NAME	VR–B881 Electrical Specification	NO	VR-1-1-1956

Regulation System Connection Wire Diagram

B+
F(TOP)
COM
Ps
GND
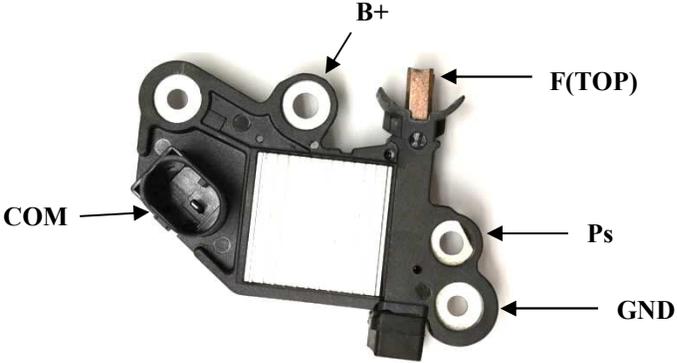
Regulator Features :
- Voltage Set Point : 14.3V (Default Vset)
- Regulation : B – Circuit
- Stand by mode
- Leakage current control
- Self mode
- Default mode
- LIN (Com) mode
- 19200 Baud rate（4byte）
- Variable V setting
- Field out duty monitor
- Temperature & Field current

PARAMETERS AND CONDITIONS	SPEC	Min.	Type	Max.	SYMBOLS
Switch OFF Leakage Current	Ps ＜ 800rpm , LIN= Low , B+=12.0V	---	---	0.5	mA
Regulator Set Point	Default Mode	14.1	14.3	14.5	V
	Defined by external ECU/LIN command.	10.7	---	16.0	V
Output Saturation Voltage	I F = 5A	---	0.5	0.7	V
Field Current Limit	F shorted to GND	---	---	12.0	A
Field Control Frequency	10% ＜ duty cycle ＜ 95%	---	400	---	Hz
Error Display High Temp. Protection Threshold on board(substrate)	Field output OFF	---	160	---	℃
Self Drive Termination rpm Threshold Safe mode	Safe mode	475	550	625	rpm
Self Drive Initiation rpm Threshold	Safe mode Frequency given according to the programmed number of generator poles	2550	3000	3450	rpm

Safety Characteristics:
- **Over voltage :** Vs = 24 V , 60 sec. from the ignition SW. is turned ON/OFF without failure.
- **Short Circuit Protection :** The regulator shall stand short circuit on Field without failure and return normal operation within 2 seconds once short condition is removed.
- **Repetitive Thermal Shock :** The Regulator shall be designed to withstand 500 cycles of -30℃ to 125℃ in 20 minutes and 125℃ to -30℃ in 20 minutes.
- **High Temperature Test :** The regulator shall be designed to operate reliably at the load from 80% to 100% of the alternator rated current and at 6000 rpm (shaft speed) for a minimum of 10 hours at 125℃ .

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