

THREE PHASE HIGH ISOLATION TRANSFORMER COPPER OR ALUMINUM WOUND, DUAL-SHIELDED COMPUTER GRADE, HIGH ISOLATION TRANSFORMER

PRODUCTION FACILITY • TESTING LAB • TELECOMMUNICATIONS
PARKS • INDUSTRIAL • GOVERNMENT • PUBLIC BUILDING • SCHOOLS
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ISO-CARE ISO-CARE PLUS 15 TO 500 KVA



Peak-Current Power Capability

Today's sophisticated systems draw alternating current in a peak, non-linear mode. During normal operation, these peaks are a result of the DC power supplies, known as switching power supplies, which repeatedly draw current to recharge their storage capacitors. Ordinary power conditioners typically have a high forward transfer impedance, which causes sine wave distortion whenever peak current is required. OnLine Power's Iso-Care has 3 to 5% (low) impedance that minimizes this distortion.

Solutions to Power Line Disturbance

Common-Mode Noise Protection

Computers using ground as a reference for logic circuits can encounter interference from common-mode noise. This type of noise is a voltage disturbance found between both current carrying leads and the common ground wire.

Transverse-Mode Noise Protection

Transverse-mode noise is not as easily eliminated as common-mode noise. It is found between the phase and neutral input leads. Transverse voltage can be found on the secondary winding of a power transformer generated from the primary winding and coupled to the secondary. The Iso-Care provides significant transverse-mode noise attenuation by reducing the high frequency noise between the input and the output windings of the transformer.

Protection Against Electrical Noise

Electrical noise consists of spurious electrical signals which enter power lines from such sources as lightning, utility network switching and the operation of countless electrical devices.

Noise is so prevalent that it accounts for nearly 90% of all problem causing power disturbances. Noise signals can cause computing errors, printing errors, improper data transfer and damage to sensitive circuit components.

Power line noise is transmitted in two different forms. The first one known as common-mode noise, and the second one known as transverse-mode (normal-mode) noise. OnLine Power's Iso-Care and Iso-Care Plus offers protection against both types.

The **Iso-Care** utilizes two Faraday shields per phase to achieve -120 dB of common-mode noise attenuation. The isolation transformer also achieves -20 dB per decade transverse (normal) mode noise attenuation.

The **Iso-Care Plus** utilizes multi-shields per phase to achieve -126 dB of common-mode noise attenuation. An optional attenuation of -140 dB and -152 dB is available. The isolation transformer with input filter achieves -40 dB per decade transverse (normal) mode noise attenuation. With input and output filter Iso-Care Plus can achieve -60 dB per decade, transverse (normal) mode.

Power Line Disturbances

A major cause of computer malfunctions and the failure of other sensitive equipment is electrical noise. Power line disturbances occur every day. Dirty power can seriously impair the performance of sub-miniaturized systems and computer micro-circuits by causing program errors and memory loss.

UL Listed

Adjustable Input Taps

Single Point Grounding

Temperature Sensor

High Noise Immunity

Optional Aluminum Transformer

Common Mode Noise Attenuation Up to -152 dB

Low Output Impedance

Clean Noise-Free Power

Indoor and Outdoor

NEMA 12 Certified

1 Year Warranty

ISO-CARE/PLUS SPECIFICATIONS

Sizes: 15, 30, 50, 75, 100, 125, 150, 175, 200, 225, 250, 300, 400 and 500 kVA

***Input Voltage:** 208 or 480 VAC +5%, -10% @ 2.5% Manual Taps

***Output Voltage:** 208Y/120, or 480Y/277 VAC

***Frequency:** 50 to 60 Hz, ±5%

Response Time: <200ns

Audible Noise: <35 dB measured on Response Curve "A"

Common-Mode: -120 dB (CMNA)

Normal-Mode: -20 dB/decade

Overload (Inrush): 200% of full load for 30 minutes
1000% of full load for 1 cycle

Efficiency: 96% at full loads; 98.5% at light loads typical

Load Power Factor: 0.3 leading or lagging to unity

Transformer: 3 phase dual-shielded, isolation transformer

Transformer Output Impedance: 3 to 5%

Iso-Care Plus meets all of the Iso-Care specifications.

Iso-Care Plus adds a greater level of Common-Mode Noise Attenuation.

- -126 dB CMNA (Standard)
- -140 dB CMNA (Optional)
- -152 dB CMNA (Optional)

The Iso-Care Plus is available in the same kVA range and voltages as the Iso-Care product line. Ask your local representative or consult the factory when ordering the Iso-Care Plus.

Environmental:

Operating Temperature: 32°F (0°C) to 104°F (40°C)

Operating Humidity: 5 to 95% non-condensing

Storage Temperature: 5°F (-15°C) to 122°F (50°C)

Operating Altitude: up to 10,000 ft.

* Other voltages or frequencies available - contact factory
** Specify copper or aluminum at the time of ordering.

STANDARD FEATURES

- NEMA 1 Indoor Cabinet
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- 3 Phase Dual-Shielded, Computer Grade, Isolation Transformer
- Common-Mode Noise Attenuation (CMNA) -120 dB
- Normal-Mode Noise Attenuation -20 dB/decade

OPTIONS

- High Isolation Transformer with Harmonic Reduction (up to K-50)
- Drip Shield/Water Shield (NEMA 3R)
- Secondary Surge Suppression
- NEMA 3R, NEMA 12
- Input Filter (-40 dB/decade)
- Input/Output Filter (-60 dB/decade)
- CMNA: -140 dB and -152 dB
- Special Paint

KVA SIZE	INPUT VOLTAGE	ISO-CARE MODEL #		ISO-CARE PLUS MODEL #		COPPER WGT. (LBS)	ALUMINUM WGT. (LBS)	BTUs/HR	CABINET SIZES H" x W" x D"
		208Y/120 OUT	480Y/277 OUT	208Y/120 OUT	480Y/277 OUT				
15	208	IC015B050013	IC015B090013	NR015B050013	NR015B090013	300	230	2040	28" x 21" x 14"
	480	IC015H050013	IC015H090013	NR015H050013	NR015H090013				
30	208	IC030B050013	IC030B090013	NR030B050013	NR030B090013	420	340	4080	32" x 26.5" x 17"
	480	IC030H050013	IC030H090013	NR030H050013	NR030H090013				
50	208	IC050B050013	IC050B090013	NR050B050013	NR050B090013	530	510	6800	38.5" x 28.5" x 20"
	480	IC050H050013	IC050H090013	NR050H050013	NR050H090013				
75	208	IC075B050013	IC075B090013	NR075B050013	NR075B090013	670	600	10200	40.5" x 31.5" x 21.75"
	480	IC075H050013	IC075H090013	NR075H050013	NR075H090013				
100	208	IC100B050013	IC100B090013	NR100B050013	NR100B090013	800	690	13600	40.5" x 36.5" x 21.75"
	480	IC100H050013	IC100H090013	NR100H050013	NR100H090013				
125	208	IC125B050013	IC125B090013	NR125B050013	NR125B090013	890	800	17000	51.5" x 40.5" x 26.5"
	480	IC125H050013	IC125H090013	NR125H050013	NR125H090013				
150	208	IC150B050013	IC150B090013	NR150B050013	NR150B090013	970	880	20400	51.5" x 40.5" x 26.5"
	480	IC150H050013	IC150H090013	NR150H050013	NR150H090013				
175	208	IC175B050013	IC175B090013	NR175B050013	NR175B090013	1150	1050	23800	51.5" x 40.5" x 26.5"
	480	IC175H050013	IC175H090013	NR175H050013	NR175H090013				
200	208	IC200B050013	IC200B090013	NR200B050013	NR200B090013	1300	1200	27200	51.5" x 40.5" x 26.5"
	480	IC200H050013	IC200H090013	NR200H050013	NR200H090013				
225	208	IC225B050013	IC225B090013	NR225B050013	NR225B090013	1400	1300	30600	51.5" x 40.5" x 26.5"
	480	IC225H050013	IC225H090013	NR225H050013	NR225H090013				
250	208	IC250B050013	IC250B090013	NR250B050013	NR250B090013	1500	1400	34000	51.5" x 40.5" x 26.5"
	480	IC250H050013	IC250H090013	NR250H050013	NR250H090013				
300	208	IC300B050013	IC300B090013	NR300B050013	NR300B090013	1700	1600	40800	66" x 50.5" x 32"
	480	IC300H050013	IC300H090013	NR300H050013	NR300H090013				
400	208	IC400B050013	IC400B090013	NR400B050013	NR400B090013	2350	2275	54400	66" x 50.5" x 32"
	480	IC400H050013	IC400H090013	NR400H050013	NR400H090013				
500	208	IC500B050013	IC500B090013	NR500B050013	NR500B090013	2550	2475	68000	66" x 50.5" x 32"
	480	IC500H050013	IC500H090013	NR500H050013	NR500H090013				

Specifications are subject to change without prior notification.

