

NAME	VR- B2004B Electrical Specification	NO	VR-1-1-2603
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<p align="center">Regulation System Connection Wire Diagram</p>	<p>System Regulator Type:</p> <ul style="list-style-type: none"> ● Voltage Set Point :28.3V ● Regulation : B – Circuit ● L terminal Drives choke ● Soft Start , 0.5sec LRC ● Short Circuit Protection ● S open Lamp OFF
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PARAMETERS AND CONDITIONS	SYMBOLS	MIN.	TYP.	MAX.	UNITS
Operating Temperature Range	T_{OP}	-30	---	125	°C
Voltage Set Point (2500 RPM ,at 20A load)	V_{SET}	28.00	28.30	28.60	V
Secondary Set Point (2500 RPM ,at 20A load)	V_{SET2}	28.00	28.40	28.80	V
Speed Regulation (2000 RPM to 6000 RPM ,at load = 15A)	V_{SR}	---	-0.1	-0.3	V
Load Regulation (10% to 95% ,at Speed = 6000 RPM)	V_{LR}	---	-0.4	-0.5	V
Saturation Voltage @ 5A, 24Volts	V_{SAT}	---	0.5	0.8	V
Standby Current (Key off, $V_{BAT} = 25.2V$)	I_{SB}	---	---	1	mA
Temperature Coefficient	T_C	-3	0	3	mV/ °C
Soft-Start Duty	D_{SS}	7	12	17	%
LRC Delay Time	T_{LRC}	0	0.5	1.0	Sec
Cut-In Speed	R_{CIS}	---	---	1900	RPM
Lamp and charge status @ Ignition terminal open	Lamp	---	On	---	---
	Regulation	---	Regulation	---	---
Lamp and charge status @ After Ignition terminal open	Lamp	---	Off	---	---
	Regulation	---	Regulation	---	---

Safety Characteristics:

- **Over voltage :** $V_s = 48 V$, 60 sec. from the ignition SW. is turned ON/OFF 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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DATE OF FIRST EDITION	DATE OF REVISED EDITION	EDITION	MANU-SCRIPT	ORI-GINAL REVIEW	SECOND REVIEW	APP-ROVAL	ISSUED MARK	COPY'S NUMBER