Low impedance | **Isolation transformer** | **3 stage protection**

ILc model

24000-120/208Y

24 kVA
24 kW
120/208V
3 phase wye

36000-120/208Y

36 kVA
36 kW
120/208V
3 phase wye

Three Phase Low-impedance Isolation Transformer Line Conditioner

TSi Power's ILc Series Line Conditioners provide the best all-round power conditioning and surge protection for sensitive electronic equipment. The integral isolation transformer provides 100% isolation from the input ac line, the secondary neutral-to-ground bond eliminates all surge voltages between neutral and ground. Surge protection and noise filtering are superior to conventional surge protection and filtering devices.

(Split phase model shown)

Typical applications

Designed for situations where reliability and predictability matter to the enterprise. Examples include: sensitive industrial and telecommunications equipment, file servers, industrial controllers (PLC), automatic test equipment (ATE), and other sensitive, specialized microprocessor-based equipment.

Key benefits

ILc Series conditioners reduce the need for a high quality ground and a dedicated line, while eliminating interference from adjacent sources of disturbances. ILc contributes to enhanced operation, improved repeatability, fewer reboots and system lock-ups and extended operating life. In addition, a reduction in equipment down time and service costs can be expected.

TSi's use of one transformer per phase minimizes single phasing or lost phase problems associated with single unit three phase transformers.

How ILc conditioners work

The integral isolation transformers provide complete isolation between the primary and secondary, and permits bonding its output neutral to ground, which completely eliminates all disturbances between neutral and ground, regardless of source. The series inductance of the isolation transformer in combination with capacitive elements and MOV's, provide superb noise filtering, as well as coordinated multi-stage surge protection in accordance with the principles of IEC-61312.3.

Key features of the TSi isolation line conditioner

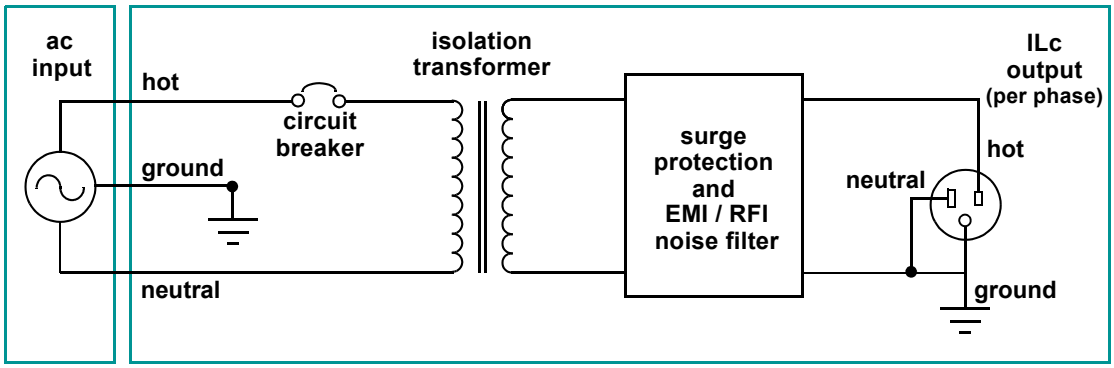
- Coordinated surge protection per IEC61312.3
- Low-impedance isolation transformer ~ one per phase
- True isolation
- Common-mode noise elimination
- Advanced noise and interference filter reduces dV/dt from 6kV/µS to less than 10V/µS
- High efficiency
- Quiet operation
- Five year warranty

TSi Power Corporation
1103 West Pierce Ave
Antigo, WI 54409 USA
800 874 3160 (USA only)
Phone +1 715 623 0636
Fax +1 715 623 2426
sales@tsipower.com
www.tsipower.com

Isolation line conditioner

Specification	ILc-24000-120/208Y	ILc-36000-120/208Y
Electrical		
Capacity in VA (watts)	24 kVA (24000 W)	36 kVA (36000 W)
Transformer type	Low-impedance E-I core isolation transformer (one per phase)	
Input		
Nominal voltage	120/208 volts ac, three phase wye	
Operating voltage	Nominal voltage +/- 10%	
Nominal frequency	60 Hz +/-3	
Circuit breaker rating	3 pole input breakers: 3 x 70 A	3 pole input breakers: 3 x 100 A
Ac connections	Terminal block (L1, L2, L3, neutral and ground wires) provided.	
Output		
Nominal voltage	120/208 volts ac, three phase wye	
Power efficiency	95% (typical)	
Load regulation	Better than + / - 2%	
Load power factor	Tightly coupled isolation transformer windings provide compatibility with switchmode power supplies and SCR controlled devices; it is compatible with loads with very low true power factor of 0.5.	
Surge test conditions	Per ANSI/IEEE C62.41-1991 test waveforms	
Surge protection	A three-stage surge protection system consisting of isolation transformer, capacitor and MOV is included.	
Surge test conditions	Per ANSI/IEEE C62.41-1991 test waveforms	
Surge let-through voltages	Single pulse: L-N: 50 V, L-G: 50 V, N-G: 0.5 V Ring wave: L-N: 20 V, L-G: 20 V, N-G: 0.5 V Combination wave: L-N: 250 V, L-G: 250 V, N-G: 0.5 V The measured rate of voltage rise/fall (dV/dt) of the remnant waveform is less than 10 V/µS with input test waveform dV/dt of 6 kV/µS.	
Common mode filtering	Neutral-ground bond eliminates all noise or voltage on neutral (< 0.1 V)	
Normal mode filtering	Built-in inductor-capacitor filter attenuates EMI/RFI noise from output.	
Ac connections	Terminal block (L1, L2, L3, neutral and ground wires) provided.	
Physical		
Dimensions	914 mm (36") wide x 914 mm (36") high x 813 mm (32") deep	
Weight	245 kg (540 lbs)	318 kg (700 lbs)
Safety		
Agency approvals	Designed to meet UL/cUL and IEC standards.	
Environmental		
Ambient temperature	0° to 40 °C (32° to 104 °F). 10 to 90% relative humidity (non-condensing).	
Warranty		
Warranty	Five year limited warranty, parts and labor.	

ILc system architecture (per phase)



TSi Power Corporation
1103 West Pierce Ave
Antigo, WI 54409 USA
800 874 3160 (USA only)
Phone +1 715 623 0636
Fax +1 715 623 2426
sales@tsipower.com
www.tsipower.com