TECHNICAL DATA - HAINAM

Type Test Certificate of Switchgear
and Control gear assembly (TTA)

IEC Publication 60439-1:2001 Edition 4.1 and EN 60439-1:1999 with Admendment 1:2004 Clause 8.2.1, 8.2.2, 8.2.3, 8.2.4, 8.2.5, 8.2.6, 8.2.7 and 8.2.8

Issued by ASTA for Switchgear: Incoming 3200A ACB, operation current 3000A

Specifications and Standard Items	Details	Values
Switchgear rated currents	Incoming Air Circuit Breakers	Up to 6300A
	Outgoing feeders	Up to 3200A
Temperature-rise limits (Clause 8.2.1)	Rated current of the assembly	Up to 6000A
	Rated current of incoming 6300A ACB unit	Up to 6000A
	Rated diversity factor of the outgoing units	0.8
	Outgoing 3200A MCCB units	Up to 3000A
Dielectric properties (Clause 8.2.2)	Rated insulation voltage of the assembly	690V
	Rated impluse withstand voltage of the assembly	6KV
Short-circuit withstand strength (Clause 8.2.3)	Rated conditional short-circuit current (Clause 8.2.3.2.3 a&b) - Incoming 6300A ACB unit - Outgoing 3200A MCCB unit	100kA at 400V
	Rated peak and short-time withstand current (Clause 8.2.3.2.3 b) - Incoming 6300A 3P ACB unit and its connection phase busbars - Main horizontal phase busbars 3P tinned Cu busbars	100kA rms for 3s, 220kA Peak
	Rated peak and short-time withstand current (Clause 8.2.3.2.3 d) - Main horizonal neutral busbars (half size)	60kA rms for 3s, 132kA Peak
Effectiveness of the protective circuit (Clause 8.2.4)	Rated conditional short-circuit current (Clause 8.2.4.2) Protective circuit of the outgoing MCCB unit	60kA rms for 1s, 132kA Peak
Clearance and creepage distances (Clause 8.2.5)	Rated insulation Voltage 690V (Ui) for pollution degree 3	> 8mm > 10mm
Mechanical operation (Clause 8.2.6)	Incoming ACB unit and Outgoing MCCB's	50
Degree of protection (Clause 8.2.7		IP30 to IP54
Electromagnetic Compatibility (EMC) Tests (Clause 8.2.8)	Emission and immunity tests for Enviroment A conditions	Verified
Internal separation	Form 1 to form 4	IEC 60439-1, section 7.7, BS EN 60439-1
Material	Type: Thickness:	Electro-Gavalnized Steel Sheet 2mm, 3mm
Finishing	Frame part Enclosure Door	Electro Powder Coated not less than 50µm
Dimensions		Height: 2090 mm Width: 800, 1000, 1200 mm Depth: 800, 1000, 1200, 1400 mm