

WSP415/I/TT

Type 1/2 (Test Class I/II)

Three Phase Surge Arrester



The WSP415/I/TT is a three phase, type 1 & 2¹ surge arrester, designed for use on the boundary between LPZs 0 & 1² in structures using TNS and TT earthing systems.

The WSP415/I/TT is designed for use in structures of LPL I³, such as hospitals, banks, mobile operator stations, water-works, power plants, airport buildings for air traffic control and all structures with an explosive risk.

¹ EN 61643-1; ² IEC 1312 & EN 62305; ³

Remote monitor terminals (RMT)

The WSP415/I/TT is fitted with 0v remote terminals for connection to a building management or other indication system.

Under normal operating conditions, remote terminal pins 1-2 are closed and 2-3 are open. If the internal varistor component is damaged as a result of thermal overloading, terminations 1-2 will then be open and 2-3 closed.

Features and Benefits:

1. Repeated protection in lightning intense environments.
2. Per-phase remote signalling contacts allow surge protection status to be monitored via a building management system.
3. Thermal disconnect for safe disconnection from abnormal or faulty supplies.
4. A failure status indicator, when the Red button is **IN** the system is ok, if the button is **OUT** this shows a failure.



Specification		
Max. continuous operating voltage	U_c	275 V AC
Temporary overvoltage (TOV), L/N	U_t	335 V/5 sec.
Temporary overvoltage (TOV), N/PE	U_t	1200 V/0.2 sec.
Response time L/N	t_A	<25 ns
Response time N/PE	t_A	<100 ns
Max back-up fuse		250 A gL/gG
Max back-up fuse (when 'V' connected)		125 A gL/gG
Short-circuit with stand capability at max. back-up fuse	I_p	80 kA rms
Lightning impulse current (10/350 μ S) L/N	I_{imp}	25 kA
- charge	Q	12.5 As
- Specific energy	W/R	156 kJ/ Ω
Lightning impulse current (10/350 μ S) N/PE	I_{imp}	100 kA
- charge	Q	50 As
- Specific energy	W/R	2500 kJ/ Ω
Total lightning current (10/350 μ S) L1+L2+L3+N \rightarrow PE	I_{total}	100 kA
Max. discharge current (8/20 μ S)	I_{max}	120 kA(L/N) 160kA (N/PE)
Nominal discharge current (8/20 μ S)	I_n	50 kA
Voltage protection level at I_{imp}	U_p	<1.3 kV
Terminals	10-35mm ²	
Type according to: BS EN 61643-11 & IEC 61643-11	SPD Type 1/2(Test Class I/II)	
Operating Temperature	-40 °C to +80 °C	
Failure Status Indicator	YES	
Weight	m	1125g
Part Code	WSP415/I/TT	

Electrical strength - Surrounding circuits	3750 V rms
Electrical strength - Network circuits	3750 V rms
Insulation resistance	2 x 10 ⁷ Ω
Max switching current	~ 0.5 A
Max switching voltage	~ 250 V

Revision: ANW-v7, 05/02/19
Information subject to change without notice.

All of the above information, including drawings, illustrations and graphic designs, reflects our present understanding and is to the best of our knowledge and belief correct and reliable. Users, however, should independently evaluate the suitability of each product for the desired application.

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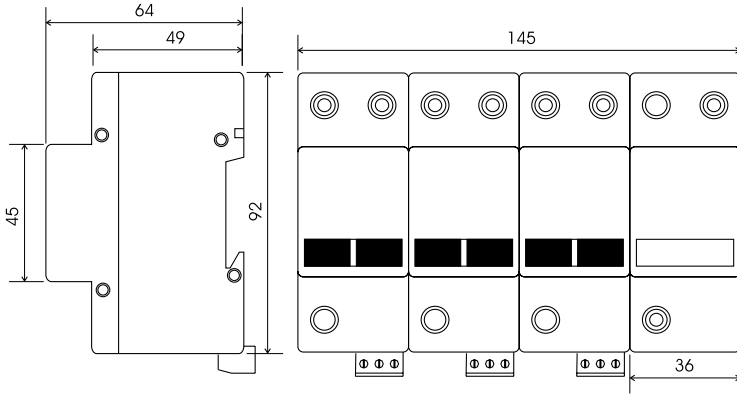
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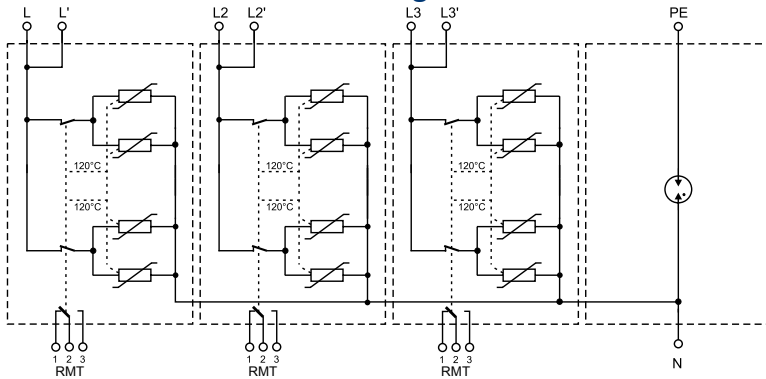
Dimensions in mm



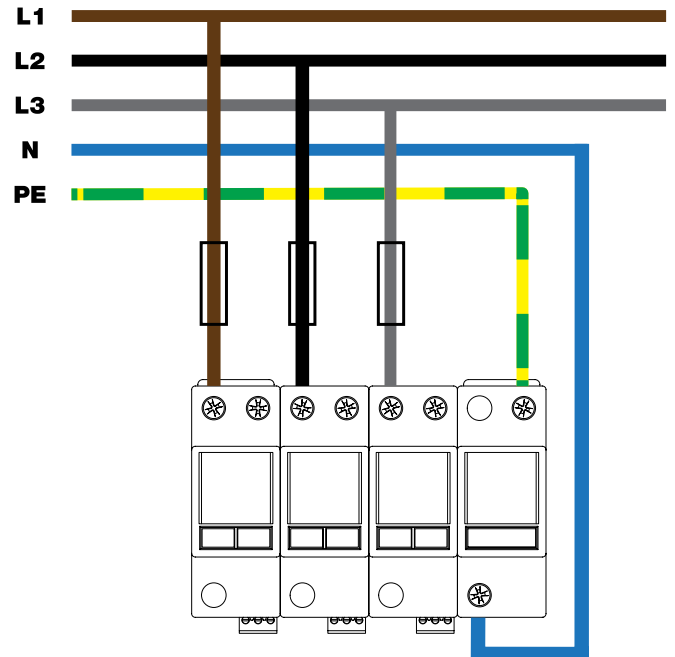
WSP415/I/TT Installation



Internal Diagram



Wiring Diagram



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