

## SYSTEM FEATURES



- Protects facilities and equipment against the harmful effects of lightning strikes and internally generated electrical transients
- Includes pre-wired pigtail conductors to streamline installation
- Internal copper bus conduction path to minimize system impedances, reducing let-through voltage and increasing reliability
- Status indicating lights and Form "C" dry relay contacts for remote monitoring
- NEMA LS1 Compliance – single pulse tested at independent 3rd party lab (NEMA LS 1, 2.2-9 and 3-9)
- Hybrid design using MOV and Tracking Filter
- UL 1283 Tracking Filter
- CE Compliant
- Small, Compact Footprint – makes installation flexible
- 25-Year Unlimited Free Replacement Warranty

## PRODUCT SPECIFICATIONS

### GENERAL SPECIFICATIONS

**Maximum Rated Surge Current:** 200kA per phase; 100kA per mode  
**Application:** ANSI/IEEE C62.41 Location C, B & A. Ideal for service entrances, motor control centers and distribution panels  
**Design:** Compact design for easy installation  
**Warranty:** 25-Year Unlimited Free Replacement  
**Safety Listing:** UL 1449 2<sup>nd</sup> Edition 2005 Revision (effective 2/9/2007) and UL 1283

### ELECTRICAL SPECIFICATIONS

**Modes of Protection:** All Modes. L-N, L-L, L-G, & N-G  
**Input Power Frequency:** 40-440Hz (47-64 Hz with enhanced filter option)  
**Response Time:** < 1 nanosecond  
**Standard Monitoring:** Status indicator lights (one per phase); Form C dry relay contacts for suppressor status  
**Short Circuit Current Rating:** 25 kAIC using 20A breaker or fuse (not provided) EXCEPT: 277/480 and 480 models, 18 kAIC using 20A breaker or fuse (not provided)

### MECHANICAL SPECIFICATIONS

**Dimensions (approx.):** 7" H x 7" W x 5" D (186 mm H x 186 mm W x 125 mm D)  
**Enclosure:** High-impact non-metallic, NEMA 4X (IP 56)  
**Connection:** Pre-wired with 24" (610 mm) #10 AWG conductor (5.26 mm<sup>2</sup>) (for use with maximum 200 amp breaker or fuse)  
**Mounting:** Multi-point mounting feet  
**Operating Environment:** -40° C to 70° C (-40° F to 160° F)  
 5% to 95% non-condensing humidity  
**Weight:** 12.7 lbs. (5.8 kg)

### AVAILABLE CONFIGURATIONS

Model Number	Description
TK-TT200-1P240*	240VAC, 1 $\phi$ , 2-wire + grd
TK-TT200-1S240	120/240VAC, 1 $\phi$ SPLIT-PHASE, 3-wire + grd
TK-TT200-3Y208	120/208VAC, 3 $\phi$ WYE, 4-wire + grd
TK-TT200-3Y380*	220/380VAC, 3 $\phi$ WYE, 4-wire + grd
TK-TT200-3Y415*	240/415VAC, 3 $\phi$ WYE, 4-wire + grd
TK-TT200-3Y480	277/480VAC, 3 $\phi$ WYE, 4-wire + grd
TK-TT200-3D240	120/240VAC, 3 $\phi$ high-leg DELTA, 4-wire + grd (B phase must be 208V)
TK-TT200-240NN	240VAC, 3 $\phi$ DELTA, 3-wire + grd
TK-TT200-380NN	380VAC, 3 $\phi$ DELTA, 3 wire + grd
TK-TT200-480NN	480VAC, 3 $\phi$ DELTA, 3-wire + grd

\*CE approved models

### AVAILABLE OPTIONS

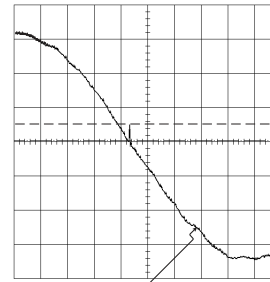
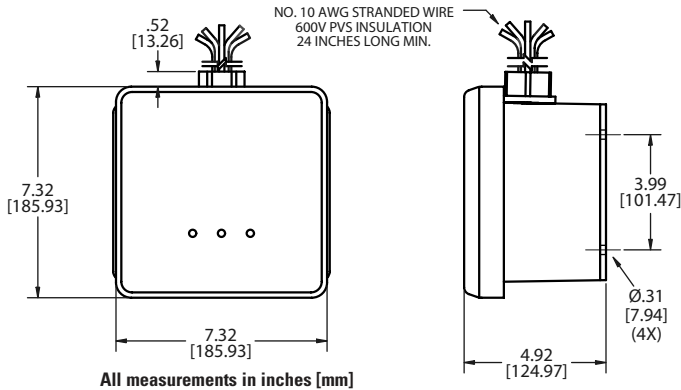
- Enhanced Transient Filter (ETF): add suffix "-F" to the standard part number: Example: TK-TT200-3Y208-F

### EMI / RFI FILTER ATTENUATION – MIL STANDARD 220B

Frequency	Attenuation
1kHz	1 dB
10kHz	14 dB
100kHz	23 dB
1MHz	18 dB
10MHz	3 dB
100MHz	2 dB
Max. Attenuation Frequency	57 dB @ 153 kHz



# TransTrack TT200



• Peak Let-Through Voltage Level - 26V  
• Reference Level Zero Crossing of AC Sine Wave

For 120/208V Configuration

ANSI/IEEE C62.41.1  
Category A1 Ring Wave  
2000V, 67A Test Plot

L-N Mode, Dynamic,  
180° Phase Angle,  
6" Leads, Positive Polarity  
1 msec/div Horizontal  
500 Mega samples/sec  
55V/div Vertical

ANSI/IEEE C62.41.1-2002, C62.41.2-2002, & C62.45-2002  
Measured Limited Voltage

Model Number	System Voltage	System Configuration	Protection Mode	MCOV	ANSI/IEEE C62.41.1-2002, C62.41.2-2002, & C62.45-2002 Measured Limited Voltage			UL SVR	
					ETF Models		All Models	All Models	UL 1449 2nd Edition
					A1 Ring Wave	B3/C1 Impulse Wave	C3 Impulse Wave	Suppressed Voltage Ratings	
					180° Phase Angle	90° Phase Angle	90° Phase Angle		
TK-TT200-1P240	240V	1-Phase 2-wire+grnd	L-N	320V	31V	1020V	1290V	900V	
			L-G	320V	747V	1010V	1310V	900V	
			N-G	320V	767V	1010V	1305V	900V	
TK-TT200-1S240	120V/240V	1-Phase 3-wire+grnd	L-N	150V	26V	507V	773V	400V	
			L-G	150V	291V	533V	853V	400V	
			L-L	300V	35V	880V	1193V	700V	
TK-TT200-3Y208	120/208V	3-Phase WYE 4-wire+grnd	N-G	150V	275V	520V	910V	400V	
			L-N	150V	26V	507V	773V	400V	
			L-G	150V	291V	533V	853V	400V	
TK-TT200-3Y380	220/380V	3-Phase WYE 4-wire+grnd	L-L	300V	35V	880V	1193V	700V	
			N-G	150V	275V	520V	910V	400V	
			L-N	320V	28V	987V	1333V	900V	
TK-TT200-3Y415	240/415V	3-Phase WYE 4-wire+grnd	L-G	320V	738V	957V	1350V	900V	
			L-L	640V	38V	1833V	2277V	1800V	
			N-G	420V	709V	950V	1420V	800V	
TK-TT200-3Y480	277/480V	3-Phase WYE 4-wire+grnd	L-N	320V	28V	987V	1333V	900V	
			L-G	320V	738V	957V	1350V	900V	
			L-L	640V	38V	1833V	2277V	1800V	
TK-TT200-3D240	120/240V	3-Phase High-Leg DELTA 4-wire+grnd	N-G	320V	709V	950V	1420V	800V	
			L-N	150V	26V	507V	773V	400V	
			H-N	275V	28V	987V	1333V	800V	
TK-TT200-240NN	240V	3-Phase DELTA 3-wire+grnd	L-G	150V	291V	533V	853V	400V	
			H-G	275V	738V	957V	1350V	800V	
			L-L	300V	35V	880V	1193V	700V	
TK-TT200-380NN	380V	3-Phase DELTA 3-wire+grnd	H-L	425V	63V	1250V	1640V	1500V	
			N-G	150V	275V	520V	910V	400V	
			L-G	275V	565V	817V	1163V	800V	
TK-TT200-480NN	480V	3-Phase DELTA 3-wire+grnd	L-L	300V	36V	890V	1270V	800V	
			L-G	420V	1135V	1480V	1987V	1200V	
			L-L	550V	35V	1897V	2413V	1500V	
TK-TT200-480NN	480V	3-Phase DELTA 3-wire+grnd	L-G	550V	1135V	1480V	1987V	1500V	
			L-L	640V	35V	1897V	2413V	1800V	

ETF = Enhanced Transient Filter (-F suffix). All tests performed with 6" (152 mm) lead length, positive polarity. All voltages are peak values ( $\pm 10\%$ ) measured from the zero reference point at the phase angles referenced above using a 10  $\mu\text{s}/\text{div}$  display rate and 500 Mega samples/sec sampling rate. Specifications subject to change without notice, see web site, [www.TPSSurge.com](http://www.TPSSurge.com) for latest revisions.