Medium Voltage Drives

Applications:

H Series
- Centrifugal load (pumps, compressors, fans)
- Retrofitting on existing motors
- High speed applications

N Series
- Finishing block for rod mill
- Ship propulsion
- High reversing cold mill
- Roll mill
- Mill stand & coilers
- Tube mill
- Conveyor starter

Silcovert H Series is a multi-level drive with IGBT power devices and a more efficient and precise control for induction and synchronous motors.

Our H Series drives (th/nh) are compatible with your existing motor systems, regardless of brand or age. With our customized retrofit you can achieve increased levels of safety, reliability and efficiency.

The Silcovert N Series is a neutral point clamped voltage source drive high performance variable speed drives for induction and synchronous motors. Field oriented, V/Hz - sensorless controls for different applications.

Silcovert H Series

Voltage:
Up to 2400 / 3300 / 4160 / 6000 / 6600 / 7200

TH
Power range:
Air cooling up to 9000 KVA
Water cooling up to 21200 KV

Drive Topology:
Pulse With Modulated (PWM)
Direct Front End (DFE)

Output Frequency:
250 Hz (std)
330 Hz max with Derating

NH
Power range:
Air cooling 1500/3700 KVA
Water cooling 2900/14400 KVA

Output Frequency:
5-140 Hz

Silcovert N Series

Voltage:
Up to 3300 V

TN
Power range:
Air cooling 1300/10400 KVA
Water cooling up to 21600 KVA

Drive Topology:
Neutral Point Clamped (NPC)
Active Front End (AFE)

Output Frequency:
Normal 5 - 70 Hz
Extended 5 - 140 Hz

GN
Power range:
Water cooling 9000 - 24000 KVA
(higher power on request)

Output Frequency:
Normal 10 - 65 Hz
Extended 10 - 100 H

Nidec
All for dreams

INDUSTRIAL SOLUTIONS

DEP2018.03.3X.0/EN

Nidec
All for dreams

Power Electronics

Low Voltage Drives

Applications:

AC Drives
- General purpose drives for water treatment, energy, marine, petrochemical,

DC Drives
- General purpose drives for, metals, paper, cement, textile, material handling Cranes and carousels

The Answer Drives Series are vector variable frequency drives with unmatched levels of adaptability. This efficient drive has proven service in a wide range of applications with the highest levels of efficiency, stability and user control.

Energy-saving solution for optimal performance can reduce energy demand significantly by automatically adjusting operating conditions to meet system demands in a wide range of applications.

Answer DRIVES

Answer Drives 700
Power range:
0.37 - 22 kW
Voltage:
1F: 220/240 V; 3F: 380/480 V
Output Frequency:
0-480 Hz

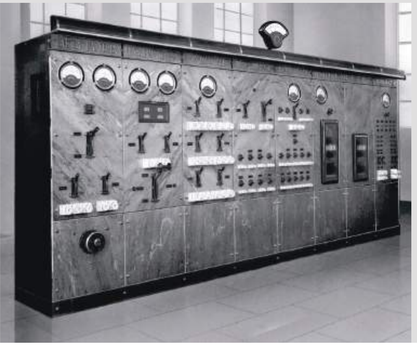
Answer Drives 1000
Power range:
1,5 - 450 kW
Voltage:
F: 380 - 480 V ±10%
Output Frequency:
Up to 200 Hz

GT 3000
Power range:
0.75 - 1200 kW
Voltage:
380 - 690 V
Output Frequency:
Up to 200 Hz

DC Drives
Current ratings:
30 - 4000 A dc
Input Voltage:
400 - 950 V ac
Power range:
1.6 - 12 MW
Voltage:
400 - 1500 V dc

Highlights:
- Two - or four - quadrant operation
- High dynamic response
- Auto-tuning
- Easy customization, even for complex functions
- Powerful diagnostics
- Automatic commissioning

Nidec ASI, a tradition in excellence



Nidec ASI: destined to be number one in industrial drive solutions

With over 150 years of experience in the energy, metal, environmental, marine and industrial markets, Nidec ASI has the experience to deliver process oriented power quality and control solutions, from components to complete engineered systems.

Nidec ASI is a global supplier of power electronic equipment and automation systems as well as electric motors and generators.

This combination of technologies and background is the base of our expertise in engineering flexible, customized solutions for global industrial markets at competitive prices.

Our ultimate goal is Total Customer Success

At Nidec we know that quality is determined by the Customer.
Our 3Q6S quality model is designed to continuously improve
and control the quality of our products and services.
For you, our customer, this means:

- Advanced, robust product and system designs
- Seamless integration with your existing systems
- Maximum performance, high efficiency, and long term reliability

We are committed to your quest for success.

3Q6S Driving Continual Improvement Among Workers, Company and Products

Reliable Cost-Effective Solutions for all industrial applications

At Nidec ASI reliability is the foundation of our product design.
Using proven IGBT/IGCT or traditional LCI technology our variable frequency drives are custom engineered to provide outstanding static and dynamic performance with a high level of efficiency across the driven equipment's entire operating range.
Our Variable Frequency Drives' built-in WINDOWS® based diagnostic tools and streamlined modular design result in easy maintenance and repair.
In addition, the flexibility of our modular design allows us to configure compact solutions granting you greater flexibility in terms of plant layout.
Our remote diagnostics features can play an important role in your Maintenance and Operating strategies, contributing to a significant reduction in Life Cycle Costs for your equipment by making it possible for plant managers and technicians to monitor equipment performance from any position across the globe.

Compliant with all applicable norms and standards including IEEE519 and EN-IEC 61800

Power Conversion Systems

Applications:

- Photovoltaic power plants
- Battery Energy Storage Systems
- Smart Micro Grids

Nidec ASI has more than forty years of experience in power conversion solutions with significant experience in power quality. The PCS (Power Conversion System) consists of power converter, control system, transformer & switch gear (where needed). Power conversion systems are based on a flexible modular design, suitable for either indoor or outdoor use.

For Battery Energy Storage Systems the PCS offers bi-directional power conversion and can be configured for both on-grid and off-grid use. Thanks to the sophisticated algorithms and open control platform, the PCS seamlessly integrates with any battery management system (bms) regardless of type or brand.

Commercial Scale Units

Typical Users:
- Large residential units
- Resorts
- University Campuses
- Public buildings and complexes
- Military bases
- Hospitals
- Shopping centers
- Industrial parks

Power range:
20 kW - 100 kW

Utility Scale Units

Typical Users:
- Solar & Wind Farm Operators
- Public Utilities
- Independent Power Producers
- Transmission System Operators (TSO)
- Distribution System Operators (DSO)
- Regional Transmission Organizations (RTO)
- Independent System Operators (ISO)
- Smart microgrids

Power range:
200 kW - 1100 kW

Village & Town - Cabinet solution
Power range:
200 - 3.2 MW (at 1.1 kVdc)
1.0 MW - 3.2 MW (at 1.1 kVdc)
1.0 MW - 5.0 MW (at 1.5 kVdc)

Urban Compact - Station
Power range:
1.0 MW - 3.2 MW (at 1.1 kVdc)
1.0 MW - 5.0 MW (at 1.5 kVdc)

Excitation systems & softstarters

Applications:

- Voltage regulations of synchronous generators
- Power control of synchronous motors

The Silcostat is an AC/DC thyristor power converter that supplies excitation current to the motor windings.

Nidec ASI's digital soft starters Silcostart are designed to start induction motors in any fixed speed application, mitigating mechanical shock and reducing inrush current to protect both motor and load.

Silcostat

Power range:
Natural air up to 200A
Forced air up to 3500A
Forced water up to 6000A

Cooling methods include:
- Natural air
- Forced air
- Forced water with water/ water-air exchanger

Silcostart

Power range:
400 - 9000 kW

Voltage:
3300 - 11000V

Main characteristics:
- Input voltage tolerance ± 10%
- Frequency 50/60 Hz ± 5%
- Control signals fiber-optically isolated from HV signals
- Remote control with dedicated digital inputs (24Vdc and 230Vac)
- Remote monitoring with dedicated digital outputs (dry contacts)
- Current limit: adjust. 100 - 3/400 % In (ask to the factory)
- Ramp-up time: adjust. 1- 30 sec.
- Numbers of starts : 2/3 per hour at maximum conditions according to the motor data.

Silcovert S

Applications:

- Starting of synchronous compensators, large gas turbine alternators or motor/generators
- Ship propulsion Pumps and fans
- Extruders and mixers,
- High power ratings
- High speed applications.

The Silcovert S is a load-commutated current source inverter (LCI) for synchronous motors and provides speed regularity, monitoring and braking torque regulation, V/Hz low shaping.

The Silcovert S has a rugged, compact design and is highly efficient and reliable.

Silcovert S

Features:
- High accuracy
- Four-quadrant operation
- High immunity to any line transient and "flying restart" after a supply voltage loss or dip
- High starting torque and wide constant torque operation range
- Air and water cooled
- 98% efficiency

Power range:
Air cooling up to 4500 V
Water cooling up to 10000 V

Voltage:
5 - 95 Hz

Container Solutions available