

## A. System Specifications and Ratings

- Maximum Voltage: 1,500 Volts
- Maximum Current: 80 Amps (120 Amps for 884)
- Allowable Wire: 14 AWG - 6 AWG (14-2/0 for 884)
- Spacing: Please maintain a spacing of at least 1/2" between uninsulated live part and fittings for conduit, armored cable, and uninsulated live parts of opposite polarity.
- Enclosure Rating: Type 3R
- Roof Slope Range: 2-90 degrees (reference images in Mamba install manual)
- Max Side Wall Fitting Size: \*See Max Fitting Size Chart
- Ambient Operating Conditions: (-35°C) - (+75°C)
- Compliance:
  - UL1741, CSA C22.2 No. 290
  - Approved Wire Connectors: Must conform to UL1741
- System Marking: **Intertek Symbol and File #5029623**
- Periodic Re-inspections: If re-inspections yield loose components, loose fasteners, or any corrosion between components, components that are found to be affected are to be replaced immediately.

ITEM NO.	H (in)	W (in)	D (in)
MAMBA-663-DR	6.52	6.52	3.25
MAMBA-884-DR	8.52	8.52	4.25

Max Fitting Size Chart	
Mamba Model	Max Fitting Size (in)
663-DR	1-1/2"
884-DR	2"

**Table 1: Typical Wire Size, Torque Loads and Ratings**

	1 Conductor	2 Conductor	Torque				
			Type	NM	Inch Lbs	Voltage	Current
ABB ZS6 terminal block	10-24 awg	16-24 awg	Sol/Str	0.5-0.7	6.2-8.85	600V	30 amp
ABB ZS10 terminal block	6-24 awg	12-20 awg	Sol/Str	1.0-1.6	8.85-14.16	600V	40 amp
ABB ZS16 terminal block	4-24 awg	10-20 awg	Sol/Str	1.6-2.4	14.6-21.24	600V	60 amp
ABB M6/8 terminal block	8-22 awg		Sol/Str	.08-1	8.85	600V	50 amp
Ideal 452 Red <small>WING-NUT Wire Connector</small>	8-18 awg		Sol/Str	Self-Torque	Self-Torque	600V	
Ideal 451 Yellow <small>WING-NUT Wire Connector</small>	10-18 awg		Sol/Str	Self-Torque	Self-Torque	600V	
Ideal, In-Sure <small>Push-In Connector Part #39</small>	10-14 awg		Sol/Str	Self-Torque	Self-Torque	600V	
WAGO, 2204-1201	10-20 awg	16-24 awg	Sol/Str	Self-Torque	Self-Torque	600V	30 amp
WAGO, 221-612	10-20 awg	10-24 awg	Sol/Str	Self-Torque	Self-Torque	600V	30 amp
Dottie DRC75	6-12 awg		Sol/Str	Snap-In	Snap-In		
ESP NG-53	4-6 awg		Sol/Str		45		
ESP NG-63	10-14 awg		Sol/Str		35		2000V
ESP NG-717	4-6 awg		Sol/Str		45		
	10-14 awg		Sol/Str		35		2000V
Brumall 4-5,3	4-6 awg		Sol/Str		45		
	10-14 awg		Sol/Str		35		2000V

**Table 2: Minimum wire-bending space for conductors through a wall opposite terminals in mm (inches)**

Wire size, AWG or kcmil (mm <sup>2</sup> )	Wires per terminal (pole)				
	1 mm (inch)	2 mm (inch)	3 mm (inch)	4 or More mm (inch)	
14-10 (2.1-5.3)	Not Specified	-	-	-	
8 (8.4)	38.1 (1-1/2)	-	-	-	
6 (13.3)	50.8 (2)	-	-	-	

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