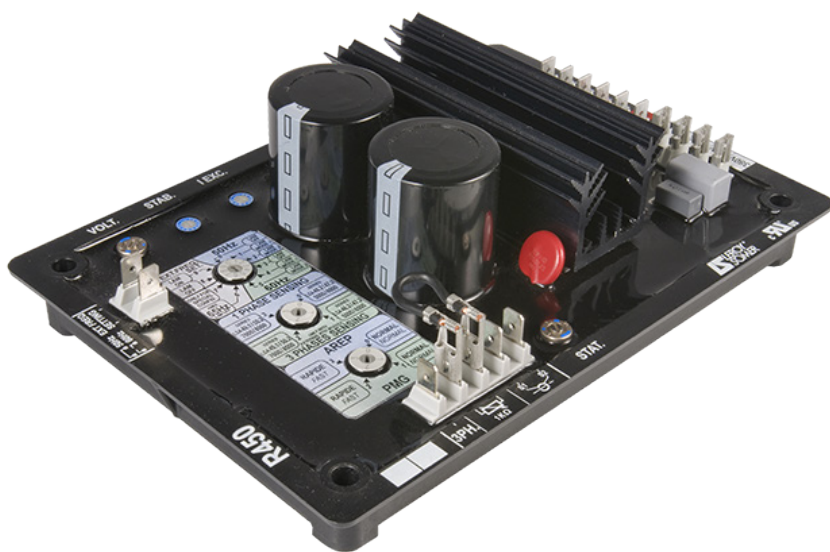


R450 AVR

FOR SHUNT, AREP or PMG ALTERNATORS



R450 is an analog AVR. It is designed for alternators with a SHUNT, AREP or PMG excitation.

R450 controls the excitation current in order to maintain the output voltage of the alternator. R450 is performant in terms of voltage regulation, simple to set, to use and is reliable. Rotating switch for U/F, LAM, excitation type and voltage sensing are available.

It is in compliance with I.E.C. 60034-1 standard and U.L. 508 / C.S.A. approved.

CHARACTERISTICS

- Voltage regulation : $\pm 0.5\%$.
- Under-speed protection by function :
 - 1) U/F (LAM : OFF).
 - 2) U/F (LAM : MODE1).
 Auto-adaptating LAM + 2 U/F (LAM : MODE 2).
- Nominal excitation current : 6A.
- Maximum excitation current : 10A during 10 s.
- Supply range 150V (50Hz/60Hz).
- Voltage détection : ≤ 530 V.
- Protection : fuse fast 10A.
- Protection on load, short-circuit and voltage reference loss.

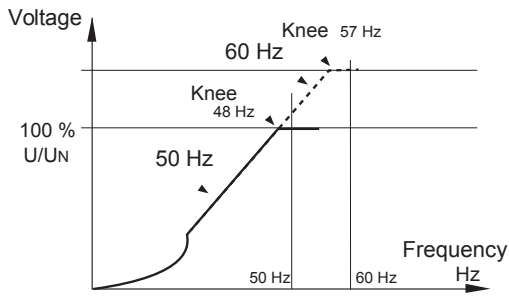
OPERATION RANGE

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

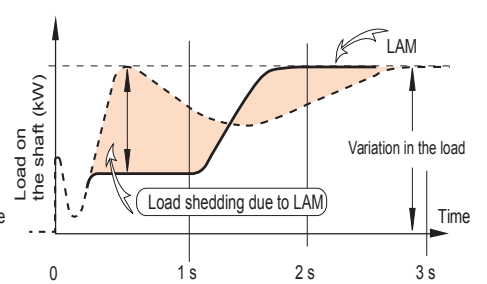
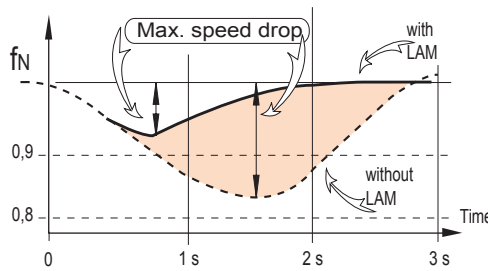
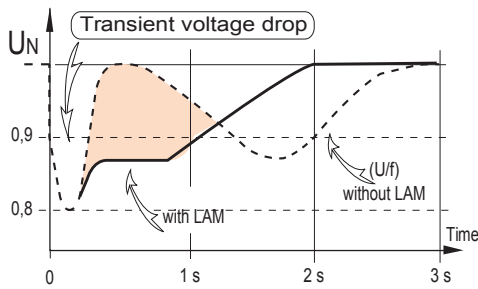
Operation mode : Standalone

MAIN FEATURE

U/F FONCTION



LAM FONCTION



CONNEXION AND SETTING

Settings are done through the AVR.

- Potentiometer P1 : voltage setting.
- Potentiometer P2 : stability setting.
- Potentiometer P3 : excitation.
- Rotating switch selection 1 : frequency, U/F function, LAM function.
- Rotating switch selection 2 : alternator type and voltage sensing (1 ph. ou 3 ph.).
- Rotating switch selection 3 : excitation type (AREP or PMG) and time response.
- Potentiometer P4 : quadrature droop.

OPERATION CONDITIONS

- Operating temperature range : - 40° C to + 65° C.
- Storage temperature range : - 55° C to + 85° C.
- Hygrometry : 98%.
- Maximum choc : 9 g on 3 axis.
- Vibrations : less than 10 Hz , 2 mm peak magnitude.
- From 10 Hz to 100 Hz : 100 mm/s, below 100 Hz : 8g.
- Optional modules compatible :
 - R731 : three phase voltage sensing.
 - R734 : 3-phase current and voltage sensing for parallel operation
 - R726 : regulation system changed to "4 - function".

CONNEXION AND SETTING

