



QX³ Inverter Series

QX³4000 · QX³5000 · QX³6000 · QX³7000 · QX³8000

Three phases

2 MPP trackers

Integrated data-logger and web server

IP 65

Simple installation Plug & Play

Homogenous yields



DC Input:	QX ³ 4000	QX ³ 5000	QX ³ 6000	QX ³ 7000	QX ³ 8000
Recommended DC power (+15% acc. ISE)	4.700 W	5.800 W	7.000 W	8.700 W	9.500 W
Maximum input voltage	1.000 V				
Minimum input voltage/Start input voltage	Input A: 175 V/200 V				
Minimum input voltage*	Input B: 120 V				
MPP voltage range	190-680 V	240-680 V	280-680 V	260-680 V	290-680 V
Rated input voltage	600 V				
Maximum current per input (A/B) **	10/10 A			18/10 A	
Maximum short circuit current per input	12/12 A			20/12 A	
Start feeding-in at	20 W				
Number of independent MPP inputs	2				
Strings per MPP input	1			2/1	
DC terminal type	SUNCLIX				
DC Overvoltage category	III				
AC Output:	QX ³ 4000	QX ³ 5000	QX ³ 6000	QX ³ 7000	QX ³ 8000
Rated output power (230 V/50 Hz, cos(φ)=1)	4.000 W	5.000 W	6.000 W	7.000 W	8.000 W
Maximum apparent AC power	4.000 VA	5.000 VA	6.000 VA	7.000 VA	8.000 VA
AC connection	3/N/PE				
AC nominal output voltage range	3x 400 V/3x 230 V +/- 20%				
Power factor range, adjustable cos(φ)	0,9 ind. ... 1 ... 0,9 kap.				
Operating range at nominal frequency	50 Hz/47,5 Hz-51,5 Hz				
Maximum output current	3x 8 A	3x 8 A	3x 10 A	3x 12 A	3x 12 A
Maximum short circuit current	3x 8 A	3x 8 A	3x 10 A	3x 12 A	3x 12 A
Maximum permitted fusing	Circuit breaker 16 A, characteristic B				
Distortion factor at cos(φ) = 1	< 3%				
Self-consumption at night	< 2 W				
AC Overvoltage category	III				

Efficiency	QX ³ 4000	QX ³ 5000	QX ³ 6000	QX ³ 7000	QX ³ 8000
Maximum efficiency	97,5%	97,5%	97,5%	97,5%	97,5%
European efficiency	97,0%	97,0%	97,0%	97,0%	97,0%
Protection and protective devices	QX ³ 4000	QX ³ 5000	QX ³ 6000	QX ³ 7000	QX ³ 8000
Topology	transformerless				
Protection class	I				
Earth fault detection	integrated				
Residual current monitoring	integrated, sensitive to universal current				
Overload behaviour	operating point adjustment				
Overtemperature behaviour	operating point adjustment				
Input isolator	integrated				
Overvoltage protection-input	integrated, type 3 as per EN61643-11				
Overvoltage protection-output	integrated, type 3 as per EN61643-11				
Automatic disconnection device	as per VDE 0126-1-1				
Environmental conditions	QX ³ 4000	QX ³ 5000	QX ³ 6000	QX ³ 7000	QX ³ 8000
Ingress protection	IP 65	IP 54/connection area IP 65			
Cooling concept	fan-less	variable speed, temperature-controlled fan			
Operating temperature range	-20 bis +60 °C				
Maximum ambient temperature at rated power	45 °C	45 °C	45 °C	40 °C	40 °C
Climatic category	4K4H according to IEC 721-3-4 ***				
Maximum operating altitude	2000 m above sea level				
Noise emission	≤ 50 dB (A)				
Standards and approvals	QX ³ 4000	QX ³ 5000	QX ³ 6000	QX ³ 7000	QX ³ 8000
EMC emission	EN 61000-6-3: 2001				
EMC immunity	EN 61000-6-2: 2005				
Equipment safety	EN 62109-1, -2				
Grid compliance	VDE-AR-N 4105				
General Data	QX ³ 4000	QX ³ 5000	QX ³ 6000	QX ³ 7000	QX ³ 8000
Dimensions in mm (W x H x D)	360 x 506 x 190 mm (without plugs)				
Weight (approx.)	25 kg	25 kg	25 kg	27 kg	27 kg
Display	liquid crystal display, 128 x 64 pixel				
Communication interfaces	(internal) RS 485, USB, Ethernet, solar radiation, S0 as per DIN EN 62053-31 class B				
Data storage	24 hours: 5-min values 30 days: hourly values 20 years: daily values				
Relay contact	2x potential-free contact				
Warranty	5 years				

*) This value is valid if one input has exceeded the start input voltage.

**) It is permitted to exceed this limit as long as the maximum short circuit current is not exceeded.

***) The device is designed for an outdoor use. Direct sunlight and precipitation (rain, snow hail) must be avoided on site.

Q3150402 · Subject to technical alterations, errors and misprints excepted.



We develop and produce innovative and customized electronic devices for the field of renewable energies. Our maxim is thereby to guarantee our customers a high level of quality, efficiency and safety. Our products are characterized by simple and fast installation. As a result, they save time and achieve high yield stability through a coherent networking concept.

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