

ISN

Current-Limited
Regulating Transformer

SINGLE PHASE 7.5 kVA - 100 kVA



AMETEK[®]

SOLIDSTATE CONTROLS

PROVIDING CONTINUITY OF ELECTRICAL POWER

ISN

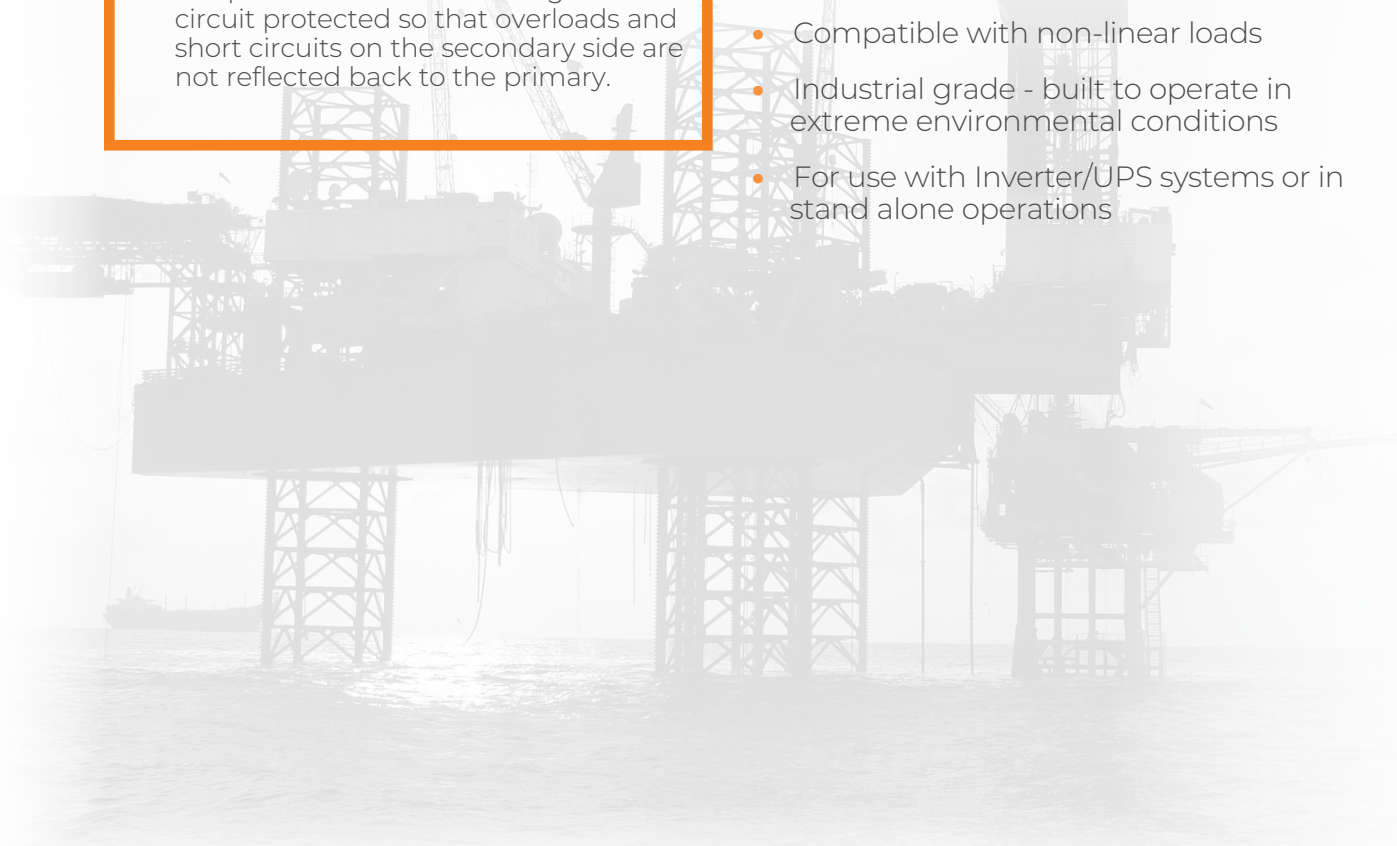
Current-Limited Regulating Transformer

7.5 kVA - 100 kVA



The ISN Series Ferroresonant regulating transformers are housed in a single system enclosure. These units are designed to accept a widely varying AC input voltage, while simultaneously producing a well regulated, filtered AC output. ISN Series units feature the unique characteristic of being short circuit protected so that overloads and short circuits on the secondary side are not reflected back to the primary.

- High reliability - 205,000 hours MTBF
- Constructed with entirely passive magnetic components
- Low Audible Noise < 65 dBA
- High Efficiency
- 1/4 cycle output ride-through
- Compatible with non-linear loads
- Industrial grade - built to operate in extreme environmental conditions
- For use with Inverter/UPS systems or in stand alone operations

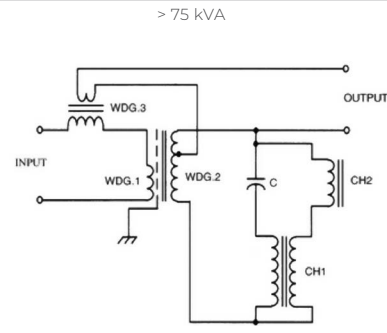
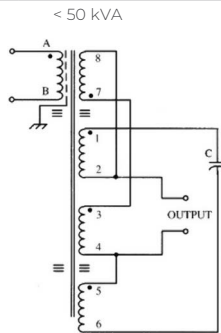


General Specifications

Isolimiter		Environmental	
AC Input		Ambient Temperature	32°F to 104°F (0°C)
Voltage	120, 220, 380, 480 1-phase	Relative Humidity	0-95% non-condensing
Range	- 15% to + 10%	Operating Altitude	10,000 feet (3,048 meters)
Frequency ¹	60 Hz ± 1%	Audible Noise	65-72 dB (A) @ 4.9 feet (1.5 meter) Addition of drip shield may increase the noise by 1-3 dB (A)
		Cooling	Convection < 37.5 kVA Forced Air > 50 kVA
AC Output		Cable Entry	Top or Bottom
Voltage	120, 220, 380, 480 VAC 1-Phase	Efficiency	> 88% at full load
Regulation	+ 2%		
Frequency ¹	60	Standard Features	
Load Power Factor	0.8 to 1.0	Circuit Breakers	AC Input
Harmonic Distortion	5% (or less) THD	Indicators and Alarms ²	Fan Failure (> 50 kVA)
Overload	150% to 200% fault clearing	Optional Features	
Also available in 120/240 VAC 3-wire, 60 Hz and 600 VAC. Consult us.		Internal Manual Bypass Switch	3-Position; Make Before Break
		Circuit Breakers	AC Output
		Meters	Voltmeters, Ammeters and Frequency Meter
		Indicators & Alarms ²	Over Temperature, Low AC Output, High AC Output, AC Output Overload

Transformer			
Noise Attenuation	120 dB common mode 80 dB transverse mode	Construction	All copper windings, electrostatic shield

Isolimiter Block Diagrams



Model Number	kVA	Efficiency	AC Input Current ³				Input Circuit Breaker Ampacity				AC Output Current ³			Heat Loss BTU/hr	Dimensions Inches H x W x D	Dimensions Millimeters H x W x D	Weight		
			120 VAC	220 VAC	380 VAC	480 VAC	120 VAC	220 VAC	380 VAC	480 VAC	120 VAC	220 VAC	240 VAC				240/120* VAC	lb	kg
ISN1007	7.5	85%	86	47	27	22	125	60	35	30	62	34	31	31	4,516	79 x 32 x 36	2,007 x 813 x 914	740	336
ISN1010	10	88%	111	61	35	30	150	80	45	40	83	45	42	42	4,653	79 x 32 x 36	2,007 x 813 x 914	825	374
ISN1015	15	88%	167	91	53	42	225	125	70	60	125	68	62	62	6,979	79 x 32 x 36	2,007 x 813 x 914	950	431
ISN1020	20	89%	220	120	70	55	300	175	90	70	167	91	83	83	8,434	79 x 32 x 36	2,007 x 813 x 914	1,235	560
ISN1025	25	89%	275	150	87	69	350	150	110	90	208	114	104	104	10,543	79 x 32 x 36	2,007 x 813 x 914	1,390	630
ISN1030	30	90%	327	178	103	82	500	200	150	125	250	136	125	125	11,373	79 x 32 x 36	2,007 x 813 x 914	1,645	746
ISN1037	37.5	91%	404	220	128	101	600	300	175	150	312	170	156	156	12,654	79 x 32 x 36	2,007 x 813 x 914	1,800	816
ISN1050	50	91%	539	294	170	135	700	400	225	175	417	227	208	208	16,873	79.5 x 32 x 36	2,019 x 813 x 914	1,965	891
ISN1075	75	88%	-----	456	264	209	-----	600	350	300	625	341	312	312	34,895	79.5 x 54 x 36	2,019 x 1372 x 914	3,935	1,785
ISN1100	100	90%	-----	594	344	272	-----	800	500	350	833	454	417	417	37,911	79.5 x 32 x 36	2,019 x 813 x 914	4,750	2,155

Specifications subject to change without notice

¹ 50 Hz available, contact us

² Alarms provide one SPDT contact rated for 3 Amps at 120 VAC

³ At Nominal Line

* 1-phase, 3-wire output, model number becomes '2ISN1xxx'. All other characteristics remain the same.

Certain optional features and/or combinations may require larger cabinets. Contact us. Image shown with optional meters and breakers.

SERVICE OPTIONS

AMETEK Solidstate Controls' products are known for their high quality. To keep them running smoothly, do not trust the maintenance of them to just anyone. No one will have the in-depth knowledge and familiarity as we do. We care about our products and we provide superior service agreements that ensure your critical power equipment continuously functions as designed.

We offer three levels of multi-year service agreements, designed to support our preventative maintenance schedules.

General Services	Basic	CSA ¹	CSA+ ¹
Pre-Inspection Interview	Annually	Annually	Annually
Post-Inspection Interview	Annually	Annually	Annually
Detailed Service Report	Annually	Annually	Annually
UPS/Inverter/Charger Services	Basic	CSA	CSA+
Visual Inspection	Annually	Annually	Annually
Scheduled Parts Replacement	Every 5 Years	Annually	Annually
System Operational and Functional Testing	Every 5 Years	Annually	Annually
Infrared Scanning/Thermal Imaging	Optional	Annually	Annually
Battery Inspection & Continuity Test	Basic	CSA	CSA+
Visual Inspection	Annually	Annually	Annually
Individual Cell Voltages	Every 5 Years	Annually	Annually
Continuity Test	Every 5 Years	Annually	Annually
Inter-cell resistance	Optional	Optional	Annually
Specific Gravity	Optional	Optional	Annually
System AC Load testing	Optional	Optional	Annually
Battery Capacitance Discharge Testing per IEEE Recommended Schedule	Optional	Optional	Optional
Parts and Service Coverage	Basic	CSA	CSA+
Emergency Service Fee	Waived	Waived	Waived
Guaranteed Emergency Response Time	Not Specified	72 Hours ²	24 Hours ²
Minimum Repair Service Cost per Repair Trip	Waived	Waived	Waived
Parts Covered Under Warranty	Only PM parts covered	All Parts in System	All Parts in System
Transformers (Less than 20 years)	No Coverage	Covered	Covered
Travel and Living Expenses	Billed at cost	Covered	Covered
Labor	Standard Rates	Covered	Covered
Replacement System Manuals	\$350 each	\$175 each	No Cost
Financial Benefits	Basic	CSA	CSA+
Spare Parts Discount	5%	15%	20%
Annualized Pricing	Included	Included	Included
Discount on Training Seminars	None	25%	50%

¹ CSA and CSA+ meet factory recommended guidelines for preventative maintenance

² System restored to safe and stable condition

WORLD HEADQUARTERS

875 Dearborn Drive
Columbus, Ohio 43085
Phone: +1-614-846-7500
Toll Free: +1-800-635-7300
Fax: +1-614-885-3990

GLOBAL OFFICES LOCATED IN

Mexico Middle East
Asia Pacific India
Brazil Argentina

WEBSITE

www.solidstatecontrolsinc.com

EMAIL

SCI.sales@AMETEK.com



THE PURPOSE OF OUR BUSINESS IS TO PROVIDE CONTINUITY OF ELECTRICAL POWER TO KEEP BUSINESSES IN BUSINESS.

WE DO THIS BY HELPING CLIENTS SOLVE THEIR POWER PROBLEMS AND BY CREATING THE MOST ECONOMICAL LONG-TERM RESULTS.