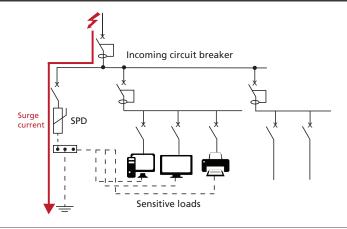
ZAPGUARD PRO® SURGE DIVERTERS

PowerShield ZapGuard Pro Diverters are designed to provide a high degree of protection for critical circuits in single and three phase systems. Diverters can be installed at point-of-entry or sub-board to provide protection for domestic, commercial and industrial UPS applications against detrimental effects of occurrences such as lightning, utility switching and electrical motor switching.







PANEL MOUNT SERIES 60KA SINGLE AND THREE PHASE, 2 MODE SURGE DIVERTER

The ZapGuard PSZ60KA is a Type 2 AC surge arrester designed for low-voltage power supply system protection against surges at the boundaries from lightning protection zone 1–2 and higher.

- Comply with IEC 61643-11, apply to single phase TT and TN systems.
- · Pluggable design, 2 poles SPD, easy replaced without any tools.
- · High discharge capacity with 8/20 us waveform, Imax 60kA.
- · Visual status indication and remote signal contact available.
- · Supplied in enclosure as standard.



WALL MOUNT SERIES 200KA, 3 PHASE, 2 MODE, PRIMARY SURGE DIVERTER

The ZapGuard PSZ200KASD4 is designed to protect three phase power systems against damage from surges and spikes caused by lightning and other electrical sources. The unit is intended for point of entry or main board protection and is connected in parallel with the power system vis its own safety disconnect MCB.

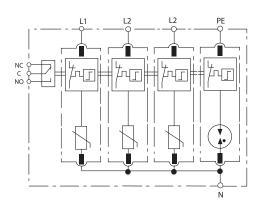
- Compact, 3-Phase panel mount metal enclosure.
- Includes 3 Phase MCB safety disconnect housed inside enclosure.
- 200kA L-N each phase, 100kA N-E.
- · Dry contact alarm outputs.
- · LED visual indicators for protection and power.
- Integrated surge counter visible from front panel.





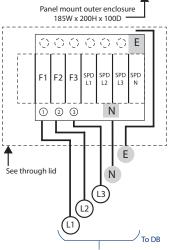
CIRCUIT DIAGRAM

PSZ60KASD4



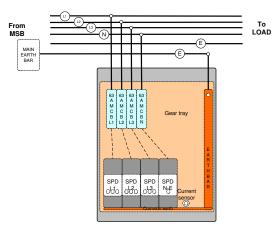
CONNECTION DIAGRAM

PSZ60KASD4



CIRCUIT DIAGRAM

PSZ200KASD4



	NT SERIES		
Model Number		PSZ60KASD2	PSZ60KASD4
Circuit		1P+N	3P+N
In accordance with		IEC61643-11 2011, UL 1449-4th	
Category IEC/VDE		II/C	
Max Continuous Operating Voltage UC	L-N (AC/DC)	320/420	
	N-PE (AC)	255	
Nominal Discharge Current (8/20) In	L-N	30kA	
	N-PE	30kA	
Nominal Discharge Current (8/20) Imax	L-N	60kA	
Protection modes	N-PE	60	kA
Voltage Protection Level Up	L-N@In	<1 8kV	<1 5kV
	L-N@VPR	<1 3kV	1 1kV
	N-PE (1.2/50)	<1 5kV	1 5kV
Response Time	L-N	< 25ns	
	N-PE	< 100ns	
Follow Current	L-N	No	
	N-PE	lfi 100Arms @ 255Vac	
Backup Fuse (only required if not already provided in mains		160A gL/gG	
Operating Temperature Range		−40°C − +80°C	
Cross-section of Connection Wire		Single strand 35mm2, multi-strand 25mm	
Mounting		35mm DIN-rail in accordance with EN 50022/DIN46277-3	
Enclosure Material		Thermoplastic; extinguishing degree UL94 V-O	
Degree of Protection		IP20	
Installation Width		2 modules, DIN 43880	4 modules, DIN 43880
Thermal Disconnector		Internal green-normal / red-failure	
Remote Alarm Contact		Optional	
Approvals, Certifications		CE	
Additional Data for Remote Aları	m Contacts		
Remote Alarm Contact Type		Isolated Form C	
Switching Capability Un/In		AC 250V/0.5A DC 250V/0 1/ 125V/0.2A 75V/0.5A	
Switching Capability Un/In		125V/0.2A	75V/0.5A

Model NumberPSZ2200KASD4Number of Ports1 Port (parallel connect)Method of mountingFixed panel mountInput voltage – Uc380-440vac 3PMaximum continuous voltage – MCOV320VACTemporary overvoltage – TOV345V (5S)Service typeTN, TN C-S, 3 phase system with a grounded neutralTest classification (IEC61643-11)Class IIProtection modesLine-Neutral, Neutral-EarthInom 8/20us (Line-Neutral) Nominal surge life100kAImax 8/20us (Line-Neutral) Maximum surge level< 1000v (3kA, 8/20us)Residual voltage (Vpl) (Line-Neutral/Earth) (Let through volt-age)< 1300v (20kA, 8/20us)Safety disconnectSeries thermal fusing on MOV'sExternal disconnector requirementNIL. Uses internal 63A MCBTerminationsAll conductors 16-35mm2Alarms/indicatorsNeon indicators each phase and Neu-tralSurge counter sensitivity< 3kA, 8/20us. 5 digit display, resettableEnclosure ratingIP50, steelStandardsIEC61643-11, ANSI/IEEE C62.41 Cat C & D, AS1768-2007 Cat C & DDimensions360W x 280D x 560HWeight14kgEnvironment-40 to 70°C, 5 to 95%RH (non-condensing)	ZAPGUARD® WALL MOUNT SERIES			
Method of mounting Input voltage – Uc 380-440vac 3P Maximum continuous voltage – MCOV Temporary overvoltage – TOV 345V (5S) Service type TN, TN C-S, 3 phase system with a grounded neutral Test classification (IEC61643-11) Protection modes Line-Neutral, Neutral-Earth Inom 8/20us (Line-Neutral) Nominal surge life Imax 8/20us (Line-Neutral) Maximum surge level Residual voltage (Vpl) (Line-Neutral/Earth) (Let through volt-age) Safety disconnect Series thermal fusing on MOV's External disconnector requirement All conductors 16-35mm2 Alarms/indicators Neon indicators each phase and Neu-tral Surge counter sensitivity Enclosure rating Standards Line-Neutral, Neutral-Earth 100kA 200kA - Neon indicators on MOV's Neon indicators each phase and Neu-tral Surge counter sensitivity Enclosure rating IP50, steel Standards LieC61643-11, ANSI/IEEE C62.41 Cat C & D, AS1768-2007 Cat C & D Dimensions 360W x 280D x 560H Weight 14kg Environment	Model Number	PSZ200KASD4		
Input voltage – Uc Maximum continuous voltage – MCOV Temporary overvoltage – TOV 345V (5S) Service type TN, TN C-S, 3 phase system with a grounded neutral Test classification (IEC61643-11) Protection modes Line-Neutral, Neutral-Earth Inom 8/20us (Line-Neutral) Nominal surge life Imax 8/20us (Line-Neutral) Maximum surge level Residual voltage (Vpl) (Line-Neutral/Earth) (Let through volt-age) Safety disconnect Series thermal fusing on MOV's External disconnector requirement NIL. Uses internal 63A MCB Terminations All conductors 16-35mm2 Neon indicators each phase and Neu-tral Surge counter sensitivity Protection modes Neon indicators each phase and Neu-tral Surge counter sensitivity IP50, steel Standards IEC61643-11, ANSI/IEEE C62.41 Cat C & D, AS1768-2007 Cat C & D Dimensions 360W x 280D x 560H Weight Taking Protection 120VA 130V (20kA,8/20us) 14kg Environment	Number of Ports	1 Port (parallel connect)		
Maximum continuous voltage — MCOV Temporary overvoltage — TOV 345V (5S) Service type TN, TN C-S, 3 phase system with a grounded neutral Test classification (IEC61643-11) Protection modes Line-Neutral, Neutral-Earth Inom 8/20us (Line-Neutral) Nominal surge life Imax 8/20us (Line-Neutral) Maximum surge level Residual voltage (Vpl) (Line-Neutral/Earth) (Let through volt-age) Series thermal fusing on MOV's External disconnector requirement NIL. Uses internal 63A MCB Terminations All conductors 16-35mm2 Alarms/indicators Neon indicators each phase and Neu-tral Surge counter sensitivity Protection modes IEC61643-11, ANSI/IEEE C62.41 Cat C & D, AS1768-2007 Cat C & D Dimensions 360W x 280D x 560H Weight 14kg Environment Temporary overvoltage — MCOV 345V (5S) TN, TN C-S, 3 phase system with a grounded neutral Tolos, 1000 (2000) Also, 8/20us Alous (3kA, 8/20us) Alous (3kA, 8/20us) Series thermal fusing on MOV's External disconnector requirement NIL. Uses internal 63A MCB All conductors 16-35mm2 Alarms/indicators All conductors 16-35mm2 Neon indicators each phase and Neu-tral Surge counter sensitivity Alarms/indicators A	Method of mounting	Fixed panel mount		
Temporary overvoltage – TOV Service type TN, TN C-S, 3 phase system with a grounded neutral Test classification (IEC61643-11) Protection modes Line-Neutral, Neutral-Earth Inom 8/20us (Line-Neutral) Nominal surge life Imax 8/20us (Line-Neutral) Maximum surge level Residual voltage (Vpl) (Line-Neutral/Earth) Safety disconnect Series thermal fusing on MOV's External disconnector requirement NIL. Uses internal 63A MCB Terminations All conductors 16-35mm2 Alarms/indicators Neon indicators each phase and Neu-tral Surge counter sensitivity Residual voltage Series thermal fusing on MOV's External disconnector requirement NIL. Uses internal 63A MCB Terminations All conductors 16-35mm2 Neon indicators each phase and Neu-tral Surge counter sensitivity IEC61643-11, ANSI/IEEE C62.41 Cat C & D, AS1768-2007 Cat C & D Dimensions 360W x 280D x 560H Weight Turning Tu	Input voltage – Uc	380-440vac 3P		
Service type TN, TN C-S, 3 phase system with a grounded neutral Test classification (IEC61643-11) Protection modes Line-Neutral, Neutral-Earth Inom 8/20us (Line-Neutral) Nominal surge life Imax 8/20us (Line-Neutral) Maximum surge level Residual voltage (Vpl) (Line-Neutral/Earth) (Let through volt-age) Safety disconnect Series thermal fusing on MOV's External disconnector requirement NIL. Uses internal 63A MCB Terminations All conductors 16-35mm2 Neon indicators each phase and Neu-tral Surge counter sensitivity Residual voltage (Vpl) (Line-Neutral/Earth) Surge counter sensitivity IP50, steel Standards IEC61643-11, ANSI/IEEE C62.41 Cat C & D, AS1768-2007 Cat C & D Dimensions 360W x 280D x 560H Weight Typical Carlot of the system with a grounded neutral Tolas II Class II Time-Neutral, Neutral-Earth 100kA 100k	Maximum continuous voltage – MCOV	320VAC		
Test classification (IEC61643-11) Protection modes Line-Neutral, Neutral-Earth Inom 8/20us (Line-Neutral) Nominal surge life Imax 8/20us (Line-Neutral) Maximum surge level Residual voltage (Vpl) (Line-Neutral/Earth) (Let through volt-age) Safety disconnect External disconnector requirement Terminations All conductors 16-35mm2 Alarms/indicators Neon indicators each phase and Neu-tral Surge counter sensitivity Enclosure rating Standards IEC61643-11, ANSI/IEEE C62.41 Cat C & D, AS1768-2007 Cat C & D Dimensions 360W x 280D x 560H Weight Environment Line-Neutral, Neutral-Rearth 100kA 200kA 200kA 21000v (3kA, 8/20us) 21300v (20kA,8/20us) 21300v (20kA,8/20	Temporary overvoltage – TOV	345V (5S)		
Protection modes Line-Neutral, Neutral-Earth Inom 8/20us (Line-Neutral) Nominal surge life Imax 8/20us (Line-Neutral) Maximum surge level Residual voltage (Vpl) (Line-Neutral/Earth) (Let through volt-age) Safety disconnect External disconnector requirement Terminations All conductors 16-35mm2 Neon indicators each phase and Neu-tral Surge counter sensitivity Enclosure rating Standards Line-Neutral, Neutral-Earth 100kA 200kA 200kA 8/20us) Series thermal fusing on MOV's External disconnector requirement NIL. Uses internal 63A MCB All conductors 16-35mm2 Neon indicators each phase and Neu-tral Surge counter sensitivity IP50, steel Standards IEC61643-11, ANSI/IEEE C62.41 Cat C & D, AS1768-2007 Cat C & D Dimensions 360W x 280D x 560H Weight 14kg Environment -40 to 70°C, 5 to 95%RH	Service type			
Inom 8/20us (Line-Neutral) Nominal surge life Imax 8/20us (Line-Neutral) Maximum surge level Residual voltage (Vpl) (Line-Neutral/Earth) (Let through volt-age) Safety disconnect External disconnector requirement Terminations All conductors 16-35mm2 Alarms/indicators Neon indicators each phase and Neu-tral Surge counter sensitivity Enclosure rating Standards IEC61643-11, ANSI/IEEE C62.41 Cat C & D, AS1768-2007 Cat C & D Dimensions 360W x 280D x 560H Weight Environment 100kA 200kA 200kA 8/20us) Series thermal fusing on MOV's Nell Conductors 16-35mm2 Neon indicators each phase and Neu-tral Surge counter sensitivity IP50, steel IEC61643-11, ANSI/IEEE C62.41 Cat C & D, AS1768-2007 Cat C & D Dimensions 360W x 280D x 560H Weight 14kg Environment	Test classification (IEC61643-11)	Class II		
Nominal surge life Imax 8/20us (Line-Neutral) Maximum surge level Residual voltage (Vpl) (Line-Neutral/Earth) (Let through volt-age) Safety disconnect External disconnector requirement Terminations All conductors 16-35mm2 Alarms/indicators Neon indicators each phase and Neu-tral Surge counter sensitivity Enclosure rating IP50, steel Standards LIEC61643-11, ANSI/IEEE C62.41 Cat C & D, AS1768-2007 Cat C & D Dimensions 360W x 280D x 560H Weight LIVEN 1000 (3kA, 8/20us) Safety disconnector (20kA, 8/20us) Series thermal fusing on MOV's Nell Conductors 16-35mm2 Neon indicators each phase and Neu-tral Surge counter sensitivity IP50, steel Standards LIEC61643-11, ANSI/IEEE C62.41 Cat C & D, AS1768-2007 Cat C & D Dimensions 360W x 280D x 560H Weight LAKG Environment	Protection modes	Line-Neutral, Neutral-Earth		
Maximum surge level Residual voltage (Vpl) (Line-Neutral/Earth) (Let through volt-age) Safety disconnect External disconnector requirement NIL. Uses internal 63A MCB Terminations All conductors 16-35mm2 Neon indicators each phase and Neu-tral Surge counter sensitivity Enclosure rating Standards Neon indicators ach phase and Neu-tral Value of the phase in the phase and Neu-tral Value of the phase in the		100kA		
Earth) (Let through volt-age) Safety disconnect Series thermal fusing on MOV's External disconnector requirement NIL. Uses internal 63A MCB Terminations All conductors 16-35mm2 Neon indicators each phase and Neu-tral Surge counter sensitivity Surge counter sensitivity Enclosure rating IP50, steel Standards IEC61643-11, ANSI/IEEE C62.41 Cat C & D, AS1768-2007 Cat C & D Dimensions 360W x 280D x 560H Weight Turning Nov's Series thermal fusing on MOV's All conductors 16-35mm2 Neon indicators each phase and Neu-tral Real Phase and Neu-tral Surge counter sensitivity IP50, steel IEC61643-11, ANSI/IEEE C62.41 Cat C & D, AS1768-2007 Cat C & D Dimensions 360W x 280D x 560H Weight Turning Nov's		200kA		
External disconnector requirement NIL. Uses internal 63A MCB Terminations All conductors 16-35mm2 Neon indicators each phase and Neu-tral Surge counter sensitivity -40 to 70°C, 5 to 95%RH				
Terminations All conductors 16-35mm2 Neon indicators each phase and Neu-tral Surge counter sensitivity Enclosure rating IP50, steel Standards IEC61643-11, ANSI/IEEE C62.41 Cat C & D, AS1768-2007 Cat C & D Dimensions 360W x 280D x 560H Weight 14kg Environment All conductors 16-35mm2 Neon indicators each phase and Neu-tral IR50 igit display, resettable IP50, steel IEC61643-11, ANSI/IEEE C62.41 Cat C & D, AS1768-2007 Cat C & D Dimensions 360W x 280D x 560H	Safety disconnect	Series thermal fusing on MOV's		
Alarms/indicators Neon indicators each phase and Neu-tral Surge counter sensitivity \$\begin{array}{l} & & & & & & & & & & & & & & & & & & &	External disconnector requirement	NIL. Uses internal 63A MCB		
Alarms/Indicators Neu-tral Surge counter sensitivity **Counter sensitivity **Counter sensitivity **Counter sensitivity **Counter sensitivity **Counter sensitivity **Indicators	Terminations	All conductors 16-35mm2		
Tesettable	Alarms/indicators			
Standards IEC61643-11, ANSI/IEEE C62.41 Cat C & D, AS1768-2007 Cat C & D Dimensions 360W x 280D x 560H Weight 14kg Environment -40 to 70°C, 5 to 95%RH	Surge counter sensitivity			
Cat C & D, AS1768-2007 Cat C & D Dimensions 360W x 280D x 560H Weight 14kg Environment -40 to 70°C, 5 to 95%RH	Enclosure rating	IP50, steel		
Weight 14kg Environment -40 to 70°C, 5 to 95%RH	Standards			
Environment —40 to 70°C, 5 to 95%RH	Dimensions	360W x 280D x 560H		
	Weight	14kg		
	Environment			