



**LOW VOLTAGE BREAKOUT SPECIFICATION SHEET**

	Characteristics	Requirement	Frequency	Control Method
	Product Control			
1	Visual	Good and free from defects	100% - daily	Internal
2	Dimensions	As per Engineering Drawing	5 samples - daily	Internal
3	Tensile strength	min 10 MPa (N/mm <sup>2</sup> )	5 samples - daily	ASTM D 638
4	Ultimate elongation	min 300%	5 samples - daily	ASTM D 638
5	Hardness	min 35 shore D	Daily	ASTM D 2240
6	Tensile strength after thermal ageing (150°C, 168 hrs)	min 9 MPa (N/mm <sup>2</sup> )	Qualification	ISO 188
7	Ultimate elongation after thermal ageing (150°C, 168 hrs)	min 250%	Qualification	ISO 188
8	Heat Shock (225°C, 4 hrs)	no splitting, cracking, dripping or flowing	Qualification	ESI 09-11
9	Water absorption	max 1%	Qualification	ISO - 62
10	Dielectric strength	min 12 kV/mm	Qualification	IEC 60243
11	Dielectric constant	5 max	Qualification	ASTM D 150
12	Volume resistivity	min 10 <sup>12</sup> ohm.cm	Qualification	IEC 60093
<b>Raw Material Control</b>				
13	Carbon black content	min 2.5%	Compounding	BS 2782 Meth.-452 B : 1978
14	Tensile strength	min 10 MPa (N/mm <sup>2</sup> )	Compounding	ASTM D 638
15	Ultimate elongation	min 300%	Compounding	ASTM D 638
16	Hardness	min 35 shore D	Compounding	ASTM D 2240
		<b>Frequency</b>	<b>Agency</b>	
<b>Daily</b>		- Routine test during production	In-house	
<b>Qualification</b>		- Whichever is earlier of the following	External or In-house	
		a. At the time of introduction of new product		
		b. After a significant change in formulation		
		c. Every three years		
<b>Compounding</b>		- For compounding of every batch of material.	In-house	