



# Commander S

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S100-01D73

#### Making simple applications, simple

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RISK OF

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485

AC drives, general purpose



Drives

#### **Commander S**

0.18 to 11 kW (0.25 to 15 hp) 1Ф 100 & 200 V, 3Ф 200 & 400 V Linear V to F, Square V to F, Resistance Compensation

Take charge of motor control and energy savings with the latest addition to the Nidec Drives portfolio. With a feature set optimised for simple applications, Commander S provides a cost-effective solution for installations that require plug and play convenience straight from the box.

Commander S is the first drive to come with an app interface as a standard feature. The Marshal app is our revolutionary way to interface with the drive covering commissioning, monitoring, diagnostics and support.



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480V MAX

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#### Easy to install

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5 min

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The sleek curved design of Commander S optimises component layout for a small footprint and easy access to terminals. The click-on/click-off DIN rail mount makes installation remarkably easy.

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## 5-year warranty as standard\*

Our Commander S series is so reliable we are confident enough to supply it with a five-year warranty as standard.

Now you can buy with the same confidence.

\*Warranty terms and conditions apply.



#### Easy to use

Using our new Marshal app (Android/iOS) your drive can be configured in under 60 seconds.



#### Reliable

Durability is at the core of Commander S design, guaranteeing performance throughout its whole lifetime.



#### **Cost effective**

Equipped with unique features designed to save you time, energy and money.

# General purpose Making simple applications, simple.









#### Fan, Pump, Compressor Applications

- Improved energy efficiency during periods of low demand.
- PID functionality makes advanced control easy and efficient without the need of an external controller.
- Easily avoid equipment resonant frequencies and reduce high vibration levels using the skip frequency.
- Catch an already spinning motor to reduce start-up time and increase productivity.
- Motor thermal protection prevents overheating of the motor during operation.
- Fire mode maximizes availability of a building's smoke extraction system in the event of a fire. Once activated the drive will run until failure.

#### **Moving Applications**

conveyors, treadmills, automatic doors & barriers.

- Reliable speed control with onboard communications.
- S-ramp acceleration / deceleration profiling provides smooth speed transitions minimising machine jerk.
- Linear V to F with a controllable boost to get the machine running.
- Drive overload capacity up to 150% for rapid acceleration or load changes.
- DC braking with stop indication used to stop the motor quickly.

#### **Processing Applications**

mixers, crushers, agitators, centrifuges, kneaders, spinning & braiding machines for textile.

- Ease of integration to external PLC or other management systems with on board communications .
- Stability optimiser for improved motor control.
- Resistance compensation for excellent torque performance.
- Built-in EMC filter effectively reduces electromagnetic interference.







Nidec Drives has a long tradition of challenging the status-quo with innovative ideas and making a profound impact in the drives industry. And we've done it again with Marshal: Nidec Drives is the 1st drive supplier to implement NFC technology as standard on a drive and offer the Marshal app interface at no extra cost.

Marshal is your drive expert in the field. This rich content interface means you can commission, clone, diagnose system issues and monitor the drive in just a few screen taps.

Download the Marshal app





Vider

Drives



MARSHAL

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Powered by NFC\* technology, data transfer between the drive and mobile device takes less than 0.5s.

# <image>

Just bring your phone near the NFC logo to connect to the drive

# Marshal Your drive expert in the field

5100-0107

Choose your language

English V

LOG IN

Continue as guest

#### Commissioning

- Power off or on commissioning (even in the box).
- FastStart assisted commissioning. Only 4 simple steps to get you up and running.
- Advanced features available in parameter setting.
- Pre-set application configurations.

#### Cloning

- Parameters can be easily transferred from one drive to another just tap to write as many drives as you want.
- Back-up and restore drive configuration via the app.

#### Share

- Share configuration via Outlook, OneDrive, WhatsApp etc.
- Shared configurations are compatible with Marshal & Connect (our PC commissioning tool).
- Export customised wiring diagram and drive configuration to PDF format.

#### **Offline capabilities**

- Create new configurations in the app.
- Open existing projects to review/ change parameters.



#### Diagnostics

- Guided diagnostics for the system even without drive alarms or errors.
- Diagnostics available with power off or on.
- Get support for drive alarms within the app.
- Error log & active error diagnostics view active and historic error info.
- Differences from default compare configuration against factory defaults.

#### Support

• Access & download support materials via your Nidec Drives account.

#### Monitoring and security

- Quick view of parameter settings & drive status.
- Restrict access to drive configuration via PIN.
- Quick visualisation of I/O, motor, and speed settings.

#### **Contact us**

Access to worldwide distribution network and local drive centres for sales and technical support.

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## **Cost effective**

- Intelligent fan control reduces energy usage.
- Easy integration to automation via the onboard ModbusRTU.
- Integrated C1 EMC filter variants can operate in EMC-sensitive environments such as residential areas, without requiring additional external filters.
- Environmentally friendly meets ECO design regulations.



## Easy to install

- Simple to fit with click on/click off DIN rail mounting.
- Angled and offset screw terminal connectors for easy access and fast installation.
- The small footprint and side-by-side installation saves cabinet space.



### Easy to use

- Marshal App interface enables drive set-up in only 60s.
- Simple setup routines tailored to your application.
- FastStart commissioning menu only 4 simple steps to get your motor running.
- Full flexibility in choosing your preferred interface; Marshal App, drive keypad, Connect PC Tool.
- A PIN can be set on the drive or Marshal to restrict unwanted access.



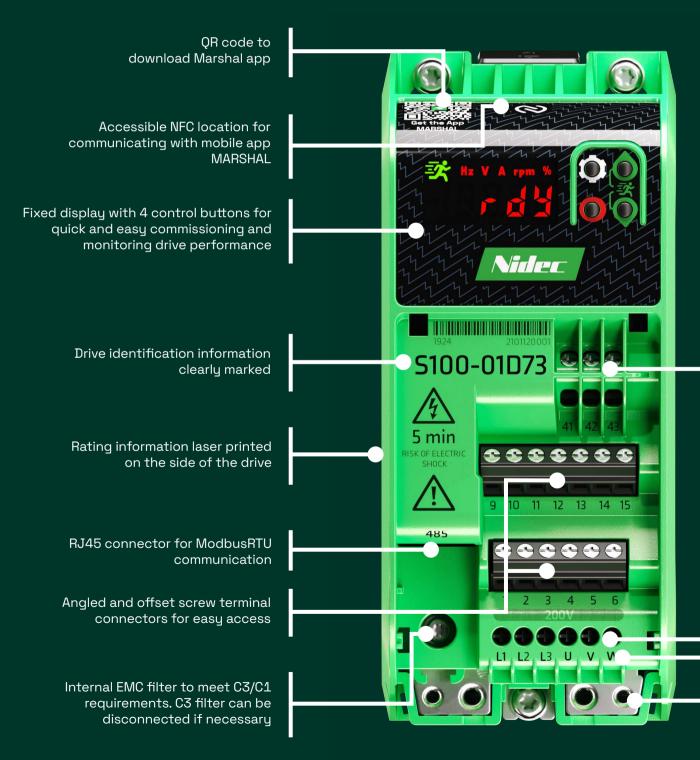
## Reliable

- Conformal coated boards ensure moisture, corrosion and dust protection.
- 5 Year Warranty as standard gives peace of mind.
- Latest generation of components from trusted suppliers, for robust performance and long term reliability.
- Keep running by default allows for continuous run during unusual loadings or operating conditions.



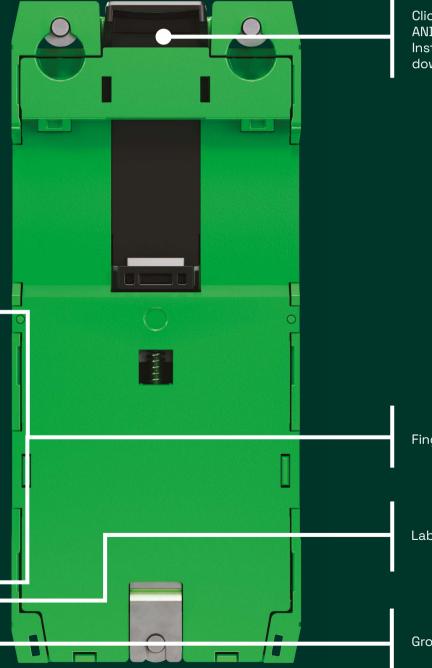


# Key usability features



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Drives



Click-on/click-off DIN rail mounting AND / OR Installation with bolts with washer. Drive drops down into position for a secure installation

Finger proof power and relay screw terminals

Labelled power terminals

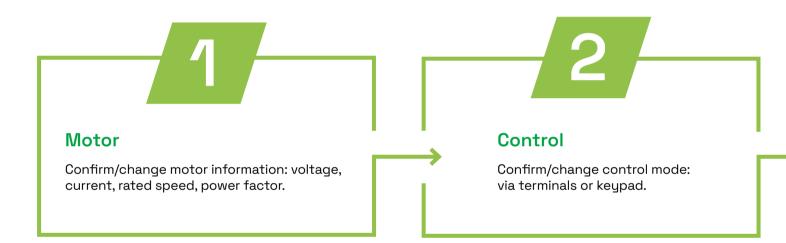
Ground / protective earth connections



#### Drives

## FastStart Step by step assistance t

#### Only 4 simple steps to get your motor running



#### via your preferred interface

Full flexibility in choosing the interface: Marshal on your mobile phone, the integrated drive keypad or Connect on a PC.

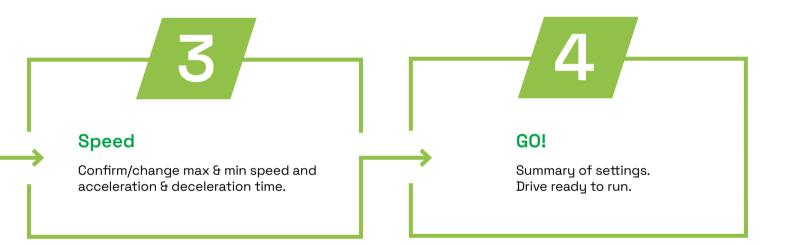




Marshal Recommended

Keypad

# o get you up and running





Connect offers an easy way to commission the drive on your PC.

The dynamic drive logic diagrams allow the visualisation and control of the drive in real time. The parameter browser enables viewing, editing and saving of parameters as well as importing parameter files from other drives.

Connect is a one tool interface for all drives in our portfolio.

Connect

## Commander S Specifications

Power & Control	
Supply Requirements	100 V drive: 100 V to 120 V ±10 % 200 V drive: 200 V to 240 V ±10 % 400 V drive: 380 V to 480 V ±10 % Maximum supply imbalance: 2 % negative phase sequence (equivalent to 3 % voltage imbalance between phases)
Power Range	0.18 to 11 kW / 0.25 to 15 hp
Supply Frequency Range	45 to 66 Hz
Output Frequency/Speed Range	0 to 300 Hz
Switching Frequency	4 kHz or 12 kHz
Heavy Duty Overload Capability	150 % for 60 s (from cold), 150 % for 8 s (from hot)
Operating Modes	Linear V to F, Square V to F, Resistance Compensation
Stopping Modes	Coast, Ramp, Ramp & DC Injection Braking, DC Injection Braking with 0 Hz detect, Timed DC Injection Braking, Distance Stop
Communication & Interfaces	
Communications	RJ45 for Modbus RTU, NFC for app interface
Keypads	Fixed LED keypad, Remote IP66 Keypad (available as an accessory) HMI (available as an accessory)
User Software Tools (Free To Download)	Marshal (Mobile App), Connect (PC commissioning tool)
Inputs & Outputs	
Analogue	2 x Analogue input Possible settings: 0-10 V, 0-20 mA, 4-20 mA (No Alarm), 4-20 mA (Alarm), 4-20 mA (Error), Digital 1 x Analogue output Possible settings: 0-10 V, 0-20 mA, 4-20 mA
Digital	4 x Digital inputs (1 frequency input) 1 x Digital input / output (can be used as a frequency or PWM output to represent analog value)
Digital Input Logic	Positive or Negative input logic (PNP or NPN sensors)
Relay	1 x Relay (single pole, double throw relay)
Resolutions	Output frequency resolution: 0.1 Hz Analogue input 1: 11 bit Analogue input 2: 11 bit Current: The resolution of the current feedback is 10 bit plus sign
Mounting & Environment	
IP Rating	IP20
Storage Temperature	-40 °C to 60 °C (-40 °F to 140 °F)
Operating Temperature Without De-Rate	-10 °C to 40 °C (14 °F to 104 °F)
Operating Temperature With De-Rate	-10 °C to 60 °C (14 °F to 140 °F)
Cooling	Natural convection (frame 1 ≤0.25 kW / 0.33 hp), Integral cooling fan (all other drives)
Altitude	≤3000 m (1000 m to 3000 m derate 1 % over 100 m)
Humidity	95 % non-condensing at 40 °C / 104 °F - EN61800-2(3k3)
Pollution	Pollution degree 2 - dry, non-conducting pollution only

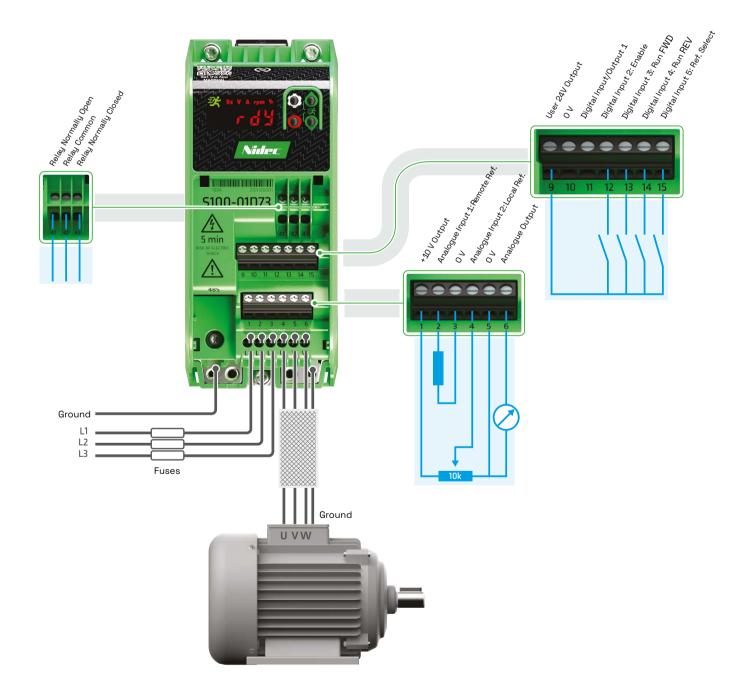
VibrationTested to IEC 60068-2-6Mounting MethodsSurface mount, click on/click off DIN rail mountMounting ClearanceO mm either side, 45 mm above and below (100 mm above and below for frame 1 drives ≤0.25 kW / 0.33 hp)Overvoltage CategoryCategory III (IEC/EN/KN/UL 61800-5-1)Corrosive EnvironmentsEN 60721-3-3 IS09223 Class C3Maximum Motor Cable Length50 m (All variants)StandardsEV (EV, CA, CUL, C-Tick, EAC, KCApprovalsCE (EV/KN/UL 61800-5-1, CSA C22.2 No.274, GB12668.501-2013, EC/EN/KN/UL 61800-3 Adjustable speed electrical power drive systems, Part 3: EMC requirements and specific test methodsProduct Emc StandardsEC/EN/KN 61800-3 Adjustable speed electrical power drive systems, Part 3: EMC requirements and specific test methods	Mounting & Environment continued	
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Immunity ComplianceSecond environment (Industrial)Envision ComplianceCategory C3 (Internal filters only) Category C3 (Caternal EMC filters) Category C1, (Internal filters only, for selected 1@ 200 Variants)Generic Immunity ComplianceEN 60000-61: Generic Immunity standard for residential, commercial and light industrial environments EN 810000-62: Generic Immunity standard for insidential environments EN 81000-64: Generic emission standard for industrial environments EN 80000-64: Generic emission standard for industrial environments EN 80000-64: Generic emission standard for industrial environments Environmenta For Motor Cable Length Category C1 environment filter Category C1 environments Category C1 environments Environmental ProtoctobeWarantyE vera (waranty terms and conditions apply)AccessorieEnvironmental ProtoctionProtectionElve filter, Cable management bracket, CT comms cable Environmental ProtoctionProtectionIon Virives -175 V 200 Virives -175 V 200 Virives -175 V 200 Virives -200 V <br< td=""><td>Product Emc Standards</td><td></td></br<>	Product Emc Standards	
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Generic Immunity Compliance   EN 61000-6-2: Generic immunity standard for industrial environments     Generic Emission Compliance   EN 61000-6-4: Generic emission standard for industrial environments     Emission Compliance for Motor Cable Length up to 50 m   C2 with an external filter C3 without a filter     Emission Compliance for Motor Cable Length up to 50 m   C1 with an external filter C3 without a filter     Emission Compliance for Motor Cable Length up to 5 m   C1 only for drive variants with internal C1 filter (S100-xxxx1)     Warranty   Stars (warranty terms and conditions apply)     Accessories   Remote keypad IP66, HMI     Remote Interfaces   Remote keypad IP66, HMI     Filters & Cables   EM 61tier, Cable management bracket, CT comms cable     Environmental Protection   Filter filter     Protection   200 V Drives 175 V 200 V Drives 200 V 200 V Drives	Emission Compliance	Category C1 & C2 (external EMC filters)
Emission Compliance for Motor Cable Lengh   C with an external filter     Emission Compliance for Motor Cable Lengh   C1 with an external filter     Emission Compliance for Motor Cable Lengh   C1 only for drive variants with internal C1 filter (\$100-xxxx1)     Emission Compliance for Motor Cable Lengh   C1 only for drive variants with internal C1 filter (\$100-xxxx1)     Warranty   C1 only for drive variants with internal C1 filter (\$100-xxxx1)     Warranty   S Years (warranty terms and conditions apply)     Accessories   Emoto Interfaces     Remote Interfaces   Remote keypad IP66, HMI     Filters Dables   EMC filter, Cable management bracket, CT comms cable     Environmental Protection   Effect     Conformal Coating   IOU V Drives 175 V     De Bus Undervoltage Error Level   SiOV Drives 275 V     Do V Drives 275 V   SiOV Drives 200 V D	Generic Immunity Compliance	
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up to 20 m, plane of white data Sum (2 without a filter     Emission Compliance for Motor Cable Length up to 5 m   cl only for drive variants with internal C1 filter (S100-xxxx1)     Warranty   5 Years (warranty terms and conditions apply)     Accessories   Emote keypad IP66, HMI     Remote Interfaces   Remote keypad IP66, HMI     Filters 6 Cables   EMC filter, Cable management bracket, CT comms cable     Environmental Protection   Eibre filter     Protection   Vol 7 Virves 175 V     Col V Drives 175 V   200 V Drives 175 V     200 V Drives 175 V   200 V Drives 175 V     200 V Drives 200 V   200 V Drives 200 V     200 V Drives 300 V   200 V Drives 300 V     200 V Drives 400 V   200 V Drives 400 V     200 V Drives 400 V   200 V Drives 400 V     200 V Drives 400 V   200 V Drives 400 V     200 V Drives 400 V   200 V Drives 400 V     200 V Drives 400 V   200 V Drives 400 V     200 V Drives 400 V   200 V Drives 400 V     200 V Drives 400 V   200 V Drives 400 V     200 V Drives 400 V   200 V Drives 400 V     200 V Drives 400 V   200 V Drives 400 V		C2 with an external filter
up to S m Clionig for drive variants with internal Clifter (SLUD-XXX1)   Warranty 5 Years (warranty terms and conditions apply)   Accessories Remote Interfaces   Remote Interfaces Remote keypad IP66, HMI   Filters & Cables EMC filter, Cable management bracket, CT comms cable   Environmental Protection Fibre filter   Portection Fibre filter   Conformal Coating IOU V Drives = 175 V   200 V Drives = 175 V 200 V Drives = 175 V   200 V Drives = 300 V 200 V Drives = 400 V   200 V Drives = 400 V 200 V Drives = 400 V   200 V Drives = 800 V 200 V Drives = 800 V   Instantaneous Overcurrent Error/Limit 150 % Motor Rated Current (Programmable)   Phase Loss Error DC Bus Ripple Threshold Exceeded   Overtemperature Error Control Board Over Temperature, Inverter Model Temperature, Inverter Thermistor Temperature   Short Circuit Error Protection against output phase-to-phase fault.   Motor Thermal Protection Electronically protects the motor from over-heating due to loading conditions		
Vertanty   5 Years (warranty terms and conditions apply)     Accessories     Remote Interfaces   Remote keypad IP66, HMI     Filters & Cables   EMC filter, Cable management bracket, CT comms cable     Environmental Protection   Fibre filter     Protection   IOO V Drives 175 V     200 V Drives = 175 V   200 V Drives = 175 V     200 V Drives = 175 V   200 V Drives = 330 V     201 Drives = 300 V   200 V Drives = 400 V     202 Bus Overvoltage Error Level   200 V Drives = 400 V     200 V Drives = 400 V   200 V Drives = 400 V     200 V Drives = 400 V   200 V Drives = 400 V     200 V Drives = 400 V   200 V Drives = 800 V     August Drives = 100 V Drives = 00 V   200 V Drives = 400 V     200 V Drives = 00 V   200 V Drives = 800 V     100 V Drives = 00 V   200 V Drives = 800 V     100 V Drives = 00 V   200 V Drives = 100 V     200 V Drives = 00 V   200 V Drives = 100 V     200 V Drives = 00 V   200 V Drives = 100 V     200 V Drives = 00 V   200 V Drives = 100 V     200 V Drives = 00 V   200 V Drives = 100 V     200 V Drives = 00 V		C1 only for drive variants with internal C1 filter (S100-xxxx1)
Accessories Remote Interfaces Remote keypad IP66, HMI   Filters & Cables EMC filter, Cable management bracket, CT comms cable   Environmental Protection Fibre filter   Protection Fibre filter   Conformal Coating IOO V Drives = 175 V   DC Bus Undervoltage Error Level 200 V Drives = 175 V   DC Bus Overvoltage Error Level 200 V Drives = 330 V   DC Bus Overvoltage Error Level 200 V Drives = 400 V   DC Bus Overvoltage Error Level 200 V Drives = 400 V   DC Bus Overvoltage Error Level 200 V Drives = 400 V   DC Bus Overvoltage Error Level 200 V Drives = 400 V   Ado V Drives = 800 V 200 V Drives = 400 V   Ado V Drives = 800 V 200 V Drives = 800 V   DC Bus Overcurrent Error/Limit 150 % Motor Rated Current (Programmable)   Phase Loss Error DC Bus Ripple Threshold Exceeded   Overtemperature Error Control Board Over Temperature, Inverter Model Temperature, Inverter Thermistor Temperature   Short Circuit Error Protection against output phase-to-phase fault.   Motor Thermal Protection Electronically protects the motor from over-heating due to loading conditions   Fire Mode Run at a set frequency ignoring selected errors	Warranty	
Remote Interfaces Remote keypad IP66, HMI   Filters & Cables EMC filter, Cable management bracket, CT comms cable   Environmental Protection Fibre filter   Protection Image: Common state in the s	Warranty	5 Years (warranty terms and conditions apply)
Filters & Cables EMC filter, Cable management bracket, CT comms cable   Environmental Protection Filter   Protection Image: Common state of the co	Accessories	
Environmental Protection Fibre filter   Protection Image: Conformal Coating   Conformal Coating Image: Conformal Coating   DC Bus Undervoltage Error Level 200 V Drives = 175 V 200 V Drives = 330 V   DC Bus Overvoltage Error Level 200 V Drives = 400 V 200 V Drives = 400 V   DC Bus Overvoltage Error Level 200 V Drives = 400 V 200 V Drives = 400 V   DC Bus Overvoltage Error Level DO V Drives = 400 V 400 V Drives = 800 V   Instantaneous Overcurrent Error/Limit 150 % Motor Rated Current (Programmable)   Phase Loss Error DC Bus Ripple Threshold Exceeded   Overtemperature Error Control Board Over Temperature, Inverter Model Temperature, Inverter Thermistor Temperature   Short Circuit Error Protection against output phase-to-phase fault.   Motor Thermal Protection Electronically protects the motor from over-heating due to loading conditions   Motor Thermal Protection Electronically generets the motor from over-heating due to loading conditions	Remote Interfaces	Remote keypad IP66, HMI
Protection   Conformal Coating IO0 V Drives= 175 V   DC Bus Undervoltage Error Level 200 V Drives = 175 V   200 V Drives = 175 V 200 V Drives = 175 V   400 V Drives = 330 V 400 V Drives = 330 V   DC Bus Overvoltage Error Level 200 V Drives = 400 V   200 V Drives = 400 V 200 V Drives = 400 V   400 V Drives = 400 V 200 V Drives = 400 V   400 V Drives = 800 V 400 V Drives = 800 V   Instantaneous Overcurrent Error/Limit 150 % Motor Rated Current (Programmable)   Phase Loss Error DC Bus Ripple Threshold Exceeded   Overtemperature Error Control Board Over Temperature, Inverter Model Temperature, Inverter Thermistor Temperature   Short Circuit Error Protection against output phase-to-phase fault.   Motor Thermal Protection Electronically protects the motor from over-heating due to loading conditions   Ricet Brone Reverser Shord Electronically protects the motor from over-heating due to loading conditions	Filters & Cables	EMC filter, Cable management bracket, CT comms cable
Conformal CoatingImage: Conformal CoatingDC Bus Undervoltage Error Level100 V Drives = 175 V 200 V Drives = 175 V 400 V Drives = 330 VDC Bus Overvoltage Error Level100 V Drives = 400 V 200 V Drives = 400 V 200 V Drives = 400 V 400 V Drives = 800 VInstantaneous Overcurrent Error/Limit150 % Motor Rated Current (Programmable)Phase Loss ErrorDC Bus Ripple Threshold ExceededOvertemperature ErrorControl Board Over Temperature, Inverter Model Temperature, Inverter Thermistor TemperatureShort Circuit ErrorProtection against output phase-to-phase fault.Motor Thermal ProtectionElectronically protects the motor from over-heating due to loading conditions	Environmental Protection	Fibre filter
DC Bus Undervoltage Error Level100 V Drives = 175 V 200 V Drives = 175 V 400 V Drives = 330 VDC Bus Overvoltage Error Level100 V Drives = 400 V 200 V Drives = 400 V 200 V Drives = 400 V 400 V Drives = 800 VInstantaneous Overcurrent Error/Limit150 % Motor Rated Current (Programmable)Phase Loss ErrorDC Bus Ripple Threshold ExceededOvertemperature ErrorControl Board Over Temperature, Inverter Model Temperature, Inverter Thermistor TemperatureShort Circuit ErrorProtection against output phase-to-phase fault.Motor Thermal ProtectionElectronically protects the motor from over-heating due to loading conditionsFire ModeRun at a set frequency ignoring selected errors	Protection	
DC Bus Undervoltage Error Level200 V Drives = 175 V 400 V Drives = 330 VDC Bus Overvoltage Error Level100 V Drives = 400 V 200 V Drives = 400 V 400 V Drives = 800 VInstantaneous Overcurrent Error/Limit150 % Motor Rated Current (Programmable)Phase Loss ErrorDC Bus Ripple Threshold ExceededOvertemperature ErrorControl Board Over Temperature, Inverter Model Temperature, Inverter Thermistor TemperatureShort Circuit ErrorProtection against output phase-to-phase fault.Motor Thermal ProtectionElectronically protects the motor from over-heating due to loading conditionsFire ModeBun at a set frequency ignoring selected errors	Conformal Coating	
DC Bus Overvoltage Error Level200 V Drives = 400 V 400 V Drives = 800 VInstantaneous Overcurrent Error/Limit150 % Motor Rated Current (Programmable)Phase Loss ErrorDC Bus Ripple Threshold ExceededOvertemperature ErrorControl Board Over Temperature, Inverter Model Temperature, Inverter Thermistor TemperatureShort Circuit ErrorProtection against output phase-to-phase fault.Motor Thermal ProtectionElectronically protects the motor from over-heating due to loading conditionsFire ModeRun at a set frequency ignoring selected errors	DC Bus Undervoltage Error Level	200 V Drives = 175 V
Phase Loss ErrorDC Bus Ripple Threshold ExceededOvertemperature ErrorControl Board Over Temperature, Inverter Model Temperature, Inverter Thermistor TemperatureShort Circuit ErrorProtection against output phase-to-phase fault.Motor Thermal ProtectionElectronically protects the motor from over-heating due to loading conditionsFire ModeRun at a set frequency ignoring selected errors	DC Bus Overvoltage Error Level	200 V Drives = 400 V
Overtemperature Error Control Board Over Temperature, Inverter Model Temperature, Inverter Thermistor Temperature   Short Circuit Error Protection against output phase-to-phase fault.   Motor Thermal Protection Electronically protects the motor from over-heating due to loading conditions   Fire Mode Run at a set frequency ignoring selected errors	Instantaneous Overcurrent Error/Limit	150 % Motor Rated Current (Programmable)
Short Circuit ErrorProtection against output phase-to-phase fault.Motor Thermal ProtectionElectronically protects the motor from over-heating due to loading conditionsFire ModeRun at a set frequency ignoring selected errors	Phase Loss Error	DC Bus Ripple Threshold Exceeded
Motor Thermal Protection Electronically protects the motor from over-heating due to loading conditions   Fire Mode Run at a set frequency ignoring selected errors	Overtemperature Error	Control Board Over Temperature, Inverter Model Temperature, Inverter Thermistor Temperature
Fire Mode Run at a set frequency ignoring selected errors	Short Circuit Error	Protection against output phase-to-phase fault.
	Motor Thermal Protection	Electronically protects the motor from over-heating due to loading conditions
Keep Running Parameter defaults set to avoid errors and machine downtime.	Fire Mode	Run at a set frequency ignoring selected errors
	Keep Running	Parameter defaults set to avoid errors and machine downtime.

## Commander S Functionality

Marshal				
Offline Programming	Program the drive while it is still in the box			
Cloning	Clone parameter sets from one drive to another			
Faststart	Guided commissioning and motor rotation verification test			
Guided Diagnostics	Easy fault finding			
Parameter File Storage	Save parameter files to the device or cloud for future use			
Share Project Configuration	Share to colleagues or to Nidec Drives Technical Support for diagnostics			
Pdf Parameter Set	Useful for sharing parameter sets for quick review			
Wiring Diagram	Automatically generate a printable pdf of a custom wiring diagram for your installation			
Non-Default Parameter	Show the parameters that have been changed from their default setting			
Favourite Parameters	Favourite parameters visited often			
Guides And Manuals	Quick access to drive documentation			
Modbus RTU Communications	Logic function control			
Control Word Control	✓			
Cloning	$\checkmark$			
Serial Baud Rate	600 to 115200 bps			
Modbus Rtu Protocol	8.2NP, 8.1NP, 8.1EP, 8.10P			
Reference				
Selectable References	4			
Jog Reference	$\checkmark$			
Up / Down % Reference (Motorised Pot)	$\checkmark$			
Bi-Polar Reference	$\checkmark$			
Preset Speeds	4			
Skip Frequencies	1			
Skip Frequencies Dead Band	✓			
Local/Remote	$\checkmark$			
S-Ramp	$\checkmark$			
Acceleration Rates	2			
Deceleration Rates	2			
Frequency Input Reference (Pulse Train)	0 Hz to 100 kHz			
Run Reverse	$\checkmark$			

Application Specific				
PID Controller	PI Control			
PID Feedforward	✓			
PID Threshold Detector	✓			
PID Slew Rate	✓			
Reference Configuration	✓			
Run/Stop Configuration	✓			
Input Scaling	4-point			
Run Permit (Latching Run)	✓			
Limit Switches	✓			
Control				
Control Mode: Linear V to F	✓ (Definable Boost)			
Control Mode: Square V to F	✓ (Definable Boost)			
Control Mode: Resistance Compensation	$\checkmark$			
Low Energy Mode (Dynamic V to F)	✓			
Motor Stability Optimiser	✓			
Slip Compensation	✓			
Auto-Tune: Static	✓			
Switching Frequency	4 or 12 kHz			
Catch An Already Spinning Motor	✓			
Stop Mode: Ramp	$\checkmark$			
Stop Mode: Coast	✓			
Stop Mode: Distance Stop	$\checkmark$ when selected it stops in the same distance from any speed based on the programmed deceleration rate			
Dc Injection Braking	✓			
Supply Loss Detection	$\checkmark$			
Programmable Output Current Limit	✓			
General				
Diagnostics	$\checkmark$			
Error History Log	4			
Parameters Saved On Error	3 (Selectable)			
Auto-Reset After Trip	$\checkmark$			
Power Loss Ride Through	✓			
Security	4-digit PIN protection			
Cooling Fan	Fixed Speed (No fan on S100-01x13 or S100-01x23 drives)			

## Commander S Wiring diagram



## **Commander S** Ordering guide

#### How to select a drive

**Electrical Considerations** 

- What is the supply voltage?
- Single or three phase input power?
- What is the motor rating? •
- Continuous current - FLA (Full Load Amps)

#### **Dimensions**

	Overa	all Dimens	ions (±0.5	mm)	Mounting Dimensions (±0.5 mm)					
Model Number	Height	Width	Depth	Weight	DIN*	M1	M2	М3	M4	Φ
S100-01	156 mm 6.14 in	68 mm 2.70 in	130 mm 5.12 in	0.7 kg 1.54 lb	46 mm 1.81 in	145 mm 5.71 in	45 mm 1.77 in	22.5 mm 0.89 in	22.5 mm 0.89 in	4.8 mm 0.19 in
S100-02	192 mm 7.56 in	68 mm 2.70 in	132 mm 5.20 in	0.8 kg 1.76 lb	46 mm 1.81 in	180 mm 7.11 in	45 mm 1.77 in	22.5 mm 0.89 in	22.5 mm 0.89 in	4.8 mm 0.19 in
S100-03	192 mm 7.56 in	90 mm 3.54 in	132 mm 5.20 in	1.0 kg 2.2 lb	46 mm 1.81 in	180 mm 7.11 in	65 mm 2.56 in	37.5 mm 1.48 in	27.5 mm 1.08 in	4.8 mm 0.19 in
S100-04	264 mm 10.40 in	115 mm 4.53 in	160 mm 6.30 in	3.81 kg 8.39 lb	46 mm 1.81 in	253 mm 9.96 in	99 mm 3.90 in	N/A	N/A	4.8 mm 0.19 in

\* No screws are required when mounting the drive onto a DIN rail.

#### **Drive Clearances**





#### **Documentation and downloads**

Product documentation and PC tools available for download from: www.controltechniques.com/support



Frame 04



Mounting Dimensions



## Commander S Model number and ratings

#### Variants with C3 built-in EMC filter

	Input		Internal	Heavy Duty				
Product Code	Phases	Frame Size	EMC Filter Performance	Max Cont. Current (A)	Motor Shaft Power (kW)	Motor Shaft Power (hp)		
100/120 Vac +/-10%								
S100-01113-0A0000	1Φ	01	C3	1.2	0.18	0.25		
S100-01123-0A0000	1Φ	01	C3	1.4	0.25	0.33		
S100-01133-0A0000	1Φ	01	C3	2.2	0.37	0.5		
S100-03113-0A0000	1Φ	03	C3	3.2	0.55	0.75		
S100-03123-0A0000	1Φ	03	C3	4.2	0.75	1		
S100-03133-0A0000	1Φ	03	C3	6	1.1	1.5		
200/240 Vac +/-10%								
S100-01S13-0A0000	1Φ	01	C3	1.4	0.18	0.25		
S100-01213-0A0000	3Φ	01	C3	1.4	0.18	0.25		
S100-01S23-0A0000	lΦ	01	C3	1.6	0.25	0.33		
S100-01223-0A0000	3Φ	01	C3	1.6	0.25	0.33		
S100-01S33-0A0000	1Φ	01	C3	2.4	0.37	0.50		
S100-01233-0A0000	3Φ	01	C3	2.4	0.37	0.50		
S100-01S43-0A0000	1Φ	01	C3	3.5	0.55	0.75		
S100-01243-0A0000	3Φ	01	C3	3.5	0.55	0.75		
S100-01S53-0A0000	1Φ	01	C3	4.6	0.75	1		
S100-01253-0A0000	3Φ	01	C3	4.6	0.75	1		
0400 04007 040000	1Φ	01	C3	6.6	1.1	1.5		
S100-01D63-0A0000	3Φ	01	C3	6.6	1.1	1.5		
0400 04077 040000	1Φ	01	C3	7.5	1.5	2		
S100-01D73-0A0000	3Φ	01	C3	7.5	1.5	2		
0400 07047 040000	1Φ	03	C3	10.6	2.2	3		
S100-03D13-0A0000	3Φ	03	C3	10.6	2.2	3		
S100-04213-0A0000	3Φ	04	C3	17	4	5		
S100-04223-0A0000	3Φ	04	C3	24.2	5.5	7.5		
380/480 Vac +/-10%								
S100-02413-0A0000	3Φ	02	C3	1.2	0.37	0.5		
S100-02423-0A0000	3Φ	02	C3	1.7	0.55	0.75		
S100-02433-0A0000	3Φ	02	C3	2.2	0.75	1		
S100-02443-0A0000	3Φ	02	C3	3.2	1.1	1.5		
S100-02453-0A0000	3Φ	02	C3	3.7	1.5	2		

S100-02463-0A0000	3Φ	02	C3	5.3	2.2	3
S100-03413-0A0000	3Φ	03	C3	7.2	3	3
S100-03423-0A0000	3Φ	03	C3	8.8	4	5
S100-04413-0A0000	3Φ	04	C3	13	5.5	7.5
S100-04423-0A0000	3Φ	04	C3	16	7.5	10
S100-04433-0A0000	3Φ	04	C3	23	11	15

\*Commander S100 variants fitted with C3 EMC filter comply with IEC 61800-3 second environment. An additional external filter is required for Commander S100 variants fitted with C3 EMC filter to meet the higher requirements of IEC 61000-6-4 and IEC 61800-3 first environment.

The requirements of IEC 61000-6-4 and IEC 61800-3 first environment are met by Commander S100 variants fitted with C1 EMC filter without additional filtering.

#### Variants with C1 built-in EMC filter

			Internal	Heavy Duty			
Product Code	Input Phases	Frame Size	EMC Filter Performance	Max Cont. Current (A)	Motor Shaft Power (kW)	Motor Shaft Power (HP)	
200/240 Vac +/-10%							
S100-02S11-0A0000	1Φ	02	C1	1.2	0.18	0.25	
S100-02S21-0A0000	1Φ	02	C1	1.4	0.25	0.33	
S100-02S31-0A0000	1Φ	02	C1	2.2	0.37	0.5	
S100-02S41-0A0000	1Φ	02	C1	3.2	0.55	0.75	
S100-02S51-0A0000	1Φ	02	C1	4.2	0.75	1	
S100-02S61-0A0000	1Φ	02	C1	6	1.1	1.5	
S100-02S71-0A0000	1Φ	02	C1	6.8	1.5	2	

## Product code structure

S100-	01 4	4	2	3	3 -	0	Α	0000
Series:	Frame Size 01 – Frame 1 02 – Frame 2 03 – Frame 3 04 – Frame 4		Frame Size, Power Step		Gen	eration Refere 0 - 2022 Release	nce Regional Defa	Reserved
	& Inpu 1 - 10 2 - 20 S - 20 D - 200	e Rating t Phase 00V, 1Φ 00V, 3Φ 00V, 1Φ 0V, 1/3Φ 00V, 3Φ		Built-in E 1 - C1 Inte 3 - C3 Inte	ernal Filter		A – EMEA & APA B – America C – LS K – Customer Spec	

Note: The listed ordering codes are for 50 Hz default setting. For 60 Hz default setting change the ending digits from 0A0000 to 0B0000.



## Accessories ordering guide

Remote Interface			Product Code
Remote Keypad IP66		Remote mountable, intuitive plain text, multilingual LCD keypad for rapid setup and helpful diagnostics from the outside of a panel. Meets IP66 (NEMA 4)	8250000000001
		The MCh panels and MChMobile Software have been designed for the	ESMART04-MCH040
HMI		easy development of HMI applications including factory and building automation.	ESMART07M-MCH070
Optional Extras			Product Code
Cable Management Bracket		Use of the optional cable management bracket allows the wiring cables to be neatly secured under the drive	3470-0207
Fibre Filter	B	The optional fibre filter allows the drive to operate efficiently even in environments prone to airborne fibres (e.g.: textile applications). Filter cleaning can be incorporated into the preventative maintenance cycle, lowering the risk of an unplanned outage.	3880-0008
RS485 Cable		The USB communications cable allows the drive to connect to the remote keypad, HMI, PLC or PC for use with Commander S PC tools.	4500-0096
Terminal Cover		Commander S has a terminal cover fitted as standard. These are also available as a spare.	Frame 1: 3880-0040-00 Frame 2 & 4: 3880-0041-00
RJ-45 Adaptor		RJ-45 break-out connector for Modbus. Allows for wired daisy chain connection.	3470-0211
Demo Cases			
Product Code		Description	
7500-0173-00		Demo case fitted with Commander S, 100 V, 60Hz default setting	
7500-0174-00		Demo case fitted with Commander S, 100 V, 60Hz default setting, with case	
7500-0175-00		Demo case fitted with Commander S, 200 V, 50Hz default setting	
7500-0176-00		Demo case fitted with Commander S, 200 V, 50Hz default setting, with case	

#### Optional External Filters\*

Commander S Product Code	Motor Shaft Power (kW)	Motor Shaft Power (hp)	Commander S Optional External EMC Filters Product Code	Commander S Optional External Low Leakage Filter Product Code	Alternative Commander C Filter** Product Code
100/120 Vac +/-10%					
S100-01113-0A0000	0.18	0.25	4200-0026	4200-0038	
S100-01123-0A0000	0.25	0.33	4200-0026	4200-0038	

S100-01133-0A0000   0.37   0.50   4200-0026   4200-0038     S100-03113-0A0000   0.55   0.75   4200-0028   4200-0039     S100-03123-0A0000   0.75   1   4200-0028   4200-0039     S100-03133-0A0000   1.10   1.50   4200-0028   4200-0039     S100-01S13-0A0000   0.18   0.25   4200-0026   4200-0038   4200-0030     S100-01S13-0A0000   0.18   0.25   4200-0026   4200-0038   4200-2003     S100-01S13-0A0000   0.18   0.25   4200-0026   4200-0038   4200-2003     S100-01S23-0A0000   0.25   0.33   4200-0026   4200-0040   4200-2003     S100-0123-0A0000   0.37   0.50   4200-0026   4200-0040   4200-2003     S100-0123-0A0000   0.55   0.75   4200-0026   4200-0038   4200-1000     S100-0123-0A0000   0.55   0.75   4200-0026   4200-0038   4200-1000     S100-01243-0A0000   0.55   0.75   4200-0026   4200-0038   4200-1000
\$100-03123-0A0000   0.75   1   4200-0028   4200-0039     \$100-03133-0A0000   1.10   1.50   4200-0028   4200-0039     200/240 Vac +/-10%   200/240 Vac +/-10%   200/240 Vac +/-10%   4200-0026   4200-0038   4200-1000     \$100-01513-0A0000   0.18   0.25   4200-0026   4200-0038   4200-2003     \$100-0123-0A0000   0.18   0.25   4200-0026   4200-0038   4200-1000     \$100-0123-0A0000   0.25   0.33   4200-0026   4200-0038   4200-1000     \$100-0123-0A0000   0.25   0.33   4200-0026   4200-0038   4200-1000     \$100-0123-0A0000   0.37   0.50   4200-0026   4200-0038   4200-1000     \$100-0123-0A0000   0.55   0.75   4200-0026   4200-0038   4200-1000     \$100-01243-0A0000   0.55   0.75   4200-0026   4200-0038   4200-2003     \$100-01253-0A0000   0.75   1   4200-0026   4200-0038   4200-2003     \$100-01253-0A0000   0.75   1   4200-0026
8100-03133-040000   1.10   1.50   4200-0028   4200-0039     200/240 Vac +/-10%   5100-01513-040000   0.18   0.25   4200-0026   4200-0038   4200-1000     5100-01213-040000   0.18   0.25   4200-0026   4200-0038   4200-1000     5100-01223-040000   0.25   0.33   4200-0026   4200-0038   4200-1000     5100-01223-040000   0.25   0.33   4200-0026   4200-0038   4200-1000     5100-01233-040000   0.25   0.37   0.50   4200-0026   4200-0038   4200-1000     5100-01233-040000   0.37   0.50   4200-0026   4200-0038   4200-1000     5100-01233-040000   0.55   0.75   4200-0026   4200-0038   4200-1000     5100-01243-04000   0.55   0.75   1   4200-0038   4200-0038   4200-1000     5100-01253-040000   0.75   1   4200-0026 (1 ph)   4200-0038 (1 ph)   4200-2003 (3 ph)     5100-01263-040000   0.75   1   4200-0026 (1 ph)   4200-0038 (1 ph)   4200-2003 (3 ph)
200/240 Vac +/-10%     \$100-01\$13-0A0000   0.18   0.25   4200-0026   4200-0038   4200-1000     \$100-01213-0A0000   0.18   0.25   4200-0031   4200-0040   4200-2003     \$100-01\$23-0A0000   0.25   0.33   4200-0026   4200-0038   4200-1000     \$100-01\$23-0A0000   0.25   0.33   4200-0026   4200-0038   4200-2003     \$100-01\$23-0A0000   0.37   0.50   4200-0026   4200-0038   4200-1000     \$100-01\$33-0A0000   0.37   0.50   4200-0026   4200-0038   4200-1000     \$100-01\$33-0A0000   0.37   0.50   4200-0026   4200-0038   4200-1000     \$100-01\$43-0A0000   0.55   0.75   4200-0031   4200-0038   4200-1000     \$100-01\$53-0A0000   0.75   1   4200-0031   4200-0038   4200-2003     \$100-01\$53-0A0000   0.75   1   4200-0032   4200-2003   4200-2003     \$100-01\$53-0A0000   0.75   1   4200-0032   4200-0038   4200-2003     \$100-01\$
\$100-01\$13-0A0000 0.18 0.25 4200-0026 4200-0038 4200-1000   \$100-01213-0A0000 0.18 0.25 4200-0031 4200-0040 4200-2003   \$100-01\$23-0A0000 0.25 0.33 4200-0026 4200-0038 4200-1000   \$100-01\$23-0A0000 0.25 0.33 4200-0026 4200-0038 4200-2003   \$100-01\$23-0A0000 0.25 0.37 0.50 4200-0026 4200-0038 4200-2003   \$100-01\$33-0A0000 0.37 0.50 4200-0026 4200-0038 4200-2003   \$100-01\$33-0A0000 0.55 0.75 4200-0026 4200-0038 4200-2003   \$100-01\$43-0A0000 0.55 0.75 4200-0026 4200-0038 4200-2003   \$100-01\$53-0A0000 0.75 1 4200-0026 4200-0038 4200-2003   \$100-01\$53-0A0000 0.75 1 4200-0026 4200-0038 4200-2003   \$100-01\$53-0A0000 0.75 1 4200-0026 4200-0038 4200-2003   \$100-01\$63-0A0000 1.10 1.50 4200-0026 4200-0038 4200-2003 4200-2003
\$100-01213-0A0000   0.18   0.25   4200-0031   4200-0040   4200-2003     \$100-01523-0A0000   0.25   0.33   4200-0026   4200-0038   4200-1000     \$100-01223-0A0000   0.25   0.33   4200-0031   4200-0038   4200-2003     \$100-01533-0A0000   0.37   0.50   4200-0026   4200-0038   4200-1000     \$100-0123-0A0000   0.37   0.50   4200-0031   4200-0040   4200-2003     \$100-0123-0A0000   0.37   0.50   4200-0026   4200-0038   4200-1000     \$100-01243-0A0000   0.55   0.75   4200-0031   4200-0038   4200-2003     \$100-0153-0A0000   0.75   1   4200-0026   4200-0038   4200-2003     \$100-0153-0A0000   0.75   1   4200-0031   4200-0038   4200-2003     \$100-01563-0A0000   0.75   1   4200-0026   4200-0038   4200-2003     \$100-01563-0A0000   1.10   1.50   4200-0026   4200-0038   4200-2003   4200-2003     \$100-0157-0A0000   1.50 </td
\$100-01\$23-0A0000 0.25 0.33 4200-0026 4200-0038 4200-1000   \$100-01223-0A0000 0.25 0.33 4200-0031 4200-0040 4200-2003   \$100-01233-0A0000 0.37 0.50 4200-0026 4200-0038 4200-1000   \$100-01233-0A0000 0.37 0.50 4200-0026 4200-0038 4200-2003   \$100-01233-0A0000 0.55 0.75 4200-0026 4200-0038 4200-1000   \$100-01243-0A0000 0.55 0.75 4200-0031 4200-0040 4200-2003   \$100-01253-0A0000 0.55 0.75 4200-0026 4200-0038 4200-1000   \$100-01253-0A0000 0.75 1 4200-0031 4200-0038 4200-2003   \$100-01253-0A0000 0.75 1 4200-0031 4200-0038 4200-2003   \$100-01263-0A0000 0.75 1 4200-0026 4200-0038 4200-2003   \$100-01263-0A0000 1.10 1.50 4200-0026 4200-0038 4200-2003 4200-2003   \$100-01273-0A0000 1.50 2 4200-0026 4200-0038 4200-2003 4200-2003
\$100-01223-0A0000 0.25 0.33 4200-0031 4200-0040 4200-2003   \$100-01233-0A0000 0.37 0.50 4200-0026 4200-0040 4200-2003   \$100-01233-0A0000 0.37 0.50 4200-0031 4200-0040 4200-2003   \$100-01233-0A0000 0.55 0.75 4200-0026 4200-0038 4200-1000   \$100-01243-0A0000 0.55 0.75 4200-0031 4200-0038 4200-1000   \$100-01253-0A0000 0.75 1 4200-0026 4200-0038 4200-1000   \$100-01253-0A0000 0.75 1 4200-0031 4200-0038 4200-1000   \$100-01253-0A0000 0.75 1 4200-0031 4200-0038 4200-1000   \$100-01253-0A0000 0.75 1 4200-0031 4200-0038 4200-1000   \$100-01253-0A0000 1.10 1.50 4200-0026 4200-0038 4200-2003 4200-2003   \$100-01263-0A0000 1.50 2 4200-0026 4200-0038 4200-2003 4200-2003 4200-2003 4200-2003 4200-2003 4200-2003 4200-2003 4200-2003 4200-2003
\$100-01\$33-0A0000 0.37 0.50 4200-0026 4200-0038 4200-1000   \$100-01233-0A0000 0.37 0.50 4200-0031 4200-0040 4200-2003   \$100-01233-0A0000 0.55 0.75 4200-0026 4200-0038 4200-1000   \$100-01243-0A0000 0.55 0.75 4200-0026 4200-0040 4200-2003   \$100-01253-0A0000 0.55 0.75 4200-0026 4200-0040 4200-2003   \$100-01253-0A0000 0.75 1 4200-0026 4200-0038 4200-1000   \$100-01253-0A0000 0.75 1 4200-0031 4200-0038 4200-2003   \$100-01253-0A0000 0.75 1 4200-0032 4200-0038 4200-2003   \$100-01253-0A0000 1.10 1.50 4200-0026 4200-0038 4200-2003 4200-2003   \$100-01D73-0A0000 1.50 2 4200-0026 4200-0038 4200-2003 4200-2003 4200-2003 4200-2003 4200-2003 4200-2003 4200-2003 4200-2003 4200-2003 4200-2003 4200-2003 4200-2003 4200-2003 4200-2003 4200-2003 4
\$100-01233-0A0000 0.37 0.50 4200-0031 4200-0040 4200-2003   \$100-01543-0A0000 0.55 0.75 4200-0026 4200-0038 4200-1000   \$100-01243-0A0000 0.55 0.75 4200-0031 4200-0040 4200-2003   \$100-01253-0A0000 0.75 1 4200-0026 4200-0038 4200-1000   \$100-01253-0A0000 0.75 1 4200-0026 4200-0038 4200-2003   \$100-01253-0A0000 0.75 1 4200-0031 4200-0038 4200-2003   \$100-01253-0A0000 0.75 1 4200-0031 4200-0038 4200-2003   \$100-01263-0A0000 1.10 1.50 4200-0026 (1 ph) 4200-0032 (3 ph) 4200-0038 (1 ph) 4200-2003 (3 ph) 4200-2003 (3 ph)   \$100-01D73-0A0000 1.50 2 4200-0028 (1 ph) 4200-0032 (3 ph) 4200-0038 (1 ph) 4200-2003 (3 ph) 4200-2003 (3 ph)   \$100-03D13-0A0000 2.20 3 4200-0028 (1 ph) 4200-0033 (3 ph) 4200-0039 (1 ph) 4200-0033 (3 ph) 4200-0039 (1 ph) 4200-0039 (1 ph) 4200-0042 (3 ph) 4200-4002 (3 ph)
S100-01\$43-0A0000 0.55 0.75 4200-0026 4200-0038 4200-1000   S100-01243-0A0000 0.55 0.75 4200-0031 4200-0040 4200-2003   S100-01\$53-0A0000 0.75 1 4200-0026 4200-0038 4200-1000   S100-01253-0A0000 0.75 1 4200-0031 4200-0038 4200-2003   S100-01253-0A0000 0.75 1 4200-00326 4200-0038 4200-2003   S100-01263-0A0000 0.75 1 4200-00326 4200-0038 4200-2003   S100-01D63-0A0000 1.10 1.50 4200-0026 4200-0032 4200-0038 100   S100-01D73-0A0000 1.50 2 4200-0026 4200-0032 4200-0038 4200-2003 4200-4000
\$100-01243-0A0000 0.55 0.75 4200-0031 4200-0040 4200-2003   \$100-01\$55-0A0000 0.75 1 4200-0026 4200-0038 4200-1000   \$100-01253-0A0000 0.75 1 4200-0031 4200-0038 (1 ph) 4200-2003   \$100-01253-0A0000 0.75 1 4200-0026 (1 ph) 4200-0038 (1 ph) 4200-2001 (1 ph)   \$100-01263-0A0000 1.10 1.50 4200-0026 (1 ph) 4200-0038 (1 ph) 4200-2003 (3 ph)   \$100-01273-0A0000 1.50 2 4200-0026 (1 ph) 4200-0038 (1 ph) 4200-2003 (3 ph)   \$100-01273-0A0000 1.50 2 4200-0026 (1 ph) 4200-0038 (1 ph) 4200-2003 (3 ph)   \$100-03213-0A0000 2.20 3 4200-0028 (1 ph) 4200-0039 (1 ph) 4200-2003 (3 ph)
S100-01S53-0A0000 0.75 1 4200-0026 4200-0038 4200-1000   S100-01253-0A0000 0.75 1 4200-0031 4200-0040 4200-2003   S100-01D63-0A0000 1.10 1.50 4200-0026 (1 ph) 4200-0038 (1 ph) 4200-2003 (1 ph) 4200-2003 (3 ph) 4200-2003 (3 ph) 4200-2003 (3 ph)   S100-01D73-0A0000 1.50 2 4200-0026 (1 ph) 4200-0038 (1 ph) 4200-2003 (3 ph) 4200-2003 (3 ph) 4200-2003 (3 ph) 4200-2003 (3 ph)   S100-01D73-0A0000 1.50 2 4200-0028 (1 ph) 4200-0038 (1 ph) 4200-2003 (3 ph) 4200-2003 (3 ph) 4200-2003 (3 ph) 4200-2003 (3 ph)   S100-03D13-0A0000 2.20 3 4200-0028 (1 ph) 4200-0039 (1 ph) 4200-0039 (1 ph) 4200-4002 (3 ph) 4200-4002 (3 ph) 4200-4002 (3 ph)
\$100-01253-0A0000 0.75 1 4200-0031 4200-0040 4200-2003   \$100-01D63-0A0000 1.10 1.50 4200-0026 (1 ph) 4200-0032 (3 ph) 4200-0038 (1 ph) 4200-0040 (3 ph) 4200-2001 (1 ph) 4200-2003 (3 ph)   \$100-01D73-0A0000 1.50 2 4200-0026 (1 ph) 4200-0032 (3 ph) 4200-0038 (1 ph) 4200-0038 (1 ph) 4200-0040 (3 ph) 4200-2001 (1ph) 4200-2003 (3ph)   \$100-03D13-0A0000 2.20 3 4200-0028 (1 ph) 4200-0033 (3 ph) 4200-0039 (1 ph) 4200-0042 (3 ph) 4200-4000 (1ph) 4200-4002 (3ph)
\$100-01D63-0A0000 1.10 1.50    4200-0026 (1 ph) 4200-0032 (3 ph)   4200-0038 (1 ph) 4200-0040 (3 ph])     4200-2001 (1 ph) 4200-2003 (3 ph)    \$100-01D73-0A0000 1.50 2    4200-0026 (1 ph) 4200-0032 (3 ph)     4200-0038 (1 ph) 4200-2003 (3 ph)     4200-2003 (3 ph)    \$100-01D73-0A0000 2.20 3    4200-0028 (1 ph) 4200-0033 (3 ph)     4200-0039 (1 ph) 4200-0042 (3 ph)     4200-4000 (1ph) 4200-4002 (3ph)
\$100-01D63-0A0000 1.10 1.50 4200-0032 (3 ph) 4200-0040 (3 ph]) 4200-2003 (3 ph)   \$100-01D73-0A0000 1.50 2 4200-0026 (1 ph) 4200-0038 (1 ph) 4200-2001 (1ph)   \$100-01D73-0A0000 1.50 2 4200-0026 (1 ph) 4200-0038 (1 ph) 4200-2003 (3 ph)   \$100-03D13-0A0000 2.20 3 4200-0028 (1 ph) 4200-0039 (1 ph) 4200-4000 (1ph)   \$100-033 (3 ph) 4200-0033 (3 ph) 4200-0042 (3 ph) 4200-4002 (3ph) 4200-4002 (3ph)
\$100-01D73-0A0000 1.50 2 4200-0032 (3 ph) 4200-0040 (3 ph) 4200-2003 (3 ph)   \$100-03D13-0A0000 2.20 3 4200-0028 (1 ph) 4200-0039 (1 ph) 4200-4000 (1ph)   \$100-03D13-0A0000 2.20 3 4200-0033 (3 ph) 4200-0042 (3 ph) 4200-4002 (3ph)
S100-03D13-0A0000   2.20   3   4200-0033 (3 ph)   4200-0042 (3 ph)   4200-4002 (3ph)
S100-04213-0A0000 4 5 4200-0252
4200-0202
\$100-04223-0A0000   5.5   7.5   4200-0252
380/480 Vac +/-10%
\$100-02413-0A0000   0.37   0.50   4200-0034   4200-0041   4200-2005
\$100-02423-0A0000   0.55   0.75   4200-0034   4200-0041   4200-2005
\$100-02433-0A0000   0.75   1   4200-0034   4200-0041   4200-2005
\$100-02443-0A0000   1.10   1.50   4200-0034   4200-0041   4200-2005
\$100-02453-0A0000   1.50   2   4200-0034   4200-0041   4200-2005
\$100-02463-0A0000   2.20   3   4200-0034   4200-0041   4200-2005
\$100-03413-0A0000   3   3   4200-0033   4200-0042   4200-3008
\$100-03423-0A0000   4   5   4200-0033   4200-0042   4200-3008
\$100-04413-0A0000   5.5   7.5   4200-0252
\$100-04423-0A0000 7.5 10 4200-0252
\$100-04433-0A0000   11   15   4200-0252

\*Commander S100 variants fitted with C3 EMC filter comply with IEC 61800-3 second environment. An additional external filter is required for Commander S100 variants fitted with C3 EMC filter to meet the higher requirements of IEC 61000-6-4 and IEC 61800-3 first environment. The requirements of IEC 61000-6-4 and IEC 61800-3 first environment are met by Commander S100 variants fitted with C1 EMC filter without additional filtering.

\*\*The alternative Commander C Filter does not support footprint mounting of the Commander S



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