

Eaton Power-Suppress T7

Three-phase ultra-isolator noise suppressors



The Eaton® Power-Suppress™ T7 ultra-isolator noise suppressor protects electronic equipment in data rooms, wiring cabinets and other sensitive equipment against electrical noise disturbances. These impediments, from sources such as lightning, utility network switching and the operation of electric motors, are the most prevalent and troublesome of all AC power disturbances.

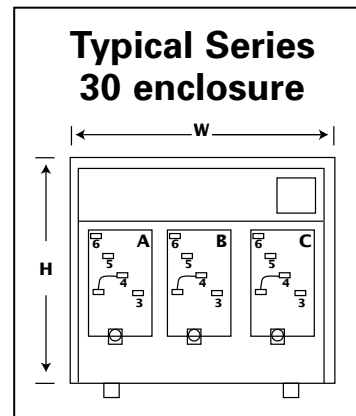
The Power-Suppress T7 employs an exclusive shielding technique that blocks all forms of electrical noise, over a broad range of frequencies,

without impeding the normal power flow. Providing noise attenuation at a ratio of up to 20 million to 1, these products can reduce a 6,000 volt spike to an insignificant 0.0030 volt.

The Power-Suppress T7 (Series 30, K-13) encompasses two thermal switches and provides first stage, early warning of any transformer malfunction of output overload and second stage shut down under severe conditions. All Topaz T7 transformers are UL listed and designed to handle the most intense non-linear load application.

Features

- 20,000,000:1 (146 dB) Common-mode Noise Attenuation
- Typically 1000 to 1 (60 dB) Normal-mode Noise Attenuation
- Transient suppression system with status indicators
- Exclusive shielding
- K-13 rated
- Over-temperature protection
- Clean, noise-free power output
- High efficiency
- Fast, easy installation
- UL and cUL listed requirements
- Five-year warranty



Applications

- Industrial manufacturing equipment
- Computer systems
- Telecommunications
- Voltage reconfiguration

TRANSIENT SUPPRESSION

Peak transient current	15,000 amps (8 x 20 microsec. wave)
Max clamping voltage	350 V at 300 amps
Pulse transient energy	200 joules
Response time	< 25 nano seconds

PRIMARY SURGE PROTECTION

For standardized current wave (8 x 20 microsec.) of 10 kA, the crest voltage will be limited to 2.9 kV.



Powering Business Worldwide

TECHNICAL SPECIFICATIONS

Ultra-isolator (three-phase)	Series 30
Input voltage	208, 480 Vac
Output voltage	208Y/120Y
K-13 rated	Yes
Common-mode noise	146 dB
Normal-mode noise	60 dB
Overload capacity	500% for 1 cycle 200% for 30 seconds
Dielectric strength	2,500 Vac minimum
Frequency	57–63 Hz for 60 Hz model
Impedance	3–5% typical
Efficiency (output voltage)	95% typical
TAPS	(6) @ 2.5% / 2 above nominal / 4 below nominal
Input voltage range	±10% of nominal rated voltage
Load regulation	3.5% or less from no load to full load at unity power factor

Harmonic distortion	1% maximum
Insulation resistance	100 megohms minimum from windings to core
Electro-magnetic interference	0.1 gauss maximum measure at 36 inches

ENVIRONMENTS

Audible noise	Less than 50 dbA measured at 3 feet
Operating temperature	0°C to 40°C
Storage temperature	-40°C to 85°C
Operating altitude	10,000 feet maximum
Operating humidity	95% relative (non-condensing)

STANDARD

Safety agency	UL 1561, UL 1449, cUL listed, ISO 9001
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WARRANTY

Standard	Five years
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POWER-SUPPRESS T7 MODELS

Power Rating	Input Voltage†	Output Voltage†	Frequency†	H x W x D (in)	Weight (lb)*	BTU/hour	Series 30 (146 dB)
15 kVA	208 Vac	208Y/120 Vac	60 Hz	31 x 35 x 18	420	2,154	97201-31
15 kVA	480 Vac	208Y/120 Vac	60 Hz	31 x 35 x 18	420	2,154	97401-31
30 kVA	208 Vac	208Y/120 Vac	60 Hz	31 x 35 x 18	490	4,265	97203-31
30 kVA	480 Vac	208Y/120 Vac	60 Hz	31 x 35 x 18	490	4,265	97403-31
50 kVA	208 Vac	208Y/120 Vac	60 Hz	43 x 43 x 22	710	6,397	97205-31
50 kVA	480 Vac	208Y/120 Vac	60 Hz	43 x 43 x 22	710	6,397	97405-31
75 kVA	208 Vac	208Y/120 Vac	60 Hz	43 x 43 x 22	950	10,663	97207-31
75 kVA	480 Vac	208Y/120 Vac	60 Hz	43 x 43 x 22	810	10,663	97407-31
100 kVA	280 Vac	208Y/120 Vac	60 Hz	43 x 43 x 22	990	14,217	97410-31
125 kVA	480 Vac	208Y/120 Vac	60 Hz	43 x 43 x 22	1,140	18,482	97412-31
150 kVA	480 Vac	208Y/120 Vac	60 Hz	43 x 43 x 22	1,240	21,549	97415-31
225 kVA	480 Vac	208Y/120 Vac	60 Hz	55 x 47 x 28	1,780	39,203	97422-31

Note: 50 Hz are available upon request. † For other voltages and frequencies, contact a factory applications engineer at (800) 523-0142 * Shipping weight listed



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