



VACON® 8000 SOLAR 10-100 kW

VACON 8000 SOLAR 10-100 kW series is a compact cabinet-assembled product line with integrated isolation transformers for maximum worldwide grid compatibility. The little brother of the product family is ideally suited for smaller and decentralized installations. It is well suited for such purposes as rooftop installations.

The smaller power range of the VACON 8000 SOLAR 10-100 kW series does not make it any less handy than the larger products in the series. It is extremely fast to install and commission. It offers the same high quality, efficiency and reliability that you would expect from any Vacon product.

FEATURES

- Nine power ratings for optimum fit with PV-installation
- Wide DC-input range: 340-900 VDC
- Common 400 VAC grid connection
- Safety built in: AC- and DC-protections, Ground fault monitoring, Overload and overtemperature protection, IP21 steel cabinet
- Options available for DC-positive or -negative pole grounding, different communication set-ups and BOS equipment

BENEFITS

- High efficiency and reliability
- Fast installation and plug n' play commissioning
- Thin film compatibility
- Allows flexible string configurations (due to wide MPP range)
- Connectivity to Vacon remote monitoring system
- Wide range of grid certifications

TECHNICAL DATA

Inverter type	Nominal output power kW		Nominal output current IAC A		Max no. of output connections	Recomm. max PV connections	Max nominal input power kW		Max allowed input current A		Max no. of DC connections I _{sc} ^{1b} A	Max. efficiency %	Euro efficiency %	Power cons. at night W	Inverter dimensions WxHxD mm	Inverter weight kg	Air flow requirement m ³ /h
	10	15	1	2			1	2	1	2							
NXV00104A2L	10	14,4	1	12	29	50	2	94,9	93,1	0	600X1481X600	220	300				
NXV00154A2L	15	21,6	1	18	44	50	2	94,9	93,6	0	600X1481X600	220	300				
NXV00204A2L	20	28,8	1	24	59	99	2	95,3	92,2	0	600X1481X600	300	425				
NXV00254A2L	25	36,1	1	30	74	99	2	95,3	93,0	0	600X1481X600	300	425				
NXV00304A2L	30	43,3	1	36	88	99	2	95,4	93,9	0	600X1481X600	300	425				
NXV00404A2L	40	57,7	2	48	118	198	4	95,8	94,8	0	800X1881X600	550	700				
NXV00504A2L	50	72,1	2	60	147	198	4	96,2	95,2	0	800X1881X600	550	700				
NXV00804A2L	80	115	2	96	235	353	4	96,4	95,6	0	800X2281X600	850	800				
NXV01004A2L	100	144	2	120	294	353	4	96,5	95,8	0	800X2281X600	850	800				

INPUT

MPP voltage range	340 - 800 VDC
Max input voltage	900 VDC
Max open circuit voltage	850 VDC

OUTPUT

Nominal output voltage	400 V, 3 phase
Output frequency	50 / 60
Power factor	Adjustable 0,8-1 leading/lagging
AC overvoltage protection	Yes
AC current harmonics at rated power	<3%

AUX POWER

Aux Power Supply	internal 1ph, 230VAC, 50/60Hz
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AMBIENT

Temperature range	-10 C° to 40 C°
Temperature derating	1,5% / 1C° up to 50 C°
Relative humidity	95%, no condensation allowed
Installation altitude	2000m ^{1g}
Environment category	Indoor, conditioned
Pollution degree	PD2
Overvoltage category	AC (Mains) = OVCIII DC (Panel) = OVCII

SAFETY / PROTECTION

IP class	IP21
Ground fault monitoring	Yes
Overload behaviour	Power limiting
Over temperature behaviour	Power limiting
Forced stop	Yes
Circuit breaker AC side	Yes
Circuit breaker DC side	Yes

CONTROL INTERFACE

Communication	RS485 (Modbus RTU) Ethernet (Modbus TCP) GPRS
Signalling	3 Potential free contacts to indicate faults and alarms (programmable)

CERTIFICATES

EMC	EN 61000-6-2, EN 61000-6-4
Safety	EN-62109-1
Grid Codes 10-100kW	VDE 0126-1-1, VDE-AR-N 4105*, EN 50438 CEI 11-20, CEI 11-21*, R.D. 1633/2000 AS 4777.2, AS 4777.3 IEC-62116
Grid Codes 50-100kW	BDEW 2008 Arrêté du 23 avril 2008 Allegato 17. Terna Regolazione P.O. 12.2, P.O. 12.3

^{1b} Maximum input current withstand of the inverter cabinet.

^{1c} See manual for recommended cross sections of cables

^{1d} Efficiency measured at 340VDC

^{1g} Up to 3000m with derating of 1% per 100m. Hence 2600m would mean a derating of 6% of nominal output power. Note! EN-62109 certification is done only for European conditions up to 2000m

* Certification in progress, please check status from your local sales office