KVAZAR
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KV 195/24 M
KV 190/24 M
KV 185/24 M
KV 180/24 M
KV 175/24 M
KV 170/24 M

- Solar modules manufactured by Kvazar PJSC provide high level of electricity generation due to up-to-date technology and optimal combination of materials.
- Wide range of power classes allows performance of an individual designing and installation of photovoltaic systems.
- Solar module frame construction was tested for bending resistance and provides reliable and quick assembling.
- Modern manufacturing methods and certified quality management system guarantee the client a high quality level of the product.
- Positive sorting of the modules output provides exceeding of the nominal parameters of electricity generation.
- The full range of tests and trials conducted with solar modules manufactured by Kvazar PJSC (including electro-luminescence) first of all guarantees durability of solar systems and power plants.

General Features

Performance Classes	170Wp, 175 Wp, 180 Wp, 185 Wp, 190 Wp, 195 Wp
Module Dimensions	1585 x 805 x 40 mm
Frame	Aluminium (anodized)
Qualifications	Product sertification according to IEC 61215 Ed.2 Protection class II or IEC 61730 Development and manufacture certification according ISO 9001-2008
Warranty *	up to 10 years
Performance Guarantee *	12 years on 90 % of the performance 25 years on 80 % of the performance

TÜVRheinland CERT ISO 9001

Technical subject to alterations

** In accordance with our respective applicable guarantee conditions*

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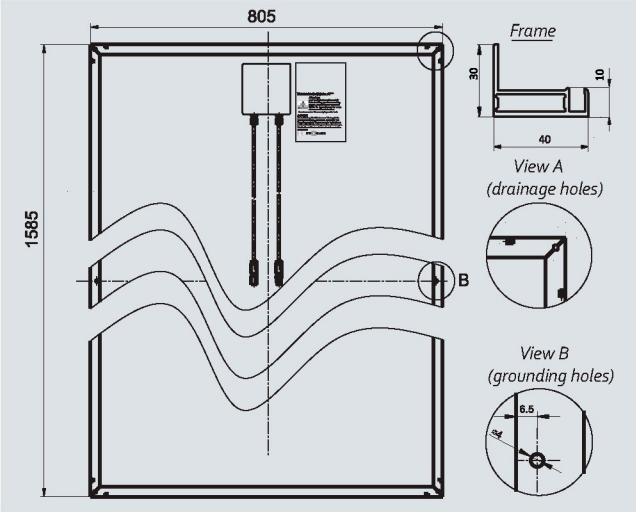
Technical Data

Dimensions



General Data

Module Technology	Glas-Foil-Laminate
Frame	Aluminium
Module Dimensions	1585 x 805 x 40 mm
Cover Material	High transparent solar glass (tempered) 4 mm
Back Material	Multilayered backsheet, white
Type of Cells	72 monocrystalline solar cells
Cell Dimensions	125 mm x 125 mm
Connection Box	Tyco with 3 Bypass Diods
Cables	2 x 1.000 mm / 4 mm ^{2}
Connectors	Tyco Solarlok
Weight	16,5 kg

Electrical Data

STC: *Standart Test Conditions:*

Irradiance =1 000 W/m^2; Air mass = AM 1.5; Nominal operating temperature T = 25 °C *(The average statistical module parameters)*

Module Indication	KV-170/24M	KV-175/24M	KV-180/24M	KV-185/24M	KV-190/24M	KV-195/24M
Nominal Power P	170	175	180	185	190	195
Sorting limits	-0/+5	-0/+5	-0/+5	-0/+5	-0/+5	-0/+5
Open circuit voltage V_{oc}, V	44,2	44,4	44,6	44,8	45	45,2
Short circuit current I_{sc}, A	5,2	5,3	5,4	5,5	5,6	5,65
Voltage at max power V_{mpp}, V	35,6	35,8	36	36,3	36,6	36,9
Current at max power I_{mpp}, A	4,8	4,9	5	5,1	5,2	5,3

NOCT:

Irradiance=800 W/m^2; Air mass = AM 1.5; Nominal operating temperature T = 47±2 °C *(The average statistical module parameters)*

Module Indication	KV-170/24M	KV-175/24M	KV-180/24M	KV-185/24M	KV-190/24M	KV-195/24M
Nominal Power P	120,1	123,6	127,1	130,7	134,2	137,7
Open circuit voltage V_{oc}, V	40,2	40,4	40,5	40,7	40,9	41,1
Short circuit current I_{sc}, A	4,22	4,31	4,39	4,47	4,55	4,59
Voltage at max power V_{mpp}, V	32	32,2	32,5	32,8	33	33,2
Current at max power I_{mpp}, A	3,7	3,8	3,9	4	4,1	4,15

Temperature coefficients

TK(Isc)= +0,07%/ °C; TK(Uoc) = -0,33%/ °C
TK(P) = -0,45±0,05%/ °C; NOCT = 47±2 °C

Intencity Dependance:

W/m^2	Vmpp	Impp
1000	1,00	1,0
800	0,99	0,8
200	0,95	0,2

Limits!

Class of application: A (IEC 61730);
Protection class: II (IEC 61730);
Max. System Voltage (DC): 1.000 V;
Series Fuse Rating, A: 15 A;
IP Protection Level: IP 65;
Mechanical Ratings: Load of 2.400 Pa approved;
Operating Temperature Range: -40 ... + 85 °C
Ambiente Temperature Range: -40 ... + 45 °C

Distribution partner

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