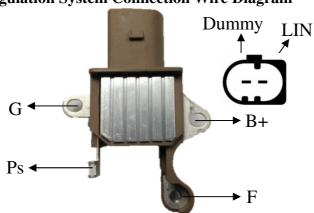
VR-H2005-272 Electrical Specification

NO

VR-1-1-2535

Regulation System Connection Wire Diagram



Regulator Features:

- Standby mode
- Leakage current control
- Default mode
- LIN (COM) mode
- 19200 Baud Rate (4byte)
- Variable V setting
- Field out duty monitor
- Temperature & Field current
- Regulation: B Circuit

Parameters and conditions	Specification	Min.	Туре	Max.	SYMBOLS
Operating Temperature	Operating Temperature	-30		125	°C
Switch OFF Leakage Current	Ps < 800rpm , LIN= Low , B+=12.0V			1.0	mA
	Default Mode	14.1	14.3	14.5	V
Regulator Set Point	Defined by external ECU/LIN command.	10.6		16.0	V
Output Saturation Voltage	$\underline{\mathbf{I}}\mathbf{f} = 5\mathbf{A}$			0.8	V
Field Current Limit	F shorted to ground	10			A
Field Control Frequency	10% < duty cycle < 95%	175	200	225	Hz
Error Display High Temp. Protection Threshold on board(substrate)	Field output OFF		160		င
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°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 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° C.

2024.09.03		1	王毅賢	柯文彬	林勝雄	林勝雄		
FIRST	DATE OF REVISED EDITION	EDITION	MANU- SCRIPT	ORI- GINAL REVIEW	SECOND REVIEW	APP- ROVAL	ISSUED MARK	COPY'S NUMBER