

# ACT TranShield 452S Series Connected Family

## A 30 Amp Series Connected Surge Protection Device



### ACT 452S Series Connected All Mode Filter Protector with standard end termination

The ACT 452S Series connected (Kelvin) design with Filter option will not only protect sensitive electronic equipment against all types of transient surges, but with the filter option installed provides one of the lowest let through voltages for Class B & A locations (IEEE C62.45).

Two Mounting options available with standard being all wires through a single Hub. The "I" option allows for a series conduit connection through 2 1/2" Hubs.

ACT Protection products are a cost effective solution for any critical location in the facility from high risk sites (like telecom & petroleum) to your sensitive Point of Use equipment.

When installed with the ACT Hard Wire Circuit Protector, you can count on a front to back facility protection system.

#### ▶ RECOMMENDED LOCATIONS (IEEE C62)

- Cell Sites, Well Pumps / Cat C / Type 2
- Distribution Equipment / Cat B / Type 2
- Branch Panels / Cat B / Type 2
- Point of Use / Cat A / Type 3

#### ▶ FEATURES AND BENEFITS

- All Modes of Discrete Protection (L-N, L-G, N-G)
- 10 Modes of Protection (L-N, L-G, N-G, L-L)
- Green Status LED's indicating protection condition
- Hybrid Multi-Stage Design with EMI /RFI Filter Option that protects from 3kHz – 1 MHz
- Individually Fused MOV Technology
- 2-Year Standard Warranty

#### ▶ STANDARDS MET

- Safety – UL 1449 4th Edition March 2016
- ANSI/IEEE C62.41, C62.45
- ANSI/NFPA 70 National Electrical Code

#### ▶ 3RD PARTY TESTED

- Survives 5,000 (C3 6kV / 3kA)

# ACT TranShield 452S Series Connected Family

## TECHNICAL INFORMATION

### ▶ PART NUMBER MATRIX

Model	System Voltage	System Configuration	Protect All Mode	MCOV	SVR (500 A 8x20us)
452S-120-040	120V	2 Wire • G	L-N	150	500
			L-G	150	500
			N-G	150	500
452S-240-040	240V	2 Wire • G	L-N	320	800
			L-G	320	800
			N-G	320	800
452S-120S-040	120/240	3 Wire • G	L-N	150	500
			L-G	150	500
			N-G	150	500
452S-240S-040	240/480	3 Wire • G	L-N	320	800
			L-G	320	800
			N-G	320	800

#### OPTIONS:

SE is Single Ended	All wires go in and out through single chase nipple
DE is Double Ended	Wires enter one side of protector and exit out opposite side through 2 chase nipples
F	EMI/Noise Filter (-40 dB @ 1 MHz)

**PART NUMBER EXAMPLE:** 452S-120-040-SE-F

### ▶ MECHANICAL SPECIFICATIONS

Dimensions	4.5" x 4.5" x 2.0"
Weight	3.2 lbs.
Enclosure	NEMA 12 Cast Aluminum
Hubs (Inch)	1/2"
Operating Temp	-40F to +140F -40C to +65C
Non-condensing Humidity	5% to 95%

### ▶ ELECTRICAL SPECIFICATIONS

Electrical Rating	30 Amps
Electrical Connection Method	Hardwire Series (Kelvin)
Surge Protection Connection	Parallel
Protection Modes (All Modes)	L-N, L-G, N-G, L-L
Pre-wired	30" stranded #10 AWG
Status Indicators	Green LED
Protection & Filter	Multi-Stage Hybrid MOV & Capacitor
Maximum Surge (8x20 uS)	40,000 Amps/Mode 80,000 Amps/Phase
Surge Response Time (with Filter)	<5 nanoseconds
Listed to UL1449 4th Edition March 2016	ETL
3rd Party Tested	C62.41, C62.45
Strength	5000 C3 8x20us
Noise Filter EMI/RFI Response	>-40 dB -3kHz to 1 MHz
Warranty	2 years