

NEW EQUIPMENT AND SYSTEM APPROVAL CERTIFICATE

Certificate No. S 08-08-10-077a

Approval date 18/10/2016
Approved by GM Technical Standards
Report no. TAS 08-1510-EL183
Report date 14/10/2015

This certificate is issued to

Supplier Elsafe Australia Pty Ltd
 1/9 Rodborough Rd, Frenchs Forest
 NSW, Australia 2086

In respect of

Manufacturer Elsafe Australia Pty Ltd
Product description Elsafe Surge Protection Cassettes & Termination modules
Item identification Refer to Approved Item List for full details.
Application ARTC Network Wide
Relevant Standards SPS 02 Environmental Conditions
 ESC-09-02 Lightning and Surge Protection Requirements

**Conditions of
Approval**

1. Termination modules 216600 and 216600A shall be wired in series mode (as dual disconnection link).
2. Earth screw on 216600 and 216600A termination module shall be tightened to ensure that edges of module bracket penetrate surface of the mounting rail.
3. Maximum conductor size 6mm² per termination.
4. Elsafe 555715 module to be used with 216600A Termination Module, for all new installations.
5. For use in accordance with ARTC standard typical circuits SDS 25 (as modified to suit this equipment) only.
6. New circuit symbols showing the dual disconnection link and removable technical cassette form of the termination module (with associated earth connections as appropriate) shall be developed and approved for inclusion in ARTC standard SDS 25.

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7. Safety Isolation Cassettes should be used whenever a circuit is deliberately interrupted by the removal of a technical cassette.
8. Only components from following approved item list may be utilised in accordance with these general conditions and any individually annotated against items on the list.
9. Ongoing quality audits of the manufacturers production and distribution systems to confirm procedures are adequate to maintain ARTC quality requirements shall be undertaken.

ARTC reserves the right to conduct its own audit of the manufacture and supply of these components to AS 19011; as part of ARTC's Quality Controller Supplier (ESG-00-15)

Any subsequent change to the design, materials or manufacturing process is not covered by this approval. The manufacturer should notify ARTC of any modification or changes in order to obtain a valid updated certificate.

Note/Comments

This type approval certificate supersedes the following documentation:

1. **08-08-10-077** (Document dated: 24/09/2007)

Issue date

Expiry date

Issued by

John Furness

ARTC Manager Standards



Catalogue No.	Type Description	Nominal Voltage/Current	Conditions of Use			Mechanical Failure Condition Flag
			Conditions	Mounting Arrangement	Use with Termination Modules	
External Circuit Protection						
216630	DC line/tail input circuit ripple filter and over-voltage clamp	DC- 30V	Designers shall allow for internal MOV leakage current (0.5mA) and circuit loop resistance (400Ω).	-	216600 or 216600A	Fitted
216640	DC line/tail input circuit ripple filter and over-voltage clamp	DC- 50V	Designers shall allow for internal MOV leakage current (0.5mA) and circuit loop resistance (3kΩ).	-	216600 or 216600A	Fitted
216655	DC line/tail output circuit surge diverter	DC- 50V	Maximum current = 1.0A.	-	216600 or 216600A	Fitted
216660	AC line/tail output circuit surge diverter	AC- 110V	External circuit must have BX & NX conductors (NOT common return). Maximum current = 1.0A.	-	216600 or 216600A	Fitted
216680	AC line/tail circuit surge diverter	DC- 290V		-	216600 or 216600A	Not Fitted
555720	DC line/tail circuit over-voltage clamp	DC- 230V	External circuit must have B & N conductors (NOT common return).	-	216600 or 216600A	Not Fitted
AF Circuit Protection						
216670	VF data line Modem/Fax over-voltage arrester	DC- 50V 1000mA	Attenuation DC - 4kHz ±0.5dB, 4k-10kHz -20dB.	-	216600 or 216600A	Fitted
Track Circuit Protection						
555715	Spark gap/MOV track arrester	DC - 90V	For AC, DC or AF track circuits having max 48V rail to rail.	-	216610 or 216600 or 216600A	Not Fitted
555716	Spark gap/MOV track arrester	DC - 90V	For AC, DC or AF track circuits having max 48V rail to rail.	-	216600A	Fitted

Catalogue No.	Type Description	Nominal Voltage/Current	Conditions of Use			Mechanical Failure Condition Flag	
			Conditions	Mounting Arrangement	Use with Termination Modules		
Power Supply Protection							
555128	Balanced power supply over-voltage arrester	DC- 24V		-	216610 or 216600 or 216600A	Not Fitted	
555670	Line to Line or Line to Earth surge arrester/diverter	AC- 275V	May protect feeders originating from bus bars fitted with an ELD. Use with 216605A termination module in 'shunt' connected form. NOT to be used on mains input feed.	-	216605A	Fitted	
555680		AC- 150V					
555690		AC- 480V					
Safety Isolation Protection							
216621	Safety Isolation Cassette	N/A	No internal connections. Used to identify that removed cassette should not be reinserted (circuit isolation/ no protection)	-	216610 or 216600 or 216600A or 216605A	Not Fitted	
Disconnection Link							
216620	Dual Through Link cassette	30A	Breaks both legs of circuit.	-	216610 or 216600 or 216600A or 216605A	Not Fitted	
Accessory Hardware							
216600	Termination Module (Obsolete)	AC- 750V, 30A DC- 500V, 20A Shunt connect format Max. current 200A	Grey - Earthed to DIN rail. Mount only on DIN rail NOT also supporting 216605A or 216610 modules. Not to be used in new installations.	DIN 32mm (G) or 35mm (top hat) rail	-	N/A	
216600A	Termination Module (CAGE CLAMP Technology)		Grey - Earthed to DIN rail. Mount only on DIN rail NOT also supporting 216605A or 216610 modules.	DIN 32mm (G) or 35mm (top hat) rail	-	-	N/A
216605A	Termination Module		Black - No Earth connection. Mount only on DIN rail NOT also supporting 216600 or 216600A modules.	DIN 32mm (G) or 35mm (top hat) rail	-	-	N/A
216610	Termination Module (Obsolete)		Blue - Isolated Earth connection. Mount only on DIN rail NOT also supporting 216600 or 216600A modules. Not to be used in new installations.	DIN 32mm (G) or 35mm (top hat) rail	-	-	N/A