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CONDUCTOR AND CONDUIT SCHEDULE W/ELECTRICAL CALCULATIONS														
ID	TYPICAL	CONDUCTOR	CONDUIT	CURRENT-CARRYING CONDUCTORS IN CONDUIT	OCPD	EGC	TEMP. CORR. FACTOR	CONDUIT FILL FACTOR	CONT CURRENT	MAX CURRENT (125%)	BASE AMP	DERATED AMP	TERM. TEMP. RATING	AMP TERMINAL
1	4	12 AWG THWN-2, COPPER, ENPHASE Q-CABLE	FREE AIR	N/A	N/A	6 AWG BARE, COPPER	0.96 (33.7°C)	1	12.1A	15.12A	30A	28.8A	75°C	25A
2	1	10 AWG THWN-2, COPPER	0.5" EMT	8	20A	8 AWG THWN-2, COPPER	0.96 (33.7°C)	0.7	12.1A	15.12A	40A	26.88A	75°C	35A
3	1	6 AWG THWN-2, COPPER	0.75" EMT	2	N/A	6 AWG THWN-2, COPPER	0.96 (33.7°C)	1	41.14A	51.42A	75A	72A	75°C	65A
4	1	6 AWG THWN-2, COPPER	0.75" EMT	2	60A	6 AWG THWN-2, COPPER	0.96 (33.7°C)	1	41.14A	51.42A	75A	72A	75°C	65A
5	1	6 AWG THWN-2, COPPER	0.75" EMT	2	N/A	6 AWG THWN-2, COPPER	0.96 (33.7°C)	1	41.14A	51.42A	75A	72A	75°C	65A



CONTRACTOR

VANTAGE HOME SOLAR, LLC

PHONE: (833) 473-3611

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NONE NEPTUNE CITY, NJ 07753

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ELE.NO.:

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DAMAGES AND PROSECUTIONS.

NEW PV SYSTEM: 12,750 KWP

BARONE RESIDENCE

31 SCUDDERS ROAD
SPARTA TOWNSHIP,
NJ 07871
APN: 1826001000000004

ENGINEER OF RECORD

PAPER SIZE: 11" x 17" (ANSI B)

LINE DIAGRAM

DATE: 2024-01-22

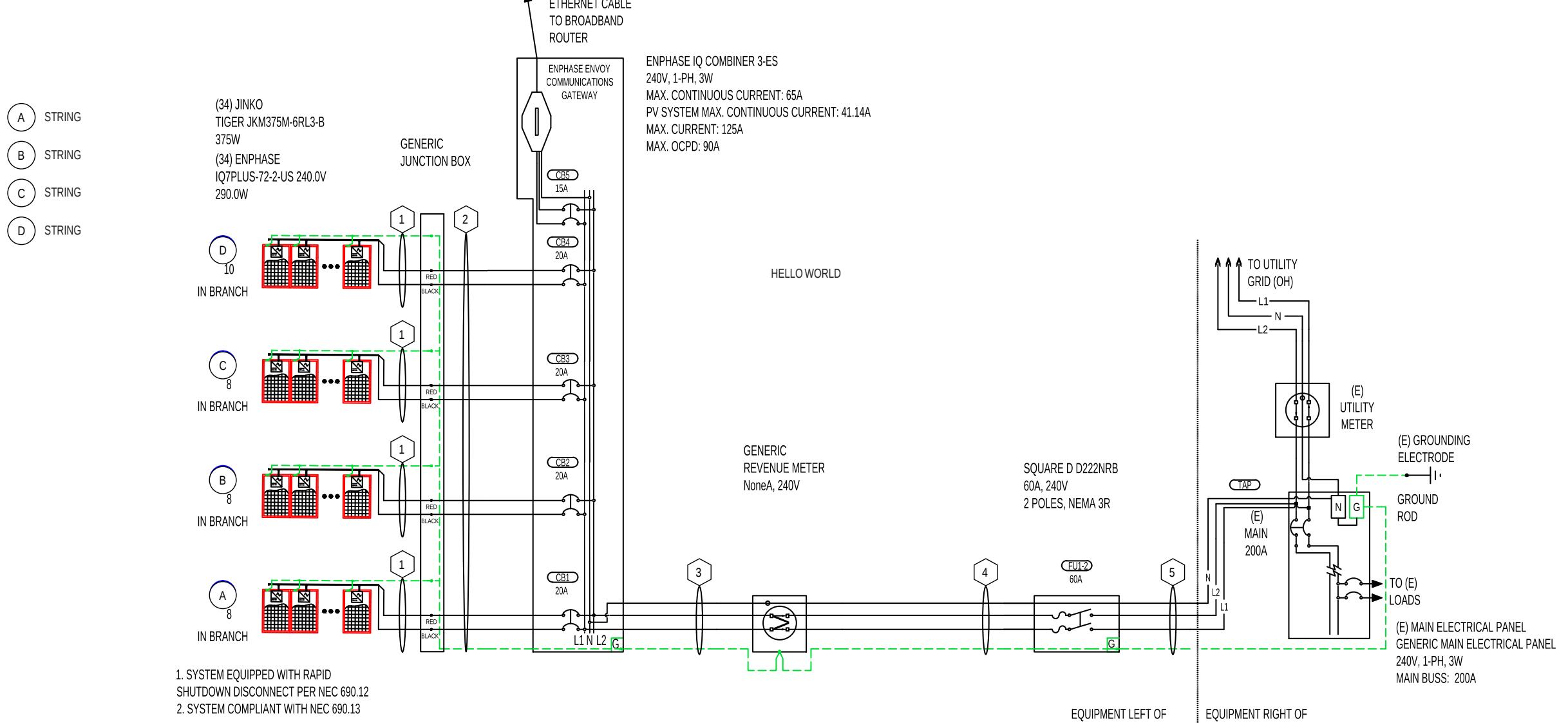
DESIGN BY: A. SHAPOVALENKO

CHECKED BY: UKRDRAFTING

REVISIONS

E-601

(SHEET 1)



A	B	C	D	E	F	G	H									
SYSTEM SUMMARY					MODULES											
	BRANCH #1	BRANCH #2	BRANCH #3	BRANCH #4	REF.	QTY.	MAKE AND MODEL	PMAX	PTC	ISC	IMP	VOC	VMP	TEMP. COEFF. OF VOC	FUSE RATING	
INVERTERS PER BRANCH	8	8	8	10	PM1-34	34	JINKO TIGER JKM375M-6RL3-B	375W	346.50W	11.01A	10.19A	44.12V	10.19V	-0.124V/°C (-0.28%/°C)	20A	
MAX AC CURRENT	9.68A	9.68A	9.68A	12.10A	INVERTERS											
MAX AC OUTPUT POWER	2,320W	2,320W	2,320W	2,900W	REF.	QTY	MAKE AND MODEL	AC VOLTAGE	GROUND	OCPD RATING	RATED POWER	MAX OUTPUT CURRENT	MAX INPUT CURRENT	MAX INPUT VOLTAGE	CEC WEIGHTED EFFICIENCY	
ARRAY STC POWER	12,750W			I1-34	34	ENPHASE IQ7PLUS-72-2-US	240A	FLOATING	20A	290W	1.21A	20A	60V	97.0%		
ARRAY PTC POWER	11,781W			DISCONNECTS					OCPDS							
MAX AC CURRENT	41.14A			REF.	QTY	MAKE AND MODEL	RATED CURRENT	MAX RATED VOLTAGE	REF.	QTY	RATED CURRENT	MAX VOLTAGE				
MAX AC POWER	9,860W			SW1	1	SQUARE D D222NRB	60A	240V	CB1-4	4	20A	240V				
DERATED (CEC) AC POWER	9,860W			ASHRAE EXTREME LOW	33.7°C (92.7°F), SOURCE: ESSEX CO (-74.28°; 40.88°)			ASHRAE 2% HIGH	33.7°C (92.7°F), SOURCE: ESSEX CO (-74.28°; 40.88°)			CB5	1	15A	240V	
									FU1-2	2	60A	240V				
BILL OF MATERIAL								DESCRIPTION								
CATEGORY	MAKE	MODEL NUMBER	REF	QTY	UNIT	QTY/UNIT		JINKO TIGER JKM375M-6RL3-B, 375W, 132 (2x66) P TYPE MONO-CRYSTALLINE								
PV MODULE	JINKO	TIGER JKM375M-6RL3-B	PM1-34	34	PIECE	1										
INVERTER	ENPHASE	IQ7PLUS-72-2-US	I1-34	34	PIECE	1		ENPHASE IQ7PLUS-72-2-US 290W MICROINVERTER								
DISCONNECT	SQUARE D	D222NRB	SW1	1	PIECE	1		SQUARE D D222NRB, FUSED, 2-POLE, 60A, 240VAC, NEMA 3R OR EQUIVALENT								
AC COMBINER PANEL	ENPHASE	IQ COMBINER 3-ES	EP1	1	PIECE	1		ENPHASE IQ COMBINER 3-ES 125A COMBINER PANEL								
PRODUCTION METER	GENERIC	GENERIC PV METER	PVM1	1	PIECE	1		GENERIC PV METER								
MONITORING	ENPHASE	ENPHASE-ENVOY	ENV1	1	PIECE	1		ENPHASE ENVOY								
WIRING	GENERIC	Q-12-10-240	WR1	145	FEET	1		ENPHASE Q-CABLE								
WIRING	GENERIC	GEN-6-AWG-BARE-CU	WR1	145	FEET	1		6 AWG BARE, COPPER (GROUND)								
WIRING	GENERIC	GEN-10-AWG-THWN-2-CU-RD	WR2	40	FEET	1		10 AWG THWN-2, COPPER, RED (LINE 1)								
WIRING	GENERIC	GEN-10-AWG-THWN-2-CU-BLK	WR2	40	FEET	1		10 AWG THWN-2, COPPER, BLACK (LINE 2)								
WIRING	GENERIC	GEN-8-AWG-THWN-2-CU-GR	WR2	40	FEET	1		8 AWG THWN-2, COPPER, GREEN (GROUND)								
WIRING	GENERIC	GEN-6-AWG-THWN-2-CU-RD	WR3-5	30	FEET	1		6 AWG THWN-2, COPPER, RED (LINE 1)								
WIRING	GENERIC	GEN-6-AWG-THWN-2-CU-BLK	WR3-5	30	FEET	1		6 AWG THWN-2, COPPER, BLACK (LINE 2)								
WIRING	GENERIC	GEN-6-AWG-THWN-2-CU-GR	WR3-5	30	FEET	1		6 AWG THWN-2, COPPER, GREEN (GROUND)								
WIRING	GENERIC	GEN-6-AWG-THWN-2-CU-WH	WR3-5	30	FEET	1		6 AWG THWN-2, COPPER, WHITE (NEUTRAL)								
WIREWAY	GENERIC	GEN-EMT-0.5"-DIA	WW2	10	FEET	1		EMT CONDUIT 0.5" DIA								
WIREWAY	GENERIC	GEN-EMT-0.75"-DIA	WW3-5	30	FEET	1		EMT CONDUIT 0.75" DIA								
OCPD	GENERIC	GEN-CB-20A-240VAC	CB1-4	4	PIECES	1		CIRCUIT BREAKER, 20A, 240VAC								
OCPD	GENERIC	GEN-CB-15A-240VAC	CB5	1	PIECE	1		CIRCUIT BREAKER, 15A, 240VAC								
OCPD	GENERIC	GEN-FU-60A-240VAC	FU1-2	2	PIECES	1		FUSE, 60A, 240VAC								
TRANSITION ENCLOSURE	GENERIC	GEN-AWB-TB-4-4X	JB1	1	PIECE	1		TRANSITION/PASS-THROUGH BOX, WITH 4 TERMINAL BLOCKS								



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NJ 07871
APN: 1826001000000004

ENGINEER OF RECORD

PAPER SIZE: 11" x 17" (ANSI B)

ELECTRICAL PLAN

DATE: 2024-01-22

DESIGN BY: A. SHAPOVALENKO

CHECKED BY: UKRDRDRAFTING

REVISIONS

E-602

(SHEET 2)

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placards image supposed to be here



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PLACARDS

DATE: 2024-01-22

DESIGN BY: A. SHAPOVALENKO

CHECKED BY: UKRDRAFTING

REVISIONS

E-603

(SHEET 3)

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www.jinkosolar.com

Tiger Mono-facial All Black 360-380 Watt

Tiling Ribbon (TR) Technology

Positive power tolerance of 0~+3%

ISO9001:2015, ISO14001:2015, ISO45001:2018

certified factory

IEC61215, IEC61730 certified product



KEY FEATURES



TR technology + Half Cell

TR technology with Half cell aims to eliminate the cell gap to increase module efficiency (mono-facial up to 19.91%)



9BB instead of 5BB

9BB technology decreases the distance between bus bars and finger grid line which is benefit to power increase.



Higher lifetime Power Yield

2.5% first year degradation, 0.6% linear degradation



Best Warranty

12 year product warranty, 25 year linear power warranty



Avoid debris, cracks and broken gate risk effectively

9BB technology using circular ribbon that could avoid debris, cracks and broken gate risk effectively



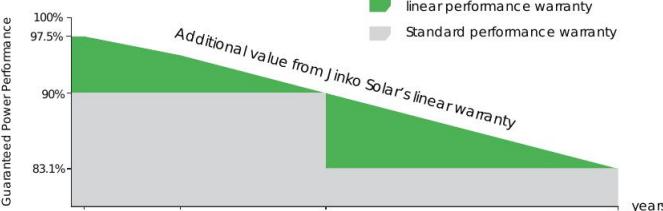
Severe Weather Resilience

Certified to withstand: wind load (2400 Pascal) and snow load (5400 Pascal).



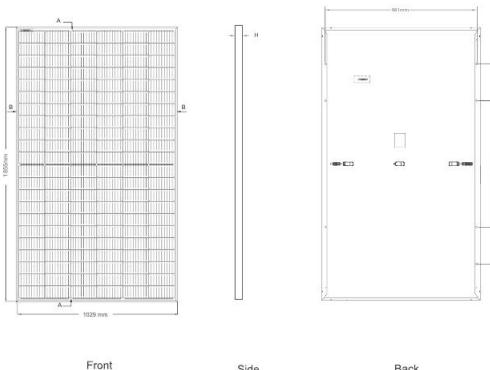
LINEAR PERFORMANCE WARRANTY

12 Year Product Warranty 25 Year Linear Power Warranty
0.6% Annual Degradation Over 25 years

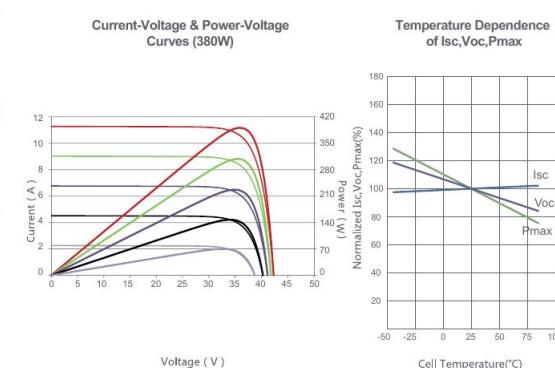


Jinko Solar
Building Your Trust in Solar

Engineering Drawings



Electrical Performance & Temperature Dependence



Mechanical Characteristics

Cell Type	P type Mono-crystalline
No.of cells	132 (2×66)
Dimensions	1855×1029×30mm (73.03×40.51×1.18 inch)
Weight	20.8 kg (45.86 lbs)
Front Glass	3.2mm,Anti-Reflection Coating, High Transmission, Low Iron, Tempered Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP67 Rated
Output Cables	TUV 1×4.0mm ² (+):290mm, (-):145 mm or Customized Length

SPECIFICATIONS

Module Type	JKM360M-6RL3-B	JKM365M-6RL3-B	JKM370M-6RL3-B	JKM375M-6RL3-B	JKM380M-6RL3-B	STC	NOCT
Maximum Power (Pmax)	360Wp	268Wp	365Wp	272Wp	370Wp	275Wp	375Wp
Maximum Power Voltage (Vmp)	36.51V	33.27V	36.61V	33.36V	36.71V	33.49V	36.80V
Maximum Power Current (Imp)	9.86A	8.05A	9.97A	8.14A	10.08A	8.22A	10.19A
Open-circuit Voltage (Voc)	43.82V	41.36V	43.92V	41.45V	44.02V	41.55V	44.12V
Short-circuit Current (Isc)	10.68A	8.63A	10.79A	8.71A	10.90A	8.80A	11.01A
Module Efficiency STC (%)	18.86%	19.12%	19.38%	19.65%	19.91%	18.86%	19.12%
Operating Temperature(°C)						-40°C~+85°C	
Maximum system voltage						1000VDC (IEC)	
Maximum series fuse rating						20A	
Power tolerance						0~+3%	
Temperature coefficients of Pmax						-0.35%/°C	
Temperature coefficients of Voc						-0.28%/°C	
Temperature coefficients of Isc						0.048%/°C	
Nominal operating cell temperature (NOCT)						45±2°C	

* STC: Irradiance 1000W/m² Cell Temperature 25°C AM=1.5

NOCT: Irradiance 800W/m² Ambient Temperature 20°C AM=1.5 Wind Speed 1m/s

* Power measurement tolerance: ± 3%

The company reserves the final right for explanation on any of the information presented hereby. TR JKM360-380M-6RL3-B-A1.1-EN

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RESOURCE DOCUMENT

DATE: 2024-01-22

DESIGN BY: A. SHAPOVALENKO

CHECKED BY: UKRDRAFTING

REVISIONS

R-001

(SHEET 4)

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Data Sheet
Enphase Microinverters
Region: AMERICAS

Enphase IQ 7 and IQ 7+ Microinverters

The high-powered smart grid-ready **Enphase IQ 7 Micro™** and **Enphase IQ 7+ Micro™** dramatically simplify the installation process while achieving the highest system efficiency.

Part of the Enphase IQ System, the IQ 7 and IQ 7+ Microinverters integrate with the Enphase IQ Envoy™, Enphase IQ Battery™, and the Enphase Enlighten™ monitoring and analysis software.

IQ Series Microinverters extend the reliability standards set forth by previous generations and undergo over a million hours of power-on testing, enabling Enphase to provide an industry-leading warranty of up to 25 years.



To learn more about Enphase offerings, visit enphase.com

 ENPHASE.

* The IQ 7+ Micro is required to support 72-cell/144 half-cell modules.

 VANTAGE
HOME SOLAR

CONTRACTOR

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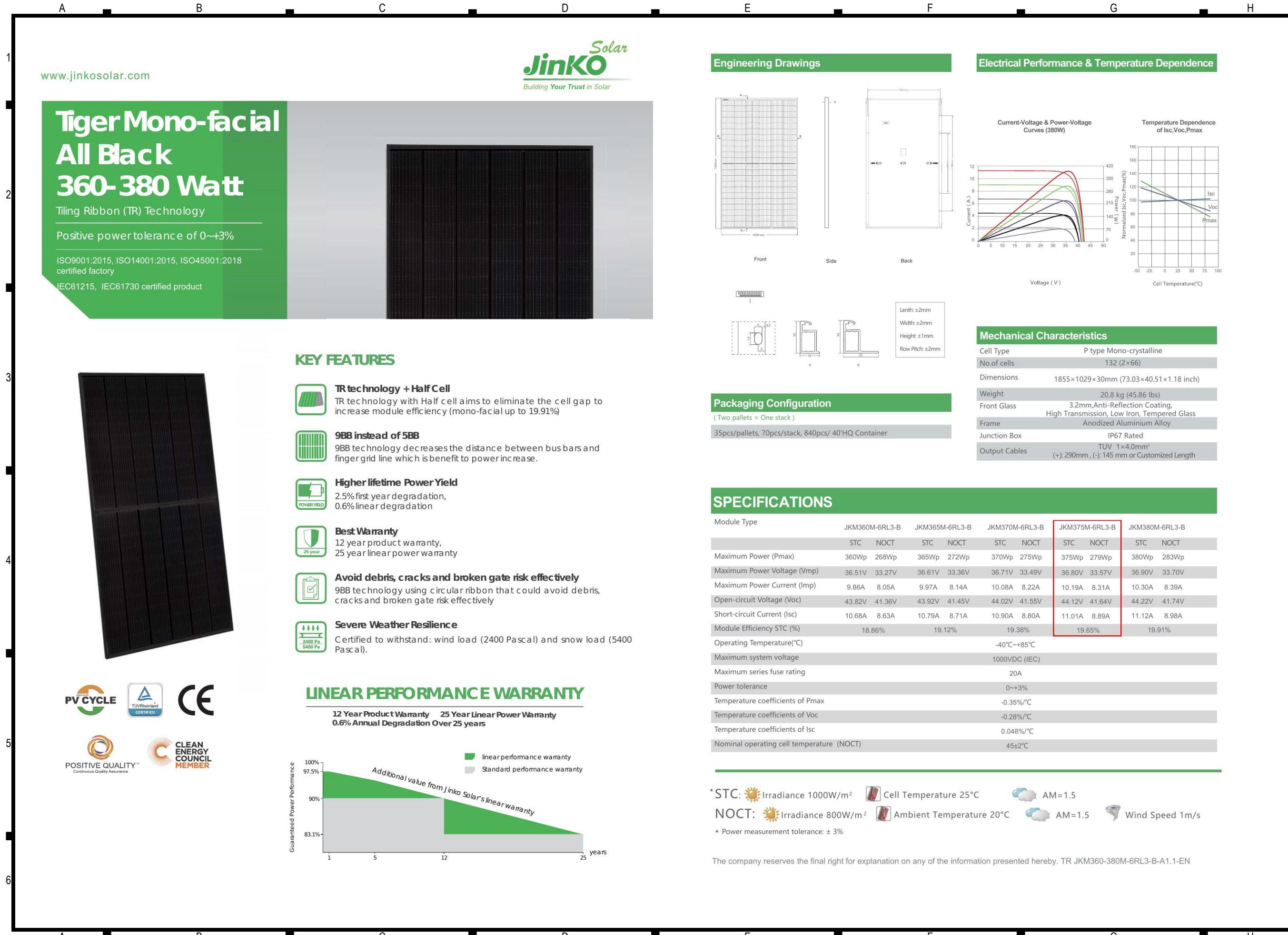
DESIGN BY: A. SHAPOVALENKO

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REVISIONS

R-002

(SHEET 5)



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DESIGN BY: A. SHAPOVALENKO

CHECKED BY: UKRDRAFTING

REVISIONS

R-001

(SHEET 6)

A

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Data Sheet
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Region: AMERICAS

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(SHEET 7)