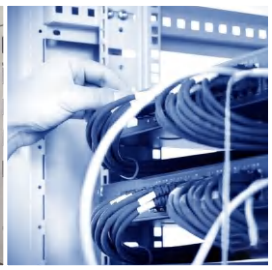
THOR

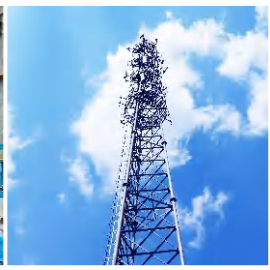
PROTECTOR OF LIGHTNING PROTECTION

– SINCE 2006 –

Catalogue
Surge Protective Devices





Company Profile

THOR is a manufacturer specialised in the development and production of surge protective devices since 2006. THOR offers a complete range of SPDs, such as AC power SPD, PV system SPD, Signal and network SPD, Coaxial RF SPD, lightning rod, lightning box, etc.

THOR SPDs are applied to lightning protection in different low–voltage system fields, such as industry, solar power generation systems, telecommunications, network data centers, office buildings, and homes, etc.

Semi-automatic welding equipment

- Maintain consistent temperature of welding iron head
- Maintain consistent tin production during welding
- More precise welding positions
- Reduce false soldering caused by manual welding

Semi-automatic factory inspection pressure sensitive tester

- Accurately set the positive and negative tolerances for voltage and leakage current
- Supporting fixtures to improve testing efficiency
- If the detection data exceeds the set range, there is an alarm warning function
- MOV 100% factory inspection

Simulated lightning impact test bench (capable of meeting T2:120KA/T1:25KA)

- By simulating lightning stroke testing, the product's ability to withstand lightning current can be verified. It can guarantee the most reliable and safe high–quality products for users.

Enterprise Certificates

As a manufacturer of surge protective devices that pursues high quality,THOR invests a considerable proportion of its annual revenue in innovation,research and development, and international certification to meet the needs of customers in different fields,obtaining more and more certificates to ensure that our SPDs can be distributed in every corner of the world.

Features of THOR Surge Protective Device

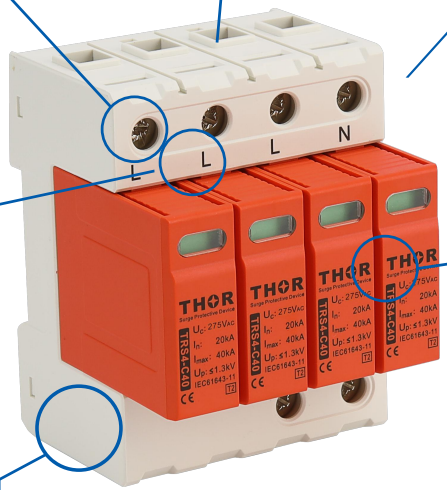
Example: TRS5-B+C

Lock system for fixing of modules

Biconnect terminals

DIN rail 35mm

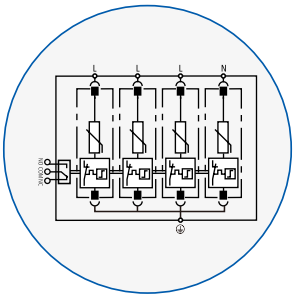
Optical lifetime status indication



Pluggable modules

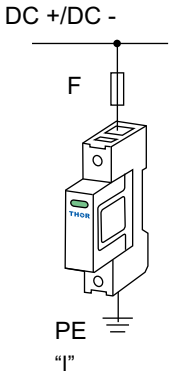
Remote signalling

Circuit diagram



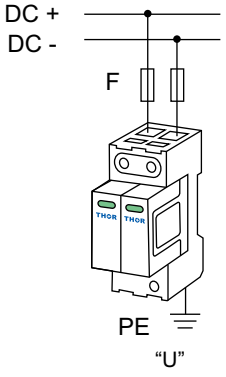
DC SPD Wiring diagram

Photovoltaic system



"I"

Connection



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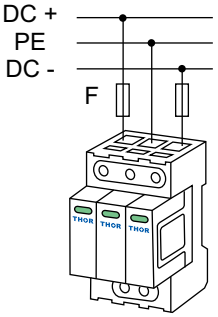
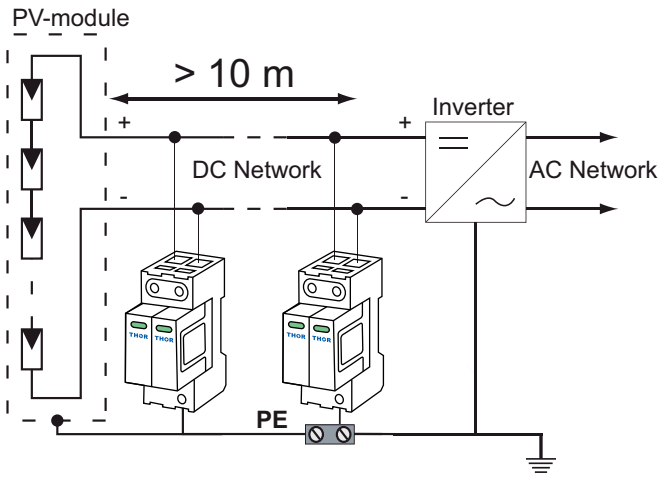
Connection



"Y"

Connection

Connection of DC SPD in networks



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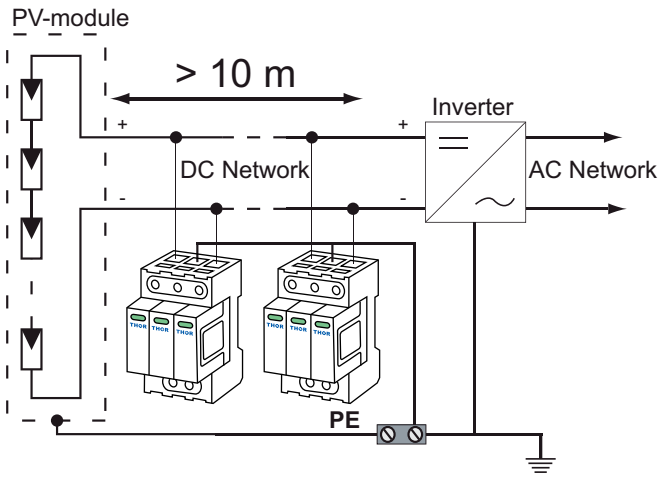

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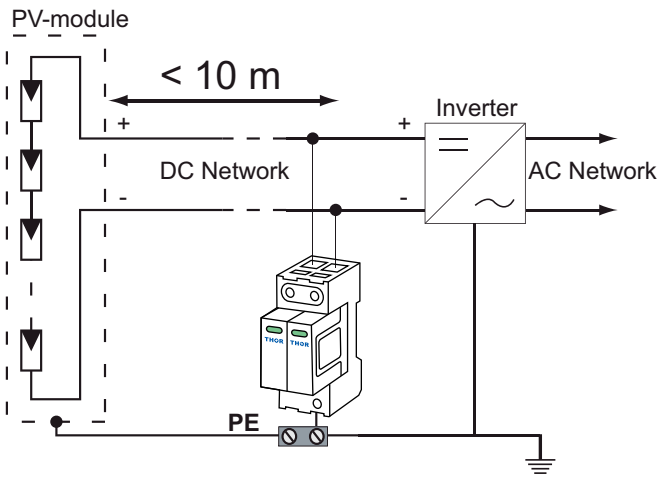

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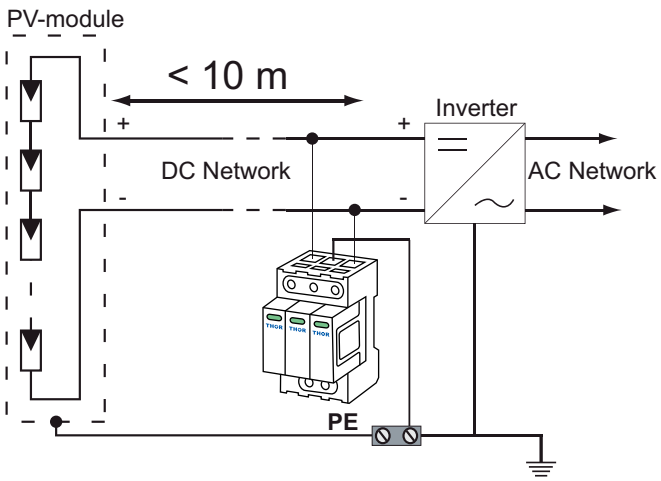


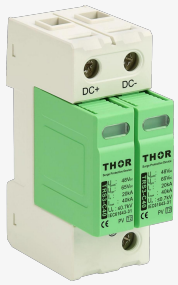
"Y" Connection

TRS3 Series DC SPD

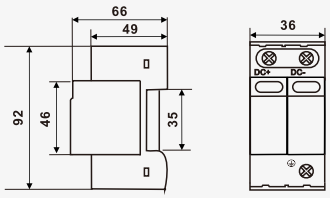
DC Surge Protector for EV Charger / Energy Storage System (ESS) / Telcom Communication

- Varistor surge arrester
- Installtion to DC network
- For protection of DC network where the separating spark–over distance is kept or without LPS
- Optional remote fault signalling(S)

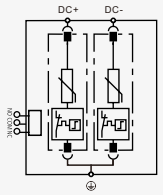
Product



Dimension



Basic circuit diagram



Parameter/Type		TRS3-C40			
Nominal PV Voltage	U_{ocstc}	24V DC	48V DC	75V DC	110V DC
Max. PV Operating Voltage	U_{cpv}	36V DC	65V DC	80V DC	180V DC
Nominal discharge current (8/20μs)	I_n	20kA			
Maximum discharge current (8/20μs)	I_{max}	40kA			
Voltage protection level mode +/PE, –/PE	U_p	≤0,6kV	≤0,7kV	≤0,8kV	≤0,9kV
Short–cicuit current rating	I_{scpv}	10kA			
Response time	t_a	< 25ns			
Cross–section of connected conductors solid(min/max)		16mm²/35mm²			
Cross–section of connected conductors stranded(min/max)		16mm²/35mm²			
Fault indication		red indication field			
Remote indication		potential–free change–over contact			
Remote indication contacts		250V/0,5A AC,250V/0,1A DC			
Cross–section of remote indication conductors		1,5mm²			
Degree of protection		IP20			
Range of operating temperatures (min/ max)		–40℃~+70℃			
Humidity range		5%~95%			
Mounting		DIN rail 35 mm			
According to standard		EN 61643–31:2012,IEC 61643–31:2011/T2			
Remarks		Other U_{CPV} can be customized.			

T2 DC SPD

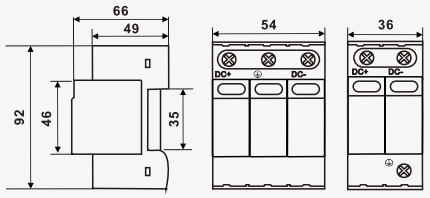
TRS3 Series PV SPD

SPD PV type 2–surge arrester for PV installation
Pluggable module,visual fault signalling

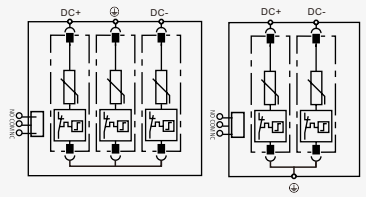
- Varistor surge arrester
- Installtion to PV system
- For protection of PV systems where the separating spark–over distance is kept or without LPS
- Optional remote fault signalling(s)

Product

Dimension



Basic circuit diagram



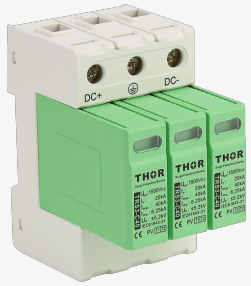
Parameter/Type		TRS3-C40				
PV connection type		U			Y	
Nominal PV Voltage	U_{ocstc}	500V DC	600V DC	800V DC	1000V DC	1250V DC
Max. PV Operating Voltage	U_{cpv}	600V DC	720V DC	960V DC	1200V DC	1500V DC
Nominal discharge current (8/20μs)	I_n	20kA				
Maximum discharge current (8/20μs)	I_{max}	40kA				
Voltage protection level mode +/PE,–/PE	U_p	≤2,0kV	≤2,3kV	≤3,0kV	≤4,5kV	≤5,0kV
Short–cicuit current rating	I_{scpv}	10kA				
Response time	t_a	< 25ns				
Cross–section of connected conductors solid(min/max)		$16mm^2/35mm^2$				
Cross–section of connected conductors stranded(min/max)		$16mm^2/35mm^2$				
Fault indication		red indication field				
Remote indication		potential–free change–over contact				
Remote indication contacts		250V/0,5A AC,250V/0,1A DC				
Cross–section of remote indication conductors		$1,5mm^2$				
Degree of protection		IP20				
Range of operating temperatures (min/ max)		–40℃~+70℃				
Humidity range		5%~95%				
Mounting		DIN rail 35 mm				
According to standard		EN 61643–31:2012,IEC 61643–31:2011/T2				
Remarks		Other U_{CPV} can be customized.				

TRS3 Series high modules PV SPD

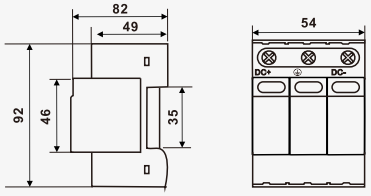
SPD PV type 1+2–lightning current and surge arresters for PV installation
Pluggable module,visual fault signalling,module locking

- Varistor surge arrester
- Installtion to PV system
- For protection of PV systems on the roofs,where the separating spark–over distance is not kept (connection to LPS)
- Optional remote fault signalling(s)

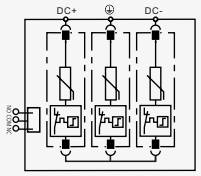
Product



Dimension



Basic circuit diagram



T1+T2 PV SPD

Parameter/Type		TRS3-C40	
PV connection type		Y	
Nominal PV Voltage	U_{ocstc}	1000V DC	1250V DC
Max. PV Operating Voltage	U_{cpv}	1200V DC	1500V DC
Lightning impulse current(10/350μs)	I_{imp}	7kA	5kA
Nominal discharge current (8/20μs)	I_n	20kA	
Maximum discharge current (8/20μs)	I_{max}	40kA	
Voltage protection level mode +/PE,–/PE	U_p	≤4,5kV	≤5,0kV
Short–cicuit current rating	I_{scpv}	10kA	
Response time	t_a	< 25ns	
Cross–section of connected conductors solid(min/max)		16mm²/35mm²	
Cross–section of connected conductors stranded(min/max)		16mm²/35mm²	
Fault indication		red indication field	
Remote indication		potential–free change–over contact	
Remote indication contacts		250V/0,5A AC,250V/0,1A DC	
Cross–section of remote indication conductors		1,5mm²	
Degree of protection		IP20	
Range of operating temperatures (min/ max)		–40℃~+70℃	
Humidity range		5%~95%	
Mounting		DIN rail 35 mm	
According to standard		EN61643–31:2012,IEC61643–31:2011/T1+T2	
Remarks		Other U_{CPV} can be customized.(1200VDC,1500VDC,etc.)	

Cherish resources
Be kind to the environment

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