

<b>NAME</b>	<b>VR-H2000-76BA Electrical Specification</b>	<b>NO</b>	<b>VR-1-1-1184</b>
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<p align="center"><b>Regulation System Connection Wire Diagram</b></p>	<p><b>System Regulator Type:</b></p> <ul style="list-style-type: none"> <li>• Voltage Set Point :28.5V</li> <li>• Regulation : A - Circuit</li> <li>• Inactive Lamp</li> <li>• Short Circuit Protection</li> <li>• Soft- Start</li> </ul>
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PARAMETERS AND CONDITIONS	SYMBOLS	MIN.	TYP.	MAX.	UNITS
Operating Temperature Range	$T_{OP}$	-40	---	125	°C
Field	$I_F$		5		A
Voltage Set Point (2500 RPM, at 20A load)	$V_{SET}$	28.2	28.5	28.8	V
Secondary Set Point (2500 RPM ,at 20A load)	$V_{SET2}$	---	---	---	V
Speed Regulation (2000 RPM to 6000 RPM ,at load = 15A)	$V_{SR}$	---	---	-0.3	V
Load Regulation (10% to 95% ,at Speed = 6000 RPM)	$V_{LR}$	---	-0.8	-1.0	V
Saturation Voltage @ 5A, 24Volts	$V_{SAT}$	---	1.3	1.5	V
Standby Current (Key off, $V_{BAT} = 25.2V$ )	$I_{SB}$	---	---	0.5	mA
Temperature Coefficient	$T_C$	-6	-3	0	mV/ °C
Over voltage Indication	$V_{OV}$	31.0	32.0	33.0	V
Under voltage Indication	$V_{UV}$	18.0	19.0	20.0	V
Soft-Start Duty	$D_{SS}$	15	30	45	%
Cut in Speed	$R_{CIS}$	---	---	1300	rpm

**Safety Characteristics:**

- **Over voltage :**  $V_s = 48 V$  , 60 sec. from the ignition SW. is turned ON/OFF without failure.
- **Battery Reversal :**  $V_s = -48 V$  , 60 sec. from accidental battery reversal without failure.
- **Short Circuit Protection :** The regulator stands short circuit of Field and Lamp without failure.
- **Repetitive Thermal Shock :**  
The Regulator shall be designed to withstand 500 cycles of -30°C to 125°C in 20 minutes and 125°C to -30°C in 20 minutes.
- **High Temperature Test :**  
The Regulator shall be designed to operate reliability at the rated current of alternator is 80% to 100% and at 6000 rpm ( shaft speed ) for a minimum of 10 hours at 125°C.

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