 M2

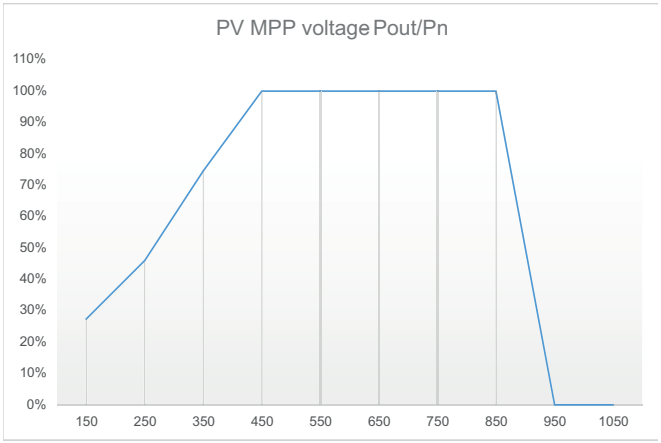


Fig. 22: 2D Diagram %Pout/Pn vs Voltage 15.0 NX3 M2

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1.6 KACO blueplanet 20.0 NX3

AC-Power	
Inverter power nominal	20 kVA
Inverter power maximal	20 kVA
Rated current (In)	3*30.3 A [@220V] / 3*29 A [@230V] / 3*27.8 A [@240V]
Short circuit current continous (max output fault current)	31,9 A
Power electronics type	IGBT-MLI (self-commutated)
Rated operating voltage	220V / 380V [3/N/PE], 230V / 400V [3/N/PE], 240V / 415V [3/N/PE]
cos phi nominal	≈ 0.80 ind ...0.80 cap
Grid connection	Three-phase

Operating behaviour in the event of a short circuit at the inverter output	
Contribution to peak short-circuit current (îp)	65,0 A
Contribution to the initial short-circuit alternating current (Ik" first single period effective value)	31,9 A

Flicker				
Grid impedance angle	30°	50°	70°	85°
Flicker step factor	0,19	0,19	0,19	0,19
Short term flicker	0,19	0,19	0,19	0,19
Note: $S_{k,fic}/S_n$ in the fictitious grid was set to	20			

Injection of DC currents
A converter must not feed in more than 0.5% of its rated current or a maximum of 20 mA (whichever is higher) as direct current.

P_{bin} [% P_n]	$P_{bin,\ e\ val}$ [% P_n]	P kW]	$I_{DCcmp\ L1}$ [mA]	$I_{DCcmp\ L2}$ [mA]	$I_{DCcmp\ L3}$ [mA]	$I_{DCcmp\ L1}$ [% I_n]	$I_{DCcmp\ L2}$ [% I_n]	$I_{DCcmp\ L3}$ [% I_n]
30	6,0	6,63	33,9	26,6	48,5	0,12%	0,09%	0,17%
40	8,0	8,08	48,8	31,4	47,7	0,02%	0,17%	0,11%
60	12,0	12,06	51,7	42,7	60,3	0,18%	0,15%	0,21%
70	14,0	13,82	46,5	43	60,8	0,16%	0,15%	0,21%
100	20,0	19,94	63	63,7	89,2	0,22%	0,22%	0,31%
[% von Imax] % rated AC current						0,23%	0,23%	0,22%

Tab. 11: DC-Injection measurement values

EN

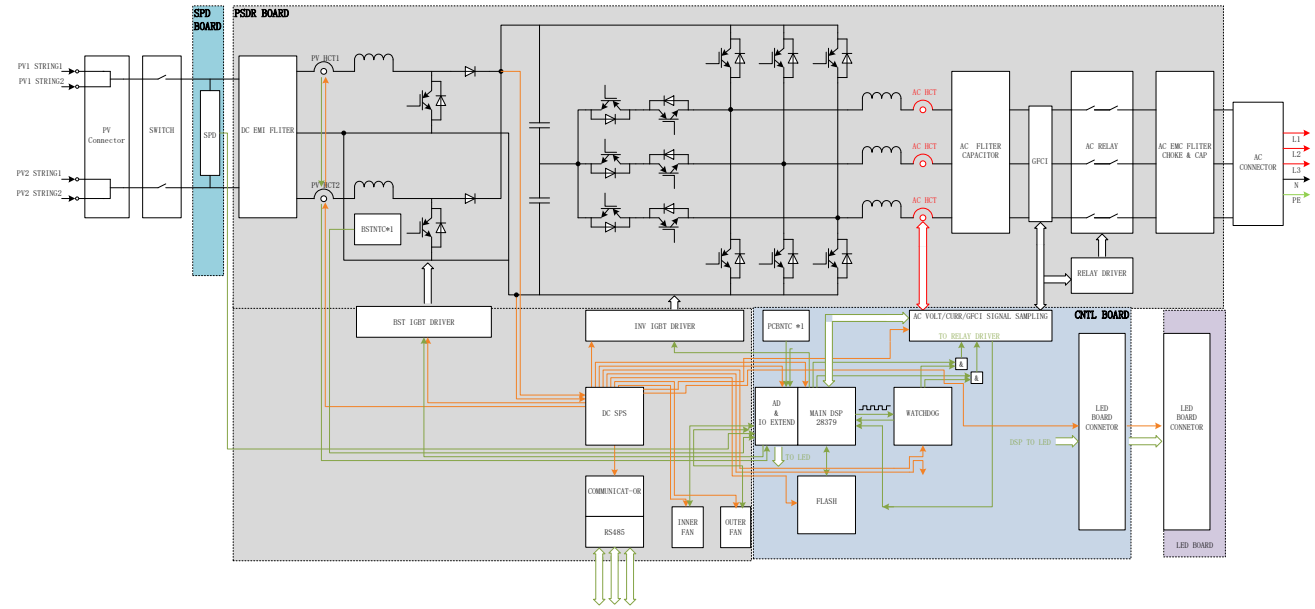


Fig. 23: Block schema blueplanet 3.0-20.0 NX3

Harmonics 50 Hz	**Linie 1**		**Linie 2**		**Linie 3**	
	[A]	**[% In]**	**[A]**	**[% In]**	**[A]**	**[% In]**
1	27,928	100,084	28,644	100,071	27,871	100,084
2	0,06	0,216	0,066	0,229	0,068	0,245
3	0,059	0,213	0,051	0,177	0,080	0,286
4	0,054	0,192	0,062	0,218	0,054	0,193
5	0,133	0,475	0,133	0,466	0,132	0,473
6	0,047	0,17	0,047	0,164	0,051	0,182
7	0,06	0,215	0,066	0,232	0,067	0,240
8	0,045	0,16	0,042	0,146	0,044	0,157
9	0,07	0,25	0,054	0,190	0,053	0,189
10	0,044	0,157	0,042	0,148	0,044	0,156
11	0,037	0,133	0,039	0,135	0,038	0,136
12	0,044	0,157	0,044	0,154	0,044	0,157
13	0,109	0,391	0,084	0,294	0,101	0,361
14	0,046	0,165	0,040	0,139	0,046	0,166
15	0,055	0,198	0,049	0,172	0,046	0,165
16	0,047	0,169	0,05	0,176	0,047	0,170
17	0,067	0,241	0,059	0,205	0,051	0,183
18	0,047	0,168	0,049	0,171	0,048	0,174
19	0,061	0,218	0,096	0,334	0,075	0,269
20	0,042	0,151	0,044	0,153	0,047	0,167
21	0,048	0,172	0,048	0,167	0,046	0,166
22	0,043	0,153	0,043	0,150	0,044	0,159
23	0,063	0,224	0,074	0,259	0,055	0,196
24	0,048	0,171	0,042	0,145	0,043	0,155
25	0,101	0,362	0,105	0,368	0,104	0,373
26	0,046	0,163	0,044	0,152	0,045	0,163
27	0,053	0,190	0,041	0,143	0,050	0,181
28	0,045	0,161	0,042	0,145	0,045	0,161

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Harmonics 50 Hz	Linie 1		Linie 2		Linie 3	
	[A]	[% In]	[A]	[% In]	[A]	[% In]
29	0,056	0,202	0,061	0,212	0,063	0,227
30	0,043	0,153	0,045	0,155	0,043	0,154
31	0,072	0,259	0,086	0,302	0,069	0,247
32	0,045	0,160	0,048	0,167	0,044	0,157
33	0,045	0,162	0,045	0,159	0,048	0,171
34	0,048	0,170	0,045	0,157	0,046	0,166
35	0,082	0,293	0,071	0,249	0,064	0,230
36	0,045	0,163	0,049	0,172	0,045	0,162
37	0,095	0,341	0,103	0,360	0,113	0,406
38	0,049	0,174	0,048	0,168	0,043	0,154
39	0,060	0,215	0,050	0,174	0,053	0,191
40	0,053	0,191	0,050	0,174	0,052	0,188

Tab. 12: Harmonics 50 Hz blueplanet 20.0 NX3

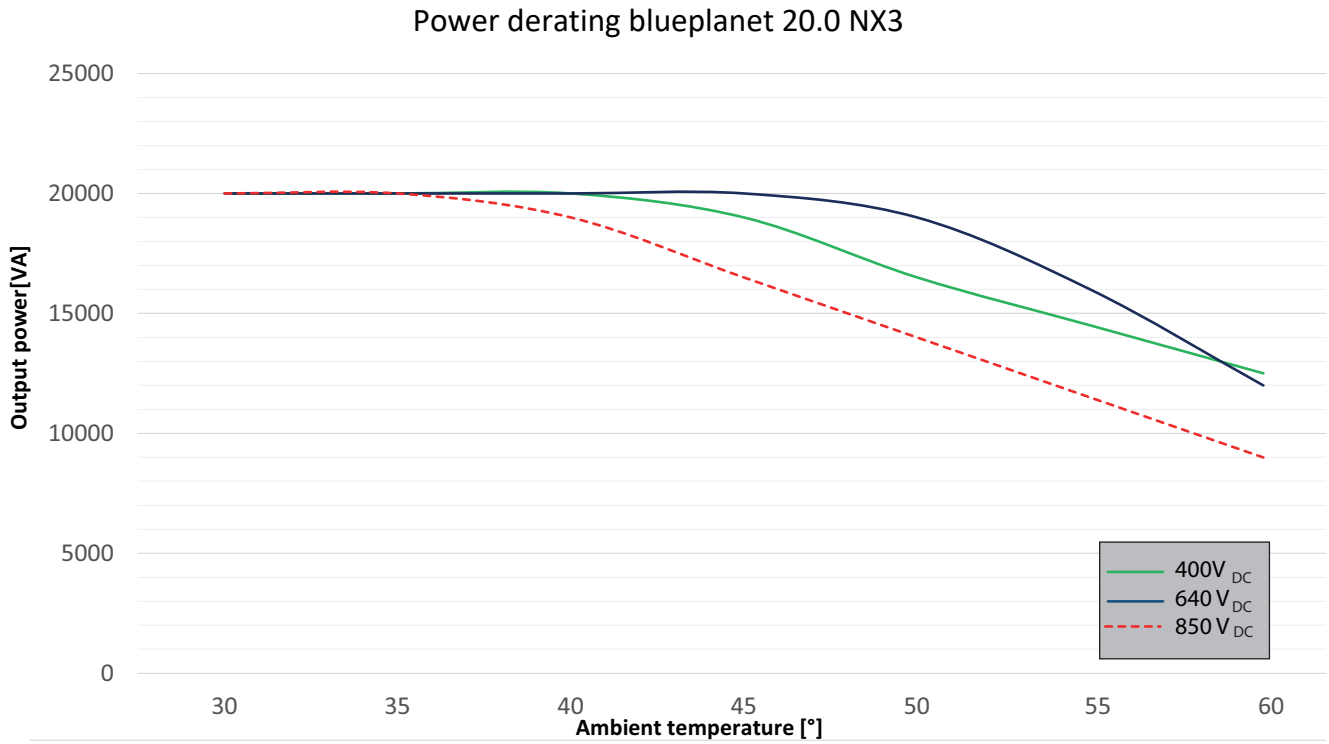


Fig. 24: Power derating blueplanet 20.0 NX3

EN

Efficiency characteristic

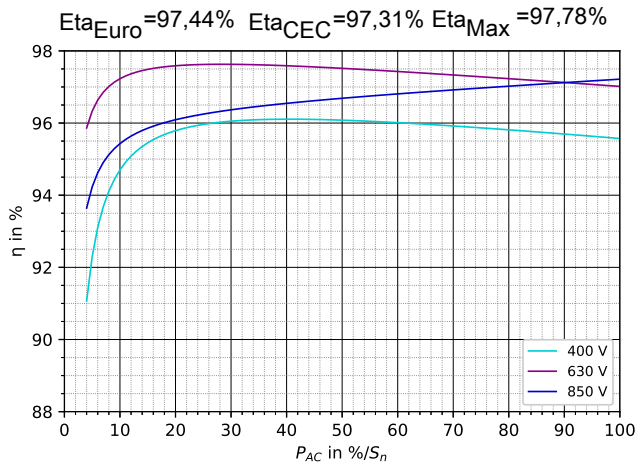


Fig. 25: 2D Diagram blueplanet 20.0 NX3 M2

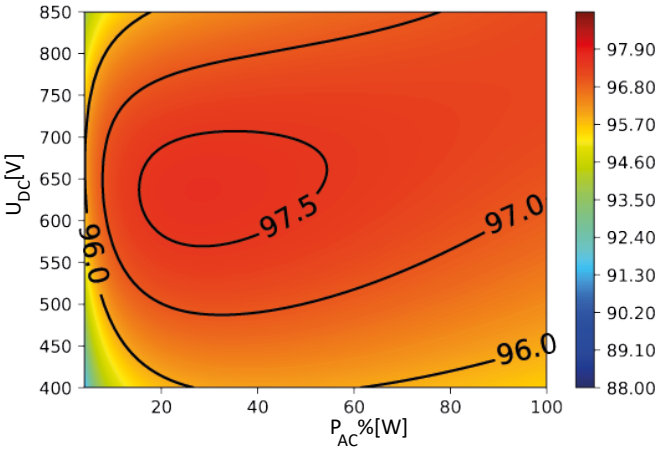


Fig. 26: 3D Diagram blueplanet 20.0 NX3 M2

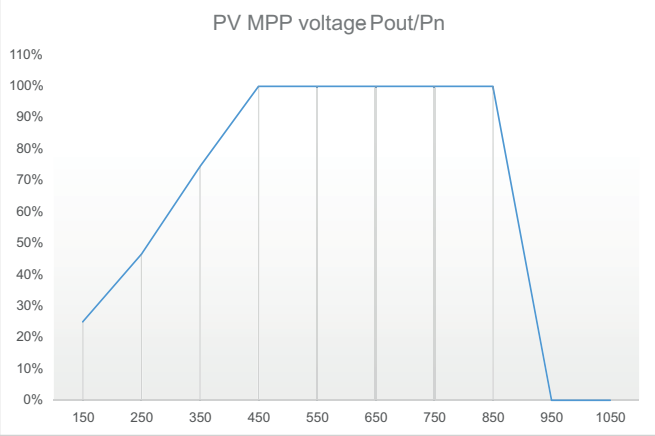


Fig. 27: 2D Diagram %Pout/Pn vs Voltage 20.0 NX3 M2

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