

ACKREDITERINGSCERTIFIKAT/ACCREDITATION CERTIFICATE



Ackred. nr 1253
Provning
ISO/IEC 17025

SAAB AB
Support and Services
Business Unit Tactical Solutions
Organisationsnummer 556036-0793

är ackrediterat som provningslaboratorium för uppgifter enligt bilaga 2. Tillämpliga bestämmelser för ackrediteringen framgår av bilaga 1./is accredited as a testing laboratory for the scope specified in appendix 2. The applicable terms of the accreditation are specified in appendix 1.

Laboratoriet är ackrediterat enligt den internationella standarden ISO/IEC 17025:2005. Ackrediteringen innebär att laboratoriet har bedömts inneha erforderlig teknisk kompetens inom de områden som definieras i bilaga 2 och tillämpar ett kvalitetsledningssystem som uppfyller ställda krav. Det ackrediterade laboratoriet ansvarar för resultatet av utförda provningar och bedömningar samt, i förekommande fall, för val av och tillämpning av arbetsmetoder inom ramen för den meddelade ackrediteringen./This laboratory is accredited in accordance with the International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system. The accredited laboratory is responsible for the results of performed testing and submitted judgements as well as, where applicable, for the selection and application of work methods within the scope of the granted accreditation.

Ackrediteringen gäller tills vidare. Styrelsen för ackreditering och teknisk kontroll (Swedac) genomför regelbundet tillsyn, och vart fjärde år en förnyad bedömning, för att bekräfta att tillämpliga bestämmelser för ackrediteringen, enligt bilaga 1 uppfylls./The accreditation is valid until further notice. The Swedish Board for Accreditation and Conformity Assessment (Swedac) regularly carries out surveillance, and a full reassessment every fourth year, in order to verify that the applicable terms of accreditation, see appendix 1 are continually fulfilled.

Detta ackrediteringscertifikat utfärdades **2016-09-30** av/This accreditation certificate was issued **2016-09-30** by
Pernilla Carlsson,
Enhetschef enheten för industri/Manager of the Industry division

Beslutet om ackreditering utfärdades med stöd av artikel 5.1 i Europaparlamentets och rådets förordning (EG) nr 765/2008 om krav för ackreditering och marknadskontroll m.m. och lagen (2011:791) om ackreditering och teknisk kontroll. Swedac är nationellt ackrediteringsorgan ansvarigt för bedömning av kompetensen hos certifieringsorgan, kontrollorgan, laboratorier och miljökontrollanter som ansöker om ackreditering. Den här ackrediteringen har utfärdats under EA:s MLA-avtal och kan därmed betraktas som likvärdig andra ackrediteringar under EA:s MLA-avtal med samma ackrediteringsomfattning. /Accreditation was granted in accordance with Article 5 (1) of Regulation (EC) No 765/2008 regarding accreditation and market surveillance etc. and the Act (SFS 2011:791) concerning Accreditation and Conformity Assessment. Swedac is the national accreditation body responsible for the assessment of the competence of certification bodies, inspection bodies, laboratories and environmental verifier applying for accreditation. This accreditation has been issued under the EA MLA and is therefore recognised as equivalent to other accreditations issued under the EA MLA within the same accreditation scope.

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2016-09-30

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Akrediteringens omfattning / Scope of accreditation

Saab AB, Support and Services, Business Unit Tactical Solutions, Östersund - 1253

Standard Standard	Utgåva Edition	Årtal Year	Standardtitel Title of standard	Kommentarer Comments	Fält- provning Field test
Bas standarder/Basic standards					
EN 61000-4-2 SS-EN 61000-4-2 IEC 61000-4-2	- 2 2	2009 2009 2008	Electromagnetic compatibility (EMC) – Part 4-2: Testing and measurement techniques Electrostatic discharge immunity test		Ja/Yes
EN 61000-4-3 SS-EN 61000-4-3 IEC 61000-4-3	- 3 3	2006 2006 2006	Electromagnetic compatibility (EMC) – Part 4-3: Testing and measurement techniques – Radiated, radio-frequency, electromagnetic field immunity test	Inklusive/Including: Amendment A1:2008 (IEC 2007) Amendment A2:2010 Frequency range 26MHz – 3GHz	
EN 61000-4-4 SS-EN 61000-4-4 IEC 61000-4-4	- 3 3	2012 2012 2012	Electromagnetic compatibility (EMC) – Part 4-4: Testing and measurement techniques – Electrical fast transient/burst immunity test -		Ja/Yes
EN 61000-4-5 SS-EN 61000-4-5 IEC 61000-4-5	- 2 2	2006 2006 2005	Electromagnetic compatibility (EMC) – Part 4-5: Testing and measurement techniques – Surge immunity test		Ja/Yes
EN 61000-4-6 SS-EN 61000-4-6 IEC 61000-4-6	- 3 3	2009 2009 2008	Electromagnetic compatibility (EMC) - Part 4-6: Testing and measurement techniques - Immunity to conducted disturbances, induced by radio- frequency fields	Frequency range 150kHz – 230MHz	Ja/Yes

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EN 61000-4-8 SS-EN 61000-4-8 IEC 61000-4-8	- 2 2	2010 2010 2009	Electromagnetic compatibility (EMC) - Part 4-8: Testing and measurement techniques - Power frequency magnetic field immunity test		
EN 61000-4-11 SS-EN 61000-4-11 IEC 61000-4-11	- 2 2	2004 2004 2004	Electromagnetic compatibility (EMC) - Part 4-11: Testing and measurement techniques - Voltage dips, short interruptions and voltage variations immunity tests	Measurement on three-phase power equipment excluded.	Ja/Yes
EN-55016-2-1 SS-EN 55016-2-1 CISPR 16-2-1	2 2 2	2009 2009 2008	Specification for radio disturbance and immunity measuring apparatus and methods Part 2-1: Methods of measurement of disturbances and immunity - Conducted disturbance measurements	Inklusive/Including: Amendment A1:2011 (CISPR 2010) Also including IN SITU	Ja/Yes
EN 55016-2-3 SS-EN 55016-2-3 CISPR 16-2-3	- 3 3	2010 2010 2010	Specification for radio disturbance and immunity measuring apparatus and methods Part 2-3: Methods of measurement of disturbances and immunity - Radiated disturbance measurements	Inklusive/Including: Amendement A1:2010 Measurement in SAC, and IN SITU and on OATS	Ja/Yes

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Produktfamiljstandarder/Productfamily standards					
EN 55011 SS-EN 55011	- 4	2009 2010	Industrial, scientific and medical (ISM) radio-frequency equipment – Radio disturbance characteristics – Limits and methods of measurement (CISPR 11:2009, modified)	Inklusive/Including: Amendment A1:2010 Also including IN SITU	Ja/Yes
EN 55022 SS-EN 55022	- 4	2010 2011	Information technology equipment – Radio disturbance characteristics – Limits and methods of measurement (CISPR 22:2008, modified)	Telecommunication ports excluded	Ja/Yes
EN 12895 SS-EN12895	1 1	2000 2000	Industrial trucks – Electromagnetic compatibility		

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Standard Standard	Utgåva Edition	Årtal Year	Standardtitel Title of standard	Kommentarer Comments	Fält- provning Field test
Generella standarder/Generic standards					
EN 61000-6-1 SS-EN 61000-6-1 IEC 61000-6-1	- 2 2	2007 2007 2005	Electromagnetic compatibility (EMC) – Part 6-1: Generic standards – Immunity for residential, commercial and light-industrial environments		
EN 61000-6-2 SS-EN 61000-6-2 IEC 61000-6-2	- 3 3	2005 2005 2005	Electromagnetic compatibility (EMC) – Part 6-2: Generic standards – Immunity for industrial environments		
EN 61000-6-3 SS-EN 61000-6-3 IEC 61000-6-3	- 2 2	2007 2007 2006	Electromagnetic compatibility (EMC) – Part 6-3: Generic standards – Emission standard for residential, commercial and light-industrial environments	Inklusive/Including: Amendment A1:2011 Excluding measurement of telecommunication ports	
EN 61000-6-4 SS-EN 61000-6-4 IEC 61000-6-4	- 2 2	2007 2007 2006	Electromagnetic compatibility (EMC) – Part 6-4: Generic standards – Emission standard for industrial environments	Inklusive/Including: Amendment A1:2011 Undantaget mätningar på telekommunikationsportar	

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Standard Standard	Utgåva Edition	Årtal Year	Standardtitel Title of standard	Kommentarer Comments	Fält- provning Field test
			Provmetoder för fordonskomponenter/ Testing methods vehicle components		
EN ISO 14982 SS-EN ISO 14982	2 2	2009 2009	Agricultural and forestry machines - Electromagnetic compatibility - Test methods and acceptance criteria (ISO 14982:)	Only testing of ESA according to 6.4 (annex D), 6.5 (annex E) and 6.6 Accreditation is valid insofar as the required basic standards are stated elsewhere in this scope.	
ISO 11452-1 SS-ISO 11452-1	3 3	2005 2005	Road vehicles – Component test methods for electrical disturbances from narrowband radiated electromagnetic energy - Part 1: General and definitions	Inklusive/Including: Amendment A1:2009	
ISO 11452-2 SS-ISO 11452-2	2 2	2004 2004	Road vehicles - Electrical disturbances by narrowband radiated electromagnetic energy – Component test methods - Part 2: Absorber-lined chamber	Frequency range 80 MHz – 18GHz	
ISO 11452-4 SS-ISO 11452-4	3 3	2005 2005	Road vehicles – Component test methods for electrical disturbances by narrowband radiated electromagnetic energy – Part 4: Bulk current injection (BCI)	Inklusive/Including: Corrigendum Cor. 1:2009	
ISO 11452-4 SS-ISO 11452-4	4 4	2011 2011	Road vehicles – Component test methods for electrical disturbances by narrowband radiated electromagnetic energy – Part 4: Harness excitation methods	Only testing according to Bulk current injection (BCI) included.	

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Standard Standard	Utgåva Edition	Årtal Year	Standardtitel Title of standard	Kommentarer Comments	Fält- provning Field test
EN 13309 SS-EN 13309	2 2	2010 2010	Construction machinery - Electromagnetic compatibility of machines with internal electrical power supply	Accreditation is valid insofar as the required basic standards are stated elsewhere in this scope Only testing of ESA according to 4.5 (annex D), 4.6 (annex E) and 4.7 (ISO 11452-2 and -4)	
ISO 13766	2	2006	Earth-moving machinery – Electromagnetic compatibility	Accreditation is valid insofar as the required basic standards are stated elsewhere in this scope Only testing of ESA according to 5.6 (annex D), 5.7 (annex E), 5.8 (ISO 11452-2 and -4), 5.9 (ISO 10605) and 5.10 (ISO 7637-2)	
ISO 10605 SS-ISO 10605	2 2	2008 2008	Road vehicles – Test methods for electrical disturbances from electrostatic discharge	Inklusive/Including: Corrigendum Cor. 1:2010	Ja/Yes
EN 55025 SS-EN 55025 CISPR 25	- 2 3	2008 2008 2008	Vehicles, boats and internal combustion engines - Radio disturbance characteristics - Limits and methods of measurement for the protection of on-board receivers	Only testing of components and modules according to 6	
ISO 7637-2 SS-ISO 7637-2	2 2	2004 2004	Road vehicles – Electrical disturbances from conduction and coupling – Part 2: Electrical transient conduction along supply lines only	Inklusive/Including: Amendment Amd. 1:2008	Ja/Yes

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ISO 7637-2 SS-ISO 7637-2	3 3	2011 2011	Road vehicles – Electrical disturbances from conduction and coupling – Part 2: Electrical transient conduction along supply lines only		Ja/Yes
ISO 16750-2 SS-ISO 16750-2	4 4	2012 2012	Road vehicles – Environmental conditions and testing for electrical and electronic equipment – Part 2: Electrical loads	Only testing of starting profile 4.6.3 and load dump 4.6.4	Ja/Yes

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Standard Standard	Utgåva Edition	Årtal Year	Standardtitel Title of standard	Kommentarer Comments	Fält- provning Field test
			Militära standarder/Military standards		
DEF-STAN 59-411	1	2007	Electromagnetic compatibility Part 4: Platform and system test and trials	Inklusive/Including: Amendment Amdt1 Methods: DRE 03 DRE 04	
MIL-STD-461F	F	2007	Department of defense interface standard Requirements for the control of electromagnetic interference characteristics of subsystems and equipment	Inklusive metoderna/Including methods: CE101 CE102 CS101 CS114 CS115 CS116 RE101 RE102 RS101 RS103 (Frequency range 2MHz – 18GHz)	Ja/Yes

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Standard Standard	Utgåva Edition	Årtal Year	Standardtitel Title of standard	Kommentarer Comments	Fält- provning Field test
MIL-STD-461E	E	1999	Department of defense interface standard Requirements for the control of electromagnetic interference characteristics of subsystems and equipment	Inklusive metoderna/Including methods: CE101 CE102 CS101 CS114 CS115 CS116 RE101 RE102 RS101 RS103 (Frequency range 2MHz – 18GHz)	Ja/Yes
AECTP-500 (Category 501- Equipment and sub- system tests)	4	2011	Electromagnetic environmental effects test and verification	Inklusive metoderna/Including methods: NCE01 NCE02 NCS01 NCS07 NCS08 NCS09 NRE01 NRE02 NRS01	Ja/Yes

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				NRS02 (Frequency range 2MHz – 18GHz)	
M7780-251913	2	1993	Elektromagnetisk skärmning av RÖS-skyddade rum utgåva 2		Ja/Yes
M7780-251913	3	2002	Elektromagnetisk skärmning av RÖS-skyddade rum utgåva 3		Ja/Yes
			Övriga standarder/Other standards		
RTCA DO-160	G	2010	Environmental Conditions and Test Procedures for Airborne Equipment	Including Section 21 Frequency range 150kHz – 152MHz (conducted) + 2MHz – 6GHz (radiated)	

Provtagning omfattas inte av ackrediteringen. Om laboratoriet ändå själv utför provtagning omfattas provningen inte av ackrediteringen. Synpunkter och tolkningar omfattas inte av ackrediteringen. Om laboratoriet ändå redovisar synpunkter och tolkningar i provningsrapporten omfattas provningen inte av ackrediteringen.

Akrediteringsomfattningen är flexibel enligt vad som anges i detta beslut. Förändrade metoder där förändringarna innefattas i den flexibla ackrediteringen får, även om nytt beslut inte har utfärdats, användas som ackrediterade metoder.

The accreditation does not cover sampling activities. If the laboratory, regardless of this, performs the sampling by itself, then the testing is not considered to be performed under accreditation.

The accreditation does not cover opinions and interpretations. If the laboratory, regardless of this, expresses opinions and/or provides interpretations in the test report, then the testing is not considered to be performed under accreditation.

The scope of accreditation is flexible according to specification in this decision. Changed methods where the changes are included in the flexible scope may, even if a new decision has not been issued, be used as accredited methods.

Ändringar är markerade med **fetstil**/Changes are highlighted in **bold**.