

Applicant Eaton Electrical
2210 Laurens Highway
Greenwood, South Carolina 29648
USA

Application Date : March 4, 2009

Order Number : 212447200-QUA/INC

Subject : low-voltage busway

Trademark : EATON

Type(s) : Pow-R-Way111 2500A

Arnhem, May 25, 2010

Manufacturer/ Production sites: Eaton Electrical, 2210 Laurens Highway, Greenwood,
South Carolina 29648, USA

Overview of tests : See page 5

Test Requirements IEC 60439-2, 3rd ed. 2000-03. Clauses: 8.2.1, 8.2.2, 8.2.3,
8.2.4, 8.2.5, 8.2.7, 8.2.9, 8.2.10, 8.2.12 and 8.2.13.

Conclusion • The product complies with the specified requirements

Tested by : H.L. Schendstok



Checked by • H.G.M. Kormelink

HLS

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1 Subject

Low-voltage Busway

Manufacturer	EATON
Type	Pow-R-Way III 2500A
Rated operational current (In)	3400 A
Rated operational voltage (Ue)	660 V
Rated insulation voltage (Ui)	1000 V
Rated impulse withstand voltage (Uimp):	8 kV / 12 kV
Rated short time withstand current	100 kA — 1,0 s
Degree of protection	IP55
Busbar material (conductor)	Aluminium

2 Tested Ratings

I E C 6 0 4 3 9 - 2 , e d i t i o n 3 . 1 , 2 0 0 5 - 1 0 , s u b c l a u s e s			
8.2.1	verification of temperature rise limits	Rated operational current [In]	3400 A
8.2.2	Verification of Dielectric properties	Rated insulation voltage [Ui]	1000 V
		Rated impulse withstand Voltage [Uimp]	
		Flange	12
		Feeder busway	kV
		Plug-in busway	12
8.2.3	Verification of short-circuit strength	Rated SC-withstand current [Icw]	100 kA —1 sec
8.2.4.1	Verification of effectiveness of protective circuit	All measured points < 0,1 0	OK
8.2.4.2	Verification of the short-circuit strength of the protective circuit	Rated SC-withstand current [Icw]	60 kA —1 sec
8.2.5	Verification of clearances and creepage distances	Min. clearance >14 mm	OK
		Min. creepage distances >16 mm	OK
8.2.7	Verification of the degree of protection		IP55
8.2.9	Verification of resistance of insulating materials to abnormal heat	Glow wire test 960 °C, on all insulating materials	OK
8.2.10	Verification of structural strength	Heavy mechanical loads	OK
8.2.12	Verification of crushing resistance	Heavy mechanical loads	OK
8.2.13	Verification of electrical characteristics	N1 electrical characteristics at the rated current	R _{20.0} : 18.9 pI/m Z: 23.1 pC1/m R: 22.5 pF/m X: 5.35 pQ/m
		N2 electrical characteristics under fault conditions	Phase to N Z: 82.6 pnm R: 77.6 4/rn X: 28.2 pr1/m
			Phase to earth Z: 62.8 pIl/m R: 59.1 pi2/m X: 21.4 pfl/m