





Peak Let-Through Voltage Level - 29V  
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

UL Voltage Ratings

Model Number	System Voltage	System Configuration	Protection Mode	MCOV	ANSI/IEEE C62.41.1-2002, C62.41.2-2002, & C62.45-2002			UL 1449 2nd Edition/ UL 1449 3rd Edition Voltage Protection Ratings
					ETF Models A1 Ring Wave 2kV, 67A 180° Phase Angle	All Models B3/C1 Impulse Wave 6kV, 3kA 90° Phase Angle	All Models C3 Impulse Wave 20kV, 10kA 90° Phase Angle	
TK-TT050-1P240	240V	1-Phase 2-wire+grnd	L-N	320V	31V	1020V	1290V	900/1200
			L-G	320V	747V	1010V	1310V	900/1200
			N-G	320V	767V	1010V	1305V	900/1200
TK-TT050-1P240-TT	240V TT Ground	1-Phase 2-wire+grnd	L-N	320V	31V	1010V	1280V	900/1200
			L-G	420V	760V	980V	1570V	1000/1200
			N-G	420V	765V	1015V	1605V	1000/1200
TK-TT050-1S240	120/240V	1-Phase 3-wire+grnd	L-N	150V	29V	522V	770V	400/800
			L-G	150V	311V	537V	993V	400/800
			L-L	300V	31V	888V	1230V	700/1200
			N-G	150V	303V	560V	990V	400/800
TK-TT050-3Y208	120/208V	3-Phase WYE 4-wire+grnd	L-N	150V	29V	522V	770V	400/800
			L-G	150V	311V	537V	993V	400/800
			L-L	300V	31V	888V	1230V	700/1200
			N-G	150V	303V	560V	990V	400/800
TK-TT050-3Y380	220/380V	3-Phase WYE 4-wire+grnd	L-N	320V	31V	1024V	1293V	900/1000
			L-G	420V	747V	995V	1369V	900/1000
			L-L	640V	37V	1830V	2377V	1800/1800
			N-G	420V	769V	1005V	1650V	800/1000
TK-TT050-3Y380-TT	220/380V TT Ground	3-Phase WYE 4-wire+grnd	L-N	320V	N.A.	1024V	1290V	900/1000
			L-G	420V	N.A.	995V	1370V	900/1000
			L-L	640V	N.A.	1830V	2300V	1800/1800
			N-G	420V	N.A.	1005V	1550V	900/1000
TK-TT050-3Y415	240/415V	3-Phase WYE 4-wire+grnd	L-N	320V	N.A.	1024V	1293V	900/1200
			L-G	420V	N.A.	995V	1369V	900/1200
			L-L	640V	N.A.	1830V	2377V	1800/2000
			N-G	420V	N.A.	1005V	1650V	800/1200
TK-TT050-3Y480	277/480V	3-Phase WYE 4-wire+grnd	L-N	320V	N.A.	1024V	1293V	900/1200
			L-G	320V	N.A.	995V	1369V	900/1200
			L-L	640V	N.A.	1830V	2377V	1800/2000
			N-G	320V	N.A.	1005V	1650V	800/1200
TK-TT050-3D240	120/240V	3-Phase High-Leg DELTA 4-wire+grnd	L-N	150V	29V	522V	770V	400/800
			H-N	275V	31V	1024V	1293V	800/1000
			L-G	150V	311V	537V	993V	400/800
			H-G	275V	747V	995V	1369V	800/1000
			L-L	300V	31V	888V	1230V	700/1200
			H-L	425V	63V	1250V	1640V	1500/1500
TK-TT050-240NN	240V	3-Phase DELTA 3-wire+grnd	L-G	275V	N.A.	822V	1237V	800/1000
			L-L	300V	N.A.	948V	1403V	800/1200
TK-TT050-380NN	380V	3-Phase DELTA 3-wire+grnd	L-G	420V	N.A.	1513V	1937V	1200/1500
			L-L	550V	N.A.	1993V	2473V	1500/1800
TK-TT050-480NN	480V	3-Phase DELTA 3-wire+grnd	L-G	550V	N.A.	1513V	1937V	1500/1800
			L-L	640V	N.A.	1993V	2473V	1800/2000

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