

3. OUTPUT SPECIFICATIONS

PARAMETER	DESCRIPTION / CONDITION	MIN	NOM	MAX	UNIT	
V1 Output Voltages	±0.5% set point accuracy RS+ closed on +V1, RS- closed on V1 RTN, at 20% load (option SL).	-	24 48	-	V	
V1 Output Power Rating *	Convection cooling (Refer to the de-rating curves below) Peak (less than 10 s, after P_OK high)			600 800	W	
V1 Output Current *	V1: 24 V _{DC} V1: 48 V _{DC}			25.0 12.5	A	
V1 Voltage Adjustment Range	Manually by push up and down buttons	-	±5	-	%V1	
V1 Line Regulation	V _{AC} : 85 – 264 V _{RMS}	-	-	±0.1	%V1	
V1 Load-Line-Cross Regulation	V _{AC} : 85 – 264 V _{RMS} ; I ₁ : 0 – 100%	-	-	±2	%V1	
V1 Ripple and Noise	Rated load, Peak-to-peak, 20 MHz BW. (100 nF ceramic, 10 µF tantalum at load)	-	-	1	%V1	
Transient Response: V1, 5V _{SB} Voltage Deviation	25% load changes at 1 A/µs 24 V at 1000 µF load / I _{OUT} > 2.5 A 48 V at 560 µF load / I _{OUT} > 1.25 A 5 V _{SB} at 560 µF load / I _{OUT} > 0.1 A	-	-	±5	%V1 %V _{SB}	
V1 Start-up Rise Time	85 < V _{IN} < 264, any load conditions.	10	-	100	ms	
V1 Hold-up Time	At nominal V _{IN} , full load	16	-	-	ms	
V1 Current Sharing Accuracy	Two units in parallel at I ₁ rated load. VS-Logic and I-Share signals connected together. RS+, RS- signals connected together and to the load	45.5	-	54.5	%I ₁	
Start-up Delay	V1 in regulation after de-asserting PS_Inhibit V1 in regulation after AC is applied (worst case: 85 V _{AC}) 5V _{SB} in regulation after AC is applied (worst case: 85 V _{AC})	-	-	450 2050 1500	ms	
Turn-on Overshoot		-	-	10 10	%V1 %V _{SB}	
Minimum Load	V1, 5V _{SB}	0	-	-	A	
Maximum Load Capacitance		V1: 24 V _{DC} V1: 48 V _{DC}	-	-	16000 8000	µF
5 V _{SB} Output Voltage	±3% set point accuracy, 20% load.	-	5	-	V	
5 V _{SB} Output Current		-	-	1.5	A	
5 V _{SB} Load-Line-Cross Regulation	V _{AC} : 85 – 264 V _{RMS} ; I _{SB} : 0 – 100%	-	-	±5	%V _{SB}	

* Rated currents and combined power are referred to 55 °C ambient and V_{AC} ≥ 180 V_{RMS}.

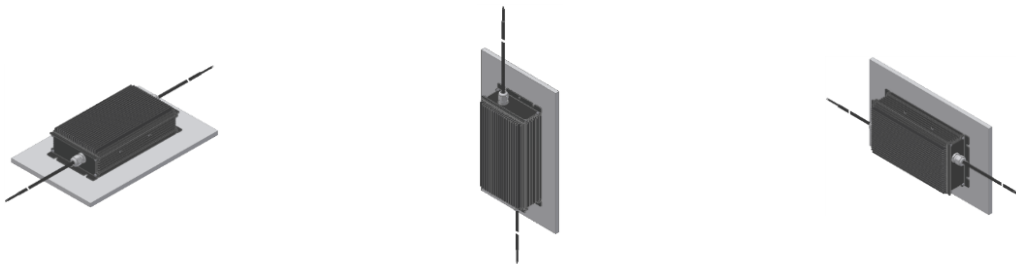


Figure 1. Mounting Orientation

3.1 OUTPUT POWER DE-RATING CURVES

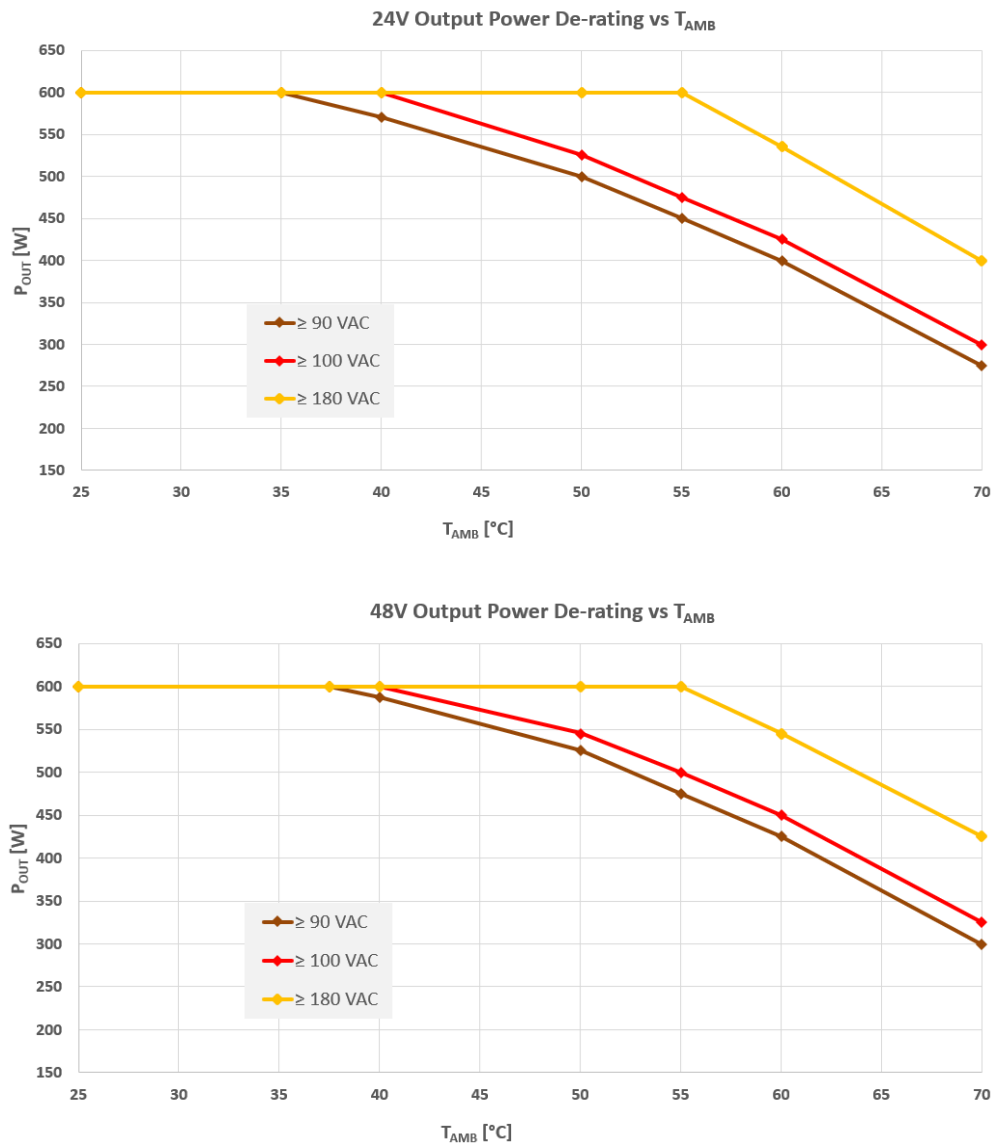


Figure 2. Power Derating Curves of MBS601 Series V1 P_{OUT} to T_{AMB}

Note: The de-rating curves are effective regardless mounting orientation