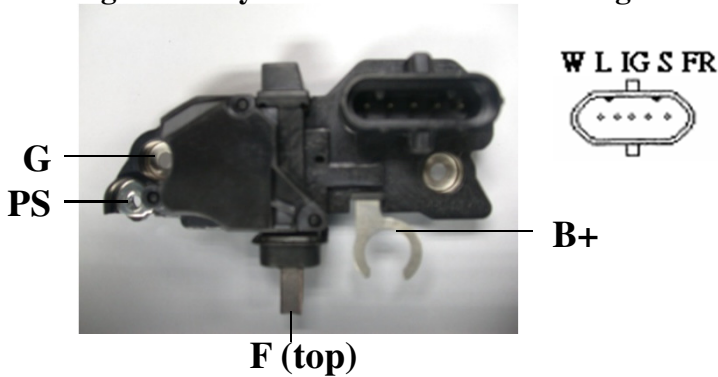


NAME	VR-B121B Electrical Specification	NO	VR-1-1-1599
------	--	----	--------------------

Regulation System Connection Wire Diagram 		System Regulator Type: <ul style="list-style-type: none"> ● Voltage Set Point :28.3V ● Regulation : B – Circuit ● L terminal Drives choke ● Soft Start ● Short Circuit Protection ● S open Lamp on
---	--	---

PARAMETERS AND CONDITIONS	SYMBOLS	MIN.	TYP.	MAX.	UNITS
Operating Temperature Range	T_{OP}	-40	---	130	°C
Field	I_F	---	5	---	A
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}	---	---	2.0	mA
Temperature Coefficient	T_C	-3	0	---	mV/ °C
Soft-Start Duty	D_{SS}	5	10	15	%
Over Current Protection Threshold (@25°C)	I_{SD}	9	11	13	A
Thermal Shutdown Threshold	T_{SD}	140	150	160	°C
Regulator Operating frequency	freq	125	150	175	Hz
Cut-In Speed	R_{CIS}	---	---	1500	RPM

Safety Characteristics:

- **Over voltage :** $V_s = 48 V$, 60 sec. from the ignition SW. is turned ON/OFF without failure.
- **Battery Reversal :** $V_s = -28 V$, 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.

2016.02.18		1	柯文彬	卓建廷	陳建文	MOBILETRON
Date of first edition	Date of revised edition	Edition	Manu-script	Review	Approval	Feb.23.2016
						Release