



Type-examination certificate no. E 7202.e

Object:	contactor
Mark:	ABB
Type designation:	AFS116-30 (contactors) AFS146-30 (contactors) CAL19-11 (auxiliary switches) CEL19-01 (auxiliary switches)
Technical details concerning safety:	The product meets the requirements of IEC 60947-4-1:2009 + A1:2012. Mirror contacts according to IEC 60947-4-1, Annex F. Details concerning useful life B10 see supplementary sheet 1/1.
Manufacturer's address:	ABB AB, Control Products Motorgränd 20 SE-721 61 Västerås
Address of applicant:	ABB AB, Control Products Motorgränd 20 SE-721 61 Västerås
Special conditions, enclosures:	See supplementary sheet 1/1
Expires on:	30 September 2024

The prototype examined corresponds to the essential requirements of Directive 2014/35/EU and the amendments of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits.
This certificate is valid in conjunction with the general conditions listed on the back and any possible enclosures mentioned above.

Place and date:
Lucerne, 26 September 2019

Suva
Accredited Certification Body SCESp 0008
Technology Sector

The Safety Engineer
Peter Kocher

Head of Certification
Guido Schmitter



In context with this type-examination certificate the meaning of the term mirror contacts is as follows:
If any main contact is closed, then no mirror contact (auxiliary contact) is closed.
(IEC 60947-4-1, Annex F)

Details concerning useful life B10 according to IEC 60947-4-1, Annex K:

Type	B10	conditions
AFS116-30	1'300'000	AC-3, max. 50% I _e
AFS146-30	1'300'000	AC-3, max. 50% I _e