



Assistant Ingénieur Certification

Technical construction file for communication options

Céline DEVANADIN

07 avril 2025 – 27 juin 2025

Tuteur de stage: Sylvain BALLET

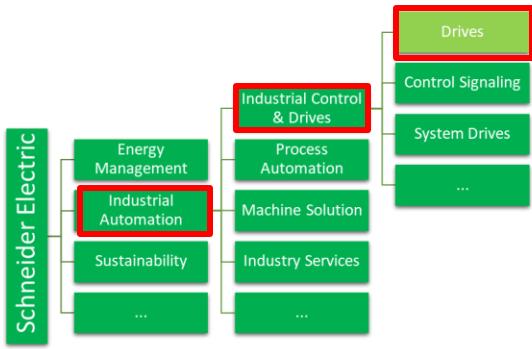
Maître de stage: George Goncalves

Summary

1. Presentation
2. Objectives
3. Tasks
4. Tools
5. Problems / Solutions

1. Presentation of the company

Schneider Electric



General

- STIE
- IC&D - Drives

ATS480 ATV900

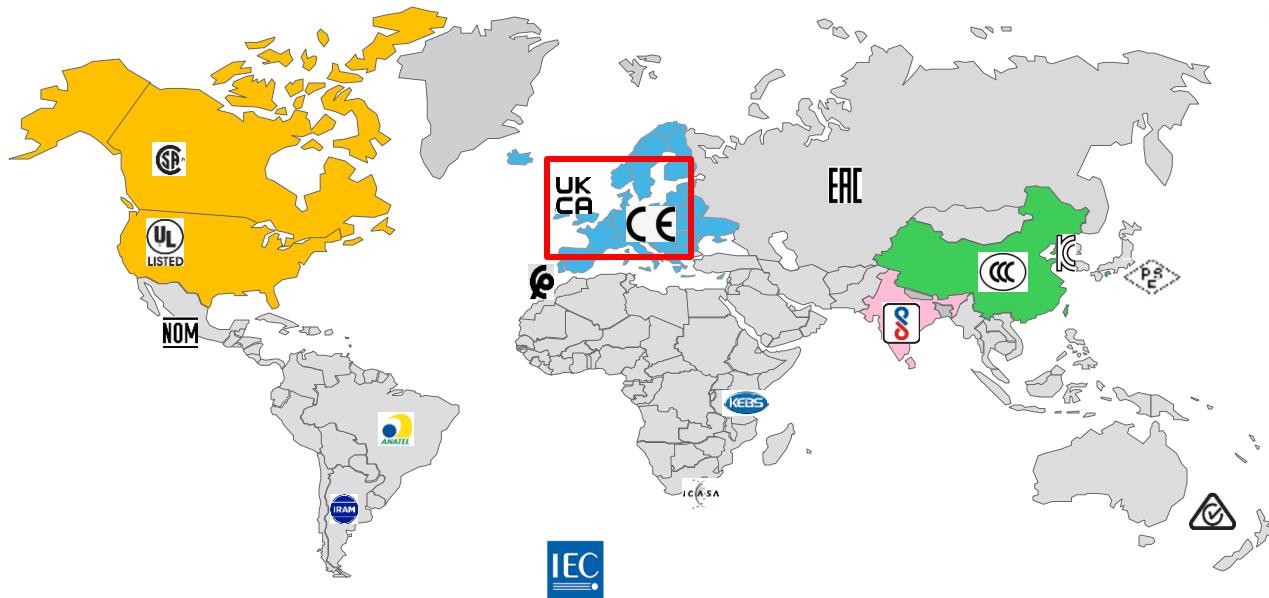
- Soft Starters
- Speed drives

Option VW3A3627

- Slot
- Communication

Conformity Assessment for sale

By parts



Exemple de plaque d'identification

La plaque d'identification contient les données suivantes :

①	Altivar 930										
②	ATV930U40N4										
③	4kW - 5HP										
④	V1.0 IE30										
⑤	<table border="1"><tr><td>Input</td><td>Output</td></tr><tr><td>U (V)</td><td>380 / 400 / 50 / 60</td></tr><tr><td>I (A)</td><td>0 ... 500</td></tr><tr><td>F (Hz)</td><td>50 / 60</td></tr><tr><td>T (°C)</td><td>93</td></tr></table>	Input	Output	U (V)	380 / 400 / 50 / 60	I (A)	0 ... 500	F (Hz)	50 / 60	T (°C)	93
Input	Output										
U (V)	380 / 400 / 50 / 60										
I (A)	0 ... 500										
F (Hz)	50 / 60										
T (°C)	93										
⑥	<p>HP</p> <p>Surge current protection refer to Annex Internal Motor Overload Protection - Class 10</p>										
⑦	<p>Cu AWG14 75 °C</p> <p>15.9 lb.in. 1.8 N.m</p> <p>CE</p> <p>UL LISTED</p> <p>IEC</p> <p>EAC</p> <p>CCC</p> <p>IP21</p>										
⑧	<p>Barcode</p> <p>0912050201001</p> <p>Schneider Electric</p> <p>Made in Indonesia</p>										
⑨											

① Type de produit ② Référence catalogue ③ Puissance nominale

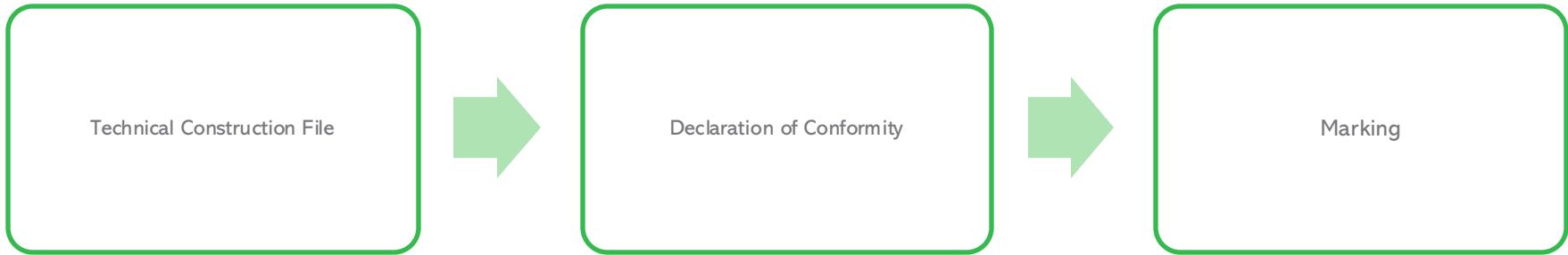
④ Version du firmware ⑤ Alimentation

⑥ Informations sur les fusibles et les protections contre les surcharges ⑦ Informations sur les câbles de puissance

⑧ Degré de protection ⑨ Certifications ⑩ Numéro de série

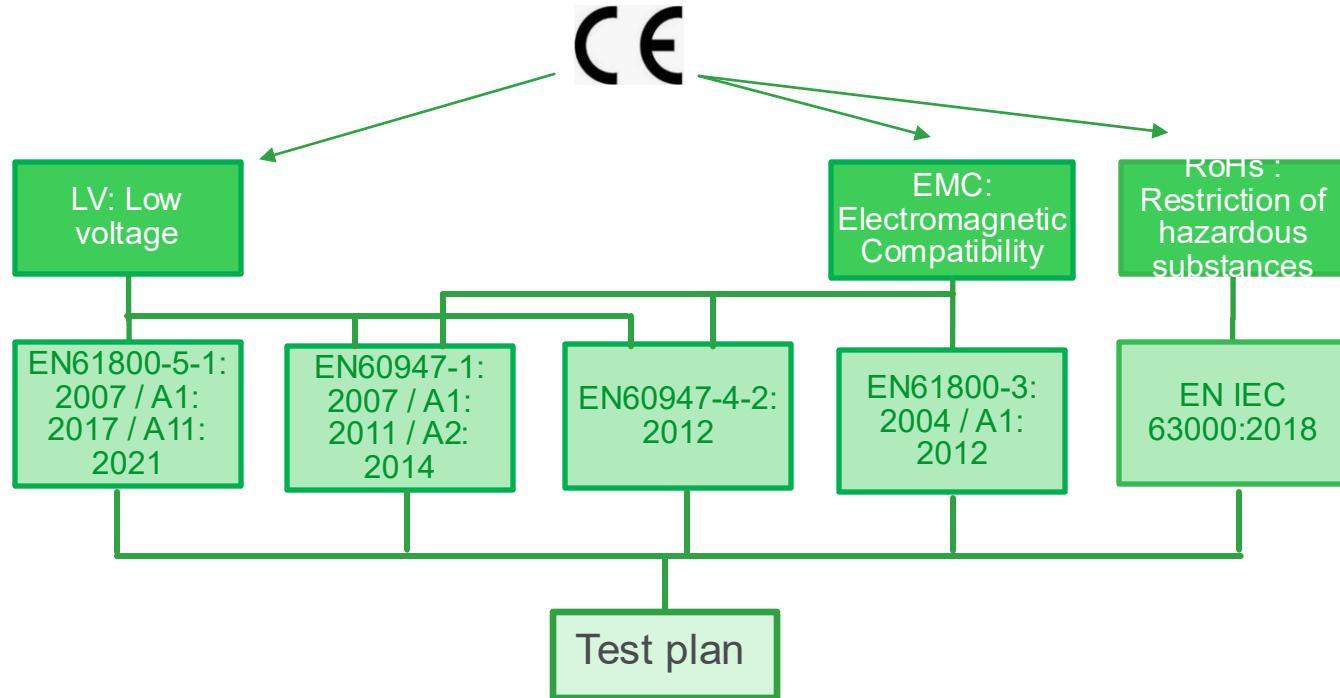
2. Objectives

Conformity Assessment



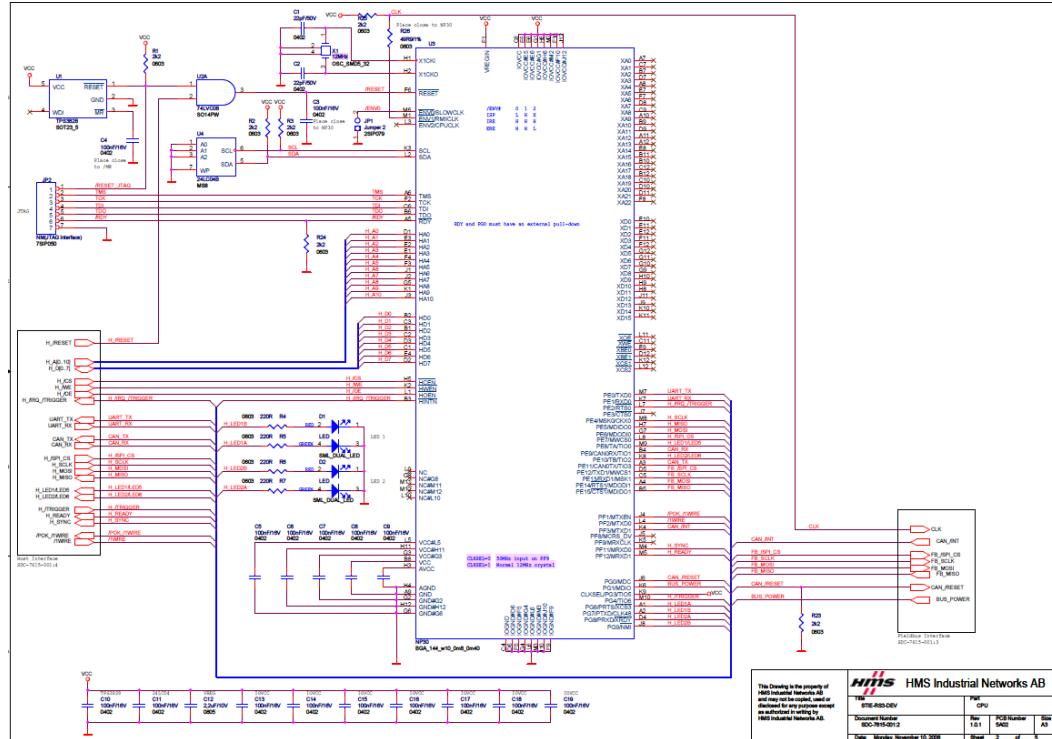
Directives / Standards

For CE marking



3. Schematics

Critical frequencies



Test reports

Profinet Option

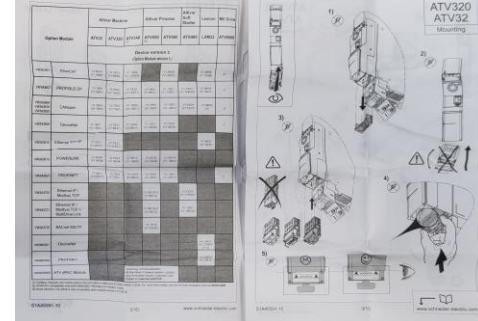
Option name →	VW3A3627
0.1.03 Visual inspection/ mass production check	25196
Test lab / storage place	10/01
1.1.01 Clearance & Creepage distances	See VW3A3607
1.1.04 Enclosure integrity	Exempted test see § 12.3
1.1.09 Arcing ignition, arc resistance, Glow-wire, Hot wire.	Exempted test see § 12.3
1.1.11 Glow wire testing	Exempted test see § 12.3
Test lab / storage place	Exempted test see § 12.3
1.2.01 Flammability	Exempted test see § 12.3
1.2.02 Conduit pull-out test, torque test and bending test with metallic conduits	Exempted test see § 12.3
1.5.01 data sheets	25196
Test lab / storage place	10/01
1.5.02 labels	25196
Test lab / storage place	10/01
Making and breaking capacity of mechanical switching devices	Exempted test see § 12.3
Wire flexing test	Exempted test see § 12.3
2.1.01 Impulse voltage	See VW3A3619
2.1.02 a.c or d.c voltage (dielectric)	See VW3A3619
2.1.03 Partial discharge	Exempted test see § 12.3
4.2.02 Damp heat	See VW3A3619
4.2.06 Dry heat	See VW3A3619
4.2.07 Low temperature test	Exempted test see § 12.3
4.3.06 Overload Protection	Exempted test see § 12.3

Product the option is tested with →	ATV320C	ATV320B	ATV600	ATV900	ATV340	
1.1.13 Ground continuity/ protective bonding					Exempted test see § 12.3	
1.4.01 Vibration					Exempted test see § 12.3	
2.1.05 Capacitor discharge					Exempted test see § 12.3	
2.2.01-1 / 2.2.01-2 / 2.2.01-3 S.C Power outputs standard fault current					Exempted test see § 12.3	
2.2.02 S.C High fault current					Exempted test see § 12.3	
4.1.01 Temperature rise					Exempted test see § 12.3	
4.3.07 Thermal memory retention					Exempted test see § 12.3	
5.2.02 Electrostatic Discharge			12213	14514	13	189
Test lab / storage place	10/01	10/01	11/01	11/01		
5.2.03 Fast transient burst		12209	14387	11	224	
Test lab / storage place	10/01	10/01	11/01	11/01		
5.2.04 Surge 1.2/50μs, 8/20μs		12212	14517	24	241	
Test lab / storage place	10/01	10/01	11/01	11/01		
5.2.05 Radiated radio frequency common mode		See VW3A3607	LM140026	9	290	
Test lab / storage place		20/01	11/01			
5.2.06 Conducted radio frequency common mode		See VW3A3607	LM140026	7	180	
Test lab / storage place		20/01	11/01	11/01		
5.3.0 Commutation notches					Exempted test see § 13.3	
5.3.0 Voltage fluctuations					Exempted test see § 13.3	
5.3.0 Common mode harmonic emission					Exempted test see § 13.3	
5.4.0 Conducted emissions					Exempted test see § 13.3	
5.4.0 Radiated emissions			See VW3A3607	21	274	
Test lab / storage place		See VW3A3607	11/01	11/01		

Test plan

Visual test

Subtitle example in one line



Parts

- Creation of location for the report
- Report with the calibration dates

Labels

- Content of the test report
- Ticket

Data sheet

- Update on excel after the testing is done

Declaration of Conformity

Final

- Composition
 - Commercial reference
 - Directives / Standards
 - Signature

Link to EU : [VW3A36xx-VW3A3725 EU Declaration | Schneider Electric](#)

Link to UK: [VW3A36xx-VW3A3725 UK Declaration | Schneider Electric](#)

Trademark	Schneider Electric
Product, Type	when used with variable speed drives ATV series * & Soft starters ATS series. Ethercat Daisy chain VW3A3601*, Profibus VW3A3607, CANOPEN 2XRJ45 VW3A3608, Devicenet VW3A3609*, Ethernet TCP/IP VW3A3616*, CANOPEN SUBD9 VW3A3618, Profinet module VW3A3627, CANOPEN VW3A3628, Profinet module VW3A3647, Bacnet VW3A3725*

* Only for ATV series
Are in conformity with the requirements of the following directives and conformity was checked in accordance with the following standards.

Directive	Harmonized standard / Notified body reference
LV Directive 2014/35/EU	EN 61800-5-1:2007 EN 61800-5-1:2007/A1:2017 EN 61800-5-1:2007/A11:2021 Adjustable speed electrical power drive systems – Part 5-1: Safety requirements – Electrical, thermal and energy. EN 60947-4-2: 2012 Low-voltage switchgear and controlgear - Part 4-2 : contactors and motor-starters - AC semiconductor motor controllers and starters Other standard considered: (IEC60947-4-2: 2020 & IEC61800-5-1/A1:2016)
EMC Directive 2014/30/EU	EN 61800-3:2004 EN 61800-3:2004/A1:2012 Adjustable speed electrical power drive systems – part 3: EMC requirements and specific test methods. EN 60947-4-2: 2012 Low-voltage switchgear and controlgear - Part 4-2 : contactors and motor-starters - AC semiconductor motor controllers and starters Other standard considered: (IEC60947-4-2: 2020 & IEC61800-3: 2017)
European Directive 2011/65/EU - "Restriction of Hazardous Substances" (RoHS) & Delegated Directive (EU) 2015/863 (RoHS 10)	EN IEC 63000:2018 Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances. Specific offer compliance information about RoHS are publicized on se.com

DocuSigned by:

4CE4DB3D073F4BE
Christian LINSBAUER
Industrial Control & Drives
Customer Satisfaction & Quality - Director

GCAD

Global Conformity Assessment Database

- Internal database for certification documents
- Missing documents
- For the options
 - Retrieve the number for the signature
 - Valid / Obsolete
 - Suppression of the version with the product

4. Tools

Subtitle example in one line



PDM - Windchill

- Documentation
- Bill of material
- Modification request



Calliper

- Visual Inspection

(support@Schneider)

PLM

- Request for the access

5. Problems / Solutions

Subtitle example in one line



WEEE

- Waste Electrical and Electronic Equipment
- There is no independent electrical function

Visual test

- No access to lab
- Software test

Reference	Board radical	Designation
VW3A3601		
VW3A3607		
VW3A3609		
VW3A3616	AAV75377	RS3 OPTION BOOK PCB
VW3A3619		
VW3A3627		
VW3A3725		
VW3A3600	EAV79779	ATV320 OPTION ADAPTER PCB
VW3A3608	0000013915051	DCX3_M3110.00_CANMOTION_4-NU PCB
VW3A3618	0000013915049	DCX3_M3110.00_CANOPEN_4-NU PCB

Test plan

- Workload too heavy
- Reduced by grouping the PCB (Printed Circuit Board)

Problems /Solution

- VW3A3628
 - Not our responsibility
 - To take back from the Declaration of conformity
- Test reports
 - Missing / Plan de tests
- Directives

Conclusion

- Personal
 - Organisation
 - Curiosity
- Company
 - Declaration of conformity

Q&A

Life Is On



se.com

