Integrated
SPD for ATS

Surge Protective Device (SPD)
For ABB's Zenith ZTE & ZTS Series
Automatic Transfer Switches

Introduction

Surge Protective Devices (SPD) have become a standard component in today's data centers, office buildings and manufacturing facilities because they improve equipment uptime and reduce expensive facility equipment repairs. ABB's SPD have always been regarded as best in class. These important components are now available factory-mounted inside ABB's Zenith Automatic Transfer Switches (ATS) for optimal facility equipment protection.

Expensive, business-critical equipment is at risk from both high magnitude lighting and utility switching surges and lower magnitude surges caused by such inductive loads as HVAC, motors, fluorescent light banks and even laser copiers. For this reason, IEEE guidelines specifically recommend that a SPD be installed at service entrance locations and in all downstream distribution components that supply sensitive loads – such as an ATS.

Integral SPD are factory wired to the load-side of the ATS to minimize lead lengths and provide the highest possible surge protection for the connected critical loads. The integral mounting conserves wall space and reduces installation costs.

ABB's full range of HE (high exposure) and ME (medium exposure) SPD products are available integrally-mounted in ABB's Zenith ZTE & ZTS Series ATS products. All are factory tested and guaranteed to provide the highest level of surge protection for your critical loads

Features and Benefits

- Available for NEMA 1 and NEMA 3R enclosed ABB Zenith ZTE & ZTS Series ATS
- Meets and/or exceeds the requirements of UL 1449 3rd Edition, cUL, NEMA LS-1 and NEC Article 285
- UL Tested to 200,000 Amperes Symmetrical Withstand for HE and 65,000 Amperes for ME
- Tranquell™ ME device is tested to a minimum of 5,000 category C3 impulses (10kA, 20kV) per mode
- Tranquell™ HE device is tested to a minimum of 20,000 category C3 impulses (10kA, 20kV) per mode
- Both HE and ME are capable of surviving a minimum of 5,000 Longwave 10x1000µs Impulses per mode
- Thermally protected MOVs eliminate the need for additional upstream overcurrent protection
- Standard Form C dry contacts for alarm monitoring, optional door-mounted status LED
- Green status indicating lights, red alarm light
- Optional surge counter
- Optional UL 1283 noise filter
- Factory wired, no field connections (except remote alarm contacts)

Technical Specifications

- Operating Frequency: 50/60 Hz
- Connection: #10 Conductors, Parallel Connected (40-600 Amp ATS)
  #6 Conductors, Parallel Connnected (800-4000 Amp ATS)
- Operating Temperature: -4°F to 104°F (-20°C to 40°C)
- Operating Humidity: 0% to 95% Non-Condensing
- Weight: ME: 13 lbs. (5.9 kg) HE: 22 lbs. (10.0 kg)

Order Matrix

TP				
1	2	3	4	5

1			
TP			
2			
HE	Select “HE” for ZTS 1000-4000 Amp ZTE 1000-4000 Amp		
ME	Select “ME” for ZTS 40-800 Amp ZTE 40-800 Amp		
3	**Nominal Voltage (Volts RMS)**	**System Voltage Configuration**	**MCOV Max. Continuous Operating Voltage L-N/G (Vrms)**
120S	120/240	1 Phase, 3 Wire + Ground	150
120Y	120Y/208	3 Phase, 4 Wire + Ground	150
240D	240 Delta	3 Phase, 3 Wire	270
240H	120/240 Delta HL	3 Phase, 4 Wire + Ground	150/270 HL
240Y	240Y/415	3 Phase, 4 Wire + Ground	320
277Y	277Y/480	3 Phase, 4 Wire + Ground	320
220Y	220Y/380	3 Phase, 4 Wire + Ground	320
480D	480 Delta	3 Phase, 3 Wire	550
347Y	347Y/600	3 Phase, 4 Wire + Ground	420
4			
06	65kA per Mode (ME)		
08	80kA per Mode (ME)		
10	100kA per Mode (ME)		
12	125kA per Mode (HE)		
15	150kA per Mode (HE)		
20	200kA per Mode (HE)		
30	300kA per Mode (HE)		
5			
WC	With surge counter & noise filter		
WC	With surge counter & noise filter		
WCNC WCNF WC	No counter, no filter With surge counter, no filter With surge counter & noise filter		
NSWM	With surge counter & noise filter		
NSWM	With surge counter & noise filter		
NSWM	With surge counter & noise filter		
NSWM	With surge counter & noise filter		

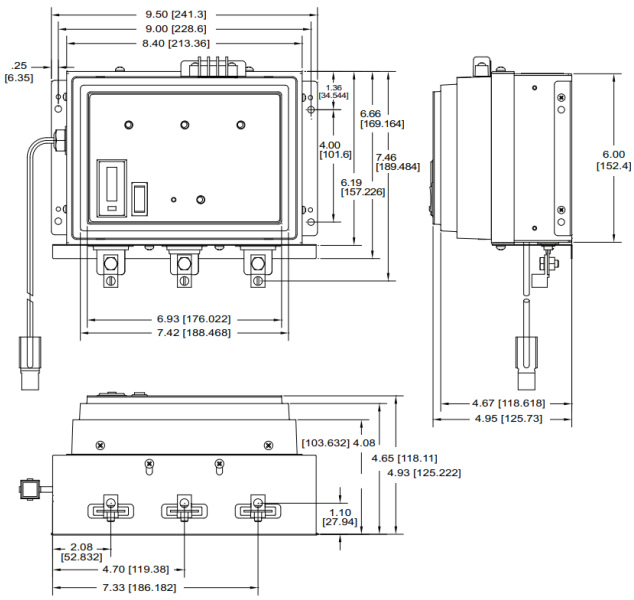
TPHE Protection Ratings

Voltage Code	120S / 120Y				240D		240H							220Y / 240Y / 277Y				347Y				480D	
Protection Mode	L-N	L-G	N-G	L-L	L-G	L-L	L-N	HL-N	L-G	HL-G	N-G	L-L	HL-L	L-N	L-G	N-G	L-L	L-N	L-G	N-G	L-L	L-G	L-L
UL 1449, 3rd Edition Voltage Protection Ratings (VPR) (assigned UL rating)	900	800	700	1200	1200	1800	1000	1200	800	1200	700	2000	2200	1500	1200	1200	2000	1500	1500	1500	2500	1800	3000

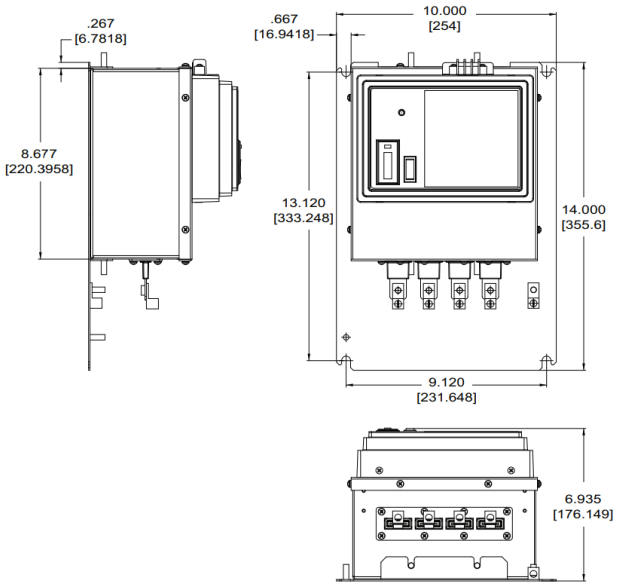
TPME Protection Ratings

Voltage Code	120S / 120Y				240D		240H							220Y / 240Y / 277Y				347Y				480D	
Protection Mode	L-N	L-G	N-G	L-L	L-G	L-L	L-N	HL-N	L-G	HL-G	N-G	L-L	HL-L	L-N	L-G	N-G	L-L	L-N	L-G	N-G	L-L	L-G	L-L
UL 1449, 3rd Edition Voltage Protection Ratings (VPR) (assigned UL rating)	700	600	600	1200	900	1800	700	1200	600	1000	600	1200	1900	1200	1000	1000	2000	1500	1500	1500	3000	1500	3000

Dimensions "ME" Model



Dimensions "HE" Model



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