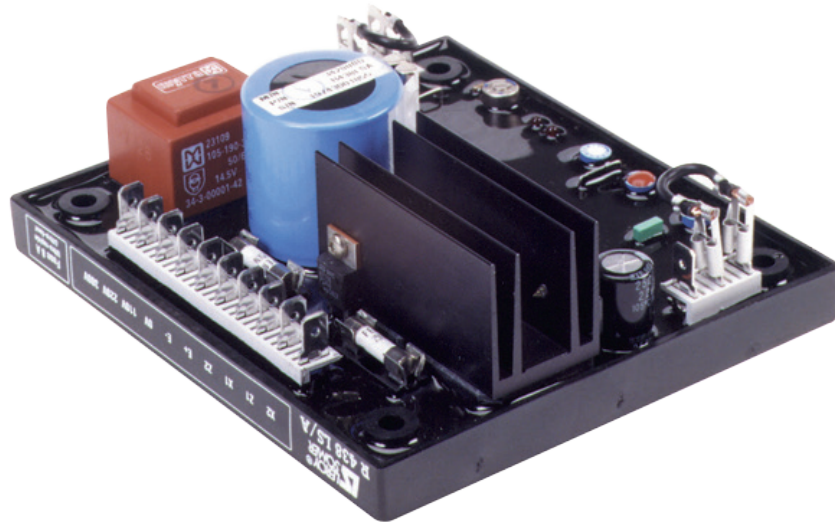


# R438 AVR

FOR SHUNT, AREP or PMG ALTERNATORS

DATASHEET



R438 is an analog AVR. It is designed for alternators with a AREP or PMG excitation.

R438 controls the excitation current in order to maintain the output voltage of the alternator. R438 is performant in terms of voltage regulation, simple to set , to use and is reliable.

It can run without LAM (U/f), or with LAM, selection is done by strap ST5. It is in compliance with I.E.C. 60034-1 standard and U.L. 508 / C.S.A. approved.

## CHARACTERISTICS

- Voltage regulation :  $\pm 0.5\%$ .
- U/F function (1).
- LAM function (2).
- Response time : 500 ms.
- Nominal excitation current : 5A.
- Maximum excitation current : 8A during 10 s.
- Supply range and voltage détection : 95 to 520 V.
- Protection : fuse 8A.

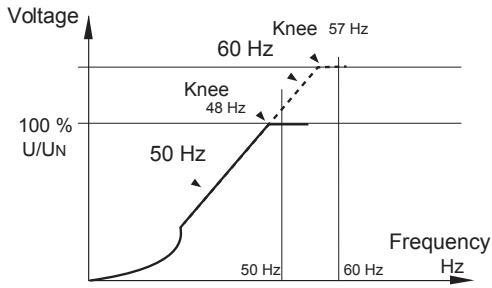
## OPERATION RANGE

	LSA 40	42,3	44,3	46,3	47,2	49,3	50,2	51,2	53,1	54
SHUNT	-	-	-	-	-	-	-	-	-	-
AREP	✓	✓	✓	-	-	-	-	-	-	-
PMG	-	✓	✓	-	-	-	-	-	-	-

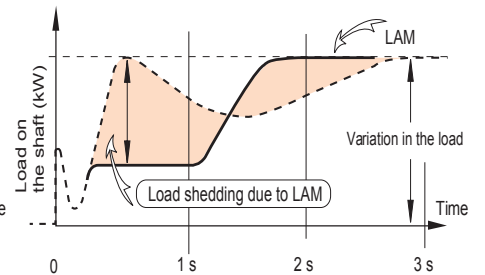
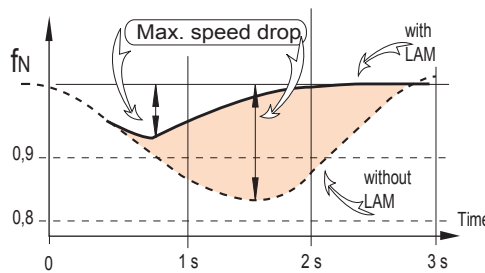
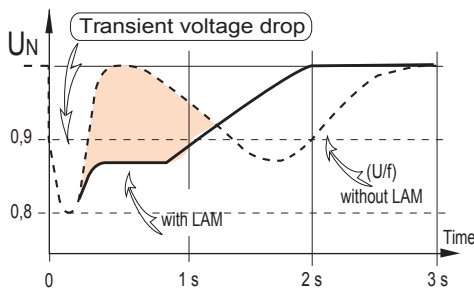
Operation mode : Standalone

## MAIN FEATURE

### U/F FUNCTION



### LAM FUNCTION



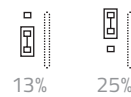
**ST5**



**F1**

Slow fuse  
250V 8 A

**ST10**  
LAM



**P1**  
Quad droop

## CONNEXION AND SETTING

Settings are done through the AVR.

- Potentiometer P1 : Quadrature droop setting.
- Potentiometer P2 : Voltage setting.
- Potentiometer P3 : Stability setting.
- Potentiometer P5 : Excitation ceiling setting.

