

R220 AVR

FOR ALTERNATORS WITH SHUNT EXCITATION



R220 is an analog AVR with power controlled by transistors. It is designed for small alternators with a SHUNT excitation.

R220 controls the excitation current in order to maintain the output voltage of the alternator. R220 is performant in terms of voltage regulation, simple to set, to use and is reliable.

It is in compliance with IEC 60034-1 standard and UL 508 / CSA approved.

DATASHEET

KEY FEATURES

- Voltage regulation: $\pm 0.5\%$
- 1.07 U/F function
- Quick response: 500 ms
- Nominal excitation current: 3A
- Maximum excitation current: 7A during 10 s
- Supply range / voltage detection: 85 to 139 V (50/60Hz)
- Protection: fuse embedded in resin

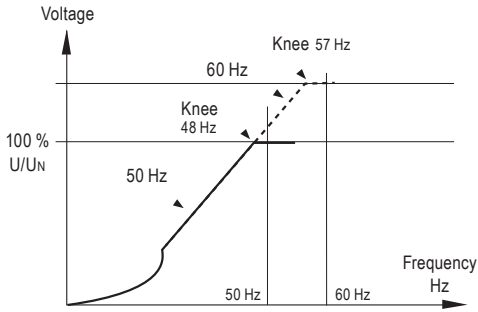
OPERATION RANGE

| | LSA 40 | 42.3 | 44.3 | 46.3 | 47.3 | 49.3 | 50.2 | 52.3 | 53.2 | 54.2 |
|-------|--------|------|------|------|------|------|------|------|------|------|
| SHUNT | ✓ | ✓ | - | - | - | - | - | - | - | - |
| AREP | - | - | - | - | - | - | - | - | - | - |
| PMG | - | - | - | - | - | - | - | - | - | - |

Operation Mode: Standalone / Compatibility with 3 phase sensing or parallel to the grid: no

MAIN FUNCTIONS

U/F FUNCTION



OPERATION CONDITIONS

- Operating temperature range: - 40° C to + 65° C
- Storage temperature range: - 55° C to + 85° C
- Hygrometry: 98%
- Maximum impact: 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

CONNECTIONS AND SETTINGS

Settings are done through the AVR.

- Potentiometer P1: voltage setting
- Potentiometer P2: stability setting
- Strap ST3: frequency selection
- Potentiometer ST4: remote voltage setting

