



CERTIFICATE NUMBER 20-SG1939761-PDA

EFFECTIVE DATE 25-February-2020

EXPIRATION DATE 24-February-2025

ABS TECHNICAL OFFICE Singapore Engineering Services

CERTIFICATE OF

Product Design Assessment

This is to certify that a representative of this Bureau did, at the request of

SCHNEIDER TOSHIBA INVERTER EUROPE SAS

located at

33 RUE BLANCHET, PACY SUR EURE, FRANCE, 27120

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

Product Frequency Converter

Model ATV6A0xxx4, ATV6A0xxx6, ATV9A0xxx4, ATV9A0xxx6, ATV6B0xxx4, ATV6B0xxx6, ATV9B0xxx4, ATV9B0xxx6, MODBUOxxx4APM, MODBUOxxx6APM where 'x' represents different power ratings

This Product Design Assessment (PDA) Certificate remains valid until 24-February-2025 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

American Bureau of Shipping

Manoraaju, Engineer/ Consultant

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010)

SCHNEIDER TOSHIBA INVERTER EUROPE SAS

33 RUE BLANCHET

PACY SUR EURE

France 27120

Telephone: +33 (0)2 32 78 16 71

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Email: frederic.roussel@schneider-electric.com

Web: schneider-electric.com

Tier: 5 - Unit Certification Required

Product: Frequency Converter

Model: ATV6A0xxxx4, ATV6A0xxxx6, ATV9A0xxxx4, ATV9A0xxxx6, ATV6B0xxxx4, ATV6B0xxxx6, ATV9B0xxxx4, ATV9B0xxxx6, MODBUOxxxx4APM, MODBUOxxxx6APM where 'x' represents different power ratings

Intended Service:

Motor Controller for use in propulsion, thrusters, pumps, cranes etc. for use on ABS classed vessels and offshore installations in accordance with the listed ABS Rules and International Standards.

Description:

The APM (Altivar Process Modular) is a modular, scalable single drives assembly, for cabinet integration by Schneider Electric qualified panel builder.

The APM-series covers a voltage range of 400V up to 690V and a power range of 75 kW up to 1200kW.

It consists of the following main components:

- a) Standard Diode-Front-End (DFE) variable speed drives with ATV600 or ATV900 control unit
- b) Active-Front-End (AFE), low-harmonic variable speed drives with ATV600 or ATV900 control unit
- c) Optional braking unit for 400V up 690V DFE and AFE variable speed drive converters.

Rating:

See attachment

Service Restriction:

1. Unit Certification is required for this product when used as:

- a) Motor controller of 100 kW (135 hp) and over motor intended for essential services (Marine Vessels Rules 4-8-1/ Table 1 & 2) or for services indicated in 4-8-3/ Table 7 as per 4-8-3/1.5 and 4-8-3/5.11 of the Marine Vessels Rules.
- b) Motor controller of 100 kW (135 hp) and over motor intended for essential services (Mobile Offshore Units Rules 4-1-1/ Table 3 & 4) or for services related to additional optional notations requested for the drilling unit as per 6-1-7/9.1.1(b) and 6-1-7/19.7 of the Mobile Offshore Units Rules.

2. The following requirement is applicable to computer-based frequency drive control system in accordance with 4-9-3 of the Marine Vessels Rules:

- a) The assigned system Category II
- b) The required evidence to be kept by the manufacturer in accordance with 4-9-3/ Table 2
- c) The tests required to be witness by ABS surveyor in accordance with 4-9-3/ Table 2

Comments:

1. The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.
2. The approval is only for hardware (power module, control unit and braking module) only.
3. Motor Controller enclosure IP/UL/NEMA rating to be based on Marine Vessel Rules 4-8-3/ Table 2, based on their installation location.
4. Each installation onboard is to be specifically approved and drawings/schematics will need to be submitted.

Notes/Drawing/Documentation:

See attachment

Terms of Validity:

This Product Design Assessment (PDA) Certificate remains valid until 24/Feb/2025 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

SCHNEIDER TOSHIBA INVERTER EUROPE SAS

33 RUE BLANCHET

PACY SUR EURE

France 27120

Telephone: +33 (0)2 32 78 16 71

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Email: frederic.roussel@schneider-electric.com

Web: schneider-electric.com

Tier: 5 - Unit Certification Required

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

STANDARDS

ABS Rules:

Rules for Conditions of Classification (2020) – 1-1-4/7.7, 1-1-A3, 1-1-A4, which covers the following:

Rules for Building and Classing Marine Vessels: 4-8-3/8, 4-9-9/13;

Rules for Conditions of Classification (2019) – Offshore Units and Structures 1-1-4/9.7, 1-1-A2, 1-1-A3, which covers the following:

Rules for Building and Classing Mobile Offshore Units: 6-1-7/12;

National:

NA

International:

IEC 61800-5-1:2007

Government:

NA


EUMED:

NA

OTHERS:

IACS UR E10 Rev.7


Altivar Process Modular standard single drives for cabinet integration

Market segments		<ul style="list-style-type: none"> Water & wastewater Oil & gas Mining, minerals & metals Food & beverage 	
			
Mounting type	Cabinet integration		
Degree of protection	IP00		
Power range for 50...60 Hz line supply	Three-phase: 400 V (kW)	110...800	
	Three-phase: 440 V (kW)	–	
	Three-phase: 480 V (HP)	110...800	
Drive	Output frequency	0.1...500 Hz	
	Control type	Asynchronous motor Synchronous motor PM (permanent magnet) motor	
Functions	Advanced functions	<ul style="list-style-type: none"> Including all the advanced features of ATV600 drives: Accurate measurement for monitoring system energy consumption (deviation < 5%) Installation energy drift detection Embedded Ethernet with direct access to system configuration and monitoring Integration of actual pump curves to optimize the system operating point Optimized pump monitoring based on actual operating point Sensorless estimated flow rate Measurements expressed in working units (e.g. m³/h, kWh/m³) Limitation of overvoltage at the motor terminals Contextual access to technical documentation through dynamic QR code Continuous and historical real-time measurements with customizable dashboards Predictive and preventive maintenance tracking functions (e.g. temperatures with PT100/1000 probe, fan monitoring) Easy setting of drive identification from 110 kW up to 800 kW (150...1100 HP) 	
	Integrated safety function	1: STO (Safe Torque Off) SIL3	
	Number of preset speeds	16	
Number of integrated I/O	Analog inputs	3: Configurable as voltage (0...10 V) or current (0-20 mA/4-20 mA), 2 of them including probes (PTC, PT100, PT1000 or KTY84)	
	Digital inputs	6: Voltage 24 V --- (positive or negative logic)	
	Digital output	–	
	Analog outputs	2: Configurable as voltage (0...10 V) or current (0-20 mA)	
	Relay outputs	3: 1 with NO/NC contacts and 2 with NO contacts	
I/O expansion modules (optional)	Safety function inputs	2: For safety function STO	
	Analog inputs	2 differential analog inputs configurable via software as voltage (0...±10 V) or current (0-20 mA/4-20 mA), or for PTC, PT100, or PT1000, 2- or 3-wire	
	Digital inputs	6: Voltage 24 V --- (positive or negative logic)	
Relay output module (optional)	Digital outputs	2: Assignable	
	Relay outputs	3: NO contacts	
Communication	Embedded	Modbus/TCP, Modbus serial link	
	Option modules	Ethernet/IP, Modbus TCP and MD-Link dual port, CANopen Daisy chain, SUB-D and screw terminal block, PROFINET, PROFIBUS DP V1, DeviceNet, BACnet MS/TP, POWERLINK	
Configuration and runtime tools	Graphic display terminal, embedded Web server, DTM (Device Type Manager), SoMove software		
Standards and certifications	86/188/EEC, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, EN/IEC 61800-3, EN/IEC 61800-5-1, IEC 61000-3-12, IEC 60721-3, IEC 61508, IEC 13849-1, TÜV certification, CE marking, cUL		
References	ATV6A0C●●Q4	ATV6A0C●●R4	ATV6A0C●●T4

Company name: SCHNEIDER TOSHIBA INVERTER EUROPE SAS (776487)
 33 RUE BLANCHET, ,PACY SUR EURE,France-27120
 Model: ATV6A0xxx4, ATV6A0xxx6, ATV9A0xxx4, ATV9A0xxx6, ATV6B0xxx4, ATV6B0xxx6, ATV9B0xxx4, ATV9B0xxx6, MODBUOxxx4APM, MODBUOxxx6APM where 'x' represents different power ratings
 Certificate No.: 20-SG1939761-PDA
 Issued date: 25 February 2020
 Expiry date: 24 February 2025
 Revision: 01

Market segments		<ul style="list-style-type: none"> Water & wastewater Oil & gas Mining, minerals & metals Food & beverage 	
			
			
Mounting type	Cabinet integration		
Degree of protection	IP00		
Power range for 50...60 Hz line supply	Three-phase: 400 V (kW)	110...800	
	Three-phase: 440 V (kW)	–	
	Three-phase: 480 V (HP)	110...800	
Drive	Output frequency	0.1...599 Hz	
	Control type	Asynchronous motor Synchronous motor PM (permanent magnet) motor	
Functions	Advanced functions	<ul style="list-style-type: none"> Including all the advanced features of ATV900 drives: Performance on motor control with an overload torque up to 180% T_n in an open or closed loop Asynchronous, synchronous, special motors: all efficiency classes, brand independent, permanent magnet motors, torque motors, conical sliding rotor, reluctance motor Embedded EtherNet/IP and Modbus TCP dual port, cybersecurity (Achilles Level 2) Smart integration in PlantStruxure and Foxboro Evo process automation systems Optimized energy efficiency, detection of energy consumption drift of the installation Adaptation to the process by dedicated functions with modular design Embedded safety functions STO SIL3 Master/slave and load sharing with drive-to-drive capability: <ul style="list-style-type: none"> torque sharing on rigid coupling torque sharing on elastic coupling Contextual access to technical documentation through dynamic QR code Continuous and historical real-time measurements with customizable dashboards Predictive maintenance (e.g. temperatures with PT100/1000 probe, fan monitoring, etc.) Easy setting of drive identification from 110 kW up to 800 kW (150...1100 HP) 	
	Integrated safety function	1: STO (Safe Torque Off) SIL3	
	Number of preset speeds	16	
Number of integrated I/O	Analog inputs	3: 2 configurable as voltage (0...10 V) or current (0-20 mA/4-20 mA), including probes (PTC, PT100, PT1000, or KTY84) and 1 configurable as (0...±10 V)	
	Digital inputs	8: Voltage 24 V --- (positive or negative logic)	
	Digital output	1: Assignable, can be used as PTO (pulse train output)	
	Analog outputs	2: Configurable as voltage (0...10 V) or current (0-20 mA)	
	Relay outputs	3: 1 with NO/NC contacts and 2 with NO contacts	
I/O expansion modules (optional)	Safety function inputs	2: For safety function STO	
	Analog inputs	2 differential analog inputs configurable via software as current (0-20 mA/4-20 mA), or for PTC, PT100 or PT1000, 2- or 3-wire	
	Digital inputs	6: Voltage 24 V --- (positive or negative logic)	
Relay output module (optional)	Digital outputs	2: Assignable	
	Relay outputs	3: NO contacts	
Communication	Embedded	EtherNet/IP, Modbus/TCP dual port, Modbus serial link	
	Option modules	CANopen Daisy chain, SUB-D and screw terminal block, PROFINET, PROFIBUS DP V1, DeviceNet, EtherCAT, POWERLINK	
Configuration and runtime tools	Graphic display terminal, embedded Web server, DTM (Device Type Manager), SoMove software		
Standards and certifications	86/188/EEC, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, EN/IEC 61800-3, EN/IEC 61800-5-1, IEC 61000-3-12, IEC 60721-3, IEC 61508, IEC 13849-1, TÜV certification, CE marking, cUL		
References	ATV9A0C●●Q4	ATV9A0C●●R4	ATV9A0C●●T4

Altivar Process Modular standard single drives for cabinet integration

Market segments		<ul style="list-style-type: none"> ■ Water & wastewater ■ Oil & gas ■ Mining, minerals & metals ■ Food & beverage 	
			
Mounting type		Cabinet integration	
Degree of protection		IP00	
Power range for 50...60 Hz line supply	Three-phase: 500 V (kW)	75...800	–
	Three-phase: 600 V (HP)	–	125...1200
	Three-phase: 690 V (kW)	–	110...1200
Drive	Output frequency	0.1...500Hz	
	Control type	Standard constant torque, variable standard torque, optimized torque mode	
Functions	Asynchronous motor	PM (permanent magnet) motor, synchronous reluctance motor	
	Synchronous motor	<p>Including all the advanced features of ATV600 drives:</p> <ul style="list-style-type: none"> ■ Accurate measurement for monitoring system energy consumption (deviation < 5%) ■ Installation energy drift detection ■ Embedded Ethernet with direct access to system configuration and monitoring ■ Integration of actual pump curves to optimize the system operating point ■ Optimized pump monitoring based on actual operating point ■ Sensorless estimated flow rate ■ Measurements expressed in working units (e.g. m³/h, kWh/m³) ■ Limitation of overvoltage at the motor terminals ■ Contextual access to technical documentation through dynamic QR code ■ Continuous and historical real-time measurements with customizable dashboards ■ Predictive and preventive maintenance tracking functions (e.g. temperatures with PT100/1000 probe, fan monitoring) Easy setting of drive identification from 75 kW up to 1200 kW (125...1200 HP)	
	Integrated safety function	1: STO (Safe Torque Off) SIL3	
	Number of preset speeds	16	
Number of integrated I/O	Analog inputs	3: Configurable as voltage (0...10 V) or current (0-20 mA/4-20 mA), 2 of them including probes (PTC, PT100, PT1000 or KTY84)	
	Digital inputs	6: Voltage 24 V --- (positive or negative logic)	
	Digital output	–	
	Analog outputs	2: Configurable as voltage (0...10 V) or current (0-20 mA)	
	Relay outputs	3: 1 with NO/NC contacts and 2 with NO contacts	
	Safety function inputs	2: For safety function STO	
I/O expansion modules (optional)	Analog inputs	2 differential analog inputs configurable via software as voltage (0...±10 V) or current (0-20 mA/4-20 mA), or for PTC, PT100, or PT1000, 2- or 3-wire	
	Digital inputs	6: Voltage 24 V --- (positive or negative logic)	
	Digital outputs	2: Assignable	
Relay output module (optional)	Relay outputs	3: NO contacts	
Communication	Embedded	Modbus/TCP, Modbus serial link	
	Option modules	Ethernet/IP, Modbus TCP and MD-Link dual port, CANopen Daisy chain, SUB-D and screw terminal block, PROFINET, PROFIBUS DP V1, DeviceNet, BACnet MS/TP, POWERLINK	
Configuration and runtime tools		Graphic display terminal, embedded Web server, DTM (Device Type Manager), SoMove software	
Standards and certifications		86/188/EEC, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, EN/IEC 61800-3, EN/IEC 61800-5-1, IEC 61000-3-12, IEC 60721-3, IEC 61508, IEC 13849-1, TÜV certification, CE marking, cUL	
References		ATV6A0●●●N6	ATV6A0●●●T6
		ATV6A0●●●Q6	

Market segments		<ul style="list-style-type: none"> ■ Water & wastewater ■ Oil & gas ■ Mining, minerals & metals ■ Food & beverage 	
		 	
Mounting type		Cabinet integration	
Degree of protection		IP00	
Power range for 50...60 Hz line supply	Three-phase: 500 V (kW)	75...800	–
	Three-phase: 600 V (HP)	–	125...1200
	Three-phase: 690 V (kW)	–	110...1200
Drive	Output frequency	0.1...599Hz	
	Control type	Standard constant torque, variable standard torque, optimized torque mode	
Functions	Asynchronous motor	PM (permanent magnet) motor, synchronous reluctance motor	
	Synchronous motor	<p>Including all the advanced features of ATV900 drives:</p> <ul style="list-style-type: none"> ■ Performance on motor control with an overload torque up to 180% T_n in an open or closed loop ■ Asynchronous, synchronous, special motors: all efficiency classes, brand independent, permanent magnet motors, torque motors, conical sliding rotor, reluctance motor ■ Embedded EtherNet/IP and Modbus TCP dual port, cybersecurity (Achilles Level 2) ■ Smart integration in PlantStruxure and Foxboro Evo process automation systems ■ Optimized energy efficiency, detection of energy consumption drift of the installation ■ Adaptation to the process by dedicated functions with modular design ■ Embedded safety functions STO SIL3 ■ Master/slave and load sharing with drive-to-drive capability: <ul style="list-style-type: none"> □ torque sharing on rigid coupling □ torque sharing on elastic coupling ■ Contextual access to technical documentation through dynamic QR code ■ Continuous and historical real-time measurements with customizable dashboards ■ Predictive maintenance (e.g. temperatures with PT100/1000 probe, fan monitoring, etc.) Easy setting of drive identification from 75 kW up to 1200 kW (125...1200 HP)	
	Integrated safety function	1: STO (Safe Torque Off) SIL3	
	Number of preset speeds	16	
Number of integrated I/O	Analog inputs	3: 2 configurable as voltage (0...10 V) or current (0-20 mA/4-20 mA), including probes (PTC, PT100, PT1000, or KTY84) and 1 configurable as (0...±10 V)	
	Digital inputs	8: Voltage 24 V --- (positive or negative logic)	
	Digital output	1: Assignable, can be used as PTO (pulse train output)	
	Analog outputs	2: Configurable as voltage (0...10 V) or current (0-20 mA)	
	Relay outputs	3: 1 with NO/NC contacts and 2 with NO contacts	
	Safety function inputs	2: For safety function STO	
I/O expansion modules (optional)	Analog inputs	2 differential analog inputs configurable via software as current (0-20 mA/4-20 mA), or for PTC, PT100 or PT1000, 2- or 3-wire	
	Digital inputs	6: Voltage 24 V --- (positive or negative logic)	
	Digital outputs	2: Assignable	
Relay output module (optional)	Relay outputs	3: NO contacts	
Communication	Embedded	EtherNet/IP, Modbus/TCP dual port, Modbus serial link	
	Option modules	CANopen Daisy chain, SUB-D and screw terminal block, PROFINET, PROFIBUS DP V1, DeviceNet, EtherCAT, POWERLINK	
Configuration and runtime tools		Graphic display terminal, embedded Web server, DTM (Device Type Manager), SoMove software	
Standards and certifications		86/188/EEC, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, EN/IEC 61800-3, EN/IEC 61800-5-1, IEC 61000-3-12, IEC 60721-3, IEC 61508, IEC 13849-1, TÜV certification, CE marking, cUL	
References		ATV9A0●●●N6	ATV9A0●●●T6
		ATV9A0●●●Q6	

Altivar Process Modular low harmonic/regen single drives for cabinet integration

Market segments

- Water & wastewater
- Oil & gas
- Mining, minerals & metals
- Food & beverage



Mounting type	Cabinet integration									
Degree of protection	IP00									
Power range for 50...60 Hz line supply	<table border="1"> <tr> <td>110...800</td> <td>–</td> <td>–</td> </tr> <tr> <td>–</td> <td>110...800</td> <td>–</td> </tr> <tr> <td>–</td> <td>–</td> <td>150...1100</td> </tr> </table>	110...800	–	–	–	110...800	–	–	–	150...1100
110...800	–	–								
–	110...800	–								
–	–	150...1100								
Drive	0.1...500 Hz									
Output frequency	0.1...500 Hz									
Control type	Asynchronous motor Synchronous motor									
Functions	<p>Advanced functions</p> <ul style="list-style-type: none"> ■ Including all the advanced features of ATV600 drives: ■ Accurate measurement for monitoring system energy consumption (deviation < 5%) ■ Installation energy drift detection ■ Embedded Ethernet with direct access to system configuration and monitoring ■ Integration of actual pump curves to optimize the system operating point ■ Optimized pump monitoring based on actual operating point ■ Sensorless estimated flow rate ■ Measurements expressed in working units (e.g. m³/h, kWh/m³) ■ Limitation of overvoltage at the motor terminals ■ Contextual access to technical documentation through dynamic QR code ■ Continuous and historical real-time measurements with customizable dashboards ■ Predictive and preventive maintenance tracking functions (e.g. temperatures with PT100/1000 probe, fan monitoring) <p>Easy setting of drive identification for Altivar Process Modular drives from 110 kW up to 800 kW (150...1100 HP)</p> <p>Integrated safety function</p> <p>Number of preset speeds</p>									
Number of integrated I/O	<p>1: STO (Safe Torque Off) SIL3</p> <p>16</p> <p>3: Configurable as voltage (0...10 V) or current (0-20 mA/4-20 mA), 2 of them including probes (PTC, PT100, PT1000 or KTY84)</p> <p>6: Voltage 24 V --- (positive or negative logic)</p> <p>2: Configurable as voltage (0...10 V) or current (0-20 mA)</p> <p>3: 1 with NO/NC contacts and 2 with NO contacts</p> <p>2: For safety function STO</p> <p>2 differential analog inputs configurable via software as voltage (0...±10 V) or current (0-20 mA/4-20 mA), or for PTC, PT100, or PT1000, 2- or 3-wire</p> <p>6: Voltage 24 V --- (positive or negative logic)</p> <p>2: Assignable</p> <p>3: NO contacts</p>									
I/O expansion modules (optional)	<p>Analog inputs</p> <p>Digital inputs</p> <p>Digital outputs</p> <p>Relay outputs</p> <p>Safety function inputs</p>									
Relay output module (optional)	<p>Relay outputs</p>									
Communication	<p>Modbus/TCP, Modbus serial link</p> <p>Ethernet/IP, Modbus TCP and MD-Link dual port, CANopen Daisy chain, SUB-D and screw terminal block, PROFINET, PROFIBUS DP V1, DeviceNet, BACnet MS/TP, POWERLINK</p>									
Configuration and runtime tools	Graphic display terminal, embedded Web server, DTM (Device Type Manager), SoMove software									
Standards and certifications	86/188/EEC, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, EN/IEC 61800-3, EN/IEC 61800-5-1, IEC 61000-3-12, IEC 60721-3, IEC 61508, IEC 13849-1, TÜV certification, CE marking, cUL									
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ATV6B0C●●Q4	ATV6B0C●●R4	ATV6B0C●●T4								

Market segments

- Water & wastewater
- Oil & gas
- Mining, minerals & metals
- Food & beverage

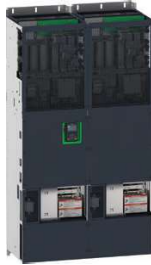


Mounting type	Cabinet integration									
Degree of protection	IP00									
Power range for 50...60 Hz line supply	<table border="1"> <tr> <td>110...800</td> <td>–</td> <td>–</td> </tr> <tr> <td>–</td> <td>110...800</td> <td>–</td> </tr> <tr> <td>–</td> <td>–</td> <td>150...1100</td> </tr> </table>	110...800	–	–	–	110...800	–	–	–	150...1100
110...800	–	–								
–	110...800	–								
–	–	150...1100								
Drive	0.1...599 Hz									
Output frequency	0.1...599 Hz									
Control type	Asynchronous motor Synchronous motor									
Functions	<p>Advanced functions</p> <ul style="list-style-type: none"> ■ Including all the advanced features of ATV900 drives: ■ Performance on motor control with an overload torque up to 180% T_n in an open or closed loop ■ Asynchronous, synchronous, special motors: all efficiency classes, brand independent, permanent magnet motors, torque motors, conical sliding rotor, reluctance motor ■ Embedded EtherNet/IP and Modbus TCP dual port, cybersecurity (Achilles Level 2) ■ Smart integration in PlantStruxure and Foxboro Evo process automation systems ■ Optimized energy efficiency, detection of energy consumption drift of the installation ■ Adaptation to the process by dedicated functions with modular design ■ Embedded safety functions STO SIL3 ■ Master/slave and load sharing with drive-to-drive capability: <ul style="list-style-type: none"> □ torque sharing on rigid coupling □ torque sharing on elastic coupling ■ Contextual access to technical documentation through dynamic QR code ■ Continuous and historical real-time measurements with customizable dashboards ■ Predictive maintenance (e.g. temperatures with PT100/1000 probe, fan monitoring, etc.) <p>Easy setting of drive identification from 75 kW up to 1200 kW (125...1200 HP)</p> <p>Integrated safety function</p> <p>Number of preset speeds</p>									
Number of integrated I/O	<p>1: STO (Safe Torque Off) SIL3</p> <p>16</p> <p>3: 2 configurable as voltage (0...10 V) or current (0-20 mA/4-20 mA), including probes (PTC, PT100, PT1000, or KTY84) and 1 configurable as (0...±10 V)</p> <p>8: Voltage 24 V --- (positive or negative logic)</p> <p>1: Assignable, can be used as PTO (pulse train output)</p> <p>2: Configurable as voltage (0...10 V) or current (0-20 mA)</p> <p>3: 1 with NO/NC contacts and 2 with NO contacts</p> <p>2: For safety function STO</p> <p>2 differential analog inputs configurable via software as current (0-20 mA/4-20 mA), or for PTC, PT100 or PT1000, 2- or 3-wire</p> <p>6: Voltage 24 V --- (positive or negative logic)</p> <p>2: Assignable</p> <p>3: NO contacts</p>									
I/O expansion modules (optional)	<p>Analog inputs</p> <p>Digital inputs</p> <p>Digital outputs</p> <p>Relay outputs</p> <p>Safety function inputs</p>									
Relay output module (optional)	<p>Relay outputs</p>									
Communication	<p>Modbus/TCP, Modbus serial link</p> <p>EtherNet/IP, Modbus TCP and MD-Link dual port, CANopen Daisy chain, SUB-D and screw terminal block, PROFINET, PROFIBUS DP V1, DeviceNet, EtherCAT, POWERLINK</p>									
Configuration and runtime tools	Graphic display terminal, embedded Web server, DTM (Device Type Manager), SoMove software									
Standards and certifications	86/188/EEC, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, EN/IEC 61800-3, EN/IEC 61800-5-1, IEC 61000-3-12, IEC 60721-3, IEC 61508, IEC 13849-1, TÜV certification, CE marking, cUL									
References	<table border="1"> <tr> <td>ATV9B0C●●Q4</td> <td>ATV9B0C●●R4</td> <td>ATV9B0C●●T4</td> </tr> </table>	ATV9B0C●●Q4	ATV9B0C●●R4	ATV9B0C●●T4						
ATV9B0C●●Q4	ATV9B0C●●R4	ATV9B0C●●T4								

Altivar Process Modular low harmonic/regen single drives for cabinet integration

Market segments

- Water & wastewater
- Oil & gas
- Mining, minerals & metals
- Food & beverage



Mounting type	Cabinet integration
Degree of protection	IP00
Power range for 50...60 Hz line supply	75...800
	Three-phase: 500 V (kW)
	Three-phase: 600 V (HP)
	Three-phase: 690 V (kW)
Drive	Output frequency
	Control type
	Asynchronous motor
	Synchronous motor
Functions	Advanced functions
	Integrated safety function
	Number of preset speeds
Number of integrated I/O	Analog inputs
	Digital inputs
	Digital output
	Analog outputs
	Relay outputs
	Safety function inputs
I/O expansion modules (optional)	Analog inputs
	Digital inputs
	Digital outputs
Relay output module (optional)	Relay outputs
Communication	Embedded
	Option modules
Configuration and runtime tools	
Standards and certifications	
References	

Cabinet integration		
IP00		
75...800	–	
–	125...1200	–
–		110...1200
0.1...500Hz		
Standard constant torque, variable standard torque, optimized torque mode		
PM (permanent magnet) motor, synchronous reluctance motor		
Including all the advanced features of ATV600 drives:		
■ Accurate measurement for monitoring system energy consumption (deviation < 5%)		
■ Installation energy drift detection		
■ Embedded Ethernet with direct access to system configuration and monitoring		
■ Integration of actual pump curves to optimize the system operating point		
■ Optimized pump monitoring based on actual operating point		
■ Sensorless estimated flow rate		
■ Measurements expressed in working units (e.g. m ³ /h, kWh/m ³)		
■ Limitation of overvoltage at the motor terminals		
■ Contextual access to technical documentation through dynamic QR code		
■ Continuous and historical real-time measurements with customizable dashboards		
■ Predictive and preventive maintenance tracking functions (e.g. temperatures with PT100/1000 probe, fan monitoring)		
Easy setting of drive identification from 75 kW up to 1200 kW (125...1200 HP)		
1: STO (Safe Torque Off) SIL3		
16		
3: Configurable as voltage (0...10 V) or current (0-20 mA/4-20 mA), 2 of them including probes (PTC, PT100, PT1000 or KTY84)		
6: Voltage 24 V --- (positive or negative logic)		
–		
2: Configurable as voltage (0...10 V) or current (0-20 mA)		
3: 1 with NO/NC contacts and 2 with NO contacts		
2: For safety function STO		
2 differential analog inputs configurable via software as voltage (0...±10 V) or current (0-20 mA/ 4-20 mA), or for PTC, PT100, or PT1000, 2- or 3-wire		
6: Voltage 24 V --- (positive or negative logic)		
2: Assignable		
3: NO contacts		
Modbus/TCP, Modbus serial link		
Ethernet/IP, Modbus TCP and MD-Link dual port, CANopen Daisy chain, SUB-D and screw terminal block, PROFINET, PROFIBUS DP V1, DeviceNet, BACnet MS/TP, POWERLINK		
Graphic display terminal, embedded Web server, DTM (Device Type Manager), SoMove software		
86/188/IEC, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, EN/IEC 61800-3, EN/IEC 61800-5-1, IEC 61000-3-12, IEC 60721-3, IEC 61508, IEC 13849-1, TÜV certification, C€ marking, cUL		
ATV6B0●●●N6	ATV6B0●●●T6	ATV6B0●●●Q6

Market segments

- Water & wastewater
- Oil & gas
- Mining, minerals & metals
- Food & beverage



Cabinet integration		
IP00		
75...800	–	
–	125...1200	–
–		110...1200
0.1...599Hz		
Standard constant torque, variable standard torque, optimized torque mode		
PM (permanent magnet) motor, synchronous reluctance motor		
Including all the advanced features of ATV900 drives:		
■ Performance on motor control with an overload torque up to 180% Tn in an open or closed loop		
■ Asynchronous, synchronous, special motors: all efficiency classes, brand independent, permanent magnet motors, torque motors, conical sliding rotor, reluctance motor		
■ Embedded EtherNet/IP and Modbus TCP dual port, cybersecurity (Achilles Level 2)		
■ Smart integration in PlantStruxure and Foxboro Evo process automation systems		
■ Optimized energy efficiency, detection of energy consumption drift of the installation		
■ Adaptation to the process by dedicated functions with modular design		
■ Embedded safety functions STO SIL3		
■ Master/slave and load sharing with drive-to-drive capability:		
□ torque sharing on rigid coupling		
□ torque sharing on elastic coupling		
■ Contextual access to technical documentation through dynamic QR code		
■ Continuous and historical real-time measurements with customizable dashboards		
■ Predictive maintenance (e.g. temperatures with PT100/1000 probe, fan monitoring, etc.)		
Easy setting of drive identification from 75 kW up to 1200 kW (125...1200 HP)		
1: STO (Safe Torque Off) SIL3		
16		
3: 2 configurable as voltage (0...10 V) or current (0-20 mA/4-20 mA), including probes (PTC, PT100, PT1000, or KTY84) and 1 configurable as (0...±10 V)		
8: Voltage 24 V --- (positive or negative logic)		
1: Assignable, can be used as PTO (pulse train output)		
2: Configurable as voltage (0...10 V) or current (0-20 mA)		
3: 1 with NO/NC contacts and 2 with NO contacts		
2: For safety function STO		
2 differential analog inputs configurable via software as current (0-20 mA/ 4-20 mA), or for PTC, PT100 or PT1000, 2- or 3-wire		
6: Voltage 24 V --- (positive or negative logic)		
2: Assignable		
3: NO contacts		
EtherNet/IP, Modbus/TCP dual port, Modbus serial link		
CANopen Daisy chain, SUB-D and screw terminal block, PROFINET, PROFIBUS DP V1, DeviceNet, EtherCAT, POWERLINK		
Graphic display terminal, embedded Web server, DTM (Device Type Manager), SoMove software		
86/188/IEC, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, EN/IEC 61800-3, EN/IEC 61800-5-1, IEC 61000-3-12, IEC 60721-3, IEC 61508, IEC 13849-1, TÜV certification, C€ marking, cUL		
ATV9B0●●●N6	ATV9B0●●●T6	ATV9B0●●●Q6

Specification of Optional Braking Unit and Braking Resistors

380...480 V

Braking unit MODBUO	C16•4APM	C31•4APM	C50•4APM	C63•4APM	C80•4APM
Braking voltage					
Braking voltage VBR	780 Vdc	780 Vdc	780 Vdc	780 Vdc	780 Vdc
Max. DC link voltage	820 Vdc	820 Vdc	820 Vdc	820 Vdc	820 Vdc
Braking power					
12 s / 240 s (= 5 %)	198 kW	375 kW	600 kW	750 kW	945 kW
120 s / 240 s (= 50 %)	116.16 kW	220 kW	352 kW	440 kW	554.40 kW
Continuous (= 100 %)	75 kW	130 kW	225 kW	260 kW	355 kW
Maximum rms current / phase output					
During braking phase (1)	85 A	161 A	247 A	161 A	247 A
Over whole braking sequence (1)	62 A	115 A	176 A	115 A	176 A
For continuous operation	69 A	125 A	198 A	125 A	198 A
Braking resistor					
Minimum (2)	3 x 6.7 Ω	3 x 3.35 Ω	3 x 2.23 Ω	6 x 3.35 Ω	6 x 2.68 Ω or 3 x 2.23 Ω + 3 x 3.35 Ω
Maximum (3)	3 x 8.2 Ω	3 x 4.1 Ω	3 x 2.7 Ω	6 x 4.1 Ω	6 x 3.35 Ω or 3 x 2.7 Ω + 3 x 4.1 Ω
(1) Values are related to a load cycle of 120 s / 240 s (= 50 %).					
(2) Minimum nominal value of the braking resistor. A tolerance of -10 % is allowed.					
(3) Maximum nominal value of the braking resistor. A tolerance of +10 % is allowed.					

500...690 V

Braking unit MODBUO	C20•6APM	C40•6APM	C63•6APM	C80•6APM	M10•4APM	M12•6APM
Braking voltage						
Braking voltage VBR	1,130 Vdc	1,130 Vdc	1,130 Vdc	1,130 Vdc	1,130 Vdc	1,130 Vdc
Max. DC link voltage	1,250 Vdc	1,250 Vdc	1,250 Vdc	1,250 Vdc	1,250 Vdc	1,250 Vdc
Braking power						
12 s / 240 s (= 5 %)	240 kW	472.5 kW	750 kW	945 kW	1,200 kW	1,500 kW
120 s / 240 s (= 50 %)	140.8 kW	277.2 kW	440 kW	554.4 kW	704 kW	785 kW
Continuous (= 100 %)	85 kW	165 kW	285 kW	330 kW	450 kW	550 kW
Maximum rms current / phase output						
During braking phase (1)	74 A	142 A	216 A	142 A	216 A	204 A
Over whole braking sequence (1)	54 A	102 A	154 A	102 A	154 A	146 A
For continuous operation	58 A	110 A	175 A	110 A	175 A	172 A
Braking resistor						
Minimum (2)	3 x 11 Ω	3 x 5.5 Ω	3 x 3.67 Ω	6 x 5.5 Ω	6 x 4.4 Ω or 3 x 3.67 Ω + 3 x 5.5 Ω	6 x 3.67 Ω
Maximum (3)	3 x 13.75 Ω	3 x 6.88 Ω	3 x 4.4 Ω	6 x 6.88 Ω	6 x 5.5 Ω or 3 x 4.4 Ω + 3 x 6.88 Ω	6 x 4.4 Ω
(1) Values are related to a load cycle of 120 s / 240 s (= 50 %).						
(2) Minimum nominal value of the braking resistor. A tolerance of -10 % is allowed.						
(3) Maximum nominal value of the braking resistor. A tolerance of +10 % is allowed.						

Notes, Drawings, and Documentation :

Test Reports:

Report No.C3687, Test: Clearance and creepage distances per IEC 61800-5-1 Ed.2 / 5.2.2.1 by Schneider Electric Power Drives GmbH, Dated: 02-May-2019, Revision: 0, Pages: 9

Report No.C3624, Test: Non-accessibility per IEC 60529/ 13.2 by Schneider Electric Power Drives GmbH, Dated: 29-Apr-2019, Revision: 0, Pages: 9

Report No.C3638, Test: Ground continuity protective bounding per IEC 61800-5-1 Ed.2 / 5.2.3.9 by Schneider Electric Power Drives GmbH, Dated: 04-Mar-2019, Revision: 0, Pages: 7

Report No.C3749, Test: Label Check per - by Schneider Electric Power Drives GmbH, Dated: 06-Aug-2019, Revision: 0, Pages: 8

Report No.FP17195, Test: Capacitor discharge per STI No. 2.1.05 by Schneider Electric Power Drives GmbH, Dated: 19-Dec-2014, Revision: 0, Pages: 6

Report No.C3731, Test: Voltage and frequency deviations for marine per DNVGL-CG-0339 2016 Sec. 3, Chapter 5 by Schneider Electric Power Drives GmbH, Dated: 10-Jul-2019, Revision: 0, Pages: 12

Report No.C3730, Test: Electrical power supply failure test per DNVGL-CG-0339 2016 Sec. 3, Chapter 4 by Schneider Electric Power Drives GmbH, Dated: 10-Jul-2019, Revision: 0, Pages: 7

Report No.C3632, Test: Electrostatic discharge per DNVGL-CG-0339 2016 Chapter 14.9 by Schneider Electric Power Drives GmbH, Dated: 20-Feb-2019, Revision: 0, Pages: 13

Report No.C3677, Test: Surge 1,2/50µs, 8/20µs- Surge Power per STI No. 5.2.04 Rev.10 by Schneider Electric Power Drives GmbH, Dated: 18-Mar-2019, Revision: 0, Pages: 11

Report No.C3676, Test: Surge 1,2/50µs, 8/20µs- Surge Control per STI No. 5.2.04 Rev.10 by Schneider Electric Power Drives GmbH, Dated: 18-Mar-2019, Revision: 0, Pages: 9

Report No.TGM-VA EE 38007 EMC, Test: EMC Test per CISPR 11/ IEC 61000-4-x by TGM Technologisches Gewerbemuseum, Dated: 10-Apr-2019, Revision: -, Pages: 42

Report No.SGP-09636-020-03, Test: Short-circuit test 100kA/480V per - by Austrian Institute of Technology, Dated: 07-Dec-2018, Revision: -, Pages: 12

Report No.C2827, Test: Clearance and creepage distances per IEC 61800-5-1 Ed.2 / 5.2.2.1 by Schneider Electric Power Drives GmbH, Dated: 03-May-2019, Revision: 3, Pages: 17

Report No.C3634, Test: Ground continuity protective bounding per IEC 61800-5-1 Ed.2 / 5.2.3.9 by Schneider Electric Power Drives GmbH, Dated: 25-Feb-2019, Revision: 0, Pages: 6

Report No.FP17477, Test: Capacitor discharge per STI No. 2.1.05 by Schneider Electric Power Drives GmbH, Dated: 20-Jul-2015, Revision: 0, Pages: 5

Report No.C3650, Test: Electrostatic discharge per STI NO. 5.2.02 by Schneider Electric Power Drives GmbH, Dated: 25-Mar-2019, Revision: 0, Pages: 14

Report No.C3651, Test: Surge 1,2/50µs, 8/20µs- Surge Power per STI No. 5.2.04 Rev.10 by Schneider Electric Power Drives GmbH, Dated: 25-Mar-2019, Revision: 0, Pages: 12

Report No.C3652, Test: Surge 1,2/50µs, 8/20µs- Surge Control per STI No. 5.2.04 Rev.10 by Schneider Electric Power Drives GmbH, Dated: 26-Mar-2019, Revision: 0, Pages: 10

Report No.TGM-VA EE 38006 EMC, Test: EMC Test per CISPR 11/ IEC 61000-4-x by TGM Technologisches Gewerbemuseum, Dated: 10-Apr-2019, Revision: -, Pages: 36

Report No.C3655, Test: Visual Inspection per IEC 61800-5-1/ 5.2.1 by Schneider Electric Power Drives GmbH, Dated: 28-Mar-2019, Revision: 0, Pages: 8

Report No.C3633, Test: Non-accessibility per IEC 60529/ 13.2 by Schneider Electric Power Drives GmbH, Dated: 21-Feb-2019, Revision: 0, Pages: 8

Report No.C2713, Test: Non-accessibility per IEC 60529/ 13.2 by Schneider Electric Power Drives GmbH, Dated: 24-Apr-2018, Revision: 0, Pages: 9

Report No.C2723, Test: Ground continuity protective bounding per IEC 61800-5-1 Ed.2 / 5.2.3.9 by Schneider Electric Power Drives GmbH, Dated: 26-Apr-2018, Revision: 0, Pages: 6

Report No.C3547, Test: Deformation per IEC 61800-5-1 Ed.2/ 5.2.2.5.2 by Schneider Electric Power Drives GmbH, Dated: 14-Sep-2018, Revision: 0, Pages: 4

Report No.C3781, Test: Vibration for Marine per IEC 60068-2-6 by Schneider Electric Power Drives GmbH, Dated: 30-Oct-2019, Revision: 0, Pages: 10

Report No.C3647, Test: Marking per IEC 61800-5-1 Ed.2/ Chapter 6 by Schneider Electric Power Drives GmbH, Dated: 25-Mar-2019, Revision: 0, Pages: 10

Report No.C3668, Test: Labels per - by Schneider Electric Power Drives GmbH, Dated: 20-Feb-2019, Revision: 0, Pages: 13

Report No.C2736, Test: Capacitor discharge per STI No. 2.1.05 by Schneider Electric Power Drives GmbH, Dated: 02-May-2018, Revision: 0, Pages: 9

Report No.C3755, Test: Voltage deviations, dips & short interruptions per IEC 61800-5-2/ Table E.1 by Schneider Electric Power Drives GmbH, Dated: 23-Jul-2019, Revision: 0, Pages: 16

Report No.C3810, Test: Voltage and frequency deviations for marine per DNVGL-CG-0339 2016 Sec. 3, Chapter 5 by Schneider Electric Power Drives GmbH, Dated: 08-Oct-2019, Revision: 0, Pages: 12

Report No.C3812, Test: Electrical power supply failure test per DNVGL-CG-0339 2016 Sec. 3, Chapter 4 by Schneider Electric Power Drives GmbH, Dated: 09-Oct-2019, Revision: 0, Pages: 7

Report No.C3549, Test: Harmonics and interharmonics per IEC 61000-3-2:2014-05 by Schneider Electric Power Drives GmbH, Dated: 12-Nov-2019, Revision: 0, Pages: 5

Report No.ATV630_LTR_14069, Test: Partial discharge per IEC 61800-5-1 Chapter 5.2.3.3 by Schneider Electric Toshiba, Dated: 24-Jun-2014, Revision: 0, Pages: 2

Report No.SGP-09636-002-02-#01, Test: Insulation Test per IEC 60664-1/ 6.1.2.2.1 by Austrian Institute of Technology, Dated: 30-Jul-2018, Revision: 0, Pages: 11

Report No.C2631, Test: Impulse Noise Test (Power) per STI No. 5.2.01.1 by Schneider Electric Power Drives GmbH, Dated: 05-Apr-2018, Revision: 0, Pages: 11

Report No.C2637, Test: Electrostatic discharge per STI NO. 5.2.02 by Schneider Electric Power Drives GmbH, Dated: 06-Apr-2018, Revision: 0, Pages: 11

Report No.C2648, Test: Surge 1,2/50µs, 8/20µs- Surge Power per STI No. 5.2.04 Rev.10 by Schneider Electric Power Drives GmbH, Dated: 10-Apr-2018, Revision: 0, Pages: 13

Report No.C2649, Test: Surge 1,2/50µs, 8/20µs- Surge Control per STI No. 5.2.04 Rev.10 by Schneider Electric Power Drives GmbH, Dated: 10-Apr-2018, Revision: 0, Pages: 11

Report No.C3191, Test: AC or DC voltage dielectric per STI test procedure 2-1-02 by Schneider Electric Power Drives GmbH, Dated: 23-Aug-2018, Revision: 0, Pages: 21

Report No.TGM -VA EE 37725a EMC, Test: EMC Test per CISPR 11/ IEC 61000-4-x by TGM Technologisches Gewerbemuseum, Dated: 07-Aug-2018, Revision: -, Pages: 12

Report No.No2018-0136304, Test: IP Test per IEC 60529 by Institute for International Product Safety GmbH, Dated: 25-Oct-2018, Revision: 0, Pages: 14

Report No.1E32446M1, Test: VIBRATION TESTS ON DRIVE per IEC 60068-2-64 Test Fh by SOPEMEA, Dated: 26-Jul-2019, Revision: 0, Pages: 97

Report No.C3245, Test: Impulse Voltage per STI test procedure 2-1-01 by Schneider Electric Power Drives GmbH, Dated: 13-Sep-2018, Revision: 0, Pages: 24

Report No.C3191, Test: AC or DC voltage dielectric per STI test procedure 2-1-02 by Schneider Electric Power Drives GmbH, Dated: 23-Aug-2018, Revision: 0, Pages: 21

Report No.TGM -VA EE 37725 EMC, Test: EMC Test per CISPR 11/ IEC 61000-4-x by TGM Technologisches Gewerbemuseum, Dated: 07-Aug-2018, Revision: 0, Pages: 37

Report No.E116875, Test: POWER CONVERSION EQUIPMENT and SOLID STATE AC MOTOR CONTROLLERS per UL 61800-5-1 by UL, Dated: -, Revision: -, Pages: -

Report No.C3669, Test: Non-accessibility per IEC 60529/ 13.2 by Schneider Electric Power Drives GmbH, Dated: 12-Apr-2019, Revision: 0, Pages: 9
Report No.C3657, Test: Ground continuity protective bounding per IEC 61800-5-1 Ed.2 / 5.2.3.9 by Schneider Electric Power Drives GmbH, Dated: 01-Apr-2019, Revision: 0, Pages: 7
Report No.C3658, Test: Electrostatic discharge per STI NO. 5.2.02 by Schneider Electric Power Drives GmbH, Dated: 01-Apr-2019, Revision: 0, Pages: 17
Report No.C3683, Test: Surge 1,2/50µs, 8/20µs- Surge Power & Surge Control per STI No. 5.2.04 Rev.10 by Schneider Electric Power Drives GmbH, Dated: 23-Apr-2019, Revision: 0, Pages: 15
Report No.TGM - VA EE 38082 EMC, Test: EMC Test per CISPR 11/ IEC 61000-4-x by TGM Technologisches Gewerbemuseum, Dated: 10-Jun-2019, Revision: 0, Pages: 48
Report No.C729, Test: Capacitor discharge per STI No. 2.1.05 by Schneider Electric Power Drives GmbH, Dated: 19-Sep-2019, Revision: 1, Pages: 7
Report No.C2812, Test: Visual Inspection per IEC 61800-5-1 Ed 2 Chapter 5.2.1 by Schneider Electric Power Drives GmbH, Dated: 19-Jun-2018, Revision: 0, Pages: 9
Report No.C2232, Test: Clearance and creepage distances per IEC 61800-5-1 Ed.2 / 5.2.2.1 by Schneider Electric Power Drives GmbH, Dated: 29-Jan-2018, Revision: 0, Pages: 11
Report No.C1885, Test: Non-accessibility / Enclosure integrity per UL61800-5-1:2015-03 by Schneider Electric Power Drives GmbH, Dated: 29-Nov-2019, Revision: 3, Pages: 7
Report No.C1758, Test: Ground continuity protective bounding per IEC 61800-5-1 Ed.2 / 5.2.3.9 by Schneider Electric Power Drives GmbH, Dated: 04-Oct-2017, Revision: 0, Pages: 6
Report No.C3782, Test: Vibration for Marine per DNV2.4 April 2006 Chapter 3.6 by Schneider Electric Power Drives GmbH, Dated: 24-Oct-2019, Revision: 0, Pages: 9
Report No.FP17289, Test: Partial discharge per STI No. 2.1.03 by Schneider Electric Power Drives GmbH, Dated: -, Revision: 0, Pages: 10
Report No.C2814, Test: Insulation resistance per DNV2.4 April 2006 Chapter 3.12 by Schneider Electric Power Drives GmbH, Dated: 18-Jun-2018, Revision: 0, Pages: 4
Report No.FP17219, Test: Capacitor discharge per STI No. 2.1.05 by Schneider Electric Power Drives GmbH, Dated: 27-Jan-2015, Revision: 0, Pages: 7
Report No.FP17128, Test: Breakdown of component (DC-Capacitors) per IEC 61800-5-1 Ed 2 Chapter 5.2.3.6.4 by Schneider Electric Power Drives GmbH, Dated: 04-Nov-2014, Revision: 0, Pages: 13
Report No.C1777, Test: Electrostatic discharge per STI NO. 5.2.02 by Schneider Electric Power Drives GmbH, Dated: 09-Oct-2017, Revision: 0, Pages: 11
Report No.C2230, Test: Surge 1,2/50µs, 8/20µs- Surge Power per STI No. 5.2.04 Rev.10 by Schneider Electric Power Drives GmbH, Dated: 26-Jan-2018, Revision: 0, Pages: 10
Report No.C2231, Test: Surge 1,2/50µs, 8/20µs- Surge Control per STI No. 5.2.04 Rev.10 by Schneider Electric Power Drives GmbH, Dated: 26-Jan-2018, Revision: 0, Pages: 11
Report No.SGP-09363-002-01, Test: Insulation Test per IEC 60664-1/ 6.1.2.2.1 by Austrian Institute of Technology, Dated: 17-Jan-2018, Revision: 0, Pages: 8
Report No.C2520, Test: Voltage deviations, dips & short interruptions per IEC61800-3 Ed2 chapter 5.2.3 and IEC61326-3-2 Ed01 Chapter 7 by Schneider Electric Power Drives GmbH, Dated: 28-Nov-2017, Revision: 0, Pages: 14
Report No.C2536, Test: Voltage unbalance & Frequency variations IEC per IEC61800-3 Ed2 chapter 5.2.4 by Schneider Electric Power Drives GmbH, Dated: 15-Mar-2018, Revision: 0, Pages: 9
Report No.FP16855, Test: 4.2.01 - Dry Heat Storage & 4.2.02 - Damp Heat per by Schneider Electric Power Drives GmbH, Dated: 11-Aug-2014, Revision: 0, Pages: 15
Report No.FP17035, Test: Short circuit power outputs standard fault currents per STI No. 2.2.01 by Schneider Electric Power Drives GmbH, Dated: 09-Aug-2014, Revision: 0, Pages: 6
Report No.C2554, Test: 1.03.1-A Deflection for IEC per IEC61800-3 Ed2 chapter 5.2.2.5.2 by Schneider Electric Power Drives GmbH, Dated: 26-Mar-2018, Revision: 0, Pages: 4
Report No.FP17195, Test: Capacitor discharge per STI No. 2.1.05 by Schneider Electric Power Drives GmbH, Dated: 19-Dec-2014, Revision: 0, Pages: 6
Report No.FP17315, Test: Short circuit power outputs standard fault currents per STI No. 2.2.01 by Schneider Electric Power Drives GmbH, Dated: 07-Apr-2015, Revision: 0, Pages: 6
Report No.C2849, Test: Harmonics and interharmonics per IEC 61000-3-2:2014-05 by Schneider Electric Power Drives GmbH, Dated: 12-Nov-2019, Revision: 0, Pages: 6
"Report No.C2405, Test: NERA FW Validation Release Report
APM 400V STD per Performance Test by Schneider Electric Power Drives GmbH, Dated: 06-Apr-2018, Revision: 0, Pages: 8"
"Report No.C2406, Test: NERA FW Validation Release Report
APM 400V STD per Performance Test by Schneider Electric Power Drives GmbH, Dated: 06-Apr-2018, Revision: 0, Pages: 8"

Drawings:

Product Catalog for ATV600 and ATV900 drives, Pages: 71
Document No. MFR77831, Altivar Process Modular Optional Braking Unit Integration Manual, Pages: 96
Document No. PHA2452602, Altivar Process Modular Low Harmonic / Regen Integration Manual, Pages 165