

Altivar Process ATV6100

Variable Speed Drives

Handbook

BRU16010.04

03/2025



Legal Information

The information provided in this document contains general descriptions, technical characteristics and/or recommendations related to products/solutions.

This document is not intended as a substitute for a detailed study or operational and site-specific development or schematic plan. It is not to be used for determining suitability or reliability of the products/solutions for specific user applications. It is the duty of any such user to perform or have any professional expert of its choice (integrator, specifier or the like) perform the appropriate and comprehensive risk analysis, evaluation and testing of the products/solutions with respect to the relevant specific application or use thereof.

The Schneider Electric brand and any trademarks of Schneider Electric SE and its subsidiaries referred to in this document are the property of Schneider Electric SE or its subsidiaries. All other brands may be trademarks of their respective owner.

This document and its content are protected under applicable copyright laws and provided for informative use only. No part of this document may be reproduced or transmitted in any form or by any means (electronic, mechanical, photocopying, recording, or otherwise), for any purpose, without the prior written permission of Schneider Electric.

Schneider Electric does not grant any right or license for commercial use of the document or its content, except for a non-exclusive and personal license to consult it on an "as is" basis.

Schneider Electric reserves the right to make changes or updates with respect to or in the content of this document or the format thereof, at any time without notice.

To the extent permitted by applicable law, no responsibility or liability is assumed by Schneider Electric and its subsidiaries for any errors or omissions in the informational content of this document, as well as any non-intended use or misuse of the content thereof.

Table of Contents

Safety Information.....	5
Qualification Of Personnel.....	6
Intended Use.....	6
Product Related Information	6
About the Book.....	9
Drive System	12
Overview	12
Presentation.....	16
ATV6100 - Your Medium Voltage Drive for an efficient operation.....	16
Benefits.....	16
Applications.....	19
Standards and regulations	21
Drive topology	22
Device basic information	23
Control features.....	25
Key functions.....	26
Selection and ordering data	27
Type designation	27
Selection and ordering data.....	28
General Specification	35
General Technical Data.....	35
ATV6100 Drive System I/O Interface Diagram.....	37
I/O Interface Diagram (Standard Configuration)	37
Technical Data.....	38
Output Voltage 6 kV	38
ATV6100D445A6060...ATV6100D870A6060	38
ATV6100C100A6060...ATV6100C200A6060	41
ATV6100C225A6060...ATV6100C261A6060	45
ATV6100C280A6060	47
ATV6100C350A6060...ATV6100C419A6060	48
ATV6100C500A6060...ATV6100C600A6060	50
Output Voltage 6.6 kV	52
ATV6100D394A6666...ATV6100D950A6666	52
ATV6100C113A6666...ATV6100C221A6666.....	56
ATV6100C251A6666...ATV6100C286A6666	60
ATV6100C335A6666	62
ATV6100C389A6666...C471A6666	63
ATV6100C555A6666...ATV6100C669A6666	65
Output Voltage 6 kV	67
Output Voltage 6.6 kV	69
Layout drawing for all frame sizes	72
Layout drawing for size 1 & size 2 (front access).....	72
Layout drawing for size 3 to size 5 (front & rear access)	73
Options	74
Available Options	74
Communication Buses and Networks.....	76
Output Filters	77

Power Supply	78
Wiring	79
Environment and General Technical Data	82
Cabinet and Transformer.....	83
Harsh Environment.....	84
Guarding Options	85
Customization	88

Safety Information

Important Information

Read these instructions carefully, and look at the equipment to become familiar with the device before trying to install, operate, service, or maintain it. The following special messages may appear throughout this documentation or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.



The addition of this symbol to a “Danger” or “Warning” safety label indicates that an electrical hazard exists which will result in personal injury if the instructions are not followed.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

DANGER

DANGER indicates a hazardous situation which, if not avoided, **will result in** death or serious injury.

WARNING

WARNING indicates a hazardous situation which, if not avoided, **could result in** death or serious injury.

CAUTION

CAUTION indicates a hazardous situation which, if not avoided, **could result in** minor or moderate injury.

NOTICE

NOTICE is used to address practices not related to physical injury.

Please Note

Electrical equipment should be installed, operated, serviced, and maintained only by qualified personnel. No responsibility is assumed by Schneider Electric for any consequences arising out of the use of this material.

A qualified person is one who has skills and knowledge related to the construction and operation of electrical equipment and its installation, and has received safety training to recognize and avoid the hazards involved.

Qualification Of Personnel

Only appropriately trained persons who are familiar with and understand the contents of this manual and all other pertinent product documentation are authorized to work on and with this product. In addition, these persons must have received safety training to recognize and avoid hazards involved. These persons must have sufficient technical training, knowledge and experience and be able to foresee and detect potential hazards that may be caused by using the product, by changing the settings and by the mechanical, electrical and electronic equipment of the entire system in which the product is used. All persons working on and with the product must be fully familiar with all applicable standards, directives, and accident prevention regulations when performing such work.

Intended Use

This product is a drive for three-phase synchronous, asynchronous motors and intended for industrial use according to this manual.

The product may only be used in compliance with all applicable safety standard and local regulations and directives, the specified requirements and the technical data. The product must be installed outside the hazardous ATEX zone. Prior to using the product, you must perform a risk assessment in view of the planned application. Based on the results, the appropriate safety measures must be implemented. Since the product is used as a component in an entire system, you must ensure the safety of persons by means of the design of this entire system (for example, machine design). Any use other than the use explicitly permitted is prohibited and can result in hazards.

Product Related Information

Read and understand these instructions before performing any procedure with this drive.

DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH

Before performing work on the drive system:

- Follow the instructions given in the section "Complete drive system power Off procedure" of the installation manual.

Before applying voltage to the drive system:

- Verify that the work has been completed and that the entire installation cannot cause hazards.
- Remove the ground and the short circuits on the mains input terminals and the motor output terminals.
- Verify proper grounding of all equipment.
- Verify that all protective equipment such as covers, doors, grids is installed and/or closed.

Failure to follow these instructions will result in death or serious injury.

⚠ ⚠ DANGER**HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH**

- Only appropriately trained persons who are familiar with and fully understand the contents of the present manual and all other pertinent product documentation and who have received all necessary training to recognize and avoid hazards involved are authorized to work on and with this drive system.
- Installation, adjustment, repair and maintenance must be performed by qualified personnel.
- Verify compliance with all local and national electrical code requirements as well as all other applicable regulations with respect to grounding of all equipment.
- Only use properly rated, electrically insulated tools and measuring equipment.
- Do not touch unshielded components or terminals with voltage present.
- Prior to performing any type of work on the drive system, block the motor shaft to prevent rotation.
- Insulate both ends of unused conductors of the motor cable
- Do not create short circuits across the DC bus terminals or the DC bus capacitors.

Failure to follow these instructions will result in death or serious injury.

Damaged products or accessories may cause electric shock or unanticipated equipment operation.

⚠ ⚠ DANGER**ELECTRIC SHOCK OR UNANTICIPATED EQUIPMENT OPERATION**

Do not use damaged products or accessories.

Failure to follow these instructions will result in death or serious injury.

Contact your local Schneider Electric sales office if you detect any damage whatsoever.

This equipment has been designed to operate outside of any hazardous location. Only install this equipment in zones known to be free of a hazardous atmosphere.

⚠ DANGER**POTENTIAL FOR EXPLOSION**

Install and use this equipment in non-hazardous locations only.

Failure to follow these instructions will result in death or serious injury.

Product may perform unexpected movements because of incorrect wiring, incorrect settings, incorrect data or other errors.

⚠ WARNING**UNANTICIPATED EQUIPMENT OPERATION**

- Carefully install the wiring in accordance with the EMC requirements.
- Do not operate the product with unknown or unsuitable settings or data.
- Perform a comprehensive commissioning test.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

⚠ WARNING**LOSS OF CONTROL**

- The designer of any control scheme must consider the potential failure modes of control paths and, for critical control functions, provide a means to achieve a safe state during and after a path failure. Examples of critical control functions are emergency stop, overtravel stop, power outage and restart.
- Separate or redundant control paths must be provided for critical control functions.
- System control paths may include communication links. Consideration must be given to the implications of unanticipated transmission delays or failures of the link.
- Observe all accident prevention regulations and local safety guidelines (1).
- Each implementation of the product must be individually and thoroughly tested for proper operation before being placed into service.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

(1) For USA: Additional information, refer to NEMA ICS 1.1 (latest edition), Safety Guidelines for the Application, Installation, and Maintenance of Solid State Control and to NEMA ICS 7.1 (latest edition), Safety Standards for Construction and Guide for Selection, Installation and Operation of Adjustable-Speed Drive Systems.

⚠ WARNING**LOSS OF CONTROL**

Perform a comprehensive commissioning test to verify that communication monitoring properly detects communication interruptions.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

NOTICE**DESTRUCTION DUE TO INCORRECT MAINS VOLTAGE**

Before switching on and configuring the product, verify that it is approved for the mains voltage.

Failure to follow these instructions can result in equipment damage.

About the Book

Document Scope

This document gives you an overview of the available Altivar Process Drive Systems.

Furthermore, you can select from the options described in detail in order to adapt the Altivar Process Drive System to the actual requirements of your system.

Validity Note

The information in this manual is merely informative and maybe subject to modification.

Original instructions and information given in this manual have been written in English (before optional translation).

All pictures shown are for 3D illustration purpose only. Depending on the product chosen, product layout may vary.

This documentation is valid for the Altivar Process ATV6100 Medium Voltage Drives.

The asterisks (*) available to this document is linked to the following information: Based on previous data. This is not a guarantee of future performance or performance in your particular circumstances.

The technical characteristics of the devices described in the present document also appear online. To access the information online, go to the Schneider Electric home page www.se.com/ww/en/download/.

The characteristics of the products described in this document are intended to match the characteristics that are available on www.se.com. As part of our corporate strategy for constant improvement, we may revise the content over time to enhance clarity and accuracy. If you see a difference between the characteristics in this document and the characteristics on www.se.com, consider www.se.com to contain the latest information.

Related Documents

Use your tablet or your PC to quickly access detailed and comprehensive information on all our products on www.se.com.

The Internet site provides the information you need for products and solutions:

- The Handbook for detailed characteristics and selection guides,
- The CAD files to help design your installation,
- All software and firmware to maintain your installation up to date,
- Additional documents for better understanding of drive systems and applications
- And finally all the User Guides related to your drive, listed below:

(Other option manuals and Instruction sheets are available on www.se.com)

Title of Documentation	Reference number
ATV6100 Handbook	BRU16010 (English)
ATV6100 Installation Manual	BRU15995 (English)
ATV6100 Programming manual	BRU16021 (English)
Recommended Cybersecurity Best Practices	CS-Best-Practices-2019-340 (English)

You can download these technical publications and other technical information from our website at www.se.com/en/download

Terminology

The technical terms, terminology, and the corresponding descriptions in this manual normally use the terms or definitions in the relevant standards.

In the area of drive systems this includes, but is not limited to, terms such as **error**, **error message**, **failure**, **fault**, **fault reset**, **protection**, **safe state**, **safety function**, **warning**, **warning message**, and so on.

Among others, these standards include:

- IEC 61800 series: Adjustable speed electrical power drive systems
- IEC 61508 Ed.2 series: Functional safety of electrical/electronic/programmable electronic safety-related
- EN 954-1 Safety of machinery - Safety related parts of control systems
- ISO 13849-1 & 2 Safety of machinery - Safety related parts of control systems
- IEC 61158 series: Industrial communication networks - Fieldbus specifications
- IEC 61784 series: Industrial communication networks - Profiles
- IEC 60204-1: Safety of machinery - Electrical equipment of machines – Part 1: General requirements

In addition, the term **zone of operation** is used in conjunction with the description of specific hazards, and is defined as it is for a **hazard zone** or **danger zone** in the EC Machinery Directive (2006/42/EC) and in ISO 12100-1.

Contact Us

Select your country on:

www.se.com/contact

Schneider Electric Industries SAS

Head Office

35, rue Joseph Monier

92500 Rueil-Malmaison

France

Drive System

Overview

Altivar Process - ATV6100

Marketing segment	• Mining, Mineral & Metals • Water & Wastewater • Energy & Chemicals • Power Generation
Product Picture	
Type	ATV6100
Brief description	Medium Voltage Drive System with multi-pulse transformer and low voltage inverter cascade provides a sinusoidal sine wave at both input and output with low THD(i).
Protection degree	IP41 enclosure design IP42 enclosure design optional available
Power range	150...13,500 kW
Voltage ranges	2.4 kV, 3.3 kV, 4.16 kV, 6.0 kV, 6.6 kV, 10 kV, 11 kV
Mains frequency	50/60 Hz ± 5 %
Output frequency	0.1 to 120 Hz for U/f and 0.1 to 60 Hz for vector control
Controlled motors	• Asynchronous motor • Synchronous motor ◦ PM motor • Synchronous motor external excited ◦ Brushed DC ◦ Brushless AC ◦ Brushless DC
Application types	• Constant torque • Variable torque • Multi motor applications
Control features	• Vector control mode, with or without an encoder • U/f mode
Interfaces	10 inch LCD touch screen as operating panel in the enclosure door, I/O terminals for digital and analog signals, Ethernet Modbus TCP and Modbus SL connector, Fieldbus options for Ethernet, Profibus, Profinet and DeviceNet.
Further reading	You will find detailed information in this document.

Altivar Process - ATV6000

Marketing segment

- Mining, Mineral & Metals
- Water & Wastewater
- Energy & Chemicals
- Power Generation

Product Picture**Type**

ATV6000

Brief description

Medium Voltage Drive System with multi-pulse transformer and low voltage inverter cascade provides a sinusoidal sine wave at both input and output with low THD(i).

Protection degree

IP31 enclosure design

IP41 enclosure design optional available

IP42 enclosure design optional available

Power range

160...20,000 kW

Voltage ranges

3.3 kV, 4.16 kV, 6.0 kV, 6.6 kV, 10 kV, 11 kV

2.4 kV (on request), 13.8 kV (on request)

Mains frequency50/60 Hz $\pm$ 5 %**Output frequency**

0.1 to 120 Hz

Controlled motors

- Asynchronous motor
- Synchronous motor
 - PM motor
 - PM motor with starter winding DOL

Application types

- Constant torque
- Variable torque
- Multi motor applications

Control features

- Vector control mode
- Energy efficiency mode
- With or without encoder

Interfaces

10 inch LCD touch screen as operating panel in the enclosure door,

I/O terminals for digital and analog signals,

Ethernet dual port connector, supporting Ethernet IP and Modbus TCP,

Modbus SL connector

Fieldbus options for Profibus, Profinet, EtherCAT, DeviceNet, CANopen

Further reading

You can find information about project planning and order in the "ATV6000 Handbook" and on www.se.com.

Altivar Process - ATV6xx

Marketing segment

- Water and waste water
- Oil & gas
- Mining, minerals & metals
- Food & beverage

Product Picture



Type	ATV660	ATV680
Brief description	Enclosure unit, alternatively in the standard design, with additionally installed options or as a customized solution (Engineered To Order ETO)	Enclosure unit ready for regeneration, alternatively in the standard design, with predefined customizations or as individual customer solution
Protection degree	IP23 standard design of the enclosure	IP54 optional design of the enclosure
Power range	110 / 90 up to 800 / 630 kW	
Voltage ranges	3AC 380 V -10% - 415 V +6 % (other voltages possible - ETO)	
Mains frequency	50/60 Hz $\pm$ 5 %	
Output frequency	0.1...500 Hz	
Control method	Asynchronous motor: • Constant load torque standard, variable load torque standard, load-depending mode Synchronous motor: • PM (permanent magnet) motor	
Interfaces	Operating panel in the enclosure door, control terminals inside the enclosure, control terminals can be extended, fieldbus connection via Ethernet or Modbus, reading of the parameters via USB interface at the keypad	
Further reading	You can find information about project planning and order in the "Configuration guide Altivar Process ATV660" and on www.se.com .	You can find information about project planning and order in the "Configuration guide Altivar Process ATV680" and on www.se.com .

Altivar Process - ATV9xx

Marketing segment

- Water and waste water
- Oil & gas
- Mining, minerals & metals
- Food & beverage

Product Picture



Type

ATV960

ATV980

Brief description

Enclosure unit, alternatively in the standard design, with predefined customizations or as individual customer solution

Enclosure unit ready for regeneration, alternatively in the standard design, with predefined customizations or as individual customer solution

Protection degree

IP23 standard design of the enclosure IP54 optional design of the enclosure

Power range

110 / 90 up to 800 / 630 kW

Voltage ranges

3AC 380 V -10% - 415 V +6 % (other voltages possible)

Mains frequency

50/60 Hz $\pm$ 5 %

Output frequency

0.1...500 Hz

Control method

Asynchronous motor:

- Constant load torque standard, variable load torque standard, load-depending mode, energy saving mode

Synchronous motor:

- PM (permanent magnet) motor

Interfaces

Operating panel in the enclosure door, control terminals inside the enclosure, control terminals can be extended, fieldbus connection via Ethernet or Modbus, saving the parameters via USB interface at the keypad

Further reading

You can find detailed information in the "Altivar Process ATV960 Handbook" and on www.se.com.

You can find detailed information in the "Altivar Process ATV980 Handbook" and on www.se.com.

Presentation

ATV6100 - Your Medium Voltage Drive for an efficient operation

The **Altivar™ Process ATV6100** prioritizes space optimization and versatile performance, making it the ideal choice for applications demanding a compact footprint and precise motor control. This focus on versatility translates to several key benefits for your operations:



Reduced Footprint

- Compared to similar MVD offerings, the ATV6100 is designed with a smaller size. This translates to easier installation in space-constrained environments.

High Performance and Versatile Performance

- The ATV6100 offers versatile performance, adapting to various applications and environments with reliability and efficiency.

Tailored Engineering Solutions

- Schneider Electric's expert team is available to customize the ATV6100 to your specific project needs, ensuring optimal performance and seamless integration.

Benefits

The ATV6100 features a compact design ideal for general-purpose applications. It is easy to use and offers versatile performance to streamline your business operations by:

- Improving **Total Cost of Ownership (TCO)**
- Enabling **process optimization**
- Enhancing **operational effectiveness**
- Providing a **tailored engineering solution**

TCO Optimization



TCO: Total Cost of Ownership

Reduced Footprint

- Up to 40% smaller size helps save valuable space
- Simplified installation

Single unit cabinet design up to size 2 (185 A)

- Easier transport
- Faster installation and start-up with pre-connected cables

“Front access only” up to size 2 (185 A)

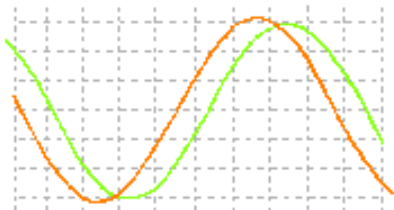
- Simplified Maintenance with Front access for quick and easy service, reducing downtime

Energy management

- Clean power low harmonics according to IEEE-519 for improved equipment performance
- High-efficiency design (> 96%) lowers energy consumption and costs
- Optimize usage of energy achieved by controlling motor speed

Energy Management

Clean power low harmonics according to IEEE-519



Voltage (Green) and Current (Orange) on grid side

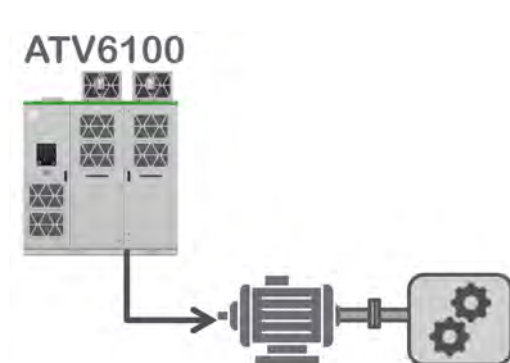
Clean Power Delivery

- Multi-winding transformer minimizes input current distortion (THDi) for smooth operation (IEEE-519 compliant)
- High power factor (≥ 0.96) across various loads (20-100%) for improved efficiency

Enhanced Reliability

- Galvanic isolation protects motors by limiting leakage current
- Eliminates the need for additional input filters and capacitor banks, simplifying installation

Optimize usage of energy & reduce consumption



ATV6100 connected to the motor and load

Energy Savings

- Optimizes energy usage, reducing overall consumption and environmental impact
- Power consumption is cubed with speed reduction, so even small adjustments yield significant savings. (Quadratic loads)

Extended Equipment Life

- Lower operating speeds minimize wear and tear, leading to longer equipment lifespan
- Improved productivity through better control over motor speed and equipment performance

Process Optimization



Availability

- Fault-tolerant features & N+1 redundancy (optional) ensure continuous operation
- Long-lasting components & capacitors guarantee reliable performance

Versatility

- Compatible with IEC & NEMA standards, eliminating variant needs
- Minimizes stress & extends motor life with low harmonics & reduced leakage current
- Flexible input/output voltage

Seamless integration

- Adapts to existing systems without modifications, saving time & resources
- No additional filters needed, simplifying installation.

Operational Effectiveness



User friendly

- Intuitive 10" graphic touch Display with simple operation & multi-language support
- View key data & modify settings efficiently
- Effortless fault recording for quick diagnosis

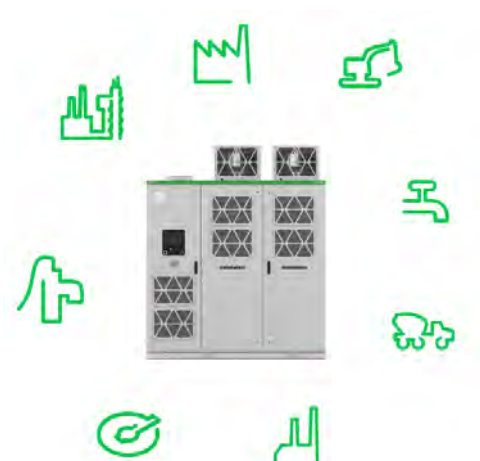
Digital connected

- Standard Protocols Modbus RTU and Modbus TCP
- Adapts to various communication networks (optional)
- EAA preventive monitoring ready

Service availability

- Modular Design for Faster repairs & replacements with easy access
- Reduced Parts Minimize spare parts needed
- Global Expert Network with MVD-certified service engineers

Tailored Solutions



Fit to cover a wide range of applications

- Suitable for all relevant segments like
 - Water/Wastewater (WWW)
 - Metals/Mining/Minerals (MMM)
 - Energy and Chemicals
 - Power Generation, and more
- Supports a wide range of 2Q applications including pumps (intake, high pressure), fans (ID/FD), conveyors, mills, compressors, and others

Turn-key solution

- Schneider Electric specialists provide comprehensive support throughout the entire project lifecycle, from design and ordering to installation, commissioning, operation, and maintenance.
- Benefit from a single point of contact for all your project needs, simplifying the process and ensuring a smooth execution.
- Experience the confidence of knowing your project is in the hands of experienced professionals.

Applications



Mining, Mineral & Metals

- Long Distance Conveyor
- Single/Multi Flat Conveyor
- Belt Conveyor
- Sintering/Dedusting / ID Fan/Mill Fan
- Blast Furnace
- Slurry Pump/Cyclone
- HPGR
- SAG Mill / Ball Mill / Vertical Mill



Oil & Gas

- ESP (Electrical Submersible Pump)
- Crude Oil Transfer Pump
- Distribution Pipeline Compressor
- Pipeline Pumps
- Load Commutated Inverter Retrofit
- LNG Compressor
- Fans/Pumps/Compressors/Mixer (Refining)
- Petrochemical Fan/Pump/Extruder
- FPSO



Water & Wastewater

- Natural Spring/Well
- Electrical Submersible Pump
- Raw Water Intake Pump
- Booster Pump
- Multi-pump Station
- Distribution Pump
- Desalination Pumps
- Wastewater Treatment Pumps
- Water Purification Pumps



Power Plant

- GT Starters, Fuel Gas Booster Compressors, Boiler (HRSG)
- Feed-water Pumps/Cooling Water Pumps
- Circulation water pump
- Primary/Secondary Draft Fan/ID fans
- Coal belt conveyor
- Coal vertical mill

Multiple Typical Functions Used for Applications

Function	MMM					WWW					E&C						Power Plant				
	Long-distance conveyor	Slurry pump	SAG/ball mill	HPGR	ID/FD fans	Raw water pump	Lifting station	Blower/compressor	Booster pump	High-pressure pumps	ESP	Crude oil transfer pump	Pipeline compressor	ID/FD fans	Extruder	Mixer	Feed water pump	ID/FD fans	Coal mill	Cooling water circ. pump	Fuel gas compressor
Motor auto tuning function	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Synchronous Motor control with external excitation	✓		✓	✓	✓	✓		✓	✓	✓			✓	✓		✓		✓	✓		
Ramp switching	✓		✓	✓			✓				✓							✓	✓		✓
5 — point ramp setting	✓			✓							✓										✓
Skip frequencies selection	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Soft start function, incl. synchronization and bypass	✓		✓			✓	✓	✓	✓	✓		✓	✓				✓			✓	✓
Master Slave	✓		✓	✓											✓	✓			✓		
Load sharing (droop control)	✓		✓	✓																	
Speed and torque control mode	✓		✓	✓											✓	✓					
Torque regulation	✓		✓	✓											✓	✓					
Ball Mill functions			✓																✓		
Catch on the fly a spinning motor				✓	✓			✓			✓			✓				✓			
Current limitation	✓		✓	✓						✓	✓				✓	✓			✓		
overload detection	✓	✓	✓	✓						✓	✓		✓		✓	✓			✓		
Torque limitation	✓		✓	✓						✓	✓				✓	✓			✓		
Reverse disable		✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓
1 year Event Trend recording	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Error storage and history	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Operating time	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Oscilloscope function	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Standards and regulations

The entire ATV6100 range conforms to international requirements in order to provide efficient and appropriate usage of products by the end user, machine manufacturer or system integrator.



Low voltage directive (LVD)

As declared by the CE mark, the mechanical and electrical design of the Low voltage cabinet (control cabinet) meets the European Directive LVD 2014/35/EU with regards to the harmonized standard EN/IEC 61800-5-1.

As described on the technical construction file, the mechanical and electrical design of Medium voltage parts meets the harmonized standard EN/IEC 61800-5-1.

Electromagnetic compatibility directive (EMC)

As declared by the CE mark, ATV6100 fulfills the requirements of the European Directive EMC 2014/30/EU with regards to the harmonized standard EN/IEC 61800-3.

Machine directive

The ATV6100 drive is to be installed as a part of a machine, system or plant. The responsibility of the machine manufacturer or system integrator is involved as it refers to the method of installation. An appropriate usage of products helps to ensure the compliance to the machine directive with regards to the IEC standards 61800-5-1. Drive operation remains totally prohibited without prior establishment of conformity by the machine manufacturer or integrator.

Drive topology

Its simple two level power cell design takes away the complexity of multilevel architecture and makes it into a clear and easy understandable technology. This reduces your maintenance cost because the crew will easily understand Altivar 6100.

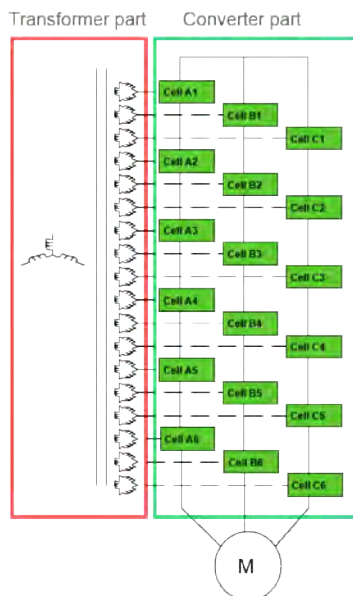


Fig. ATV6100 multilevel architecture

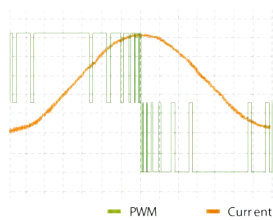


Fig. Typical output waveform of a single power cell

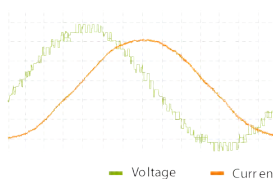


Fig. Output waveform

One of the core component of ATV6100 is the "Power cell". This "Power cell" is a single phase, two level output switching device, supplied by a 700-740 V low voltage winding of a transformer.

The big advantage of this is, that the switching elements are state-of-the-art LV components. By putting this AC - supplies in series, higher voltages are achieved. The number of "Power cells" determines the output voltage. Every cell provides a small step of motor supply, resulting in a smooth waveform. Phase shifting can be done on the secondary windings of transformer, allowing an elimination of harmonics of input.

The cells create the right part of the drive and the transformer the left section of the drive. The drives regulation system and control system are installed at front of the drive to provide an optimized footprint. The transformer and cell section can be separated for easy installation. Adequate cooling fans on top of the cabinet are supplied by auxiliary power supply or by an additional secondary winding of the integrated transformer as an option.

Schneider Electric offers this transformer (aluminum and copper) in a standard efficiency as well as in increased high efficiency.

Benefits

- Easy understandable multilevel architecture helps save money in case of maintenance
- Less spare parts because only one power cell design is needed for the whole drive
- Smooth output voltage because each power cell provides only a small step of the voltage
- Typical Power Cell Carrier Frequency: 610 Hz

Device basic information

The new arrangement of the power cells and the control cabinet is very space saving and thus helps reduce overall construction foot print

Cabinet design



Benefits

- The new and clever space saving design helps reduce capital expenditures, especially for construction space for smaller sizes.
- Power options as well as control options can be integrated in the standard drive without increasing dimensions.
- The integrated transformer and multilevel structure help to avoid bearing currents in existing motors. This results in a capability to run your old motor on a new MV drive, with conditions, leading to a drastic reduction of energy costs where your damper controlled fan or throttle controlled pump is concerned.

Power cells arrangement

The power cells cabinet contains the power electronics inverter function of the ATV6100. It is built up with power cells according to the specified voltage and current rating. The power cells are arranged onto a fast-track system providing a convenient and service friendly access to it.

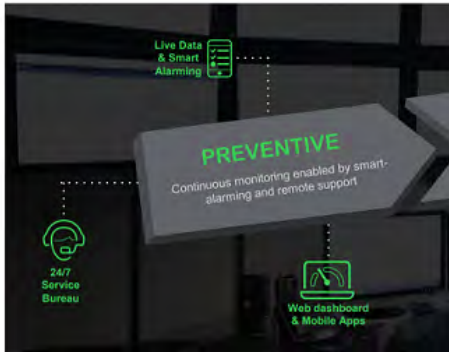


Benefits

- Clear arrangement of components helping your team in maintenance and service
- Compact and low weight cell design saving maintenance shutdown time
- Easier installation to save time

EcoStruxure Asset Advisor (EAA)

Cloud-enabled 24/7 remote monitoring service for your Medium Voltage Drive system



EcoStruxure Asset Advisor Preventive briefly

- This cloud-based service continuously monitors your MV Drive, delivers insights and smart alarming directly to your mobile – proactively helping you minimize downtime. Instant access to live drive data via the mobile app provides visibility into your assets' health and lifecycle, whether on premise or on the go.

ATV6100 is Asset Advisor ready

- ATV6100 provides this unique solution to optimize the operation and maintenance of your installation. All thanks to the combination of smart connected device technologies and powerful cloud-based monitoring capabilities.
- The ATV6100 with EcoStruxure Asset Advisor Preventive transforms data into insight to help run your operations more efficiently and reduced risk, with more availability, and increased profits.

24/7 alarm monitoring and data visibility

- Incidents are automatically recorded and tracked, enabling easy access to real-time incident status and latest device data – without the need to log into VPN.

Gain insights into your infrastructure

- Machine data forms the basis of long-term operational insights and analytics. The regular report delivers information of your Drives utilization and provide in case tailored recommendations for conditions you should pay attention or do maintenance.

Control features

The intuitive control with our user-friendly interface featuring a 10" Magelis touch-screen HMI provide easy navigation through the features and settings. Quickly find what you need with our simple Windows arrangement, all with just a few taps.

- Motor control mode
 - Vector control mode
 - U/f control mode
 - With or without encoder
- Application control mode
 - Speed control
 - Torque control
- Number of quadrant
 - 2Q operation
- Steady operation
 - Speed precision in steady state: $\pm 0.5\%$
 - Closed-loop speed precision: $\pm 0.1\%$
- Monitoring (Monitoring functions which help to protect)
 - Overcurrent, overvoltage, undervoltage, controller shutdown, cooling fan stop, overload, overtemperature, communication interruption, ground fault, phase loss, etc.
- Communication
 - Modbus TCP
 - Modbus SL
 - Fieldbus options for Profibus, Profinet, DeviceNet, Ethernet IP
- PID function
 - Integrated PID controller, and parameters can be set.
- I/O function
 - Variety different analog and digital I/Os, extendable on customer request.
- Operation mode
 - Remote/panel as standard, local as an option
- Human-Machine interface display
 - 10 inch large color LCD touch screen with graphic user surface.
 - Drive status pilot lights for ready, run, warning and error
 - Input voltage, current, power, power factor
 - Output voltage, current, power, motor speed, torque
 - Parameter settings, voltage and current waveform, transformer temperature, drive status and records
 - Comprehensive display for monitoring and maintenance data
- Multi languages for HMI: English, French, German, Spanish, Chinese, Italian, Portuguese. For other languages, contact your local Schneider Electric representative.

Key functions

Several essential functions are integrated as standard, facilitating easy adaptation to specific application requirements. The following list presents a selection of functions that address specific needs and align with diverse customer and application demands.

- Soft start function, incl. synchronization and bypass
- Speed and torque control mode
- Leader/Follower control
- Ball mill control functions, e.g. frozen load detection
- Load sharing (droop control)
- Oscilloscope function
- Catch on the fly a spinning motor
- Skip frequencies selection
- Motor auto tuning function
- Error/warning messages history with actual values
- Preset speeds setting
- 5 - point ramp setting
- Parameter set switching

Selection and ordering data

Type designation

The product designation of the ATV6100 consists of several points of reference (characters and figures). The meaning of each point is illustrated in the following example.

		ATV6100	D	470	A	66	66	N	A	4
Product Range										
ATV		6100								
Factor for power rating										
D		x 1 kVA								
C		x 10 kVA								
M		x 100 kVA								
Transformer rating										
470		470 kVA								
...		...								
Cooling Type										
A		Air cooled								
R		Redundant fan								
Input voltage										
24		2.4 kV								
33		3.3 kV								
42		4.16 kV								
60		6.0 kV								
66		6.6 kV								
10		10 kV								
11		11 kV								
Output voltage										
24		2.4 kV								
...		...								
11		11 kV								
Style										
N		No Bypass								
B		Powercell bypass								
C		Powercell bypass (n+1)								
Standard										
A		CE Standard								
B		CE High efficiency								
C		CE Adapted								
IP rating										
4		IP41								
5		IP42								

Selection and ordering data

Voltage class 2.4 kV

Power specifications for output voltage 2.4 kV, 6 power cells, 12 input pulses											
Model	Transformer rating (1)	Normal duty				Heavy duty				Power cell	
		Maximum motor shaft power (2)		Nominal continuous current	120% overload 1 min/10 mins	Maximum motor shaft power (2)		Nominal continuous current	150% overload 1 min/10 mins	Individual power cell rating	Max overload 3 sec/10 mins
	kVA	kW	HP	A	A	kW	HP	A	A	A	A
Voltage class: 2.4 kV (3)											
ATV6100D188A2424...	188	150	201	43	52	120	160	34	52	43	64.5
ATV6100D213A2424...	213	170	228	49	59	139	186	40	60	50	75
ATV6100D250A2424...	250	200	268	58	69	181	242	52	78	65	97.5
ATV6100D281A2424...	281	225	302	65	78	181	242	52	78	65	97.5
ATV6100D300A2424...	300	240	322	69	83	195	261	56	84	70	105
ATV6100D344A2424...	344	275	369	79	95	222	298	64	96	80	120
ATV6100D410A2424...	410	330	442	95	114	264	354	76	114	95	143
ATV6100D450A2424...	450	360	482	104	124	320	428	92	138	115	173
ATV6100D500A2424...	500	400	536	115	138	320	428	92	138	115	173
ATV6100D540A2424...	540	430	576	124	148	348	466	100	150	125	188
ATV6100D610A2424...	610	487	653	140	168	389	522	112	168	140	210
ATV6100D690A2424...	690	550	737	158	190	514	689	148	222	185	278
ATV6100D800A2424...	800	640	858	184	221	514	689	148	222	185	278
ATV6100D910A2424...	910	730	978	210	252	584	782	168	252	210	315
ATV6100C102A2424...	1,020	815	1,092	235	281	653	875	188	282	235	353
ATV6100C104A2424...	1,040	830	1,112	239	287	667	894	192	288	240	360
ATV6100C121A2424...	1,210	970	1,300	279	335	778	1,043	224	336	280	420
ATV6100C141A2424...	1,410	1,130	1,514	325	390	904	1,211	260	390	325	488
ATV6100C161A2424...	1,610	1,285	1,722	370	444	1,029	1,378	296	444	370	555
ATV6100C171A2424...	1,710	1,370	1,836	394	473	1,098	1,472	316	474	395	593
ATV6100C202A2424...	2,020	1,615	2,164	465	558	1,293	1,732	372	558	465	698
ATV6100C221A2424...	2,210	1,770	2,372	509	611	1,418	1,900	408	612	510	765
ATV6100C243A2424...	2,430	1,945	2,606	560	672	1,557	2,086	448	672	560	840
1. For higher drive power please contact Schneider Electric. 2. Values valid for synchronous motor and asynchronous motor. The specifications for the maximum motor shaft power is based on a motor efficiency of 95%, and power factor 0.88. 3. Please contact Schneider Electric for other combinations of input and output voltage. NOTE: For dimensions and outline drawings please refer to Handbook Technical Data chapter, page 38.											

Voltage class 3.3 kV

Power specifications for output voltage 3.3 kV, 9 power cells, 18 input pulses											
Model	Transformer rating (1)	Normal duty				Heavy duty				Power cell	
		Maximum motor shaft power (2)		Nominal continuous current	120% overload 1 min/10 mins	Maximum motor shaft power (2)		Nominal continuous current	150% overload 1 min/10 mins	Individual power cell rating	Max overload 3 sec/10 mins
	kVA	kW	HP	A	A	kW	HP	A	A	A	A
Voltage class: 3.3 kV (3)											
ATV6100D250A3333...	250	200	268	42	50	164	220	34	52	43	64.5
ATV6100D300A3333...	300	240	322	50	60	191	256	40	60	50	75
ATV6100D338A3333...	338	270	362	57	68	248	333	52	78	65	97.5
ATV6100D388A3333...	388	310	415	65	78	248	333	52	78	65	97.5
ATV6100D413A3333...	413	330	442	69	83	268	359	56	84	70	105
ATV6100D475A3333...	475	380	509	80	95	306	410	64	96	80	120
ATV6100D560A3333...	560	450	603	94	113	363	487	76	114	95	143
ATV6100D630A3333...	630	500	670	105	126	440	589	92	138	115	173
ATV6100D690A3333...	690	550	737	115	138	440	589	92	138	115	173
ATV6100D740A3333...	740	595	797	125	149	478	640	100	150	125	188
ATV6100D840A3333...	840	670	898	140	168	535	717	112	168	140	210
ATV6100D960A3333...	960	770	1,032	161	193	707	948	148	222	185	278
ATV6100C110A3333...	1,100	880	1,179	184	221	707	948	148	222	185	278
ATV6100C125A3333...	1,250	1,000	1,340	209	251	803	1,076	168	252	210	315
ATV6100C140A3333...	1,400	1,120	1,501	234	281	898	1,204	188	282	235	353
ATV6100C143A3333...	1,430	1,145	1,534	240	288	917	1,229	192	288	240	360
ATV6100C166A3333...	1,660	1,330	1,782	278	334	1,070	1,434	224	336	280	420
ATV6100C194A3333...	1,940	1,550	2,077	324	389	1,242	1,665	260	390	325	488
ATV6100C221A3333...	2,210	1,765	2,365	369	443	1,414	1,895	296	444	370	555
ATV6100C236A3333...	2,360	1,885	2,526	394	473	1,510	2,023	316	474	395	593
ATV6100C278A3333...	2,780	2,220	2,975	465	558	1,778	2,382	372	558	465	698
ATV6100C304A3333...	3,040	2,435	3,263	510	612	1,950	2,612	408	612	510	765
ATV6100C334A3333...	3,340	2,675	3,585	560	672	2,141	2,869	448	672	560	840
- For higher drive power please contact Schneider Electric. - Values valid for synchronous motor and asynchronous motor. The specifications for the maximum motor shaft power is based on a motor efficiency of 95%, and power factor 0.88. - Please contact Schneider Electric for other combinations of input and output voltage. NOTE: For dimensions and outline drawings please refer to Handbook Technical Data chapter, page 38.											

Voltage class 4.16 kV

Power specifications for output voltage 4.16 kV, 12 power cells, 24 input pulses											
Model	Transformer rating (1)	Normal duty				Heavy duty				Power cell	
		Maximum motor shaft power (2)		Nominal continuous current	120% overload 1 min/10 mins	Maximum motor shaft power (2)		Nominal continuous current	150% overload 1 min/10 mins	Individual power cell rating	Max overload 3 sec/10 mins
	kVA	kW	HP	A	A	kW	HP	A	A	A	A
Voltage class: 4.16 kV (3)											
ATV6100D313A4242...	313	250	335	42	50	207	278	34	52	43	64.5
ATV6100D375A4242...	375	300	402	50	60	241	323	40	60	50	75
ATV6100D438A4242...	438	350	469	58	70	313	420	52	78	65	97.5
ATV6100D488A4242...	488	390	523	65	78	313	420	52	78	65	97.5
ATV6100D525A4242...	525	420	563	70	84	337	452	56	84	70	105
ATV6100D600A4242...	600	480	643	80	96	386	517	64	96	80	120
ATV6100D710A4242...	710	570	764	95	114	458	613	76	114	95	143
ATV6100D790A4242...	790	630	844	105	126	554	743	92	138	115	173
ATV6100D860A4242...	860	690	925	115	137	554	743	92	138	115	173
ATV6100D940A4242...	940	750	1,005	125	149	602	807	100	150	125	188
ATV6100C105A4242...	1,050	840	1,126	139	167	675	904	112	168	140	210
ATV6100C121A4242...	1,210	970	1,300	161	193	892	1,195	148	222	185	278
ATV6100C139A4242...	1,390	1,110	1,487	184	221	892	1,195	148	222	185	278
ATV6100C158A4242...	1,580	1,260	1,688	209	251	1,012	1,356	168	252	210	315
ATV6100C176A4242...	1,760	1,410	1,889	234	281	1,132	1,517	188	282	235	353
ATV6100C180A4242...	1,800	1,440	1,930	239	287	1,157	1,550	192	288	240	360
ATV6100C211A4242...	2,110	1,685	2,258	280	336	1,349	1,808	224	336	280	420
ATV6100C245A4242...	2,450	1,960	2,626	325	390	1,566	2,099	260	390	325	488
ATV6100C279A4242...	2,790	2,230	2,988	370	444	1,783	2,389	296	444	370	555
ATV6100C298A4242...	2,980	2,380	3,189	395	474	1,903	2,551	316	474	395	593
ATV6100C350A4242...	3,500	2,800	3,752	465	558	2,241	3,003	372	558	465	698
ATV6100C384A4242...	3,840	3,070	4,114	510	612	2,458	3,293	408	612	510	765
ATV6100C421A4242...	4,210	3,370	4,516	559	671	2,699	3,616	448	672	560	840
1. For higher drive power please contact Schneider Electric. 2. Values valid for synchronous motor and asynchronous motor. The specifications for the maximum motor shaft power is based on a motor efficiency of 95%, and power factor 0.88. 3. Please contact Schneider Electric for other combinations of input and output voltage. NOTE: For dimensions and outline drawings please refer to Handbook Technical Data chapter, page 38.											

Voltage class 6 kV

Power specifications for output voltage 6 kV, 15 power cells, 30 input pulses											
Model	Transformer rating (1)	Normal duty				Heavy duty				Power cell	
		Maximum motor shaft power (2)	Nominal continuous current	120% overload 1 min/10 mins		Maximum motor shaft power (2)	Nominal continuous current	150% overload 1 min/10 mins		Individual power cell rating	Max overload 3 sec/10 mins
	kVA	kW	HP	A	A	kW	HP	A	A	A	A
Voltage class: 6 kV (3)											
ATV6100D445A6060...	445	356	477	41	49	299	400	34	52	43	64.5
ATV6100D500A6060...	500	400	536	46	55	348	466	40	60	50	75
ATV6100D600A6060...	600	480	643	55	66	452	605	52	78	65	97.5
ATV6100D700A6060...	700	560	750	64	77	452	605	52	78	65	97.5
ATV6100D760A6060...	760	608	815	70	84	487	652	56	84	70	105
ATV6100D870A6060...	870	696	933	80	96	556	745	64	96	80	120
ATV6100C100A6060...	1,000	800	1,072	92	110	660	885	76	114	95	143
ATV6100C113A6060...	1,130	904	1,211	104	125	799	1,071	92	138	115	173
ATV6100C125A6060...	1,250	1,000	1,340	115	138	799	1,071	92	138	115	173
ATV6100C136A6060...	1,360	1,088	1,458	125	150	869	1,164	100	150	125	188
ATV6100C140A6060...	1,400	1,120	1,501	129	155	973	1,304	112	168	140	210
ATV6100C175A6060...	1,750	1,400	1,876	161	193	1,286	1,723	148	222	185	278
ATV6100C200A6060...	2,000	1,600	2,144	184	221	1,286	1,723	148	222	185	278
ATV6100C225A6060...	2,250	1,800	2,412	207	249	1,460	1,956	168	252	210	315
ATV6100C250A6060...	2,500	2,000	2,680	230	276	1,633	2,189	188	282	235	353
ATV6100C261A6060...	2,610	2,088	2,798	240	288	1,668	2,235	192	288	240	360
ATV6100C280A6060...	2,800	2,240	3,002	258	309	1,946	2,608	224	336	280	420
ATV6100C350A6060...	3,500	2,800	3,752	322	387	2,259	3,027	260	390	325	488
ATV6100C394A6060...	3,940	3,152	4,224	363	435	2,572	3,446	296	444	370	555
ATV6100C419A6060...	4,190	3,352	4,492	386	463	2,745	3,679	316	474	395	593
ATV6100C500A6060...	5,000	4,000	5,360	460	552	3,232	4,331	372	558	465	698
ATV6100C525A6060...	5,250	4,200	5,628	483	580	3,545	4,750	408	612	510	765
ATV6100C600A6060...	6,000	4,800	6,432	552	663	3,892	5,216	448	672	560	840
- For higher drive power please contact Schneider Electric. - Values valid for synchronous motor and asynchronous motor. The specifications for the maximum motor shaft power is based on a motor efficiency of 95%, and power factor 0.88. - Please contact Schneider Electric for other combinations of input and output voltage. NOTE: For dimensions and outline drawings please refer to Handbook Technical Data chapter, page 38.											

Voltage class 6.6 kV

Power specifications for output voltage 6.6 kV, 15 power cells, 30 input pulses											
Model	Transformer rating (1)	Normal duty				Heavy duty				Power cell	
		Maximum motor shaft power (2)		Nominal continuous current	120% overload 1 min/10 mins	Maximum motor shaft power (2)		Nominal continuous current	150% overload 1 min/10 mins	Individual power cell rating	Max overload 3 sec/10 mins
	kVA	kW	HP	A	A	kW	HP	A	A	A	A
Voltage class: 6.6 kV (3)											
ATV6100D394A6666...	394	315	422	33	40	296	397	31	47	43	64.5
ATV6100D450A6666...	450	360	482	38	45	329	441	34	52	43	64.5
ATV6100D513A6666...	513	410	549	43	51	329	441	34	52	43	64.5
ATV6100D588A6666...	588	470	630	49	59	382	512	40	60	50	75
ATV6100D688A6666...	688	550	737	58	69	497	666	52	78	65	97.5
ATV6100D775A6666...	775	620	831	65	78	497	666	52	78	65	97.5
ATV6100D825A6666...	825	660	884	69	83	535	717	56	84	70	105
ATV6100D950A6666...	950	760	1,018	80	95	612	820	64	96	80	120
ATV6100C113A6666...	1,130	900	1,206	94	113	726	973	76	114	95	143
ATV6100C125A6666...	1,250	1,000	1,340	105	126	879	1,178	92	138	115	173
ATV6100C138A6666...	1,380	1,100	1,474	115	138	879	1,178	92	138	115	173
ATV6100C149A6666...	1,490	1,195	1,601	125	150	956	1,281	100	150	125	188
ATV6100C168A6666...	1,680	1,340	1,796	140	168	1,070	1,434	112	168	140	210
ATV6100C188A6666...	1,880	1,500	2,010	157	188	1,414	1,895	148	222	185	278
ATV6100C221A6666...	2,210	1,770	2,372	185	222	1,414	1,895	148	222	185	278
ATV6100C251A6666...	2,510	2,010	2,693	210	252	1,606	2,151	168	252	210	315
ATV6100C281A6666...	2,810	2,250	3,015	235	283	1,797	2,408	188	282	235	353
ATV6100C286A6666...	2,860	2,290	3,069	240	288	1,835	2,459	192	288	240	360
ATV6100C335A6666...	3,350	2,680	3,591	280	337	2,141	2,869	224	336	280	420
ATV6100C389A6666...	3,890	3,110	4,167	325	391	2,485	3,330	260	390	325	488
ATV6100C441A6666...	4,410	3,530	4,730	369	443	2,829	3,791	296	444	370	555
ATV6100C471A6666...	4,710	3,770	5,052	394	473	3,020	4,047	316	474	395	593
ATV6100C555A6666...	5,550	4,440	5,950	465	558	3,555	4,764	372	558	465	698
ATV6100C609A6666...	6,090	4,870	6,526	510	612	3,899	5,225	408	612	510	765
ATV6100C669A6666...	6,690	5,350	7,169	560	672	4,281	5,737	448	672	560	840
1. For higher drive power please contact Schneider Electric. 2. Values valid for synchronous motor and asynchronous motor. The specifications for the maximum motor shaft power is based on a motor efficiency of 95%, and power factor 0.88. 3. Please contact Schneider Electric for other combinations of input and output voltage. NOTE: For dimensions and outline drawings please refer to Handbook Technical Data chapter, page 38.											

Voltage class 10 kV

Power specifications for output voltage 10 kV, 24 power cells, 48 input pulses											
Model	Transformer rating (1)	Normal duty				Heavy duty				Power cell	
		Maximum motor shaft power (2)	Nominal continuous current	120% overload 1 min/10 mins		Maximum motor shaft power (2)	Nominal continuous current	150% overload 1 min/10 mins		Individual power cell rating	Max overload 3 sec/10 mins
	kVA	kW	HP	A	A	kW	HP	A	A	A	A
Voltage class: 10 kV (3)											
ATV6100D395A1010...	395	315	422	22	26	266	357	18	28	23	34.5
ATV6100D500A1010...	500	400	536	28	33	376	504	26	39	43	64.5
ATV6100D625A1010...	625	500	670	35	41	478	640	33	50	43	64.5
ATV6100D700A1010...	700	560	750	39	46	498	667	34	52	43	64.5
ATV6100D775A1010...	775	620	831	43	51	498	667	34	52	43	64.5
ATV6100D890A1010...	890	710	951	49	59	579	776	40	60	50	75
ATV6100C100A1010...	1,000	800	1,072	55	66	753	1,009	52	78	65	97.5
ATV6100C113A1010...	1,130	904	1,211	62	75	753	1,009	52	78	65	97.5
ATV6100C125A1010...	1,250	1,000	1,340	69	83	811	1,087	56	84	70	105
ATV6100C140A1010...	1,400	1,120	1,501	77	93	927	1,242	64	96	80	120
ATV6100C172A1010...	1,720	1,376	1,844	95	114	1,100	1,475	76	114	95	143
ATV6100C200A1010...	2,000	1,600	2,144	110	133	1,332	1,785	92	138	115	173
ATV6100C225A1010...	2,250	1,800	2,412	124	149	1,448	1,940	100	150	125	188
ATV6100C250A1010...	2,500	2,000	2,680	138	166	1,622	2,173	112	168	140	210
ATV6100C280A1010...	2,800	2,240	3,002	155	186	2,143	2,872	148	222	185	278
ATV6100C313A1010...	3,130	2,504	3,355	173	208	2,143	2,872	148	222	185	278
ATV6100C350A1010...	3,500	2,800	3,752	193	232	2,433	3,260	168	252	210	315
ATV6100C419A1010...	4,190	3,350	4,489	231	278	2,722	3,648	188	282	235	353
ATV6100C434A1010...	4,340	3,470	4,650	240	288	2,780	3,725	192	288	240	360
ATV6100C500A1010...	5,000	4,000	5,360	276	331	3,244	4,346	224	336	280	420
ATV6100C563A1010...	5,630	4,504	6,035	311	373	3,765	5,045	260	390	325	488
ATV6100C625A1010...	6,250	5,000	6,700	345	414	4,286	5,743	296	444	370	555
ATV6100C700A1010...	7,000	5,600	7,504	387	464	4,576	6,131	316	474	395	593
ATV6100C788A1010...	7,880	6,304	8,447	435	522	5,387	7,218	372	558	465	698
ATV6100C888A1010...	8,880	7,104	9,519	491	589	5,908	7,916	408	612	510	765
ATV6100M100A1010...	10,000	8,000	10,720	552	663	6,487	8,693	448	672	560	840
- For higher drive power please contact Schneider Electric. - Values valid for synchronous motor and asynchronous motor. The specifications for the maximum motor shaft power is based on a motor efficiency of 95%, and power factor 0.88. - Please contact Schneider Electric for other combinations of input and output voltage. NOTE: For dimensions and outline drawings please refer to Handbook Technical Data chapter, page 38.											

Voltage class 11 kV

Power specifications for output voltage 11 kV, 27 power cells, 54 input pulses											
Model	Transformer rating (1)	Normal duty				Heavy duty				Power cell	
		Maximum motor shaft power (2)		Nominal continuous current	120% overload 1 min/10 mins	Maximum motor shaft power (2)		Nominal continuous current	150% overload 1 min/10 mins	Individual power cell rating	Max overload 3 sec/10 mins
	kVA	kW	HP	A	A	kW	HP	A	A	A	A
Voltage class: 11 kV (3)											
ATV6100D456A1111...	456	365	489	23	27	293	393	18	28	23	34.5
ATV6100D563A1111...	563	450	603	28	34	430	576	27	41	43	64.5
ATV6100D688A1111...	688	550	737	35	41	526	704	33	50	43	64.5
ATV6100D856A1111...	856	685	918	43	52	548	734	34	52	43	64.5
ATV6100D994A1111...	994	795	1,065	50	60	637	854	40	60	50	75
ATV6100C113A1111...	1,130	904	1,211	57	68	828	1,110	52	78	65	97.5
ATV6100C129A1111...	1,290	1,032	1,383	65	78	828	1,110	52	78	65	97.5
ATV6100C139A1111...	1,390	1,112	1,490	70	84	892	1,195	56	84	70	105
ATV6100C159A1111...	1,590	1,272	1,704	80	96	1,019	1,366	64	96	80	120
ATV6100C189A1111...	1,890	1,510	2,023	95	114	1,211	1,622	76	114	95	143
ATV6100C206A1111...	2,060	1,650	2,211	104	124	1,465	1,964	92	138	115	173
ATV6100C229A1111...	2,290	1,830	2,452	115	138	1,465	1,964	92	138	115	173
ATV6100C249A1111...	2,490	1,990	2,667	125	150	1,593	2,134	100	150	125	188
ATV6100C279A1111...	2,790	2,230	2,988	140	168	1,784	2,390	112	168	140	210
ATV6100C319A1111...	3,190	2,550	3,417	160	192	2,357	3,159	148	222	185	278
ATV6100C369A1111...	3,690	2,950	3,953	185	222	2,357	3,159	148	222	185	278
ATV6100C419A1111...	4,190	3,350	4,489	210	252	2,676	3,586	168	252	210	315
ATV6100C468A1111...	4,680	3,740	5,012	235	282	2,994	4,013	188	282	235	353
ATV6100C478A1111...	4,780	3,820	5,119	240	288	3,058	4,098	192	288	240	360
ATV6100C558A1111...	5,580	4,460	5,976	280	336	3,568	4,781	224	336	280	420
ATV6100C648A1111...	6,480	5,180	6,941	325	390	4,141	5,549	260	390	325	488
ATV6100C736A1111...	7,360	5,890	7,893	370	444	4,715	6,318	296	444	370	555
ATV6100C786A1111...	7,860	6,290	8,429	395	474	5,033	6,745	316	474	395	593
ATV6100C925A1111...	9,250	7,400	9,916	465	558	5,925	7,940	372	558	465	698
ATV6100M101A1111...	10,100	8,080	10,827	507	609	6,499	8,708	408	612	510	765
ATV6100M111A1111...	11,100	8,880	11,899	558	669	7,136	9,562	448	672	560	840
- For higher drive power please contact Schneider Electric. - Values valid for synchronous motor and asynchronous motor. The specifications for the maximum motor shaft power is based on a motor efficiency of 95%, and power factor 0.88. - Please contact Schneider Electric for other combinations of input and output voltage. NOTE: For dimensions and outline drawings please refer to Handbook <i>Technical Data</i> chapter, page 38. NOTE: N+1 power cell configuration is not available for 11kV.											

General Specification

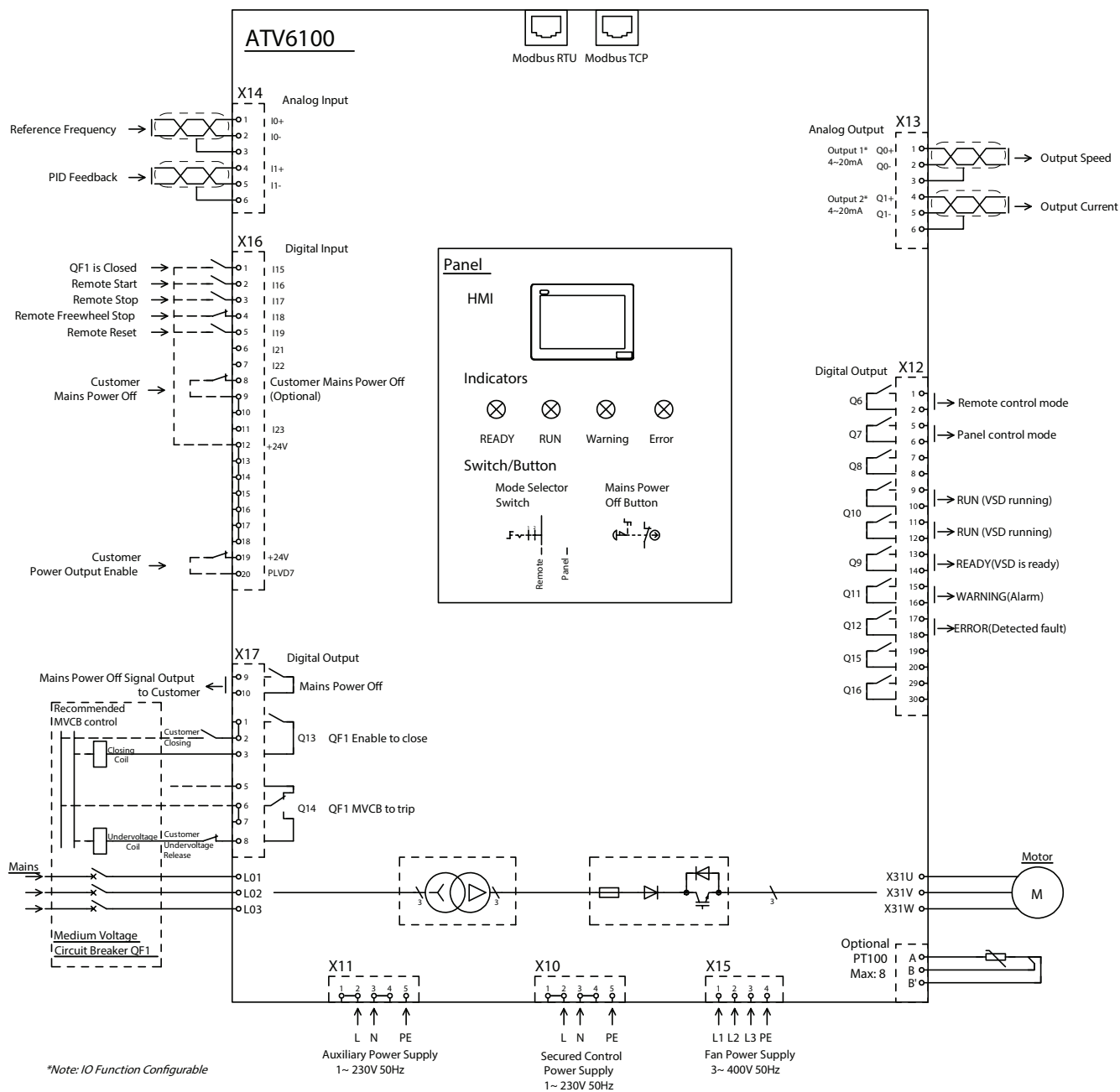
General Technical Data

Input	18-54 pulse diode rectifier bridge
Output	Multilevel PWM with 2 level low-voltage IGBT inverter cells
Input voltage	2.4 kV, 3.3 kV, 4.16 kV, 6.0 kV, 6.6 kV, 10 kV, 11 kV 13.8 kV on request - Variation: $\pm 10\%$ (according to IEC61800)
Allowable voltage fluctuation	The drive is subject to derating operation when the voltage drop of power supply is within -35 %.
Input frequency	50/60 Hz $\pm 5\%$
Incoming short circuit withstand	31.5 kA for 150 ms, option 31.5 kA/1s
Inrush current	The Multilevel topology implies that the input transformer is designed with the primary coil at the inner side at the opposite of usual distribution transformers. For that reason, the inrush current has a higher amplitude but is shorter in time. Typical values for ATV6100 are $\hat{I}_{inrush} = [8 \text{ to } 14] \times \sqrt{2} \times I_{input_RMS}$ with a time constant limited to 80 to 120 ms. The amplitude increases when the supply short circuit power increases or the transformer power rating increases. The time constant increases when the transformer power rating increases.
Overload capability	- Normal duty: 120 % 60 s/10 min and 150 % 3 s/10 min - Heavy duty: 150 % 60 s/10 min, 185 % 3 s/10 min
Total harmonics THD(i)	Comply with the requirements of power quality standard of IEEE519 - 2022. (When supplied by balanced network without preexisting pollution. For more details please contact Schneider Electric.)
Input power factor	≥ 0.96 from 20 % to 100 % of load
Cable entry	Bottom, top entry as option by gland plate
Frequency resolution	0.01 Hz
Power cells command signals transmission	Fiber optic transmission
Efficiency at rated power	Inverter efficiency is $\geq 98.5\%$. Drive efficiency including input transformer is 96 %, 96.5 % as option depending on product.
Type of motor	Asynchronous motor, external exited synchronous motor, permanent magnet motor (Surface / Interior magnet).
Three-phase output voltage for motor connection	0 to respective output voltage.
Output frequency	0.1 to 120 Hz for U/f 0.1 to 60 Hz for vector control
Input transformer	Indoor type integrated in the frequency variable device, the dry phase-shifting transformer can be supplied for 18-54 pulse rectifier.
Control power supply	100...240 Vac $\pm 10\%$ (47...63 Hz), 124 - 370 Vdc, 1 kVA capacity. Other AC and DC voltage on request
Auxiliary power supply	230 Vac $\pm 10\%$, 50/60Hz, 1kVA capacity for standard configuration, value depending on auxiliary options used, others as option.
Cooling fan power supply	400 VAC $\pm 10\%$, 50 Hz, capacity depending on drive reference. Other voltage on request
Communication protocols	Modbus serial and Modbus TCP as standard (one can be used for EAA, see EcostruXure Asset Advisor, page 24) .
HMI	10 inch, color graphic, touch screen, multi-languages
Control interface	8 DI (24 Vdc) 10 DO relay (250 Vac) 2 AI (4-20 mA) 2 AO (4-20 mA)

	(more I/Os on request)
Degree of protection (cabinet)	- Standard: IP 41, IP 22 air exhaust - Option: IP 42
Paint	RAL 7035
Panel thickness	2 mm Cabinet, 1.5 mm doors, 1.2 mm for fixed panel
Cooling	Forced air ventilation
EMC	EN/IEC 61800-3 environment 2 category C4 for power, C3 for control
Reference standard	EN IEC 61800-3, EN IEC 61800-5-1, EN 60529, IEEE 519
Product certification	CE
Environment features	
Storage temperature	-10 °C to 60 °C
Transportation temperature	-20 °C to 60 °C
Working temperature	0 to 40 °C, up to 50°C possible with derating ⁽¹⁾ .
Relative humidity	Up to 90% (without condensation) Optional: maximum up to 95% (without condensation)
Altitude	≤1000 m, up to 2000 m possible with derating. Above 2000 m case by case (up to 5000 m, 10 kV) ⁽²⁾ .
Noise level	75/80/85 dB(A) depending on size
Over Voltage Category	IEC 61800 (Adjustable speed electrical power drive systems - Part 5-1: Safety requirements - Electrical, thermal and energy)
- Drive line side - Drive motor side - Secures Control power supply - Auxiliary and fan power supply	- Category III - Category II - Category II - Category III
Pollution in accordance with IEC 61800-5-1	Pollution degree 2
Environmental parameters (operation)	Refer to IEC 60721-3-3: 2019
- Climatic conditions - Mechanical conditions - Biological conditions - Chemical conditions - Mechanically active substances	3K22 3M11 3B1 - C2 3S6
(1): Derating must be applied on the drive system and the value of the derating is defined by Schneider Services depending on the customer application and the local environment conditions. (2): For more details, please contact Schneider Electric	

ATV6100 Drive System I/O Interface Diagram

I/O Interface Diagram (Standard Configuration)



Technical Data

Output Voltage 6 kV

ATV6100D445A6060...ATV6100D870A6060

ATV6100	D445A6060●●●		D500A6060●●●	
Nominal data	Normal Duty	Heavy Duty	Normal Duty	Heavy Duty
Type rating [kVA]	445		500	
Max. Motor power [kW] / [HP] 1)	356/477	299/401	400/536	348/466
Nominal Continuous output current [A] 1)	41	34.4	46	40
Max. output current with 120 % overload 1 min / 10 min [A]	49	/	55	/
Max. output current with 150 % overload1 min / 10 min [A]	/	52	/	60
Power cells				
Number of cells per phase	5		5	
Power cell rated current [A]	43		50	
Power cell current with 120 % overload 1 min / 10 min [A]	51.6		60	
Max. output current for 3 sec [A]	64.5		75	
Characteristics with standard efficiency				
Efficiency at 100 % load (incl. Transformer) [%]	96.0%		96.0%	
Total losses at 100 % load [kW]	15.6	13.0	17.5	15.2
Air flow [m³/h]	4740		4740	
Noise level [dB (A)] @ 50 Hz	80		80	
Weight [kg / lb]	3485/7667		3485/7667	
Dimension [mm / inch] W*D*H 2)	2800*1450*2750/ 110.4*57.2*108.4		2800*1450*2750/ 110.4*57.2*108.4	
Connection				
Incoming cable type	symmetrical three-phase		symmetrical three-phase	
Typical cable size (mm² / AWG) 3)	95/000		95/000	
Motor cable type	symmetrical three-phase(Use of shielded cable is advisable)		symmetrical three-phase(Use of shielded cable is advisable)	
Typical cable size (mm² / AWG) 3)	25/4		25/4	
Motor cable Max. length 4)	300m,1000m as option		300m,1000m as option	
Grounding connection PE (mm² / AWG)	50		50	
Control power supply	single phase, 230V, 50/60Hz,		single phase, 230V, 50/60Hz,	
Capacity of control power supply w/o options	1 KVA		1 KVA	
Capacity of control power supply with options	"depending on options to be used"		"depending on options to be used"	
Fan power supply	3-phase, 400V/480V, 50/60Hz		3-phase, 400V/480V, 50/60Hz	
Capacity of fan power supply (kVA) 5)	2		2	
Maintenance				
Maintenance access	Front		Front	
Cable entry 6)	Bottom in /Bottom out		Bottom in /Bottom out	

ATV6100	D600A6060		D700A6060	
Nominal data	Normal Duty	Heavy Duty	Normal Duty	Heavy Duty
Type rating [kVA]	600		700	
Max. Motor power [kW] / [HP] 1)	480/643	452/606	560/750	452/606
Nominal Continuous output current [A] 1)	55.2	52	64.5	52
Max. output current with 120 % overload 1 min / 10 min [A]	66	/	77	/
Max. output current with 150 % overload1 min / 10 min [A]	/	78	/	78
Power cells				
Number of cells per phase	5		5	
Power cell rated current [A]	65		65	
Power cell current with 120 % overload 1 min / 10 min [A]	78		78	
Max. output current for 3 sec [A]	97.5		97.5	
Characteristics with standard efficiency				
Efficiency at 100 % load (incl. Transformer) [%]	96.0%		96.0%	
Total losses at 100 % load [kW]	20.9	19.7	24.4	19.7
Air flow [m³/h]	5580		5580	
Noise level [dB (A)] @ 50 Hz	80		80	
Weight [kg / lb]	3485/7667		3485/7667	
Dimension [mm / inch] W*D*H 2)	2800*1450*2750/ 110.4*57.2*108.4		2800*1450*2750/ 110.4*57.2*108.4	
Connection				
Incoming cable type	symmetrical three-phase		symmetrical three-phase	
Typical cable size (mm² / AWG) 3)	95/000		95/000	
Motor cable type	symmetrical three-phase(Use of shielded cable is advisable)		symmetrical three-phase(Use of shielded cable is advisable)	
Typical cable size (mm² / AWG) 3)	25/4		25/4	
Motor cable Max. length 4)	300m,1000m as option		300m,1000m as option	
Grounding connection PE (mm² / AWG)	50		50	
Control power supply	single phase, 230V, 50/60Hz,		single phase, 230V, 50/60Hz,	
Capacity of control power supply w/o options	1 KVA		1 KVA	
Capacity of control power supply with options	"depending on options to be used"		"depending on options to be used"	
Fan power supply	3-phase, 400V/480V, 50/60Hz		3-phase, 400V/480V, 50/60Hz	
Capacity of fan power supply (kVA) 5)	4		4	
Maintenance				
Maintenance access	Front		Front	
Cable entry 6)	Bottom in /Bottom out		Bottom in /Bottom out	

ATV6100	D760A6060		D870A6060	
Nominal data	Normal Duty	Heavy Duty	Normal Duty	Heavy Duty
Type rating [kVA]	760		870	
Max. Motor power [kW] / [HP] 1)	608/815	487/653	696/933	556/745
Nominal Continuous output current [A] 1)	70	56	80	64
Max. output current with 120 % overload 1 min / 10 min [A]	84	/	96	/
Max. output current with 150 % overload1 min / 10 min [A]	/	84	/	96
Power cells				
Number of cells per phase	5		5	
Power cell rated current [A]	70		80	
Power cell current with 120 % overload 1 min / 10 min [A]	84		96	
Max. output current for 3 sec [A]	105		120	
Characteristics with standard efficiency				
Efficiency at 100 % load (incl. Transformer) [%]	96.0%		96.0%	
Total losses at 100 % load [kW]	26.5	21.3	30.3	24.3
Air flow [m³/h]	5580		5580	
Noise level [dB (A)] @ 50 Hz	80		80	
Weight [kg / lb]	3485/7667		3485/7667	
Dimension [mm / inch] W*D*H 2)	2800*1450*2750/ 110.4*57.2*108.4		2800*1450*2750/ 110.4*57.2*108.4	
Connection				
Incoming cable type	symmetrical three-phase		symmetrical three-phase	
Typical cable size (mm² / AWG) 3)	95/000		95/000	
Motor cable type	symmetrical three-phase(Use of shielded cable is advisable)		symmetrical three-phase(Use of shielded cable is advisable)	
Typical cable size (mm² / AWG) 3)	25/4		25/4	
Motor cable Max. length 4)	300m,1000m as option		1000 m	
Grounding connection PE (mm² / AWG)	50		50	
Control power supply	single phase, 230V, 50/60Hz,		single phase, 230V, 50/60Hz,	
Capacity of control power supply w/o options	1 KVA		1 KVA	
Capacity of control power supply with options	"depending on options to be used"		"depending on options to be used"	
Fan power supply	3-phase, 400V/480V, 50/60Hz		3-phase, 400V/480V, 50/60Hz	
Capacity of fan power supply (kVA) 5)	4		8	
Maintenance				
Maintenance access	Front		Front	
Cable entry 6)	Bottom in /Bottom out		Bottom in /Bottom out	
NOTE: 1. Values valid for synchronous motor and asynchronous motor. The specifications for the maximum motor shaft power is based on a motor efficiency of 95%. 2. Including the height of top cooling fans. 3. Typical cable size values based on use of copper cables in cable tray laying. Incoming cable size is based on drive current rating. It has to be checked to be in accordance to mains short circuit capability and local and national electrical code requirement as well all other applicable regulations. 4. Variation in max. cable length may be possible depending on type cable and installation. For longer cable length between motor and drive contact Schneider Electric. 5. Contact Schneider Electric if N+1 redundancy cooling fan requested. 6. For other combination contact Schneider Electric.				

ATV6100C100A6060...ATV6100C200A6060

ATV6100	C100A6060●●●		C113A6060●●●	
Nominal data	Normal Duty	Heavy Duty	Normal Duty	Heavy Duty
Type rating [kVA]	1000		1125	
Max. Motor power [kW] / [HP] 1)	800/1072	660/884	900/1211	799/1071
Nominal Continuous output current [A] 1)	92.1	76	104	92
Max. output current with 120 % overload 1 min / 10 min [A]	111	/	125	/
Max. output current with 150 % overload1 min / 10 min [A]	/	114	/	138
Power cells				
Number of cells per phase	5		5	
Power cell rated current [A]	95		115	
Power cell current with 120 % overload 1 min / 10 min [A]	114		138	
Max. output current for 3 sec [A]	142.5		172.5	
Characteristics with standard efficiency				
Efficiency at 100 % load (incl. Transformer) [%]	96.0%		96.0%	
Total losses at 100 % load [kW]	34.9	28.7	39.2	34.8
Air flow [m³/h]	12600		12600	
Noise level [dB (A)] @ 50 Hz	80		83	
Weight [kg / lb]	6085/13387		6085/13387	
Dimension [mm / inch] W*D*H 2)	3350*1550*2805/ 132*61.1*110.6		3350*1550*2805/ 132*61.1*110.6	
Connection				
Incoming cable type	symmetrical three-phase		symmetrical three-phase	
Typical cable size (mm² / AWG) 3)	95/000		95/000	
Motor cable type	symmetrical three-phase(Use of shielded cable is advisable)		symmetrical three-phase(Use of shielded cable is advisable)	
Typical cable size (mm² / AWG) 3)	25/4		35/2	
Motor cable Max. length 4)	1000 m		1000 m	
Grounding connection PE (mm² / AWG)	50		50	
Control power supply	single phase, 230V, 50/60Hz,		single phase, 230V, 50/60Hz,	
Capacity of control power supply w/o options	1 KVA		1 KVA	
Capacity of control power supply with options	"depending on options to be used"		"depending on options to be used"	
Fan power supply	3-phase, 400V/480V, 50/60Hz		3-phase, 400V/480V, 50/60Hz	
Capacity of fan power supply (kVA) 5)	8		8	
Maintenance				
Maintenance access	Front		Front	
Cable entry 6)	Bottom in /Bottom out		Bottom in /Bottom out	

ATV6100	C125A6060●●●		C136A6060●●●	
Nominal data	Normal Duty	Heavy Duty	Normal Duty	Heavy Duty
Type rating [kVA]	1250		1360	
Max. Motor power [kW] / [HP] 1)	1000/1340	799/1071	1088/1458	869/1164
Nominal Continuous output current [A] 1)	115	92	125	100
Max. output current with 120 % overload 1 min / 10 min [A]	138	/	150	/
Max. output current with 150 % overload1 min / 10 min [A]	/	138	/	150
Power cells				
Number of cells per phase	5		5	
Power cell rated current [A]	115		125	
Power cell current with 120 % overload 1 min / 10 min [A]	138		150	
Max. output current for 3 sec [A]	172.5		187.5	
Characteristics with standard efficiency				
Efficiency at 100 % load (incl. Transformer) [%]	96.0%		96.0%	
Total losses at 100 % load [kW]	43.6	34.8	47.4	37.9
Air flow [m³/h]	12600		12600	
Noise level [dB (A)] @ 50 Hz	83		83	
Weight [kg / lb]	6085/13387		6085/13387	
Dimension [mm / inch] W*D*H 2)	3350*1550*2805/ 132*61.1*110.6		3350*1550*2805/ 132*61.1*110.6	
Connection				
Incoming cable type	symmetrical three-phase		symmetrical three-phase	
Typical cable size (mm² / AWG) 3)	95/000		95/000	
Motor cable type	symmetrical three-phase(Use of shielded cable is advisable)		symmetrical three-phase(Use of shielded cable is advisable)	
Typical cable size (mm² / AWG) 3)	35/2		35/2	
Motor cable Max. length 4)	1000 m		1000 m	
Grounding connection PE (mm² / AWG)	50		50	
Control power supply	single phase, 230V, 50/60Hz,		single phase, 230V, 50/60Hz,	
Capacity of control power supply w/o options	1 KVA		1 KVA	
Capacity of control power supply with options	"depending on options to be used"		"depending on options to be used"	
Fan power supply	3-phase, 400V/480V, 50/60Hz		3-phase, 400V/480V, 50/60Hz	
Capacity of fan power supply (kVA) 5)	8		8	
Maintenance				
Maintenance access	Front		Front	
Cable entry 6)	Bottom in /Bottom out		Bottom in /Bottom out	

ATV6100	C140A6060●●●		C175A6060●●●	
Nominal data	Normal Duty	Heavy Duty	Normal Duty	Heavy Duty
Type rating [kVA]	1400		1750	
Max. Motor power [kW] / [HP] 1)	1120/1501	973/1304	1400/1876	1286/1723
Nominal Continuous output current [A] 1)	129	112	161	148
Max. output current with 120 % overload 1 min / 10 min [A]	155	/	193	/
Max. output current with 150 % overload1 min / 10 min [A]	/	168	/	222
Power cells				
Number of cells per phase	5		5	
Power cell rated current [A]	140		185	
Power cell current with 120 % overload 1 min / 10 min [A]	168		222	
Max. output current for 3 sec [A]	210		277.5	
Characteristics with standard efficiency				
Efficiency at 100 % load (incl. Transformer) [%]	96.0%		96.0%	
Total losses at 100 % load [kW]	48.7	42.3	60.9	56.0
Air flow [m³/h]	13800		13800	
Noise level [dB (A)] @ 50 Hz	83		83	
Weight [kg / lb]	6085/13387		6085/13387	
Dimension [mm / inch] W*D*H 2)	3350*1550*2805/ 132*61.1*110.6		3350*1550*2805/ 132*61.1*110.6	
Connection				
Incoming cable type	symmetrical three-phase		symmetrical three-phase	
Typical cable size (mm² / AWG) 3)	95/000		95/000	
Motor cable type	symmetrical three-phase(Use of shielded cable is advisable)		symmetrical three-phase(Use of shielded cable is advisable)	
Typical cable size (mm² / AWG) 3)	35/2		35/2	
Motor cable Max. length 4)	1000 m		1000 m	
Grounding connection PE (mm² / AWG)	50		50	
Control power supply	single phase, 230V, 50/60Hz,		single phase, 230V, 50/60Hz,	
Capacity of control power supply w/o options	1 KVA		1 KVA	
Capacity of control power supply with options	"depending on options to be used"		"depending on options to be used"	
Fan power supply	3-phase, 400V/480V, 50/60Hz		3-phase, 400V/480V, 50/60Hz	
Capacity of fan power supply (kVA) 5)	12		12	
Maintenance				
Maintenance access	Front		Front	
Cable entry 6)	Bottom in /Bottom out		Bottom in /Bottom out	

ATV6100	C200A6060...	
Nominal data	Normal Duty	Heavy Duty
Type rating [kVA]	2000	
Max. Motor power [kW] / [HP] 1)	1600/2144	1286/1723
Nominal Continuous output current [A] 1)	184	148
Max. output current with 120 % overload 1 min / 10 min [A]	221	/
Max. output current with 150 % overload1 min / 10 min [A]	/	222
Power cells		
Number of cells per phase	5	
Power cell rated current [A]	185	
Power cell current with 120 % overload 1 min / 10 min [A]	222	
Max. output current for 3 sec [A]	277.5	
Characteristics with standard efficiency		
Efficiency at 100 % load (incl. Transformer) [%]	96.0%	
Total losses at 100 % load [kW]	69.6	56.0
Air flow [m³/h]	13800	
Noise level [dB (A)] @ 50 Hz	83	
Weight [kg / lb]	6085/13387	
Dimension [mm / inch] W*D*H 2)	3350*1550*2805/132*61.1*110.6	
Connection		
Incoming cable type	symmetrical three-phase	
Typical cable size (mm² / AWG) 3)	95/000	
Motor cable type	symmetrical three-phase(Use of shielded cable is advisable)	
Typical cable size (mm² / AWG) 3)	50/0	
Motor cable Max. length 4)	1000 m	
Grounding connection PE (mm² / AWG)	50	
Control power supply	single phase, 230V, 50/60Hz,	
Capacity of control power supply w/o options	1 KVA	
Capacity of control power supply with options	"depending on options to be used"	
Fan power supply	3-phase, 400V/480V, 50/60Hz	
Capacity of fan power supply (kVA) 5)	12	
Maintenance		
Maintenance access	Front	
Cable entry 6)	Bottom in /Bottom out	
NOTE: 1. Values valid for synchronous motor and asynchronous motor. The specifications for the maximum motor shaft power is based on a motor efficiency of 95%. 2. Including the height of top cooling fans. 3. Typical cable size values based on use of copper cables in cable tray laying. Incoming cable size is based on drive current rating. It has to be checked to be in accordance to mains short circuit capability and local and national electrical code requirement as well all other applicable regulations. 4. Variation in max. cable length may be possible depending on type cable and installation. For longer cable length between motor and drive contact Schneider Electric. 5. Contact Schneider Electric if N+1 redundancy cooling fan requested. 6. For other combination contact Schneider Electric.		

ATV6100C225A6060...ATV6100C261A6060

ATV6100	C225A6060●●●		C250A6060●●●	
Nominal data	Normal Duty	Heavy Duty	Normal Duty	Heavy Duty
Type rating [kVA]	2250		2500	
Max. Motor power [kW] / [HP] 1)	1800/2412	1460/1956	2000/2680	1633/2188
Nominal Continuous output current [A] 1)	207	168	230	188
Max. output current with 120 % overload 1 min / 10 min [A]	248	/	276	/
Max. output current with 150 % overload1 min / 10 min [A]	/	252	/	282
Power cells				
Number of cells per phase	5		5	
Power cell rated current [A]	210		235	
Power cell current with 120 % overload 1 min / 10 min [A]	252		282	
Max. output current for 3 sec [A]	315		352.5	
Characteristics with standard efficiency				
Efficiency at 100 % load (incl. Transformer) [%]	96.0%		96.0%	
Total losses at 100 % load [kW]	78.3	63.6	87.0	71.0
Air flow [m³/h]	21000		21000	
Noise level [dB (A)] @ 50 Hz	83		83	
Weight [kg / lb]	6700/14740		6700/14740	
Dimension [mm / inch] W*D*H 2)	4350*1400*2925/ 171.4*55.2*115.3		4350*1400*2925/ 171.4*55.2*115.3	
Connection				
Incoming cable type	symmetrical three-phase		symmetrical three-phase	
Typical cable size (mm² / AWG) 3)	95/000		95/000	
Motor cable type	symmetrical three-phase(Use of shielded cable is advisable)		symmetrical three-phase(Use of shielded cable is advisable)	
Typical cable size (mm² / AWG) 3)	70/00		70/00	
Motor cable Max. length 4)	1000 m		1000 m	
Grounding connection PE (mm² / AWG)	50		50	
Control power supply	single phase, 230V, 50/60Hz,		single phase, 230V, 50/60Hz,	
Capacity of control power supply w/o options	1 KVA		1 KVA	
Capacity of control power supply with options	"depending on options to be used"		"depending on options to be used"	
Fan power supply	3-phase, 400V/480V, 50/60Hz		3-phase, 400V/480V, 50/60Hz	
Capacity of fan power supply (kVA) 5)	15		15	
Maintenance				
Maintenance access	Front & Rear		Front & Rear	
Cable entry 6)	Bottom in /Bottom out		Bottom in /Bottom out	

ATV6100	C261A6666●●●	
Nominal data	Normal Duty	Heavy Duty
Type rating [kVA]	2610	
Max. Motor power [kW] / [HP] 1)	2088/2798	1668/2235
Nominal Continuous output current [A] 1)	240	192
Max. output current with 120 % overload 1 min / 10 min [A]	288	/
Max. output current with 150 % overload1 min / 10 min [A]	/	288
Power cells		
Number of cells per phase	5	
Power cell rated current [A]	240	
Power cell current with 120 % overload 1 min / 10 min [A]	288	
Max. output current for 3 sec [A]	360	
Characteristics with standard efficiency		
Efficiency at 100 % load (incl. Transformer) [%]	96.0%	
Total losses at 100 % load [kW]	90.8	72.6
Air flow [m³/h]	21000	
Noise level [dB (A)] @ 50 Hz	83	
Weight [kg / lb]	6700/14740	
Dimension [mm / inch] W*D*H 2)	4350*1400*2925/171.4*55.2*115.3	
Connection		
Incoming cable type	symmetrical three-phase	
Typical cable size (mm² / AWG) 3)	95/000	
Motor cable type	symmetrical three-phase(Use of shielded cable is advisable)	
Typical cable size (mm² / AWG) 3)	70/00	
Motor cable Max. length 4)	1000 m	
Grounding connection PE (mm² / AWG)	50	
Control power supply	single phase, 230V, 50/60Hz,	
Capacity of control power supply w/o options	1 KVA	
Capacity of control power supply with options	"depending on options to be used"	
Fan power supply	3-phase, 400V/480V, 50/60Hz	
Capacity of fan power supply (kVA) 5)	15	
Maintenance		
Maintenance access	Front & Rear	
Cable entry 6)	Bottom in /Bottom out	
NOTE: 1. Values valid for synchronous motor and asynchronous motor. The specifications for the maximum motor shaft power is based on a motor efficiency of 95%. 2. Including the height of top cooling fans. 3. Typical cable size values based on use of copper cables in cable tray laying. Incoming cable size is based on drive current rating. It has to be checked to be in accordance to mains short circuit capability and local and national electrical code requirement as well all other applicable regulations. 4. Variation in max. cable length may be possible depending on type cable and installation. For longer cable length between motor and drive contact Schneider Electric. 5. Contact Schneider Electric if N+1 redundancy cooling fan requested. 6. For other combination contact Schneider Electric.		

ATV6100C280A6060

ATV6100	C280A6666●●●	
Nominal data	Normal Duty	Heavy Duty
Type rating [kVA]	2800	
Max. Motor power [kW] / [HP] 1)	2240/3002	1946/2608
Nominal Continuous output current [A] 1)	258	224
Max. output current with 120 % overload 1 min / 10 min [A]	310	/
Max. output current with 150 % overload1 min / 10 min [A]	/	336
Power cells		
Number of cells per phase	5	
Power cell rated current [A]	280	
Power cell current with 120 % overload 1 min / 10 min [A]	336	
Max. output current for 3 sec [A]	420	
Characteristics with standard efficiency		
Efficiency at 100 % load (incl. Transformer) [%]	96.0%	
Total losses at 100 % load [kW]	97.4	84.6
Air flow [m³/h]	21000	
Noise level [dB (A)] @ 50 Hz	83	
Weight [kg / lb]	6700/14740	
Dimension [mm / inch] W*D*H 2)	4450*1400*2925/175.4*55.2*115.3	
Connection		
Incoming cable type	symmetrical three-phase	
Typical cable size (mm² / AWG) 3)	95/000	
Motor cable type	symmetrical three-phase(Use of shielded cable is advisable)	
Typical cable size (mm² / AWG) 3)	95/000	
Motor cable Max. length 4)	1000 m	
Grounding connection PE (mm² / AWG)	50	
Control power supply	single phase, 230V, 50/60Hz,	
Capacity of control power supply w/o options	1 KVA	
Capacity of control power supply with options	"depending on options to be used"	
Fan power supply	3-phase, 400V/480V, 50/60Hz	
Capacity of fan power supply (kVA) 5)	15	
Maintenance		
Maintenance access	Front & Rear	
Cable entry 6)	Bottom in /Bottom out	
NOTE: 1. Values valid for synchronous motor and asynchronous motor. The specifications for the maximum motor shaft power is based on a motor efficiency of 95%. 2. Including the height of top cooling fans. 3. Typical cable size values based on use of copper cables in cable tray laying. Incoming cable size is based on drive current rating. It has to be checked to be in accordance to mains short circuit capability and local and national electrical code requirement as well all other applicable regulations. 4. Variation in max. cable length may be possible depending on type cable and installation. For longer cable length between motor and drive contact Schneider Electric. 5. Contact Schneider Electric if N+1 redundancy cooling fan requested. 6. For other combination contact Schneider Electric.		

ATV6100C350A6060...ATV6100C419A6060

ATV6100	C350A6060●●●		C394A6060●●●	
Nominal data	Normal Duty	Heavy Duty	Normal Duty	Heavy Duty
Type rating [kVA]	3500		3940	
Max. Motor power [kW] / [HP] 1)	2800/3752	2259/3027	3152/4224	2572/3446
Nominal Continuous output current [A] 1)	322	260	363	296
Max. output current with 120 % overload 1 min / 10 min [A]	386	/	436	/
Max. output current with 150 % overload1 min / 10 min [A]	/	390	/	444
Power cells				
Number of cells per phase	5		5	
Power cell rated current [A]	325		370	
Power cell current with 120 % overload 1 min / 10 min [A]	390		444	
Max. output current for 3 sec [A]	487.5		555	
Characteristics with standard efficiency				
Efficiency at 100 % load (incl. Transformer) [%]	96.0%		96.0%	
Total losses at 100 % load [kW]	122.0	98.3	137.0	112.0
Air flow [m³/h]	33600		33600	
Noise level [dB (A)] @ 50 Hz	83		83	
Weight [kg / lb]	9350/20570		9350/20570	
Dimension [mm / inch] W*D*H 2)	4850*1500*3125/ 191.1*59.1*123.2		4850*1500*3125/ 191.1*59.1*123.2	
Connection				
Incoming cable type	symmetrical three-phase		symmetrical three-phase	
Typical cable size (mm² / AWG) 3)	120/0000		185/350MCM	
Motor cable type	symmetrical three-phase(Use of shielded cable is advisable)		symmetrical three-phase(Use of shielded cable is advisable)	
Typical cable size (mm² / AWG) 3)	120/0000		185/350MCM	
Motor cable Max. length 4)	1000 m		1000 m	
Grounding connection PE (mm² / AWG)	50		50	
Control power supply	single phase, 230V, 50/60Hz,		single phase, 230V, 50/60Hz,	
Capacity of control power supply w/o options	1 KVA		1 KVA	
Capacity of control power supply with options	"depending on options to be used"		"depending on options to be used"	
Fan power supply	3-phase, 400V/480V, 50/60Hz		3-phase, 400V/480V, 50/60Hz	
Capacity of fan power supply (kVA) 5)	20		20	
Maintenance				
Maintenance access	Front & Rear		Front & Rear	
Cable entry 6)	Bottom in /Bottom out		Bottom in /Bottom out	

ATV6100	C419A6060●●●	
Nominal data	Normal Duty	Heavy Duty
Type rating [kVA]	4190	
Max. Motor power [kW] / [HP] 1)	3352/4492	2745/3678
Nominal Continuous output current [A] 1)	386	316
Max. output current with 120 % overload 1 min / 10 min [A]	463	/
Max. output current with 150 % overload1 min / 10 min [A]	/	474
Power cells		
Number of cells per phase	5	
Power cell rated current [A]	395	
Power cell current with 120 % overload 1 min / 10 min [A]	474	
Max. output current for 3 sec [A]	592.5	
Characteristics with standard efficiency		
Efficiency at 100 % load (incl. Transformer) [%]	96.0%	
Total losses at 100 % load [kW]	146.0	119.0
Air flow [m³/h]	33600	
Noise level [dB (A)] @ 50 Hz	83	
Weight [kg / lb]	9350/20570	
Dimension [mm / inch] W*D*H 2)	4850*1500*3125/191.1*59.1*123.2	
Connection		
Incoming cable type	symmetrical three-phase	
Typical cable size (mm² / AWG) 3)	185/350MCM	
Motor cable type	symmetrical three-phase(Use of shielded cable is advisable)	
Typical cable size (mm² / AWG) 3)	185/350MCM	
Motor cable Max. length 4)	1000 m	
Grounding connection PE (mm² / AWG)	50	
Control power supply	single phase, 230V, 50/60Hz,	
Capacity of control power supply w/o options	1 KVA	
Capacity of control power supply with options	"depending on options to be used"	
Fan power supply	3-phase, 400V/480V, 50/60Hz	
Capacity of fan power supply (kVA) 5)	20	
Maintenance		
Maintenance access	Front & Rear	
Cable entry 6)	Bottom in /Bottom out	
NOTE: 1. Values valid for synchronous motor and asynchronous motor. The specifications for the maximum motor shaft power is based on a motor efficiency of 95%. 2. Including the height of top cooling fans. 3. Typical cable size values based on use of copper cables in cable tray laying. Incoming cable size is based on drive current rating. It has to be checked to be in accordance to mains short circuit capability and local and national electrical code requirement as well all other applicable regulations. 4. Variation in max. cable length may be possible depending on type cable and installation. For longer cable length between motor and drive contact Schneider Electric. 5. Contact Schneider Electric if N+1 redundancy cooling fan requested. 6. For other combination contact Schneider Electric.		

ATV6100C500A6060...ATV6100C600A6060

ATV6100	C500A6060●●●		C525A6060●●●	
Nominal data	Normal Duty	Heavy Duty	Normal Duty	Heavy Duty
Type rating [kVA]	5000		5250	
Max. Motor power [kW] / [HP] 1)	4000/5360	3232/4331	4200/5628	3545/4750
Nominal Continuous output current [A] 1)	460	372	483	408
Max. output current with 120 % overload 1 min / 10 min [A]	552	/	580	/
Max. output current with 150 % overload1 min / 10 min [A]	/	558	/	612
Power cells				
Number of cells per phase	5		5	
Power cell rated current [A]	465		510	
Power cell current with 120 % overload 1 min / 10 min [A]	558		612	
Max. output current for 3 sec [A]	697.5		765	
Characteristics with standard efficiency				
Efficiency at 100 % load (incl. Transformer) [%]	96.0%		96.0%	
Total losses at 100 % load [kW]	174.0	141.0	183.0	154.0
Air flow [m³/h]	42000		42000	
Noise level [dB (A)] @ 50 Hz	83		83	
Weight [kg / lb]	12385/27247		12385/27247	
Dimension [mm / inch] W*D*H 2)	6000*1500*3125/ 236.4*59.1*123.2		6000*1500*3125/ 236.4*59.1*123.2	
Connection				
Incoming cable type	symmetrical three-phase		symmetrical three-phase	
Typical cable size (mm² / AWG) 3)	240/500MCM		240/500MCM	
Motor cable type	symmetrical three-phase(Use of shielded cable is advisable)		symmetrical three-phase(Use of shielded cable is advisable)	
Typical cable size (mm² / AWG) 3)	240/510MCM		240/510MCM	
Motor cable Max. length 4)	1000 m		1000 m	
Grounding connection PE (mm² / AWG)	50		50	
Control power supply	single phase, 230V, 50/60Hz,		single phase, 230V, 50/60Hz,	
Capacity of control power supply w/o options	1 KVA		1 KVA	
Capacity of control power supply with options	"depending on options to be used"		"depending on options to be used"	
Fan power supply	3-phase, 400V/480V, 50/60Hz		3-phase, 400V/480V, 50/60Hz	
Capacity of fan power supply (kVA) 5)	22		22	
Maintenance				
Maintenance access	Front & Rear		Front & Rear	
Cable entry 6)	Bottom in /Bottom out		Bottom in /Bottom out	

ATV6100	C600A6060●●●	
Nominal data	Normal Duty	Heavy Duty
Type rating [kVA]	6000	
Max. Motor power [kW] / [HP] 1)	4800/6432	3892/5215
Nominal Continuous output current [A] 1)	552	448
Max. output current with 120 % overload 1 min / 10 min [A]	662	/
Max. output current with 150 % overload1 min / 10 min [A]	/	672
Power cells		
Number of cells per phase	5	
Power cell rated current [A]	560	
Power cell current with 120 % overload 1 min / 10 min [A]	672	
Max. output current for 3 sec [A]	840	
Characteristics with standard efficiency		
Efficiency at 100 % load (incl. Transformer) [%]	96.0%	
Total losses at 100 % load [kW]	209.0	169.0
Air flow [m³/h]	42000	
Noise level [dB (A)] @ 50 Hz	83	
Weight [kg / lb]	12385/27247	
Dimension [mm / inch] W*D*H 2)	6000*1500*3125/236.4*59.1*123.2	
Connection		
Incoming cable type	symmetrical three-phase	
Typical cable size (mm² / AWG) 3)	120*2/2*0000	
Motor cable type	symmetrical three-phase(Use of shielded cable is advisable)	
Typical cable size (mm² / AWG) 3)	120*2/2*0000	
Motor cable Max. length 4)	1000 m	
Grounding connection PE (mm² / AWG)	50	
Control power supply	single phase, 230V, 50/60Hz,	
Capacity of control power supply w/o options	1 KVA	
Capacity of control power supply with options	"depending on options to be used"	
Fan power supply	3-phase, 400V/480V, 50/60Hz	
Capacity of fan power supply (kVA) 5)	22	
Maintenance		
Maintenance access	Front & Rear	
Cable entry 6)	Bottom in /Bottom out	
NOTE: 1. Values valid for synchronous motor and asynchronous motor. The specifications for the maximum motor shaft power is based on a motor efficiency of 95%. 2. Including the height of top cooling fans. 3. Typical cable size values based on use of copper cables in cable tray laying. Incoming cable size is based on drive current rating. It has to be checked to be in accordance to mains short circuit capability and local and national electrical code requirement as well all other applicable regulations. 4. Variation in max. cable length may be possible depending on type cable and installation. For longer cable length between motor and drive contact Schneider Electric. 5. Contact Schneider Electric if N+1 redundancy cooling fan requested. 6. For other combination contact Schneider Electric.		

Output Voltage 6.6 kV

ATV6100D394A6666...ATV6100D950A6666

ATV6100	D394A6666●●●		D450A6666●●●	
Nominal data	Normal Duty	Heavy Duty	Normal Duty	Heavy Duty
Type rating [kVA]	394		450	
Max. Motor power [kW] / [HP] ¹⁾	315/422	290/388	360/482	320/429
Nominal Continuous output current [A] ¹⁾	33	31	38	34.4
Max. output current with 120 % overload 1 min / 10 min [A]	39.6	/	45.2	/
Max. output current with 150 % overload 1 min / 10 min [A]	/	46.5	/	51.6
Power cells				
Number of cells per phase	5		5	
Power cell rated current [A]	43		43	
Power cell current with 120 % overload 1 min / 10 min [A]	51.6		51.6	
Max. output current for 3 sec [A]	64.5		64.5	
Characteristics with standard efficiency				
Efficiency at 100 % load (incl. Transformer) [%]	96.0%		96.0%	
Total losses at 100 % load [kW]	13.8	12.7	15.7	14.0
Air flow [m³/h]	4740		4740	
Noise level [dB (A)] @ 50 Hz	80		80	
Weight [kg / lb]	3885/8565		3885/8565	
Dimension [mm / inch] W*D*H ²⁾	2800*1450*2750/ 110.2*57.2*108.4		2800*1450*2750/ 110.2*57.2*108.4	
Connection				
Incoming cable type	symmetrical three-phase		symmetrical three-phase	
Typical cable size (mm² / AWG) ³⁾	95/000		95/000	
Motor cable type	symmetrical three-phase(Use of shielded cable is advisable)		symmetrical three-phase(Use of shielded cable is advisable)	
Typical cable size (mm² / AWG) ³⁾	25/4		25/4	
Motor cable Max. length ⁴⁾	300m, 1000m as option		300m, 1000m as option	
Grounding connection PE (mm² / AWG)	50/0		50/0	
Control power supply	single phase, 230V, 50/60Hz		single phase, 230V, 50/60Hz	
Capacity of control power supply w/o options	1 kVA		1 kVA	
Capacity of control power supply with options	"depending on options to be used"		"depending on options to be used"	
Fan power supply	3-phase, 400V/480V, 50/60Hz		3-phase, 400V/480V, 50/60Hz	
Capacity of fan power supply (kVA) ⁵⁾	2		3	
Maintenance				
Maintenance access	Front		Front	
Cable entry ⁶⁾	Bottom in /Bottom out		Bottom in /Bottom out	

ATV6100	D513A6666●●●		D588A6666●●●	
Nominal data	Normal Duty	Heavy Duty	Normal Duty	Heavy Duty
Type rating [kVA]	513		588	
Max. Motor power [kW] / [HP] ¹⁾	410/549	320/429	470/630	380/509
Nominal Continuous output current [A] ¹⁾	43	34.4	49	40
Max. output current with 120 % overload 1 min / 10 min [A]	51.4	/	59	/
Max. output current with 150 % overload 1 min / 10 min [A]	/	51.6	/	60
Power cells				
Number of cells per phase	5		5	
Power cell rated current [A]	43		50	
Power cell current with 120 % overload 1 min / 10 min [A]	51.6		60	
Max. output current for 3 sec [A]	64.5		75	
Characteristics with standard efficiency				
Efficiency at 100 % load (incl. Transformer) [%]	96.0%		96.0%	
Total losses at 100 % load [kW]	17.9	14.0	20.5	16.6
Air flow [m³/h]	4740		4740	
Noise level [dB (A)] @ 50 Hz	80		80	
Weight [kg / lb]	3885/8565		3885/8565	
Dimension [mm / inch] W*D*H ²⁾	2800*1450*2750/ 110.2*57.2*108.4		2800*1450*2750/ 110.2*57.2*108.4	
Connection				
Incoming cable type	symmetrical three-phase		symmetrical three-phase	
Typical cable size (mm² / AWG) ³⁾	95/000		95/000	
Motor cable type	symmetrical three-phase(Use of shielded cable is advisable)		symmetrical three-phase(Use of shielded cable is advisable)	
Typical cable size (mm² / AWG) ³⁾	25/4		25/4	
Motor cable Max. length ⁴⁾	300m, 1000m as option		300m, 1000m as option	
Grounding connection PE (mm² / AWG)	50/0		50/0	
Control power supply	single phase, 230V, 50/60Hz		single phase, 230V, 50/60Hz	
Capacity of control power supply w/o options	1 kVA		1 kVA	
Capacity of control power supply with options	"depending on options to be used"		"depending on options to be used"	
Fan power supply	3-phase, 400V/480V, 50/60Hz		3-phase, 400V/480V, 50/60Hz	
Capacity of fan power supply (kVA) ⁵⁾	4		5	
Maintenance				
Maintenance access	Front		Front	
Cable entry ⁶⁾	Bottom in /Bottom out		Bottom in /Bottom out	

ATV6100	D688A6666●●●		D775A6666●●●	
Nominal data	Normal Duty	Heavy Duty	Normal Duty	Heavy Duty
Type rating [kVA]	688		775	
Max. Motor power [kW] / [HP] ¹⁾	550/737	490/657	620/831	490/657
Nominal Continuous output current [A] ¹⁾	58	52	65	52
Max. output current with 120 % overload 1 min / 10 min [A]	69.1	/	77.8	/
Max. output current with 150 % overload 1 min / 10 min [A]	/	78	/	78
Power cells				
Number of cells per phase	5		5	
Power cell rated current [A]	65		65	
Power cell current with 120 % overload 1 min / 10 min [A]	78		78	
Max. output current for 3 sec [A]	97.5		97.5	
Characteristics with standard efficiency				
Efficiency at 100 % load (incl. Transformer) [%]	96.0%		96.0%	
Total losses at 100 % load [kW]	24.0	21.4	27.0	21.4
Air flow [m³/h]	5580		5580	
Noise level [dB (A)] @ 50 Hz	80		80	
Weight [kg / lb]	3885/8565		3885/8565	
Dimension [mm / inch] W*D*H ²⁾	2800*1450*2750/ 110.2*57.2*108.4		2800*1450*2750/ 110.2*57.2*108.4	
Connection				
Incoming cable type	symmetrical three-phase		symmetrical three-phase	
Typical cable size (mm² / AWG) ³⁾	95/000		95/000	
Motor cable type	symmetrical three-phase(Use of shielded cable is advisable)		symmetrical three-phase(Use of shielded cable is advisable)	
Typical cable size (mm² / AWG) ³⁾	25/4		25/4	
Motor cable Max. length ⁴⁾	300m, 1000m as option		300m, 1000m as option	
Grounding connection PE (mm² / AWG)	50/0		50/0	
Control power supply	single phase, 230V, 50/60Hz		single phase, 230V, 50/60Hz	
Capacity of control power supply w/o options	1 kVA		1 kVA	
Capacity of control power supply with options	"depending on options to be used"		"depending on options to be used"	
Fan power supply	3-phase, 400V/480V, 50/60Hz		3-phase, 400V/480V, 50/60Hz	
Capacity of fan power supply (kVA) ⁵⁾	11		13	
Maintenance				
Maintenance access	Front		Front	
Cable entry ⁶⁾	Bottom in /Bottom out		Bottom in /Bottom out	

ATV6100	D825A6666●●●		D950A6666●●●	
Nominal data	Normal Duty	Heavy Duty	Normal Duty	Heavy Duty
Type rating [kVA]	825		950	
Max. Motor power [kW] / [HP] ¹⁾	660/884	530/710	760/1018	610/818
Nominal Continuous output current [A] ¹⁾	69	56	80	64
Max. output current with 120 % overload 1 min / 10 min [A]	82.9	/	95.4	/
Max. output current with 150 % overload 1 min / 10 min [A]	/	84	/	96
Power cells				
Number of cells per phase	5		5	
Power cell rated current [A]	70		80	
Power cell current with 120 % overload 1 min / 10 min [A]	84		96	
Max. output current for 3 sec [A]	105		120	
Characteristics with standard efficiency				
Efficiency at 100 % load (incl. Transformer) [%]	96.0%		96.0%	
Total losses at 100 % load [kW]	28.7	23.1	33.1	26.6
Air flow [m³/h]	5580		9360	
Noise level [dB (A)] @ 50 Hz	80		80	
Weight [kg / lb]	3885/8565		3885/8565	
Dimension [mm / inch] W*D*H ²⁾	2800*1450*2750/ 110.2*57.2*108.4		2800*1450*2805/ 110.2*57.2*110.6	
Connection				
Incoming cable type	symmetrical three-phase		symmetrical three-phase	
Typical cable size (mm² / AWG) ³⁾	95/000		95/000	
Motor cable type	symmetrical three-phase(Use of shielded cable is advisable)		symmetrical three-phase(Use of shielded cable is advisable)	
Typical cable size (mm² / AWG) ³⁾	25/4		25/4	
Motor cable Max. length ⁴⁾	300m, 1000m as option		1000m	
Grounding connection PE (mm² / AWG)	50/0		50/0	
Control power supply	single phase, 230V, 50/60Hz		single phase, 230V, 50/60Hz	
Capacity of control power supply w/o options	1 kVA		1 kVA	
Capacity of control power supply with options	"depending on options to be used"		"depending on options to be used"	
Fan power supply	3-phase, 400V/480V, 50/60Hz		3-phase, 400V/480V, 50/60Hz	
Capacity of fan power supply (kVA) ⁵⁾	15		17	
Maintenance				
Maintenance access	Front		Front	
Cable entry ⁶⁾	Bottom in /Bottom out		Bottom in /Bottom out	
NOTE: 1. Values valid for synchronous motor and asynchronous motor. The specifications for the maximum motor shaft power is based on a motor efficiency of 95%. 2. Including the height of top cooling fans. 3. Typical cable size values based on use of copper cables in cable tray laying. Incoming cable size is based on drive current rating. It has to be checked to be in accordance to mains short circuit capability and local and national electrical code requirement as well all other applicable regulations. 4. Variation in max. cable length may be possible depending on type cable and installation. For longer cable length between motor and drive contact Schneider Electric. 5. Contact Schneider Electric if N+1 redundancy cooling fan requested. 6. For other combination contact Schneider Electric.				

ATV6100C113A6666...ATV6100C221A6666

ATV6100	C113A6666●●●		C125A6666●●●	
Nominal data	Normal Duty	Heavy Duty	Normal Duty	Heavy Duty
Type rating [kVA]	1130		1250	
Max. Motor power [kW] / [HP] ¹⁾	900/1206	720/965	1000/1340	870/1166
Nominal Continuous output current [A] ¹⁾	94	76	105	92
Max. output current with 120 % overload 1 min / 10 min [A]	113	/	126	/
Max. output current with 150 % overload 1 min / 10 min [A]	/	114	/	138
Power cells				
Number of cells per phase	5		5	
Power cell rated current [A]	95		115	
Power cell current with 120 % overload 1 min / 10 min [A]	114		138	
Max. output current for 3 sec [A]	142.5		172.5	
Characteristics with standard efficiency				
Efficiency at 100 % load (incl. Transformer) [%]	96.0%		96.0%	
Total losses at 100 % load [kW]	39.2	31.4	43.6	37.9
Air flow [m³/h]	12600		12600	
Noise level [dB (A)] @ 50 Hz	80		83	
Weight [kg / lb]	6335/13966		6335/13966	
Dimension [mm / inch] W*D*H ²⁾	3350*1550*2805/ 131.9*61.1*110.6		3350*1550*2805/ 131.9*61.1*110.6	
Connection				
Incoming cable type	symmetrical three-phase		symmetrical three-phase	
Typical cable size (mm² / AWG) ³⁾	95/000		95/000	
Motor cable type	symmetrical three-phase(Use of shielded cable is advisable)		symmetrical three-phase(Use of shielded cable is advisable)	
Typical cable size (mm² / AWG) ³⁾	25/4		35/2	
Motor cable Max. length ⁴⁾	1000m		1000m	
Grounding connection PE (mm² / AWG)	50/0		50/0	
Control power supply	single phase, 230V, 50/60Hz		single phase, 230V, 50/60Hz	
Capacity of control power supply w/o options	1 kVA		1 kVA	
Capacity of control power supply with options	"depending on options to be used"		"depending on options to be used"	
Fan power supply	3-phase, 400V/480V, 50/60Hz		3-phase, 400V/480V, 50/60Hz	
Capacity of fan power supply (kVA) ⁵⁾	6		6	
Maintenance				
Maintenance access	Front		Front	
Cable entry ⁶⁾	Bottom in /Bottom out		Bottom in /Bottom out	

ATV6100	C138A6666●●●		C149A6666●●●	
Nominal data	Normal Duty	Heavy Duty	Normal Duty	Heavy Duty
Type rating [kVA]	1380		1490	
Max. Motor power [kW] / [HP] ¹⁾	1100/1474	870/1166	1195/1601	950/1273
Nominal Continuous output current [A] ¹⁾	115	92	125	100
Max. output current with 120 % overload 1 min / 10 min [A]	138	/	150	/
Max. output current with 150 % overload 1 min / 10 min [A]	/	138	/	150
Power cells				
Number of cells per phase	5		5	
Power cell rated current [A]	115		125	
Power cell current with 120 % overload 1 min / 10 min [A]	138		150	
Max. output current for 3 sec [A]	172.5		187.5	
Characteristics with standard efficiency				
Efficiency at 100 % load (incl. Transformer) [%]	96.0%		96.0%	
Total losses at 100 % load [kW]	47.9	37.9	52.0	41.4
Air flow [m³/h]	12600		12600	
Noise level [dB (A)] @ 50 Hz	83		83	
Weight [kg / lb]	6335/13966		6335/13966	
Dimension [mm / inch] W*D*H ²⁾	3350*1550*2805/ 131.9*61.1*110.6		3350*1550*2805/ 131.9*61.1*110.6	
Connection				
Incoming cable type	symmetrical three-phase		symmetrical three-phase	
Typical cable size (mm² / AWG) ³⁾	95/000		95/000	
Motor cable type	symmetrical three-phase(Use of shielded cable is advisable)		symmetrical three-phase(Use of shielded cable is advisable)	
Typical cable size (mm² / AWG) ³⁾	35/2		35/2	
Motor cable Max. length ⁴⁾	1000m		1000m	
Grounding connection PE (mm² / AWG)	50/0		50/0	
Control power supply	single phase, 230V, 50/60Hz		single phase, 230V, 50/60Hz	
Capacity of control power supply w/o options	1 kVA		1 kVA	
Capacity of control power supply with options	"depending on options to be used"		"depending on options to be used"	
Fan power supply	3-phase, 400V/480V, 50/60Hz		3-phase, 400V/480V, 50/60Hz	
Capacity of fan power supply (kVA) ⁵⁾	6		6	
Maintenance				
Maintenance access	Front		Front	
Cable entry ⁶⁾	Bottom in /Bottom out		Bottom in /Bottom out	

ATV6100	C168A6666●●●		C188A6666●●●	
Nominal data	Normal Duty	Heavy Duty	Normal Duty	Heavy Duty
Type rating [kVA]	1680		1880	
Max. Motor power [kW] / [HP] ¹⁾	1340/1796	1070/1434	1500/2010	1410/1890
Nominal Continuous output current [A] ¹⁾	140	112	157	148
Max. output current with 120 % overload 1 min / 10 min [A]	168	/	188	/
Max. output current with 150 % overload 1 min / 10 min [A]	/	168	/	222
Power cells				
Number of cells per phase	5		5	
Power cell rated current [A]	140		185	
Power cell current with 120 % overload 1 min / 10 min [A]	168		222	
Max. output current for 3 sec [A]	210		277.5	
Characteristics with standard efficiency				
Efficiency at 100 % load (incl. Transformer) [%]	96.0%		96.0%	
Total losses at 100 % load [kW]	58.3	46.6	65.3	61.4
Air flow [m³/h]	13800		13800	
Noise level [dB (A)] @ 50 Hz	83		83	
Weight [kg / lb]	6335/13966		6335/13966	
Dimension [mm / inch] W*D*H ²⁾	3350*1550*2805/ 131.9*61.1*110.6		3350*1550*2805/ 131.9*61.1*110.6	
Connection				
Incoming cable type	symmetrical three-phase		symmetrical three-phase	
Typical cable size (mm² / AWG) ³⁾	95/000		95/000	
Motor cable type	symmetrical three-phase(Use of shielded cable is advisable)		symmetrical three-phase(Use of shielded cable is advisable)	
Typical cable size (mm² / AWG) ³⁾	35/2		35/2	
Motor cable Max. length ⁴⁾	1000m		1000m	
Grounding connection PE (mm² / AWG)	50/0		50/0	
Control power supply	single phase, 230V, 50/60Hz		single phase, 230V, 50/60Hz	
Capacity of control power supply w/o options	1 kVA		1 kVA	
Capacity of control power supply with options	"depending on options to be used"		"depending on options to be used"	
Fan power supply	3-phase, 400V/480V, 50/60Hz		3-phase, 400V/480V, 50/60Hz	
Capacity of fan power supply (kVA) ⁵⁾	9		9	
Maintenance				
Maintenance access	Front		Front	
Cable entry ⁶⁾	Bottom in /Bottom out		Bottom in /Bottom out	

ATV6100	C221A6666●●●	
Nominal data	Normal Duty	Heavy Duty
Type rating [kVA]	2210	
Max. Motor power [kW] / [HP] ¹⁾	1770/2372	1410/1890
Nominal Continuous output current [A] ¹⁾	185	148
Max. output current with 120 % overload 1 min / 10 min [A]	222	/
Max. output current with 150 % overload 1 min / 10 min [A]	/	222
Power cells		
Number of cells per phase	5	
Power cell rated current [A]	185	
Power cell current with 120 % overload 1 min / 10 min [A]	222	
Max. output current for 3 sec [A]	277.5	
Characteristics with standard efficiency		
Efficiency at 100 % load (incl. Transformer) [%]	96.0%	
Total losses at 100 % load [kW]	77.0	61.4
Air flow [m³/h]	13800	
Noise level [dB (A)] @ 50 Hz	83	
Weight [kg / lb]	6335/13966	
Dimension [mm / inch] W*D*H ²⁾	3350*1550*2805/131.9*61.1*110.6	
Connection		
Incoming cable type	symmetrical three-phase	
Typical cable size (mm² / AWG) ³⁾	95/000	
Motor cable type	symmetrical three-phase(Use of shielded cable is advisable)	
Typical cable size (mm² / AWG) ³⁾	50/0	
Motor cable Max. length ⁴⁾	1000m	
Grounding connection PE (mm² / AWG)	50/0	
Control power supply	single phase, 230V, 50/60Hz	
Capacity of control power supply w/o options	1 kVA	
Capacity of control power supply with options	"depending on options to be used"	
Fan power supply	3-phase, 400V/480V, 50/60Hz	
Capacity of fan power supply (kVA) ⁵⁾	9	
Maintenance		
Maintenance access	Front	
Cable entry ⁶⁾	Bottom in /Bottom out	
NOTE: 1. Values valid for synchronous motor and asynchronous motor. The specifications for the maximum motor shaft power is based on a motor efficiency of 95%. 2. Including the height of top cooling fans. 3. Typical cable size values based on use of copper cables in cable tray laying. Incoming cable size is based on drive current rating. It has to be checked to be in accordance to mains short circuit capability and local and national electrical code requirement as well all other applicable regulations. 4. Variation in max. cable length may be possible depending on type cable and installation. For longer cable length between motor and drive contact Schneider Electric. 5. Contact Schneider Electric if N+1 redundancy cooling fan requested. 6. For other combination contact Schneider Electric.		

ATV6100C251A6666...ATV6100C286A6666

ATV6100	C251A6666●●●		C281A6666●●●	
Nominal data	Normal Duty	Heavy Duty	Normal Duty	Heavy Duty
Type rating [kVA]	2510		2810	
Max. Motor power [kW] / [HP] ¹⁾	2010/2693	1600/2145	2250/3015	1790/2400
Nominal Continuous output current [A] ¹⁾	210	168	235	188
Max. output current with 120 % overload 1 min / 10 min [A]	252	/	282	/
Max. output current with 150 % overload 1 min / 10 min [A]	/	252	/	282
Power cells				
Number of cells per phase	5		5	
Power cell rated current [A]	210		235	
Power cell current with 120 % overload 1 min / 10 min [A]	252		282	
Max. output current for 3 sec [A]	315		352.5	
Characteristics with standard efficiency				
Efficiency at 100 % load (incl. Transformer) [%]	96.0%		96.0%	
Total losses at 100 % load [kW]	87.4	69.6	97.8	77.8
Air flow [m³/h]	21000		21000	
Noise level [dB (A)] @ 50 Hz	83		83	
Weight [kg / lb]	6750/14850		6750/14850	
Dimension [mm / inch] W*D*H ²⁾	4350*1400*2925/ 171.4*55.2*115.3		4350*1400*2925/ 171.4*55.2*115.3	
Connection				
Incoming cable type	symmetrical three-phase		symmetrical three-phase	
Typical cable size (mm² / AWG) ³⁾	95/000		95/000	
Motor cable type	symmetrical three-phase(Use of shielded cable is advisable)		symmetrical three-phase(Use of shielded cable is advisable)	
Typical cable size (mm² / AWG) ³⁾	70/00		70/00	
Motor cable Max. length ⁴⁾	1000m		1000m	
Grounding connection PE (mm² / AWG)	50/0		50/0	
Control power supply	single phase, 230V, 50/60Hz		single phase, 230V, 50/60Hz	
Capacity of control power supply w/o options	1 kVA		1 kVA	
Capacity of control power supply with options	"depending on options to be used"		"depending on options to be used"	
Fan power supply	3-phase, 400V/480V, 50/60Hz		3-phase, 400V/480V, 50/60Hz	
Capacity of fan power supply (kVA) ⁵⁾	12		12	
Maintenance				
Maintenance access	Front & Rear		Front & Rear	
Cable entry ⁶⁾	Bottom in /Bottom out		Bottom in /Bottom out	

ATV6100		C286A6666•••	
Nominal data		Normal Duty	Heavy Duty
Type rating [kVA]		2860	
Max. Motor power [kW] / [HP] ¹⁾		2290/3069	1830/2454
Nominal Continuous output current [A] ¹⁾		240	192
Max. output current with 120 % overload 1 min / 10 min [A]		288	/
Max. output current with 150 % overload 1 min / 10 min [A]		/	288
Power cells			
Number of cells per phase		5	
Power cell rated current [A]		240	
Power cell current with 120 % overload 1 min / 10 min [A]		288	
Max. output current for 3 sec [A]		360	
Characteristics with standard efficiency			
Efficiency at 100 % load (incl. Transformer) [%]		96.0%	
Total losses at 100 % load [kW]		99.6	79.6
Air flow [m³/h]		21000	
Noise level [dB (A)] @ 50 Hz		83	
Weight [kg / lb]		6750/14850	
Dimension [mm / inch] W*D*H ²⁾		4350*1400*2925/171.4*55.2*115.3	
Connection			
Incoming cable type		symmetrical three-phase	
Typical cable size (mm² / AWG) ³⁾		95/000	
Motor cable type		symmetrical three-phase(Use of shielded cable is advisable)	
Typical cable size (mm² / AWG) ³⁾		70/00	
Motor cable Max. length ⁴⁾		1000m	
Grounding connection PE (mm² / AWG)		50/0	
Control power supply		single phase, 230V, 50/60Hz	
Capacity of control power supply w/o options		1 kVA	
Capacity of control power supply with options		"depending on options to be used"	
Fan power supply		3-phase, 400V/480V, 50/60Hz	
Capacity of fan power supply (kVA) ⁵⁾		12	
Maintenance			
Maintenance access		Front & Rear	
Cable entry ⁶⁾		Bottom in /Bottom out	
NOTE: 1. Values valid for synchronous motor and asynchronous motor. The specifications for the maximum motor shaft power is based on a motor efficiency of 95%. 2. Including the height of top cooling fans. 3. Typical cable size values based on use of copper cables in cable tray laying. Incoming cable size is based on drive current rating. It has to be checked to be in accordance to mains short circuit capability and local and national electrical code requirement as well all other applicable regulations. 4. Variation in max. cable length may be possible depending on type cable and installation. For longer cable length between motor and drive contact Schneider Electric. 5. Contact Schneider Electric if N+1 redundancy cooling fan requested. 6. For other combination contact Schneider Electric.			

ATV6100C335A6666

ATV6100	C335A6666●●●	
Nominal data	Normal Duty	Heavy Duty
Type rating [kVA]	3350	
Max. Motor power [kW] / [HP] ¹⁾	2680/3591	2140/2869
Nominal Continuous output current [A] ¹⁾	280	224
Max. output current with 120 % overload 1 min / 10 min [A]	336	/
Max. output current with 150 % overload 1 min / 10 min [A]	/	336
Power cells		
Number of cells per phase	5	
Power cell rated current [A]	280	
Power cell current with 120 % overload 1 min / 10 min [A]	336	
Max. output current for 3 sec [A]	420	
Characteristics with standard efficiency		
Efficiency at 100 % load (incl. Transformer) [%]	96.0%	
Total losses at 100 % load [kW]	117.0	93.1
Air flow [m³/h]	21000	
Noise level [dB (A)] @ 50 Hz	83	
Weight [kg / lb]	6750/14850	
Dimension [mm / inch] W*D*H ²⁾	4450*1400*2925/175.4*55.2*115.3	
Connection		
Incoming cable type	symmetrical three-phase	
Typical cable size (mm² / AWG) ³⁾	95/000	
Motor cable type	symmetrical three-phase(Use of shielded cable is advisable)	
Typical cable size (mm² / AWG) ³⁾	95/000	
Motor cable Max. length ⁴⁾	1000m	
Grounding connection PE (mm² / AWG)	50/0	
Control power supply	single phase, 230V, 50/60Hz	
Capacity of control power supply w/o options	1 kVA	
Capacity of control power supply with options	"depending on options to be used"	
Fan power supply	3-phase, 400V/480V, 50/60Hz	
Capacity of fan power supply (kVA) ⁵⁾	15	
Maintenance		
Maintenance access	Front & Rear	
Cable entry ⁶⁾	Bottom in /Bottom out	
NOTE: 1. Values valid for synchronous motor and asynchronous motor. The specifications for the maximum motor shaft power is based on a motor efficiency of 95%. 2. Including the height of top cooling fans. 3. Typical cable size values based on use of copper cables in cable tray laying. Incoming cable size is based on drive current rating. It has to be checked to be in accordance to mains short circuit capability and local and national electrical code requirement as well all other applicable regulations. 4. Variation in max. cable length may be possible depending on type cable and installation. For longer cable length between motor and drive contact Schneider Electric. 5. Contact Schneider Electric if N+1 redundancy cooling fan requested. 6. For other combination contact Schneider Electric.		

ATV6100C389A6666...C471A6666

ATV6100	C389A6666●●●		C441A6666●●●	
Nominal data	Normal Duty	Heavy Duty	Normal Duty	Heavy Duty
Type rating [kVA]	3890		4410	
Max. Motor power [kW] / [HP] ¹⁾	3110/4167	2480/3325	3530/4730	2820/3781
Nominal Continuous output current [A] ¹⁾	325	260	369	296
Max. output current with 120 % overload 1 min / 10 min [A]	390	/	443	/
Max. output current with 150 % overload 1 min / 10 min [A]	/	390	/	444
Power cells				
Number of cells per phase	5		5	
Power cell rated current [A]	325		370	
Power cell current with 120 % overload 1 min / 10 min [A]	390		444	
Max. output current for 3 sec [A]	487.5		555	
Characteristics with standard efficiency				
Efficiency at 100 % load (incl. Transformer) [%]	96.0%		96.0%	
Total losses at 100 % load [kW]	135.0	108.0	153.0	123.0
Air flow [m³/h]	31200		31200	
Noise level [dB (A)] @ 50 Hz	83		83	
Weight [kg / lb]	10000/22000		10000/22000	
Dimension [mm / inch] W*D*H ²⁾	4850*1500*3125/ 191.1*59.1*123.2		4850*1500*3125/ 191.1*59.1*123.2	
Connection				
Incoming cable type	symmetrical three-phase		symmetrical three-phase	
Typical cable size (mm² / AWG) ³⁾	120/0000		185/350MCM	
Motor cable type	symmetrical three-phase(Use of shielded cable is advisable)		symmetrical three-phase(Use of shielded cable is advisable)	
Typical cable size (mm² / AWG) ³⁾	120/0000		185/350MCM	
Motor cable Max. length ⁴⁾	1000m		1000m	
Grounding connection PE (mm² / AWG)	50/0		50/0	
Control power supply	single phase, 230V, 50/60Hz		single phase, 230V, 50/60Hz	
Capacity of control power supply w/o options	1 kVA		1 kVA	
Capacity of control power supply with options	"depending on options to be used"		"depending on options to be used"	
Fan power supply	3-phase, 400V/480V, 50/60Hz		3-phase, 400V/480V, 50/60Hz	
Capacity of fan power supply (kVA) ⁵⁾	18		18	
Maintenance				
Maintenance access	Front & Rear		Front & Rear	
Cable entry ⁶⁾	Bottom in /Bottom out		Bottom in /Bottom out	

ATV6100	C471A6666●●●	
Nominal data	Normal Duty	Heavy Duty
Type rating [kVA]	4710	
Max. Motor power [kW] / [HP] ¹⁾	3770/5052	3010/4036
Nominal Continuous output current [A] ¹⁾	394	316
Max. output current with 120 % overload 1 min / 10 min [A]	473	/
Max. output current with 150 % overload 1 min / 10 min [A]	/	474
Power cells		
Number of cells per phase	5	
Power cell rated current [A]	395	
Power cell current with 120 % overload 1 min / 10 min [A]	474	
Max. output current for 3 sec [A]	592.5	
Characteristics with standard efficiency		
Efficiency at 100 % load (incl. Transformer) [%]	96.0%	
Total losses at 100 % load [kW]	164.0	131.0
Air flow [m³/h]	31200	
Noise level [dB (A)] @ 50 Hz	83	
Weight [kg / lb]	10000/22000	
Dimension [mm / inch] W*D*H ²⁾	4850*1500*3125/191.1*59.1*123.2	
Connection		
Incoming cable type	symmetrical three-phase	
Typical cable size (mm² / AWG) ³⁾	185/350MCM	
Motor cable type	symmetrical three-phase(Use of shielded cable is advisable)	
Typical cable size (mm² / AWG) ³⁾	185/350MCM	
Motor cable Max. length ⁴⁾	1000m	
Grounding connection PE (mm² / AWG)	50/0	
Control power supply	single phase, 230V, 50/60Hz	
Capacity of control power supply w/o options	1 kVA	
Capacity of control power supply with options	"depending on options to be used"	
Fan power supply	3-phase, 400V/480V, 50/60Hz	
Capacity of fan power supply (kVA) ⁵⁾	18	
Maintenance		
Maintenance access	Front & Rear	
Cable entry ⁶⁾	Bottom in /Bottom out	
NOTE: 1. Values valid for synchronous motor and asynchronous motor. The specifications for the maximum motor shaft power is based on a motor efficiency of 95%. 2. Including the height of top cooling fans. 3. Typical cable size values based on use of copper cables in cable tray laying. Incoming cable size is based on drive current rating. It has to be checked to be in accordance to mains short circuit capability and local and national electrical code requirement as well all other applicable regulations. 4. Variation in max. cable length may be possible depending on type cable and installation. For longer cable length between motor and drive contact Schneider Electric. 5. Contact Schneider Electric if N+1 redundancy cooling fan requested. 6. For other combination contact Schneider Electric.		

ATV6100C555A6666...ATV6100C669A6666

ATV6100	C555A6666●●●		C609A6666●●●	
Nominal data	Normal Duty	Heavy Duty	Normal Duty	Heavy Duty
Type rating [kVA]	5550		6090	
Max. Motor power [kW] / [HP] ¹⁾	4440/5950	3550/4760	4870/6526	3890/5216
Nominal Continuous output current [A] ¹⁾	465	372	510	408
Max. output current with 120 % overload 1 min / 10 min [A]	558	/	612	/
Max. output current with 150 % overload 1 min / 10 min [A]	/	558	/	612
Power cells				
Number of cells per phase	5		5	
Power cell rated current [A]	465		510	
Power cell current with 120 % overload 1 min / 10 min [A]	558		612	
Max. output current for 3 sec [A]	697.5		765	
Characteristics with standard efficiency				
Efficiency at 100 % load (incl. Transformer) [%]	96.0%		96.0%	
Total losses at 100 % load [kW]	193.0	154.0	212.0	169.0
Air flow [m³/h]	42000		42000	
Noise level [dB (A)] @ 50 Hz	83		83	
Weight [kg / lb]	12885/28406		12885/28406	
Dimension [mm / inch] W*D*H ²⁾	6000*1500*3125/ 236.2*59.1*123.2		6000*1500*3125/ 236.2*59.1*123.2	
Connection 5500*1500*3125/216.7*59.1*123.26000*1500*3125/ 236.2*59.1*123.2				
Incoming cable type	symmetrical three-phase		symmetrical three-phase	
Typical cable size (mm² / AWG) ³⁾	240/500MCM		240/500MCM	
Motor cable type	symmetrical three-phase(Use of shielded cable is advisable)		symmetrical three-phase(Use of shielded cable is advisable)	
Typical cable size (mm² / AWG) ³⁾	240/510MCM		240/510MCM	
Motor cable Max. length ⁴⁾	1000m		1000m	
Grounding connection PE (mm² / AWG)	50/0		50/0	
Control power supply	single phase, 230V, 50/60Hz		single phase, 230V, 50/60Hz	
Capacity of control power supply w/o options	1 kVA		1 kVA	
Capacity of control power supply with options	"depending on options to be used"		"depending on options to be used"	
Fan power supply	3-phase, 400V/480V, 50/60Hz		3-phase, 400V/480V, 50/60Hz	
Capacity of fan power supply (kVA) ⁵⁾	22		22	
Maintenance				
Maintenance access	Front & Rear		Front & Rear	
Cable entry ⁶⁾	Bottom in /Bottom out		Bottom in /Bottom out	

ATV6100	C669A6666...	
Nominal data	Normal Duty	Heavy Duty
Type rating [kVA]	6690	
Max. Motor power [kW] / [HP] ¹⁾	5350/7169	4280/5739
Nominal Continuous output current [A] ¹⁾	560	448
Max. output current with 120 % overload 1 min / 10 min [A]	672	/
Max. output current with 150 % overload 1 min / 10 min [A]	/	672
Power cells		
Number of cells per phase	5	
Power cell rated current [A]	560	
Power cell current with 120 % overload 1 min / 10 min [A]	672	
Max. output current for 3 sec [A]	840	
Characteristics with standard efficiency		
Efficiency at 100 % load (incl. Transformer) [%]	96.0%	
Total losses at 100 % load [kW]	232.0	186.0
Air flow [m³/h]	42000	
Noise level [dB (A)] @ 50 Hz	83	
Weight [kg / lb]	12885/28406	
Dimension [mm / inch] W*D*H ²⁾	6000*1500*3125/ 236.2*59.1*123.2	
Connection		
Incoming cable type	symmetrical three-phase	
Typical cable size (mm² / AWG) ³⁾	120*2/2*0000	
Motor cable type	symmetrical three-phase(Use of shielded cable is advisable)	
Typical cable size (mm² / AWG) ³⁾	120*2/2*0000	
Motor cable Max. length ⁴⁾	1000m	
Grounding connection PE (mm² / AWG)	50/0	
Control power supply	single phase, 230V, 50/60Hz	
Capacity of control power supply w/o options	1 kVA	
Capacity of control power supply with options	"depending on options to be used"	
Fan power supply	3-phase, 400V/480V, 50/60Hz	
Capacity of fan power supply (kVA) ⁵⁾	22	
Maintenance		
Maintenance access	Front & Rear	
Cable entry ⁶⁾	Bottom in /Bottom out	
NOTE: 1. Values valid for synchronous motor and asynchronous motor. The specifications for the maximum motor shaft power is based on a motor efficiency of 95%. 2. Including the height of top cooling fans. 3. Typical cable size values based on use of copper cables in cable tray laying. Incoming cable size is based on drive current rating. It has to be checked to be in accordance to mains short circuit capability and local and national electrical code requirement as well all other applicable regulations. 4. Variation in max. cable length may be possible depending on type cable and installation. For longer cable length between motor and drive contact Schneider Electric. 5. Contact Schneider Electric if N+1 redundancy cooling fan requested. 6. For other combination contact Schneider Electric.		

Output Voltage 6 kV

Main dimensions - Output Voltage 6 kV

Product reference	Outer dimensions mm (in)			Frame size	Transformer cabinet			Powercell cabinet		
	W	H ^{a)}	D		Fan Type	Fan Number	Weight kg (lb)	Fan Type	Fan number	Weight kg (lb)
ATV6100D445A6060...	2800 (110)	2750 (108)	1450 (57)	Size 1	400	2	3485 (7683)	/	/	/
ATV6100D500A6060...	2800 (110)	2750 (108)	1450 (57)	Size 1	400	2	3485 (7683)	/	/	/
ATV6100D600A6060...	2800 (110)	2750 (108)	1450 (57)	Size 1	450	2	3485 (7683)	/	/	/
ATV6100D700A6060...	2800 (110)	2750 (108)	1450 (57)	Size 1	450	2	3485 (7683)	/	/	/
ATV6100D760A6060...	2800 (110)	2750 (108)	1450 (57)	Size 1	450	2	3485 (7683)	/	/	/
ATV6100D870A6060...	2800 (110)	2750 (108)	1450 (57)	Size 1	500	2	3485 (7683)	/	/	/
ATV6100C100A6060...	3350 (132)	2805 (110)	1550 (61)	Size 2	500	2	6085 (13415)	/	/	/
ATV6100C113A6060...	3350 (132)	2805 (110)	1550 (61)	Size 2	500	2	6085 (13415)	/	/	/
ATV6100C125A6060...	3350 (132)	2805 (110)	1550 (61)	Size 2	500	2	6085 (13415)	/	/	/
ATV6100C136A6060...	3350 (132)	2805 (110)	1550 (61)	Size 2	500	2	6085 (13415)	/	/	/
ATV6100C140A6060...	3350 (132)	2805 (110)	1550 (61)	Size 2	500	3	6085 (13415)	/	/	/
ATV6100C175A6060...	3350 (132)	2805 (110)	1550 (61)	Size 2	500	3	6085 (13415)	/	/	/
ATV6100C200A6060...	3350 (132)	2805 (110)	1550 (61)	Size 2	500	3	6085 (13415)	/	/	/
ATV6100C225A6060...	4350 (171)	2925 (115)	1400 (55)	Size 3	500	2	5000 (11023)	500	2	1700 (3748)
ATV6100C250A6060...	4350 (171)	2925 (115)	1400 (55)	Size 3	500	2	5000 (11023)	500	2	1700 (3748)
ATV6100C261A6060...	4350 (171)	2925 (115)	1400 (55)	Size 3	500	2	5000 (11023)	500	2	1700 (3748)
ATV6100C280A6060...	4450 (175)	2925 (115)	1400 (55)	Size 3	500	2	5000 (11023)	500	2	1700 (3748)
ATV6100C350A6060...	4850 (191)	3125 (123)	1500 (59)	Size 4	500	3	7150 (15763)	560	2	2200 (4850)
ATV6100C394A6060...	4850 (191)	3125 (123)	1500 (59)	Size 4	500	3	7150 (15763)	560	2	2200 (4850)
ATV6100C419A6060...	4850 (191)	3125 (123)	1500 (59)	Size 4	500	3	7150 (15763)	560	2	2200 (4850)
ATV6100C500A6060...	6000 (236)	3125 (123)	1500 (59)	Size 5	560	3	9385 (20690)	560	2	3000 (6614)
ATV6100C525A6060...	6000 (236)	3125 (123)	1500 (59)	Size 5	560	3	9385 (20690)	560	2	3000 (6614)
ATV6100C600A6060...	6000 (236)	3125 (123)	1500 (59)	Size 5	560	3	9385 (20690)	560	2	3000 (6614)

a) "H" is linked to higher size of transformer cabinet (H2) or powercell cabinet (H6).

Additional Dimensions - Output Voltage 6 kV

Product reference	Transformer Cabinet						Power cell Cabinet				Space Maintenance			
	mm (in) ⁽¹⁾						mm (in)				mm (in)			
	H1	H2	H3	H4	W1	D1	H5	H6	W2	D2	T	B ⁽²⁾	F ⁽³⁾	S
ATV6100-D445A6060***	/	/	650 (26)	910 (36)	/	/	2365 (93)	2750 (108)	2800 (110)	1450 (57)	≥500 ≥20	100 (4)	1500 (59)	0
ATV6100-D500A6060***	/	/	650 (26)	910 (36)	/	/	2365 (93)	2750 (108)	2800 (110)	1450 (57)	≥500 ≥20	100 (4)	1500 (59)	0
ATV6100-D600A6060***	/	/	650 (26)	910 (36)	/	/	2365 (93)	2750 (108)	2800 (110)	1450 (57)	≥500 ≥20	100 (4)	1500 (59)	0
ATV6100-D700A6060***	/	/	650 (26)	910 (36)	/	/	2365 (93)	2750 (108)	2800 (110)	1450 (57)	≥500 ≥20	100 (4)	1500 (59)	0
ATV6100-D760A6060***	/	/	650 (26)	910 (36)	/	/	2365 (93)	2750 (108)	2800 (110)	1450 (57)	≥500 ≥20	100 (4)	1500 (59)	0
ATV6100-D870A6060***	/	/	650 (26)	910 (36)	/	/	2307 (91)	2750 (108)	2800 (110)	1450 (57)	≥500 ≥20	100 (4)	1500 (59)	0
ATV6100-C100A6060***	/	/	650 (26)	910 (36)	/	/	2362 (93)	2805 (110)	3350 (132)	1550 (61)	≥500 ≥20	100 (4)	1500 (59)	0
ATV6100-C113A6060***	/	/	650 (26)	910 (36)	/	/	2362 (93)	2805 (110)	3350 (132)	1550 (61)	≥500 ≥20	100 (4)	1500 (59)	0
ATV6100-C125A6060***	/	/	650 (26)	910 (36)	/	/	2362 (93)	2805 (110)	3350 (132)	1550 (61)	≥500 ≥20	100 (4)	1500 (59)	0
ATV6100-C136A6060***	/	/	650 (26)	910 (36)	/	/	2362 (93)	2805 (110)	3350 (132)	1550 (61)	≥500 ≥20	100 (4)	1500 (59)	0
ATV6100-C140A6060***	/	/	650 (26)	910 (36)	/	/	2362 (93)	2805 (110)	3350 (132)	1550 (61)	≥500 ≥20	100 (4)	1500 (59)	0
ATV6100-C175A6060***	/	/	650 (26)	910 (36)	/	/	2362 (93)	2805 (110)	3350 (132)	1550 (61)	≥500 ≥20	100 (4)	1500 (59)	0
ATV6100-C200A6060***	/	/	650 (26)	910 (36)	/	/	2362 (93)	2805 (110)	3350 (132)	1550 (61)	≥500 ≥20	100 (4)	1500 (59)	0
ATV6100-C225A6060***	2482 (98)	2925 (115)	980 (39)	980 (39)	2300 (91)	1400 (55)	2482 (98)	2925 (115)	2050 (81)	1400 (55)	≥500 ≥20	1000 (39)	1500 (59)	0
ATV6100-C250A6060***	2482 (98)	2925 (115)	980 (39)	980 (39)	2300 (91)	1400 (55)	2482 (98)	2925 (115)	2050 (81)	1400 (55)	≥500 ≥20	1000 (39)	1500 (59)	0
ATV6100-C261A6060***	2482 (98)	2925 (115)	980 (39)	980 (39)	2300 (91)	1400 (55)	2482 (98)	2925 (115)	2050 (81)	1400 (55)	≥500 ≥20	1000 (39)	1500 (59)	0
ATV6100-C280A6060***	2482 (98)	2925 (115)	980 (39)	980 (39)	2400 (94)	1400 (55)	2482 (98)	2925 (115)	2050 (81)	1400 (55)	≥500 ≥20	1000 (39)	1500 (59)	0
ATV6100-C350A6060***	2682 (106)	3125 (123)	980 (39)	980 (39)	2400 (94)	1500 (59)	2482 (98)	2925 (115)	2450 (96)	1400 (55)	≥500 ≥20	1000 (39)	1500 (59)	0
ATV6100-C394A6060***	2682 (106)	3125 (123)	980 (39)	980 (39)	2400 (94)	1500 (59)	2482 (98)	2925 (115)	2450 (96)	1400 (55)	≥500 ≥20	1000 (39)	1500 (59)	0
ATV6100-C419A6060***	2682 (106)	3125 (123)	980 (39)	980 (39)	2400 (94)	1500 (59)	2482 (98)	2925 (115)	2450 (96)	1400 (55)	≥500 ≥20	1000 (39)	1500 (59)	0
ATV6100-C500A6060***	2682 (106)	3125 (123)	980 (39)	980 (39)	3200 (126)	1500 (59)	2482 (98)	2925 (115)	2800 (110)	1500 (59)	≥500 ≥20	1000 (39)	1500 (59)	0
ATV6100-C525A6060***	2682 (106)	3125 (123)	980 (39)	980 (39)	3200 (126)	1500 (59)	2482 (98)	2925 (115)	2800 (110)	1500 (59)	≥500 ≥20	1000 (39)	1500 (59)	0
ATV6100-C600A6060***	2682 (106)	3125 (123)	980 (39)	980 (39)	3200 (126)	1500 (59)	2482 (98)	2925 (115)	2800 (110)	1500 (59)	≥500 ≥20	1000 (39)	1500 (59)	0

(1) For transformer cabinet, the dimension only for single transformer.

(2) Space could be required for installation and lifting lugs.

(3) For easy handling with power cell exchange tool 2000 mm are recommended.

NOTE: For layout drawing, refer to Layout drawing for all frame sizes, page 72.

Output Voltage 6.6 kV

Main dimensions - Output Voltage 6.6 kV

Product reference	Outer dimensions mm (in)			Frame size	Transformer cabinet			Powercell cabinet		
	W	H ^(a)	D		Fan Type	Fan Number	Weight kg (lb)	Fan Type	Fan number	Weight kg (lb)
ATV6100D394A6666●●●	2800 (110)	2750 (108)	1450 (57)	Size 1	400	2	3885 (8565)	/	/	/
ATV6100D450A6666●●●	2800 (110)	2750 (108)	1450 (57)	Size 1	400	2	3885 (8565)	/	/	/
ATV6100D513A6666●●●	2800 (110)	2750 (108)	1450 (57)	Size 1	400	2	3885 (8565)	/	/	/
ATV6100D588A6666●●●	2800 (110)	2750 (108)	1450 (57)	Size 1	400	2	3885 (8565)	/	/	/
ATV6100D688A6666●●●	2800 (110)	2750 (108)	1450 (57)	Size 1	450	2	3885 (8565)	/	/	/
ATV6100D775A6666●●●	2800 (110)	2750 (108)	1450 (57)	Size 1	450	2	3885 (8565)	/	/	/
ATV6100D825A6666●●●	2800 (110)	2750 (108)	1450 (57)	Size 1	450	2	3885 (8565)	/	/	/
ATV6100D950A6666●●●	2800 (110)	2805 (110)	1450 (57)	Size 1	500	2	3885 (8565)	/	/	/
ATV6100C113A6666●●●	3350 (132)	2805 (110)	1550 (61)	Size 2	500	2	6335 (13966)	/	/	/
ATV6100C125A6666●●●	3350 (132)	2805 (110)	1550 (61)	Size 2	500	2	6335 (13966)	/	/	/
ATV6100C138A6666●●●	3350 (132)	2805 (110)	1550 (61)	Size 2	500	2	6335 (13966)	/	/	/
ATV6100C149A6666●●●	3350 (132)	2805 (110)	1550 (61)	Size 2	500	2	6335 (13966)	/	/	/
ATV6100C168A6666●●●	3350 (132)	2805 (110)	1550 (61)	Size 2	500	3	6335 (13966)	/	/	/
ATV6100C188A6666●●●	3350 (132)	2805 (110)	1550 (61)	Size 2	500	3	6335 (13966)	/	/	/
ATV6100C221A6666●●●	3350 (132)	2805 (110)	1550 (61)	Size 2	500	3	6335 (13966)	/	/	/
ATV6100C251A6666●●●	4350 (171)	2925 (115)	1400 (55)	Size 3	500	2	5050 (11133)	500	2	1700 (3748)
ATV6100C281A6666●●●	4350 (171)	2925 (115)	1400 (55)	Size 3	500	2	5050 (11133)	500	2	1700 (3748)
ATV6100C286A6666●●●	4350 (171)	2925 (115)	1400 (55)	Size 3	500	2	5050 (11133)	500	2	1700 (3748)
ATV6100C335A6666●●●	4450 (175)	2925 (115)	1400 (55)	Size 3	500	2	5050 (11133)	500	2	1700 (3748)
ATV6100C389A6666●●●	4850 (191)	3125 (123)	1500 (59)	Size 4	500	3	7800 (17196)	560	2	2200 (4850)
ATV6100C441A6666●●●	4850 (191)	3125 (123)	1500 (59)	Size 4	500	3	7800 (17196)	560	2	2200 (4850)
ATV6100C471A6666●●●	4850 (191)	3125 (123)	1500 (59)	Size 4	500	3	7800 (17196)	560	2	2200 (4850)
ATV6100C555A6666●●●	6000 (236)	3125 (123)	1500 (59)	Size 5	560	3	9885 (21792)	560	2	3000 (6614)
ATV6100C609A6666●●●	6000 (236)	3125 (123)	1500 (59)	Size 5	560	3	9885 (21792)	560	2	3000 (6614)

Product reference	Outer dimensions mm (in)			Frame size	Transformer cabinet			Powercell cabinet		
	W	H ^(a)	D		Fan Type	Fan Number	Weight kg (lb)	Fan Type	Fan number	Weight kg (lb)
ATV6100C669A6666●●●	6000 (236)	3125 (123)	1500 (59)	Size 5	560	3	9885 (21792)	560	2	3000 (6614)

a) "H" is linked to higher size of transformer cabinet (H2) or powercell cabinet (H6).

Additional Dimensions - Output Voltage 6.6 kV

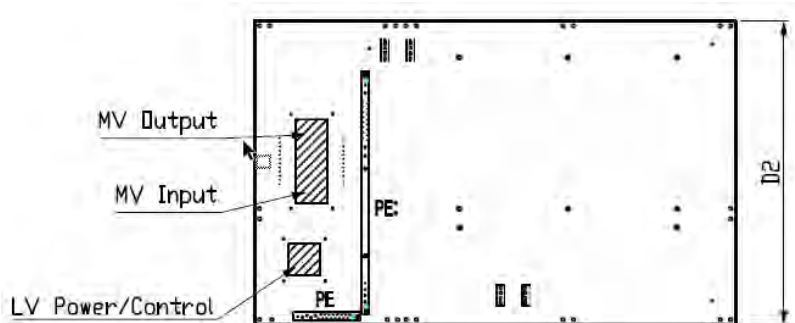
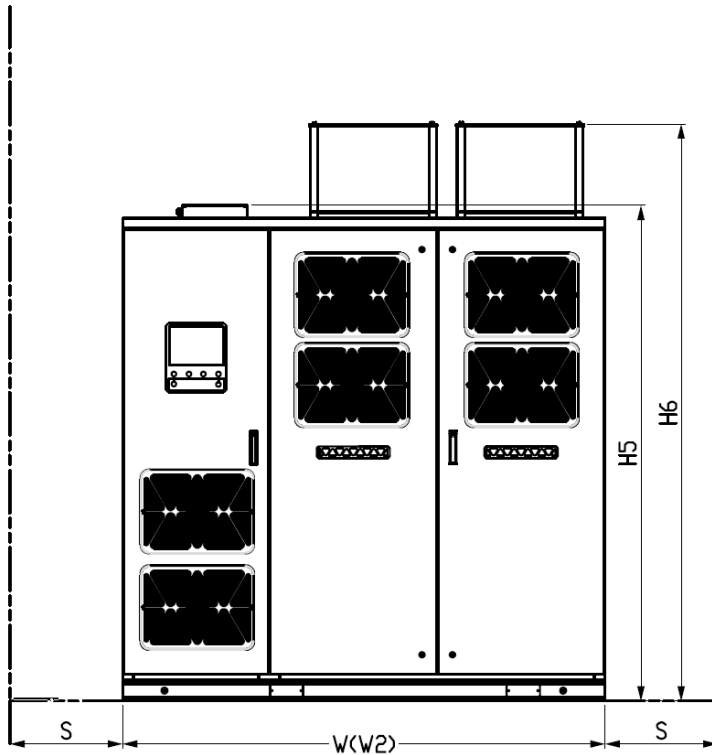
Product reference	Transformer Cabinet mm (in) ⁽¹⁾						Power cell Cabinet mm (in)				Space Maintenance mm (in)			
	H1	H2	H3	H4	W1	D1	H5	H6	W2	D2	T	B ⁽²⁾	F ⁽³⁾	S
ATV6100-D394A6666●●●	/	/	650 (26)	910 (36)	/	/	2365 (93)	2750 (108)	2800 (110)	1450 (57)	≥500 (≥20)	100 (4)	1500 (59)	0
ATV6100-D450A6666●●●	/	/	650 (26)	910 (36)	/	/	2365 (93)	2750 (108)	2800 (110)	1450 (57)	≥500 (≥20)	100 (4)	1500 (59)	0
ATV6100-D513A6666●●●	/	/	650 (26)	910 (36)	/	/	2365 (93)	2750 (108)	2800 (110)	1450 (57)	≥500 (≥20)	100 (4)	1500 (59)	0
ATV6100-D588A6666●●●	/	/	650 (26)	910 (36)	/	/	2365 (93)	2750 (108)	2800 (110)	1450 (57)	≥500 (≥20)	100 (4)	1500 (59)	0
ATV6100-D688A6666●●●	/	/	650 (26)	910 (36)	/	/	2365 (93)	2750 (108)	2800 (110)	1450 (57)	≥500 (≥20)	100 (4)	1500 (59)	0
ATV6100-D775A6666●●●	/	/	650 (26)	910 (36)	/	/	2365 (93)	2750 (108)	2800 (110)	1450 (57)	≥500 (≥20)	100 (4)	1500 (59)	0
ATV6100-D825A6666●●●	/	/	650 (26)	910 (36)	/	/	2365 (93)	2750 (108)	2800 (110)	1450 (57)	≥500 (≥20)	100 (4)	1500 (59)	0
ATV6100-D950A6666●●●	/	/	650 (26)	910 (36)	/	/	2365 (93)	2805 (110)	2800 (110)	1450 (57)	≥500 (≥20)	100 (4)	1500 (59)	0
ATV6100-C113A6666●●●	/	/	650 (26)	910 (36)	/	/	2362 (93)	2805 (110)	3350 (132)	1550 (61)	≥500 (≥20)	100 (4)	1500 (59)	0
ATV6100-C125A6666●●●	/	/	650 (26)	910 (36)	/	/	2362 (93)	2805 (110)	3350 (132)	1550 (61)	≥500 (≥20)	100 (4)	1500 (59)	0
ATV6100-C138A6666●●●	/	/	650 (26)	910 (36)	/	/	2362 (93)	2805 (110)	3350 (132)	1550 (61)	≥500 (≥20)	100 (4)	1500 (59)	0
ATV6100-C149A6666●●●	/	/	650 (26)	910 (36)	/	/	2362 (93)	2805 (110)	3350 (132)	1550 (61)	≥500 (≥20)	100 (4)	1500 (59)	0
ATV6100-C168A6666●●●	/	/	650 (26)	910 (36)	/	/	2362 (93)	2805 (110)	3350 (132)	1550 (61)	≥500 (≥20)	100 (4)	1500 (59)	0
ATV6100-C188A6666●●●	/	/	650 (26)	910 (36)	/	/	2362 (93)	2805 (110)	3350 (132)	1550 (61)	≥500 (≥20)	100 (4)	1500 (59)	0
ATV6100-C221A6666●●●	/	/	650 (26)	910 (36)	/	/	2362 (93)	2805 (110)	3350 (132)	1550 (61)	≥500 (≥20)	100 (4)	1500 (59)	0
ATV6100-C251A6666●●●	2482 (98)	2925 (115)	980 (39)	980 (39)	2300 (91)	1400 (55)	2482 (98)	2925 (115)	2050 (81)	1400 (55)	≥500 (≥20)	600 (24)	1500 (59)	0
ATV6100-C281A6666●●●	2482 (98)	2925 (115)	980 (39)	980 (39)	2300 (91)	1400 (55)	2482 (98)	2925 (115)	2050 (81)	1400 (55)	≥500 (≥20)	600 (24)	1500 (59)	0
ATV6100-C286A6666●●●	2482 (98)	2925 (115)	980 (39)	980 (39)	2300 (91)	1400 (55)	2482 (98)	2925 (115)	2050 (81)	1400 (55)	≥500 (≥20)	600 (24)	1500 (59)	0
ATV6100-C335A6666●●●	2482 (98)	2925 (115)	980 (39)	980 (39)	2400 (94)	1400 (55)	2482 (98)	2925 (115)	2050 (81)	1400 (55)	≥500 (≥20)	600 (24)	1500 (59)	0
ATV6100-C389A6666●●●	2682 (106)	3125 (123)	980 (39)	980 (39)	2400 (94)	1500 (59)	2482 (98)	2925 (115)	2450 (96)	1400 (55)	≥500 (≥20)	600 (24)	1500 (59)	0

Product reference	Transformer Cabinet						Power cell Cabinet				Space Maintenance			
	mm (in) ⁽¹⁾						mm (in)				mm (in)			
	H1	H2	H3	H4	W1	D1	H5	H6	W2	D2	T	B ⁽²⁾	F ⁽³⁾	S
ATV6100-C441A6666●●●	2682 (106)	3125 (123)	980 (39)	980 (39)	2400 (94)	1500 (59)	2482 (98)	2925 (115)	2450 (96)	1400 (55)	≥500 (≥20)	600 (24)	1500 (59)	0
ATV6100-C471A6666●●●	2682 (106)	3125 (123)	980 (39)	980 (39)	2400 (94)	1500 (59)	2482 (98)	2925 (115)	2450 (96)	1400 (55)	≥500 (≥20)	600 (24)	1500 (59)	0
ATV6100-C555A6666●●●	2682 (106)	3125 (123)	980 (39)	980 (39)	3200 (126)	1500 (59)	2482 (98)	2925 (115)	2800 (110)	1500 (59)	≥500 (≥20)	600 (24)	1500 (59)	0
ATV6100-C609A6666●●●	2682 (106)	3125 (123)	980 (39)	980 (39)	3200 (126)	1500 (59)	2482 (98)	2925 (115)	2800 (110)	1500 (59)	≥500 (≥20)	600 (24)	1500 (59)	0
ATV6100-C669A6666●●●	2682 (106)	3125 (123)	980 (39)	980 (39)	3200 (126)	1500 (59)	2482 (98)	2925 (115)	2800 (110)	1500 (59)	≥500 (≥20)	600 (24)	1500 (59)	0
(1) For transformer cabinet, the dimension only for single transformer. (2) Space could be required for installation and lifting lugs. (3) For easy handling with power cell exchange tool 2000 mm are recommended.														

NOTE: For layout drawing, refer to Layout drawing for all frame sizes, page 72.

Layout drawing for all frame sizes

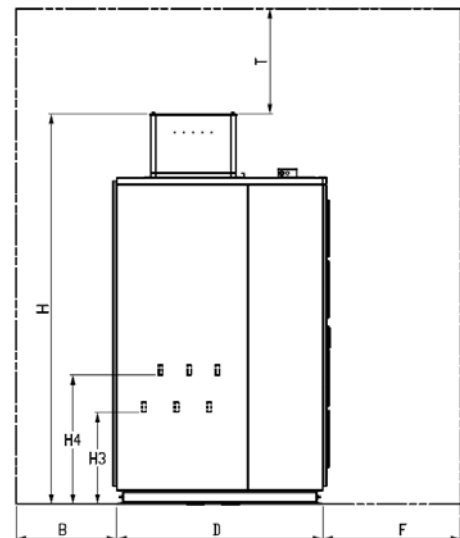
Layout drawing for size 1 & size 2 (front access)



MV Input: MV Input cable area

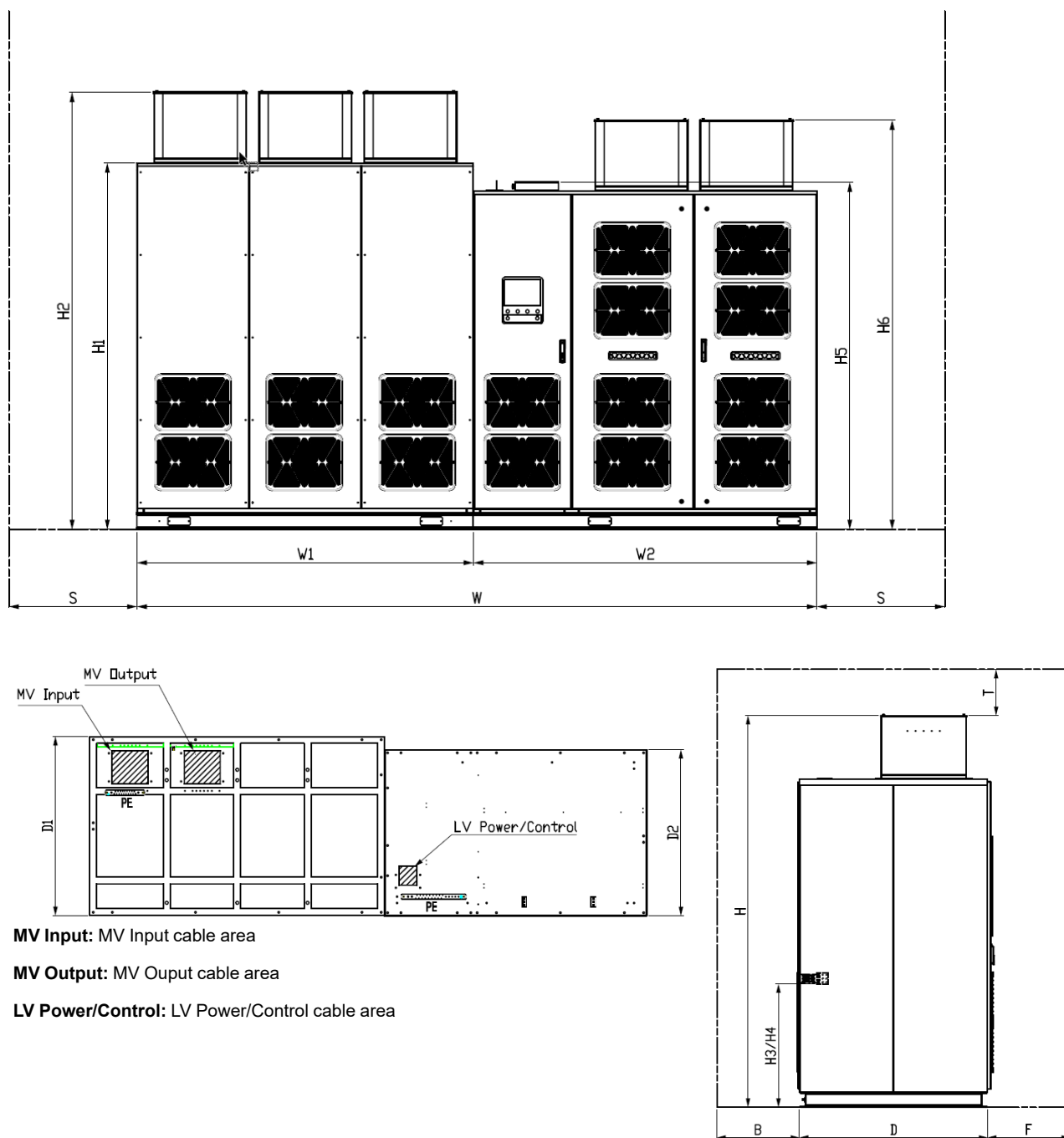
MV Output: MV Output cable area

LV Power/Control: LV Power/Control cable area



NOTE: Sketch is representing outline dimensions only, real cabinet arrangement is depending on power size.

Layout drawing for size 3 to size 5 (front & rear access)



NOTE: Sketch is representing outline dimensions only, real cabinet arrangement is depending on power size.

Options

Available Options

To enlarge the scope of application, various options are available concerning ATV6100.

General enclosure options		
Allocation table options		
Options (1)	Brief description	Option code
Communication buses and networks		
PROFINET	Fieldbus module for control of the inverter via PROFINET.	CB05
PROFIBUS DP V1	Fieldbus module for control of the inverter via Profibus DP V1.	CB03
DeviceNet	Fieldbus module for control of the inverter via DeviceNet.	CB04
Ethernet IP	Fieldbus gateway for control of the inverter via Ethernet IP.	CB02
I/O Extensions		
Motor thermal monitoring 8 x Pt100	The drive allows monitoring of the motor windings temperature (6 x Pt100) and the bearing temperature of motor (2 x Pt100)	A08
I/Os on customer request	Additional I/Os can be provided on customer request.	A12
Encoder Interface Modules		
HTL encoder interface 15V	Encoder module for connecting a HTL encoder.	EO05
TTL encoder interface 5V	Encoder module for connecting a TTL encoder.	EO06
Output filters		
dv/dt filters	Contact your local Schneider Electric representative.	OF01
Sinus filters	Contact your local Schneider Electric representative.	OF02
Power supply		
60 Hz design	The drive is designed with electrical adaptation (60 Hz top cooling fans + 60 Hz integrated transformer).	A09
Cooling fan powered by internal transformer	A shielded 400 V windings is added to the MV transformer in order to supply the cooling fans. In this case, the customer do not need to provide the fan power supply.	A63
UPS	UPS with around 10 min autonomy (depends option) for the control power.	A60
General enclosure options		
Allocation table options		
Options (1)	Brief description	Option code
Removal of mains voltage off button	Mains voltage off button is mounted by default with the product. It is possible to remove this part from door HMI Panel.	A64
Cable entry (top in/ top out)	Aluminum plates on the top to facilitate the entry and exit of power/control cables that can be easily dismantled for on-site installation.	BE03
Cable entry (top in/ bottom out)	Aluminum plates on the top and bottom to facilitate the entry and exit of power/control cables that can be easily dismantled for on-site installation.	BE04
Feeder for motor space heater	Additional contactor for controlling motor space heater.	E00
Environment and general technical data		
Input Short-circuit current rating 31.5kA/1s	Input section is reinforced to withstand high short circuit current.	E04
Seismic	ATV6100 has been adapted with a reinforced cabinet design to handle levels equal or below UBC4 at ground level. Validated by simulation. Contact SE for equivalence with local code/regulation.	E07
High altitude >1000m	For higher altitudes>1000m, up to 2000m is possible with derating. Above 2000m contact your local Schneider Electric representative.	E08

General enclosure options		
Allocation table options		
Options (1)	Brief description	Option code
Drive Efficiency $\geq 96.5\%$	Increase the ATV6100 efficiency from 96% to 96.5% by increasing the transformer efficiency from 98% to 98.5%.	E10
Maximum Ambient Temperature $>40^{\circ}\text{C}$	For higher indoor maximum ambient temperature $>40^{\circ}\text{C}$, up to 50°C is possible with derating.	E11
Cabinet and transformer		
Transformer Winding Selection Copper	Copper Winding for the internal power transformer.	A67
Reactor cabinet for synchronous bypass	An output reactor is needed for the decoupling of VSD output during the synchronous bypass process. Synchronous bypass is done automatically with one or multiple motors. For switchgear selection and process definition contact your local Schneider Electric representative.	BCS10
Inrush current limit cabinet	For a weak network is possible to limit the Inrush current up to 1.6 nominal input current caused by the internal power transformer. Typical values for ATV6100 are $I_{\text{inrush}} = [8 \text{ to } 14] \times \sqrt{2} \times I_{\text{input_RMS}}$ with a time constant limited to 80 to 120ms.	IL01
Elevated Transformer Basic Insulation Level (BIL) acc. to IEC 60076-3	This option can provide elevated Transformer Basic Insulation Level (BIL) rating according to IEC 60076-3. Standard BIL rating of ATV6100 is according to IEC61800-5-1.	A69
Harsh environment		
Humidity	The drive is designed to run in an environment with a relative humidity of up to 95% (non-condensing).	E01
Cabinet Space heater	The drive is equipped with a thermostat and a circuit breaker to energize an anti-condensation space heater independent if drive is running or not. The space heaters will be connected to the auxiliary power supply. Power for the space heaters need to be provided by the customer.	A06
Fan redundancy	The top fan's size is adapted for transformer and power cell cabinets, and fans are equipped with an electric actuator and shutter, keeping standard dimensions (which is reduced compared to N+1 fan (E03)) . Contact your local Schneider Electric representative for details.	E06
Air duct	Air duct channel solutions are available and depend on the actual installation situation. Contact your local Schneider Electric representative for details.	A01
Protection level IP42	The standard design of the ATV6100 enclosure unit complies with protection degree IP41. If a higher protection degree is desired or required, there are one alternative solution available, IP42.	SP04
Guarding options		
QF1 MVCB interlock compatibility box	This provides sequential control between the QF1 Medium Voltage Circuit Breaker (QF1 MVCB) key and the "Free key" of VSD.	A02
Grounding cable for maintenance	3 poles grounding and short circuiting device in accordance with IEC 61230.	A07
Power cell bypass	The drive (up to 560 A) is designed with Power cell bypass feature.	PC01
Inverter Redundancy (N+1)	The inverter redundancy configuration (N+1) offer more availability on the process/application with 100% load capability. Power cell bypass function is embedded in each power cell.	PC02
VAMP Arc flash detection	The VAMP arc detection system is an easily adaptable arc detection system for detection and monitoring of electricity distribution systems.	E02
Customization		
Cabling color	Customized power and control color cables for identification.	A50
Cabiling color	Customized cabinet color according to a RAL, on request.	CC01
Cabinet painting ISO 12944 C3-H	For harsh environmental conditions, this option provides cabinet painting according to ISO 12944 C3-H.	CC02
(1) For more details, see next pages or contact your local Schneider Electric representative.		
NOTE: For all other requests not mentioned in the list above, contact your local Schneider Electric representative.		

Communication Buses and Networks

Presentation

Altivar Process ATV6100 has 2 built-in RJ45 communication ports as standard:

- Modbus TCP
- Modbus SL

Integrated communication protocols

- Modbus TCP message handling is based on the Modbus protocol and is used to exchange process data with other network devices (e.g., a PLC). It provides Altivar Process drives with access to the Modbus protocol and to the high performance of the Ethernet network, which is the communication standard for numerous devices.
- Modbus SL network is a traditional way of exchanging data with other devices via the Modbus protocol. It can be for example use for connection to HMIs, e.g. the Harmony industrial HMI terminal

The detailed specifications for the Modbus SL and Modbus TCP protocols are available on our website www.se.com

Modules



Profibus-DP module



DeviceNet module



ProfiNet module



Ethernet IP module

Optional fieldbus modules

The Altivar Process drive ATV6100 can also be connected to other industrial fieldbuses and networks by using one of the fieldbus modules available as an option. Fieldbus modules are supplied as gateways in the control cabinet.

Dedicated fieldbus modules:

- PROFINET
- PROFIBUS DP
- DeviceNet
- EtherNet IP

It is possible to maintain communication using a separate power supply for the control and power sections. Monitoring and diagnostics via the network are possible even if there is no power supplied to the power section.

Functions

The drive functions can be accessed via the various communication networks:

- Configuration
- Adjustment
- Control
- Monitoring

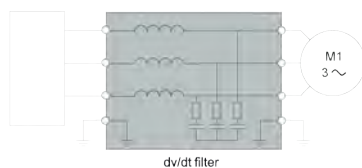
Altivar Process drives offer a high degree of interfacing flexibility with the possibility to assign, by configuration, the different control sources (I/O, communication networks, and HMI terminal) to control functions in order to meet the requirements of complex applications.

Communication is monitored according to the specific criteria for each protocol. Regardless of the protocol, it is possible to configure how the drive responds to a detected communication interruption, as follows:

- Define the type of stop when a communication interruption is detected
- Maintain last command received
- Fallback position at preset speed
- Ignore the detected communication interruption

Output Filters

Option: dv/dt Filters (OF01)



Altivar Process drive with dv/dt filter

Presentation

Altivar Process ATV6100 drives operate with the following maximum motor cable lengths as standard:

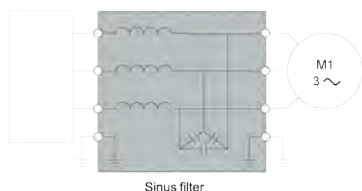
Up to 1.000m (3.280 ft) depending on cable type and laying.

It is advisable to use dv/dt filters for the following applications:

- Motor cable length is exceeding the above limits for direct connection
- Reduce stress of motor isolation

Contact your local Schneider Electric representative.

Option: Sinus Filters (OF02)



Altivar Process drive with sinus filter

Presentation

Altivar Process ATV6100 drives operate with the following maximum motor cable lengths as standard:

Up to 1.000m (3.280 ft) depending on cable type and laying.

Contact your local Schneider Electric representative.

Application

it is advisable to use sinus filters for the following applications:

- Motor cable length is exceeding the above limits for direct connection
- Quality of motor isolation is not known
- Reduction of EMC influence
- Submersible pumps sensitive to dv/dt and U_{peak}

Power Supply

60 Hz Design (A09)

The drive is designed with electrical adaptation (60 Hz top cooling fans + 60 Hz integrated transformer).

Cooling Fan Powered by Internal Transformer (A63)

A shielded 400 V windings is added to the MV transformer in order to supply the cooling fans. In this case, the customer does not need to provide the fan power supply.

Uninterrupted Power Supply (UPS) (A60)



The auxiliary control supply voltage should be provided as uninterrupted power supply. This is important to keep the electronics part of the drive operative, even the other voltages are not available.

In case the auxiliary control supply voltage is not provided with uninterrupted power supply, the UPS option can secure control part stay operative. This is e.g. important for fieldbus communication.

Benefits:

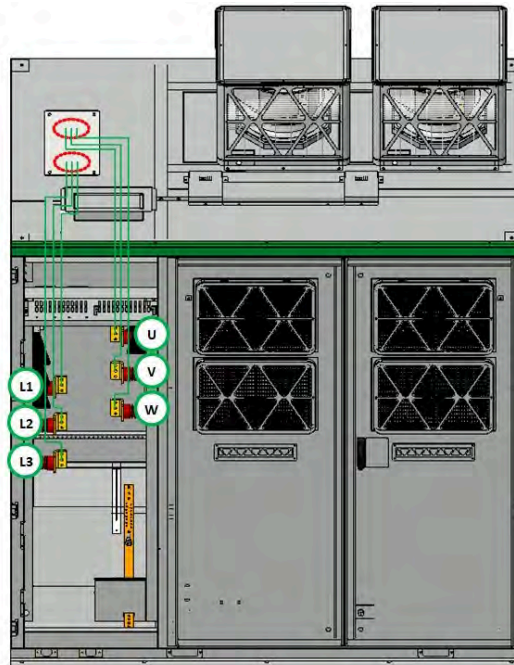
- UPS keep the control electronic operative
- Fieldbus communication is not interrupted, and data exchange is granted
- Autonomy is provided for around 10 minutes (depends on the options)

Wiring

Cable Entry: Top in / Top Out (BE03)

Aluminum plates on the top and bottom to facilitate the entry and exit of power/control cables that can be easily dismantled for on-site installation.

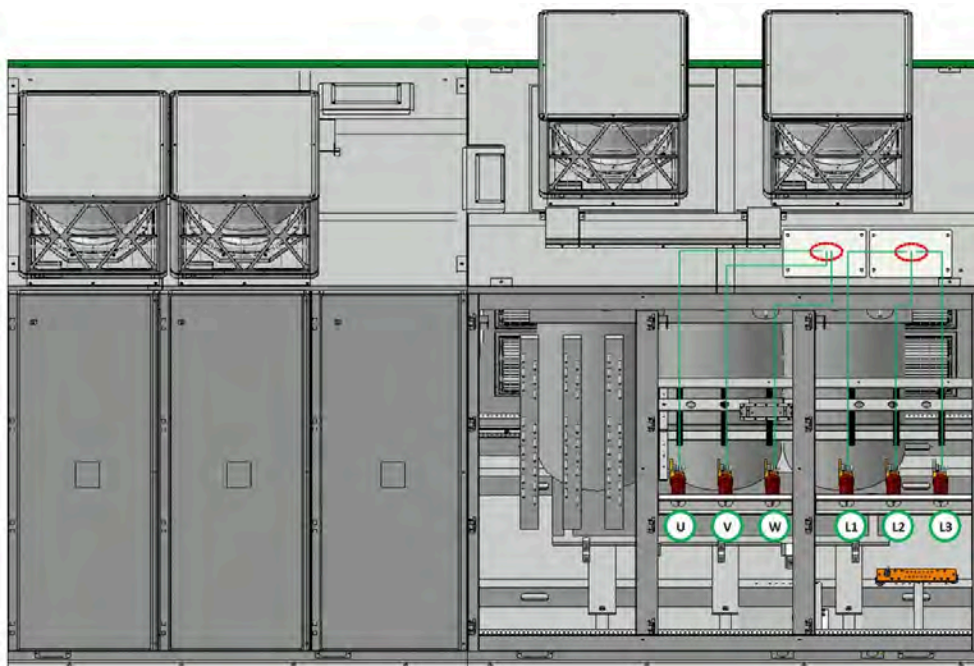
Front access drive



L1-L2-L3 Mains cables wiring

U-V-W Motor cables wiring

Front & Rear access drive



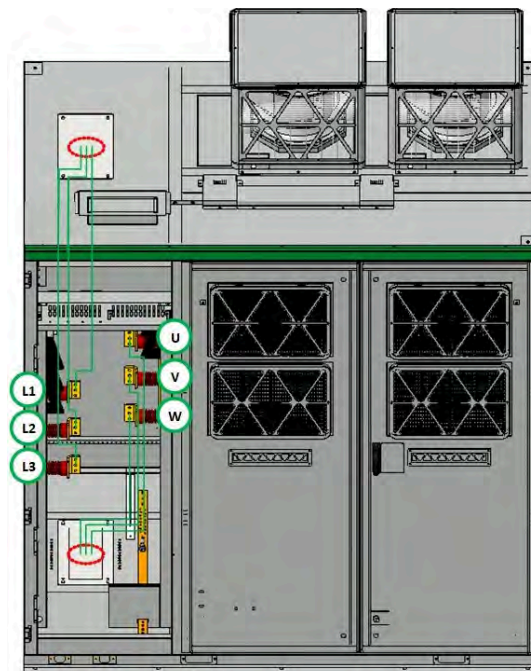
L1-L2-L3 Mains cables wiring

U-V-W Motor cables wiring

Cable Entry: Top in/ Bottom Out (BE04)

Aluminum plates on the top and bottom to facilitate the entry and exit of power/control cables that can be easily dismantled for on-site installation.

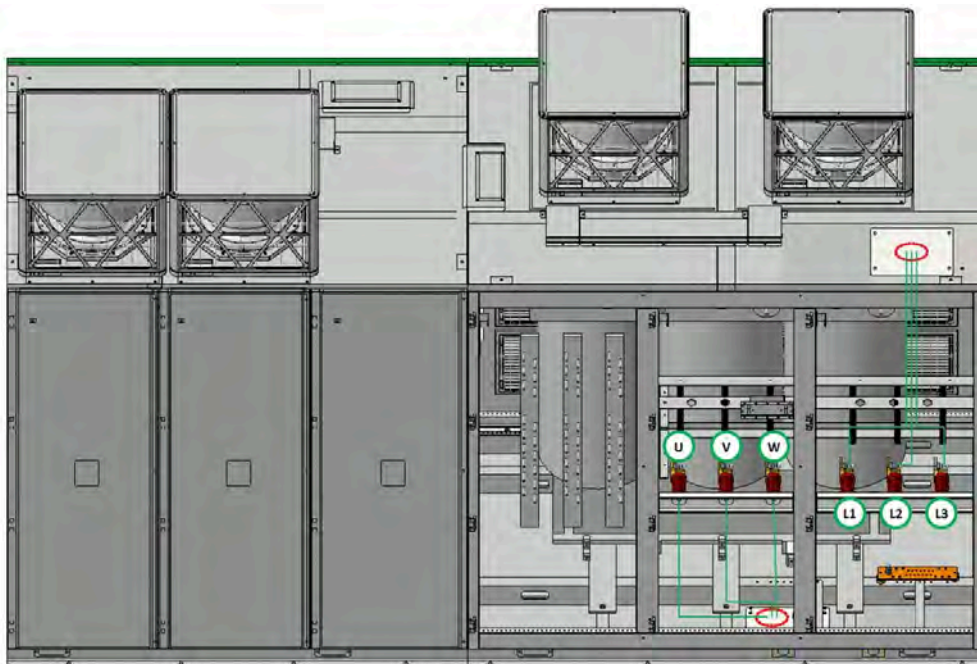
Front access drive



L1-L2-L3 Mains cables wiring

U-V-W Motor cables wiring

Front & Rear access drive



L1-L2-L3 Mains cables wiring

U-V-W Motor cables wiring

Removal of mains voltage off button (A64)

Mains voltage off button is mounted by default with the product. It is possible to remove this part from door HMI Pane.

Feeder for Motor Space Heater (E00)

Additional contactor for controlling motor space heater.

Environment and General Technical Data

Input Short-circuit Current Rating 31.5 kA/1s (E04)

Input section is reinforced to withstand high short circuit current.

Seismic (E07)

ATV6100 has been adapted with a reinforced cabinet design to handle levels equal or below UBC4 at ground level. Validated by simulation. Contact Schneider Electric for equivalence with local code/regulation.

High altitude >1000 m (E08)

For higher altitudes >1000 m, up to 2000 m is possible with derating. Above 2000 m contact your local Schneider Electric representative.

Drive Efficiency $\geq 96.5\%$ (E10)

Increase the ATV6100 efficiency from 96 % to 96.5 % by increasing the transformer efficiency from 98 % to 98.5 %.

Maximum Ambient Temperature > 40 °C (E11)

For higher indoor maximum ambient temperature >40 °C, up to 50 °C is possible with derating.

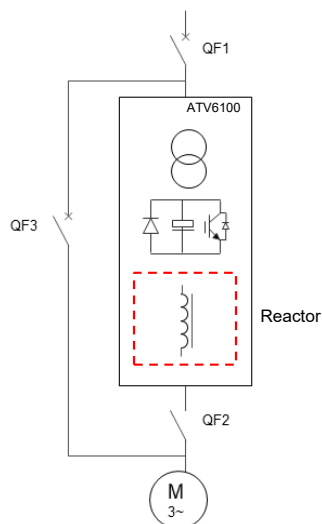
Cabinet and Transformer

Transformer Winding Selection Copper (A67)

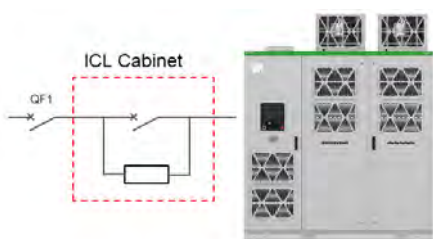
Copper Winding for the internal power transformer.

Reactor cabinet for Synchronous Bypass (BCS10)

An output reactor is needed for the decoupling of VSD output during the synchronous bypass process. Synchronous bypass is done automatically with one or multiple motors. For switchgear selection and process definition contact your local Schneider Electric representative.



Inrush Current Limit Cabinet (IL01)



For a weak network it is possible to limit the Inrush current up to 1.6 nominal input current caused by the internal power transformer. Typical values for ATV6100 are $\hat{i}_{inrush} = [8 \text{ to } 14] \times \sqrt{2} \times \text{input_RMS}$ with a time constant limited to 80 to 120 ms.

Harsh Environment

Humidity (E01)

The drive is designed to run in an environment with a relative humidity of up to 95 % (non-condensing).

Cabinet Space Heater (A06)



ATV6100 can be equipped with a cabinet space heater inside the transformer and power cell cabinets to help prevent condensation effect within the cabinets.

The default control logic is management by VSD running signal, the space heater in operation when VSD stop, the space heater out of service when VSD running.

It can be controlled also by following methods:

- Controlled by temperature
- Controlled by humidity and temperature

Fan Redundancy (E06)

The top fan's size is adapted for transformer and power cell cabinets, and fans are equipped with an electric actuator and shutter, keeping standard dimensions.

In case of one fan is broken, the electric actuator will control its shutter to close to avoid short-cut of airflow, meanwhile, the others keep running to provide sufficient airflow. This prevents production downtimes or interruptions, and replacement of this cooling fan can be postponed until the next scheduled shutdown.

Contact your local Schneider Electric representative for details.

Air Duct (A01)

Air duct channel solutions are available and depend on the actual installation situation. Contact your local Schneider Electric representative for details.

Protection Level: IP42 (SP04)

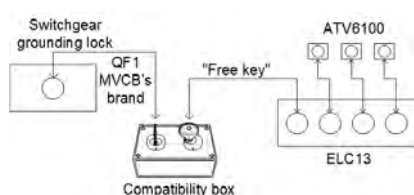
The enclosure design exists in three optimized variations, according to particular requirements or preferences. Each solution contains a clearly specified and tested cooling system which provides high reliability. The standard design of the ATV6100 enclosure unit complies with protection degree IP41. If a higher protection degree is desired or required, there are one alternative solution available, IP42.

The degree of protection provided by the enclosure of the electrical equipment aims to:

- Protect person against access to hazardous parts inside the enclosure;
- Protect equipment inside the enclosure against ingress of solid foreign objects;
- Protect equipment inside the enclosure against harmful effects due to the ingress of water.

Guarding Options

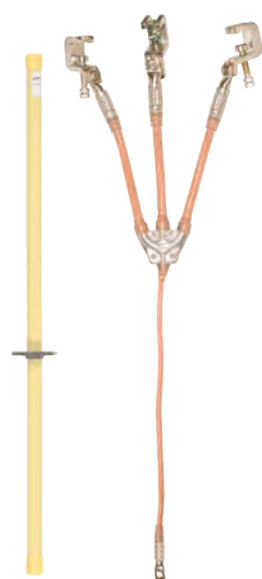
QF1 MVCB Interlock Compatibility Box (A02)



QF1 MVCB interlock ⁽¹⁾ utilizes keys for sequential control of equipment and machinery to avoid that unauthorized person opens the cabinet.

(1) The customer is required to provide the lock cylinder of QF1 MVCB's to Schneider Electric.

Grounding Cable for Maintenance (A07)



ATV6100 can be equipped with a grounding cable when maintenance for personal and equipment protection.

The grounding cable(stick included) is a 3 pole grounding and short circuiting device in accordance with IEC61230.

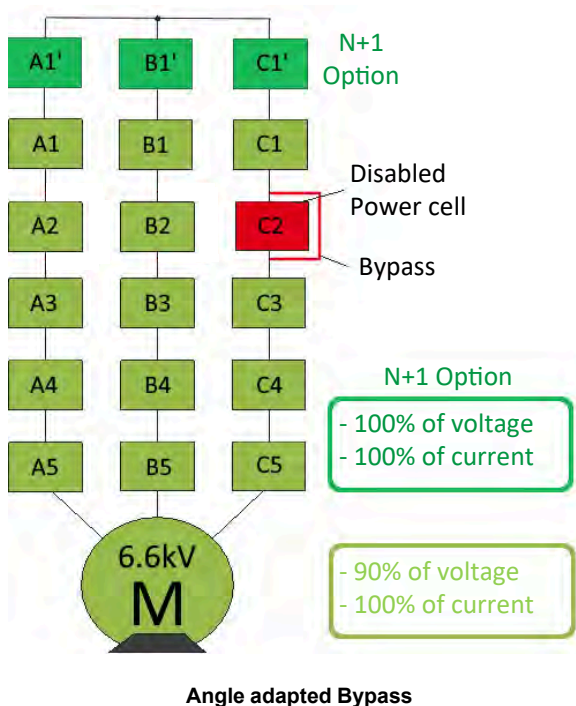
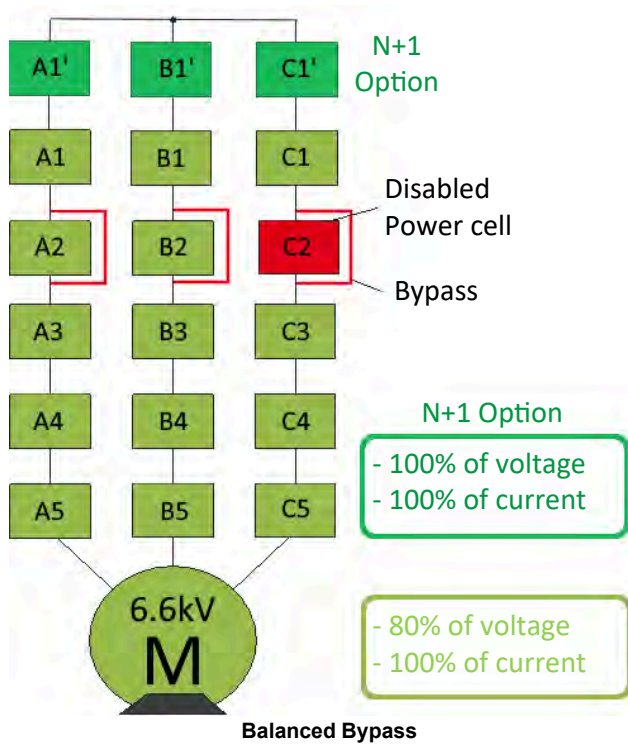
The grounding cable:

- Provides personal and equipment protection during maintenance
- Discharges the residual voltage of power supply operation system.

Short-circuit rating of fixed ball points:

	Maximum permissible I _k for...				
	0.5 s	1 s	2 s	5 s	10 s
VSD Output	33.5 kA	23.7 kA	16.7 kA	10.6 kA	7.5 kA
VSD Input	19.5 kA	13.8 kA	9.8 kA	6.2 kA	4.4 kA

Power cell bypass (PC01)



It is advisable to use an integrated power cell bypass option for crucial processes, in which case a reduction in capacity is preferable to a complete shutdown.

ATV6100 provide two different power cell bypass functions:

- Balanced bypass
- Angle adapted bypass

Balanced bypass:

When a power cell triggers an error, it will automatically bypass the same position power cell in each phase from the inverter circuit, and the VSD system will maintain running by reduced voltage and 100% of current capacity (voltage reduction depending on motor voltage).

Angle adapted bypass:

When a power cell triggers an error, it will automatically bypass the affected power cell and adapt the angles of the output voltages to keep a balanced output voltage system by shifting the neutral point. Advantage is a higher voltage and thus power capability.

Power cell errors covered by automatic bypass function are inoperative IGBT, overheating of power cell and over voltage.

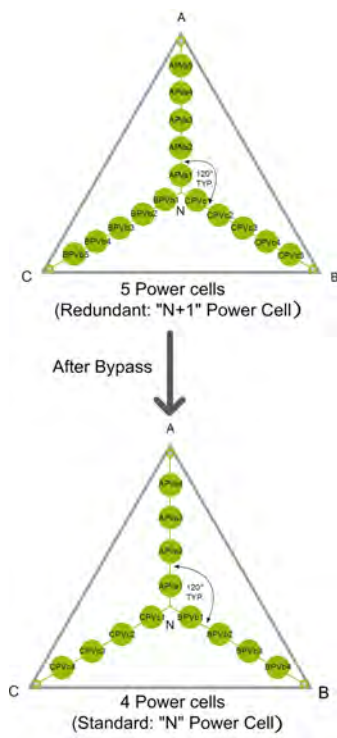
Power cell bypass function helps to prevent production downtime or unplanned interruption. Replacement of the inoperative power cell shall be arranged at the next scheduled maintenance.

The bypass circuit is fully integrated into the power cell, and this makes the power cell entirely modular and easy to service, even with a bypass function.

Power cell bypass Benefits

- The fully sealed automatic power cell bypass provides operation by avoiding damage due to environmental influence like dust or humidity.
- Increases process availability as the drive will keep on running with small load capacity reduction. In most of the cases, the optimum load control performance of the pump, fan or compressor are not affected, as their typical process operation range does not exceed 30 Hz to 45 Hz to generate energy savings.
- Provides crucial process availability until the next scheduled maintenance.

Inverter Redundancy (N+1) (PC02)



ATV6100 medium voltage drive can be equipped using the inverter redundancy configuration (N+1). With this configuration, the ATV6100 can offer more availability to the process/application with 100% load capability, enabling the pump/fan/conveyor/compressor to operate at full capacity without derating. Both the inverter and transformer section are designed in order to sustain operation at 100% load during power cell bypass.

Inverter redundancy (N+1) is available up to 10kV.

Benefits

- The inverter redundancy design helps to increase the reliability of the whole system in order to increase the availability of service.
- Motor friendly: One power cell in each phase bypassed automatically to keep a neutral point balanced, resulting in less bearing current for significantly low motor stress.
- Rated output: Using redundant inverter configuration, the drive remains able to provide full output voltage and current without any derating of speed or torque.

Arc Flash Detection (E02)



ATV6100 can be equipped with an arc flash detection system (VAMP series). The unit detects an arc flash in an installation and trips the feeding breaker to avoid larger loss of current. Arc flash detection is available in the transformer cabinet and PoC cabinet.

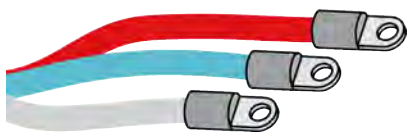
An arc flash detection system runs much faster than conventional relays and thus damage caused by an arc short circuit can be kept to a minimum level.

Benefits

- Reduces Loss of Production: The shorter the operating time of the arc flash detection unit, the smaller the damage caused by the arc flash will be, and the shorter the possible outage of the power supply.
- Prolonged drive Life Cycle: An unit increases the service life expectancy of Drive installations, investment decisions in new Drive installations can be postponed, and money can be saved.
- Low Investment Costs and Fast Installation: A comprehensive arc flash protection is characterized by low investment costs and a fast installation and commissioning time. One successful operation of the arc flash detection units provides immediate investment pay off.
- Robust Operation: Function is based on appearance of light or alternatively on the appearance of light and current from external equipment.
- Vast Experience: Schneider Electric is the pioneer in the field of arc flash detection with more than 10.000 VAMP arc flash detection systems and units.

Customization

Specific Cabling Color (A50)



Customized power and control color cables for identification.

Specific Cabinet Color RAL (CC01)



Customized cabinet color according to a RAL, on request.

Schneider Electric
35 rue Joseph Monier
92500 Rueil Malmaison
France

+ 33 (0) 1 41 29 70 00

www.se.com

As standards, specifications, and design change from time to time, please ask for confirmation of the information given in this publication.

© 2025 Schneider Electric. All rights reserved.

BRU16010.04