

# HARSH ENVIRONMENT ISOLATION TRANSFORMER

PROTECTING YOU FROM THE WORST ELECTRICAL PROBLEMS

THREE PHASE 15 KVA - 500 KVA

MADE IN THE USA

## PEAK CURRENT POWER:

Today's systems draw alternating current in peak, non linear mode. Ordinary power conditioners typically have a high forward transfer impedance, which causes sine wave distortion. DSPM has low impedance that minimizes this distortion.

## 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 preventable that it accounts for nearly 90% of all problem causing power disturbances.

Power line noise is transmitted in two different forms, common-mode noise and transverse-mode (normal-mode) noise.

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

## SOLUTIONS TO POWER LINE DISTURBANCES:

### *Common-Mode Noise Protection:*

This type of noise is a voltage disturbance found between both current carrying leads and the common ground wire.

### *Transverse-Mode Protection:*

Transverse-mode noise is not as easily eliminated as common-mode noise. Transverse voltage can be found on the secondary winding of power transformer, providing significant transverse-mode noise attenuation.



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082-0041-01 Rev. NR



# HARSH ENVIRONMENT ISOLATION TRANSFORMER

- \* Standard Power Levels.....15, 30, 50, 75, 100, 125, 150, 175, 200, 225, 250, 300, 400 and 500 kVA
  - \* Input Voltage .....208 or 480 VAC
  - \* Input Voltage Range.....+5%, -10% @ 2.5% Manual Taps
  - \* Output Voltage.....208Y/120 or 480Y/277 VAC
  - \* Output Frequency Range.....50 to 60 Hz,  $\pm 5\%$
  - Output Impedance.....3 to 5%
  - Response Time.....<200 nanoseconds
  - Common-Mode.....-120 dB Noise Attenuation
  - Normal-Mode.....-20 dB/decade
  - Overload (In-rush).....200% of a full load for 30 minutes, 1000% of a full load for 1 cycle
  - Load Power Factor.....0.3 leading or lagging to unity
  - Efficiency.....96% at full loads, and 98.5% at light loads
  - Audible Noise.....<45dB measured on Response Curve "A"
  - Operating Temperature.....-20° to 50°C (-4° to 122°F)
  - Storage Temperature.....-20° to 60°C (-4° to 140°F)
  - Humidity.....5 - 100%, Non-condensing
  - Operating Temperature.....up to 10,000 ft.
  - Cabinet.....NEMA 4X or 12
- \*Consult factory for others.  
 Specifications subject to change without notice.

Isolation Transformer Series	Power Rating	Cabinet Dimensions			Weight
		W	H	D	
ISH3 (Consult factory for others)	kVA	W	H	D	(lbs)
	15	41"	48"	32"	660
	30	41"	48"	32"	780
	50	41"	48"	32"	890
	75	41"	48"	32"	1030
	100	41"	48"	32"	1160
	125	41"	48"	32"	1250
	150	41"	48"	32"	1330
	175	41"	48"	32"	1510
	200	41"	48"	32"	1660
	225	41"	48"	32"	1760
	250	41"	72"	32"	2010
	300	41"	72"	32"	2210
400	41"	72"	32"	2860	
500	41"	72"	32"	3060	

**Options:**

- SSS - Secondary Surge Suppression
- IF - Input Filter
- IOF - Input/Output Filter
- CMNA140 - Common Mode Noise Attenuation -140dB
- CMNA152 - Common Mode Noise Attenuation -152dB
- HIT - High Isolation Transformer
- HCR - Harmonic Reduction
- STU3 - Onsite Startup
- HE - Heater
- EW - Extended Warranty



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Represented by: