



RL-3410

RL-3420, RL-3430 CURRENT SENSORS



DESCRIPTION

- Current Sensors

ENVIRONMENTAL DATA

- Storage temperature range: -55°C to +130°C
- Operating temperature range: -40°C to +130°C

PACKAGING INFORMATION

- Packaging information: pg. 494

FEATURES & APPLICATIONS

- Molded aperture for primary wire(s)
- Frequency range up to 100 kHz
- Meets VDE specifications
- PCB mounting
- Typical applications include: isolated current feedback signal in switched-mode power supplies, motor current load/overload, isolated bi-directional current sensor with full-wave bridge rectifier, ultrasound current, and high resolution sonar current

Verify operation with sample in actual circuit. Order samples at www.rencousa.com.

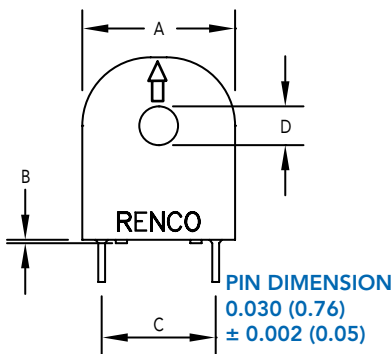
MECHANICAL DIMENSIONS

U.S. Standard (mm)

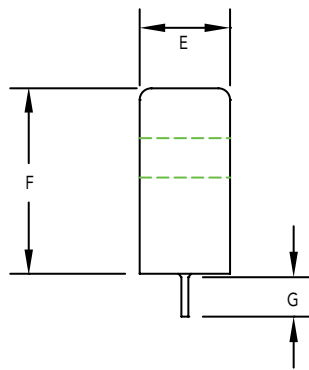
| PART NUMBER | A (MAX.) | B (MIN.) | C (TYP.) | D (TYP.) | E (MAX.) | F (MAX.) | G (MIN.) |
|-------------|---------------|--------------|---------------|--------------|--------------|---------------|--------------|
| RL-3410 | 0.670 (17.02) | 0.015 (0.38) | 0.500 (12.70) | 0.170 (4.32) | 0.390 (9.91) | 0.800 (20.32) | 0.170 (4.32) |
| RL-3420 | 0.670 (17.02) | 0.015 (0.38) | 0.500 (12.70) | 0.170 (4.32) | 0.390 (9.91) | 0.800 (20.32) | 0.170 (4.32) |
| RL-3430 | 0.670 (17.02) | 0.015 (0.38) | 0.500 (12.70) | 0.170 (4.32) | 0.390 (9.91) | 0.800 (20.32) | 0.170 (4.32) |

| PART NUMBER | PART WEIGHT |
|-------------|---------------|
| RL-3410 | 5.0g (0.18oz) |
| RL-3420 | 5.0g (0.18oz) |
| RL-3430 | 5.0g (0.18oz) |

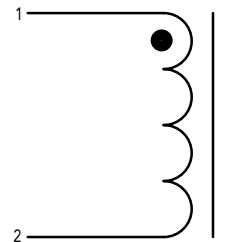
FRONT VIEW



SIDE VIEW



SCHEMATIC



RENCO ELECTRONICS INC.

595 International Place, Rockledge, FL 32955-4200 USA • www.rencousa.com • ISO 9001 Certified
Toll Free Engineering Hot Line: 800.645.5828 • P: 321.637.1000 • F: 321.637.1600



RL-3410, RL-3420, RL-3430

| Renco Part No. | Sensing Range (A) | Frequency Response * (kHz) | Secondary Turns | Secondary Inductance mH (Min.) | Secondary Inductance Test Voltage @ 15.75 kHz | Secondary DCR Max. (Ohms) |
|----------------|-------------------|----------------------------|-----------------|--------------------------------|---|---------------------------|
| RL-3410 | 2-10 | 5-25 | 50 | 5.0 | 0.5 | 0.70 |
| RL-3420 | 2-14 | 5-50 | 100 | 20.0 | 1.0 | 1.40 |
| RL-3430 | 1-35 | 1-100 | 200 | 80.0 | 2.0 | 4.50 |

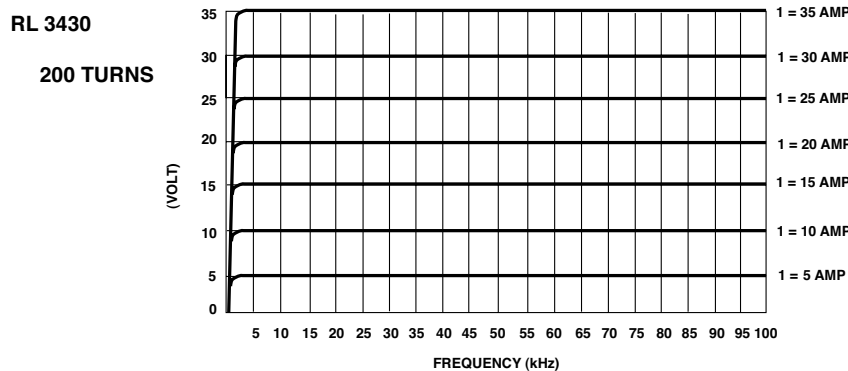
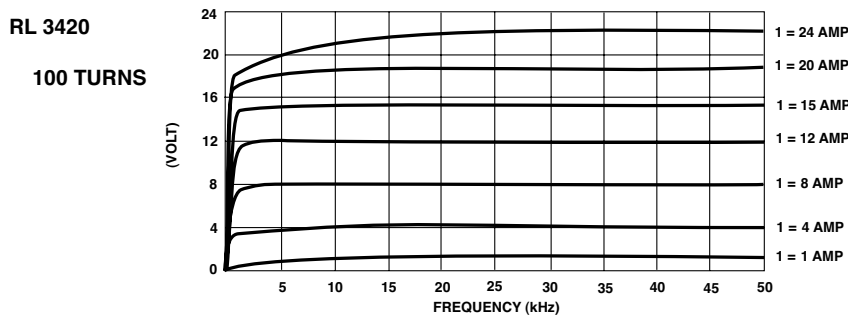
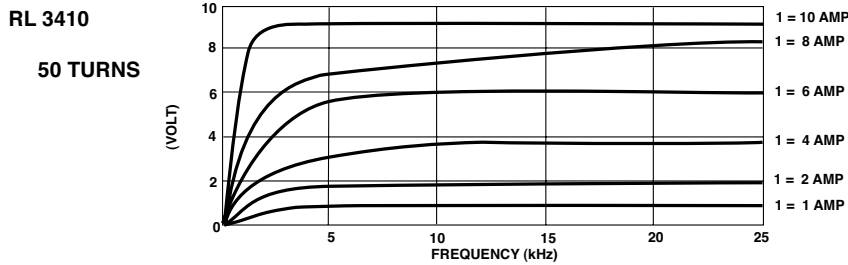
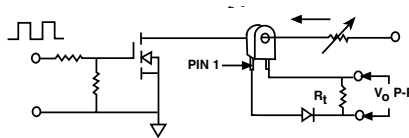
| Renco Part No. | Secondary Terminating Resistance (Ohms) ** Nom. | Primary Unipolar Amp usec. Rating (Max.) | Primary Bipolar Amp usec. Rating (Max.) | 1 Turn Primary Peak Sense Current (A) |
|----------------|---|--|---|---------------------------------------|
| RL-3410 | 50 | 150 | 300 | 20 |
| RL-3420 | 100 | 300 | 600 | 20 |
| RL-3430 | 200 | 600 | 1200 | 20 |

NOTES:

* OUTSIDE FREQUENCY RANGE SQUARE WAVE DETERIORATES

** VARYING R AFFECTS OUTPUT AND FREQUENCY RESPONSE

TEST CIRCUIT



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