
	<h1>Test Report</h1>		Date	21/07/16
			TR	<b>05672</b>
			Din Fuse Carrier 500 amp testing	
Operator: D.Maclachlan		This report is the property of Phase 3 Connectors Ltd and must not, without their written consent be passed on, copied or used for any other purpose		

**Type and description of test**  
**Din Fuse Carrier. Direct Resistance With 500A Current.**

**Object:**

The object of this test is to assess the current carrying capacity of the Din Fuse Carrier.

**Test method:**

A specified test current shall be applied to the contacts of the specimen for a minimum period of 3 hours or until equilibrium is reached. (Less than 1 degree per hour).  
The Din Fuse Carrier will be fed with 500A from the 3000A load unit via a 150mm<sup>2</sup> cable attached to the fuse blade and a Powersafe Panel Source 500A connector on 150mm<sup>2</sup> cable which is connected to the other side of the load unit.

**Requirements:**

The Din Fuse Carrier must be capable of carrying the specified test current for a minimum period of 3 hours without exceeding the specified temperature rise.

**Test Items**

- 1 x Powersafe Din Fuse Carrier
- 1 x Powersafe 500A Panel Source Connector

Instrument	Description s/n	Expiry calibration
Current generation	T & R PCU1 Mk3 P.C.I.T.S. (21TE0216)	20/01//2017
External Load Unit	3000A Loading Unit	20/01/2017
YF-160A Thermocoupler +5 probes	060300489	04/02/2017

**Recorded Results at the end of testing – (detailed hourly results and graph on pg3)**

Probe position	Temperature ° C	T (measured – ambient)	Amps
Ambient	21.9		
Probe 1 = Contact	97.1	75.2	512A
Probe 2 = Cable Core	85.4	63.5	512A
Probe 3 = Cable Jacket	61.6	39.7	512A
Probe 4 = Insulator	55.9	34.0	512A
Probe 5 = Fuse Blade	90.0	68.1	512A

Maximum Allowable Temperature 125°C

Maximum Recorded Temperature Rise @ Insulator was 34.0°C above ambient.

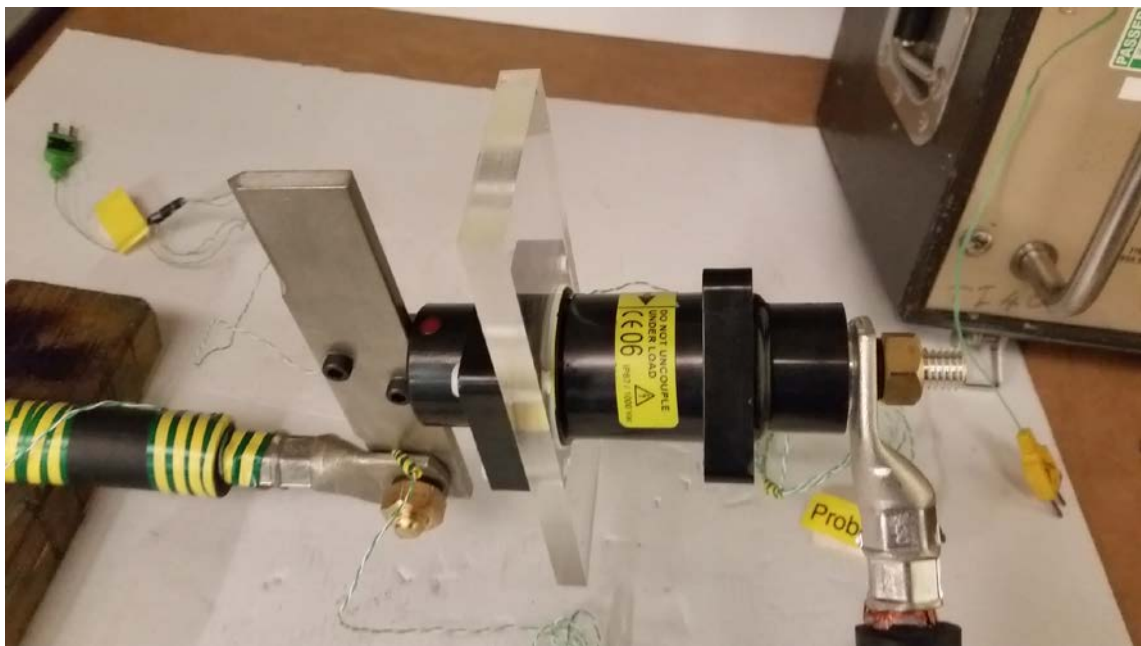
Maximum Allowable Temperature of Contacts 125°C

Maximum Recorded Temperature Rise was 75.2°C above ambient.

Conclusion: Temperature Rise within EN, BS and VDE allowable limits. PASS

 <p><b>PHASE 3</b> CONNECTORS</p>	<h1>Test Report</h1>	 <p>bsi. ISO 9001 Quality Management FS648709</p>	Date	21/07/16
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## T&R PCU1 Mk 3 P.C.I.T.S 3000A





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Time	Insulator	Fuse Blade	Cable Jacket	Cable Core	Contact	Ambient	Amps
0.5	41.0	70.1	48.1	66.5	76.4	19.8	507.0
1	48.5	81.4	57.2	76.3	88.5	21.4	503.0
1.5	53.0	86.1	60.7	81.3	93.6	20.8	502.0
2	54.5	87.1	61.4	82.4	94.1	20.7	506.0
2.5	55.0	88.5	62.2	85.7	96.8	21.4	511.0
3	55.6	89.9	62.6	85.8	97.0	22.0	514.0
3.5	55.9	89.9	62.4	85.8	97.2	21.6	510.0
4	55.7	89.9	61.8	85.6	97.4	21.9	510.0
4.5	55.7	90.0	61.5	85.4	97.2	22.2	509.0
5	55.9	90.0	61.6	85.4	97.1	21.9	512.0

