



Germanischer Lloyd

# Type Approval Certificate

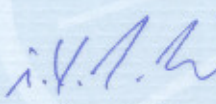
This is to certify that the undemoted product(s) has/have been tested in accordance with the relevant requirements of the GL Type Approval System.

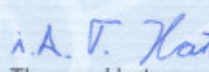
Certificate No.	13 785 - 99 HH
Company	ABB SACE S.p.A Via Baioni 35 24123 Bergamo, ITALY
Product Description	Air-Circuit Breaker
Type	E2L12, E2L16, E3L20, E3L25 Series EMAX, 3-pole
Environmental Category	C
Technical Data / Range of Application	Rated current $I_n$ : 250-1600 / 250-2500 A Rated operational voltage $U_e$ : 690 V AC Rated insulation voltage $U_i$ : 1000 V Rated impulse voltage $U_{imp}$ : 12 kV Rated frequency : 50/60 Hz Utilization category: A  Rated short-circuit capacity E2L16 / E3L25 Performance at : 440 - 690 V $I_{cm}$ [kA] : 242/242 - 187/187 kA $I_{cu}$ [kA] : 110/110 - 85/85 kA $I_{cs}$ [kA] : 110/110 - 65/65 kA  Release system: SACE PR111, PR112 and PR113 (L, S, I, G), PR121, PR122 and PR123 (L, S, I, G) Communication port for monitoring purposes only
Test Standard	Guidelines for the Performance of Type Approvals (2003) IEC 947-2 (1989), EN 60947-2 (1991-10) Amendment 1 (1993-04)
Documents	Test report : ACAE-LOVAG No. IT 98.001, 98.002, 98.003, 98.005, 97.090, 97.091, SINAL No. IA/TTR-97/005, Mariperma No. 9466, 9467, ABB SACE No. 10334, 10335, catalogue 649253/012 (June '97), ETL SEMKO C133_06, C133_08, E13306, E13307, E13308, E13309, ACAE 05-033, 05-034
Remarks	None
Valid until	2011-10-19
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File No.	I.K.01
Hamburg, 2006-10-20	

Type Approval Symbol



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Jürgen Wittburg

  
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This certificate is issued on the basis of "Guidelines for the Performance of Type Approvals Part 1, Procedure".