

# BLOCKER<sup>®</sup> STRAY VOLTAGE ISOLATOR

Catalog #	Blocking Volts	Energy	Impedance	Peak Current	Peak RMS	Weight
SVI-50 11V	11v	10,000 Joules	0.01%	80,000 Amps	100 Volts	14 lbs.
SVI-50 22V	22V	6,000 Joules	0.01%	50,000 Amps	100 Volts	14 lbs.

Stray voltages or neutral-to-earth (NE) voltages are an ongoing problem in many areas supplied from single-phase multi-grounded services and where current levels on the grounding systems are above the perception threshold for either animals or humans. Typical locations are dairy farms, feeder and confinement operations, swimming pools, water systems, residences, etc.

Stray voltages (NE) can come from many sources, both from on and off the site. In most cases, the problems are the result of several simultaneous sources combined.

On-site stray voltage can usually be resolved through a program of upgrading and reconnecting the wiring system and its various loads. Off-site stray voltage, which is of particular interest to the power supplier, can result from primary neutral currents, off-site faults, marginal grounding, etc.

The BLOCKER<sup>®</sup> is a device designed to reduce the off-site contribution to the stray voltage problem. This simplifies the solution since any remaining problems have to be on-site in nature and can be handled and resolved accordingly.

The BLOCKER<sup>®</sup> is installed between the primary and secondary neutrals of the distribution transformer. The BLOCKER<sup>®</sup> has a very low impedance (less than .5 ohms) for a voltage level above 12 volts. This provides the fault current path in the event of a primary to secondary short in the distribution transformer (with a 7,200 volt primary, the voltage drop of 12 volts across the BLOCKER<sup>®</sup> is less than 0.2% and is, therefore, negligible).

The device operates directly on the principle of magnetic saturation and does not depend on external controls or internal logic signals, therefore, it reacts instantaneously, providing immediate, continuous protection at all times.

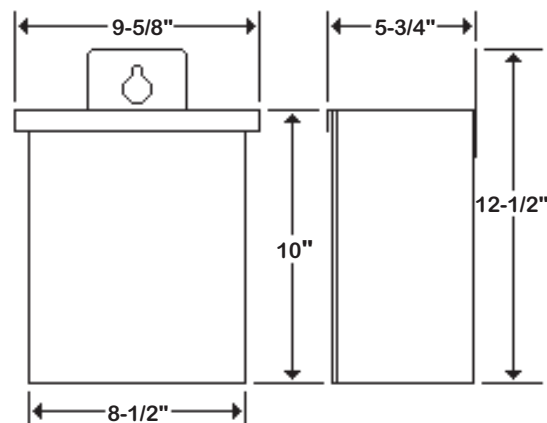
In the normal operation of a system, the primary to second-

ary neutral voltage seldom exceeds several volts (unless, of course, faults, poor grounds, or other problems exist). At these voltage levels, the BLOCKER<sup>®</sup> has very high impedance, effectively "blocking" the primary neutral voltage and current from entering the secondary neutral circuit and subsequently the system grounding conductors.

The BLOCKER<sup>®</sup> maintains the safety of the customer service while effectively reducing any off-site contribution to the customer's "stray voltage" problem.

For other voltage ratings consult Ronk for more information at 1-800-221-7665.

## DIMENSIONS OF NEMA 3R ALUMINUM ENCLOSURES



Sales Information: 1-800-221-7665



Service & Support: 1-217-563-8333