



Product Type Approval Certificate

Full

This certificate is issued to:

Supplier name and address:	Brush Switchgear Australia Unit 6, 256 Leitchs Road, Brendale QLD 4500, Australia
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In respect of:

Manufacturer:	Brush
Place of manufacture:	<ul style="list-style-type: none"> Blackwood, South Wales NP12 2XH United Kingdom & Brendale QLD 4500, Australia
Product description:	<p>1500 V DC metalclad enclosed switchgear with high speed circuit breakers, disconnectors (line panel) and harmonic filter:</p> <ul style="list-style-type: none"> Rated voltage: 1800 V dc Rated insulation voltage: 3 kV dc Positive 1500 V busbar rated service current: 8 kA SafeBond feeder/line panels (4KA NDC DCCB, 8kA disconnector) fitted with UMLE dc protection relay Rectifier panels (6 kA NDC DCCB) Rectifier panels (6 kA NDC DCCB) with busbar VT Harmonic filter (600 Hz and 1200 Hz) & 1500 V dc surge arrester panel frame leakage scheme (located in harmonic filter panel) wall mounted frame leakage panel (for use in sectioning huts) 125 V dc auxiliary supply <p>In accordance with T HR EL 04001 SP – <i>Heavy Rail Traction System - 1500 V DC Metal Enclosed Switchgear (V1.0 & TN 011 : 2020)</i></p>
Use approved for:	Approved for use in the RailCorp 1500 V dc network.

Conditions of approval:	<p>Type approval is valid as detailed on the following general drawings:</p> <ul style="list-style-type: none"> • EL 0457519 to EL 0457529 (inclusive) all version A • EL 0457531 to EL 0457532 (inclusive) all version A • EL 0457540 to EL 0457549 (inclusive) all version A • EL 0457551 version A • EL 0457561 version A <p>Any proposed change from these general drawings (other than those allowed in the drawing notes) is required to be approved by the Lead Electrical Engineer.</p> <p>The approved 1500 V dc positive 400 mm² cable termination kit is: Legend Power, part no: C1.5iDC400ST</p> <p><i>Note: Some documentation is branded Hawker Siddeley Switchgear.</i></p>
Limitations:	N/A

Evaluating rail transport operator

Name:	Terry Niemeier
Position:	Lead Electrical Engineer, Asset Standards Authority, Transport for NSW
Signature:	<i>T Niemeier</i>
Date:	20/07/2020

Product approval pack reference number: qA581065