

# CONTROL TECHNIQUES



# COMMANDER S

MAKING SIMPLE APPLICATIONS, SIMPLE.

GENERAL PURPOSE AC DRIVES

**DRIVE OBSESSED**



## COMMANDER S

**0.25 to 5 HP (0.18 to 4 kW)  
1Ø 115 & 208-230 V, 3Ø 208-230 V &  
380-480 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 Control Techniques portfolio. With a feature set optimized for simple applications, Commander S provides a cost-effective solution for installations that require plug and play convenience out of the box.

Commander S is the first drive to be supplied with an NFC app interface as a standard feature. The MARSHAL App is our revolutionary way to interface with the drive covering commissioning, monitoring, diagnostics and support.



### Easy to install

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



## YEAR FREE WARRANTY

### Free 5 year warranty\*

Our Commander S series is built and verified to be robust. In fact, it is so reliable we are confident enough to supply it with a free five-year warranty.

\*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.



## Flow Control Applications

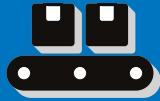
**fans, pumps, and compressors**



- 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 minimizing 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

## Process 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 optimizer for improved motor control
- Resistance compensation for excellent torque performance
- Built-in EMC filter effectively reduces electromagnetic interference

# MARSHAL REVOLUTIONIZE THE WAY YOU INTERFACE WITH YOUR DRIVE

Control Techniques has a long tradition of challenging the status-quo with innovative ideas and making a profound impact in the drive industry. We've done it again with MARSHAL: Control Techniques is the 1st drive supplier to implement NFC technology as standard on a drive and offer the MARSHALApp 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.

**TAP: JUST BRING YOUR PHONE NEAR  
THE NFC LOGO TO CONNECT TO THE DRIVE**







Powered by NFC\* technology, data transfer between the drive and mobile device takes less than half a second.



\* NFC - Near Field Communication

# MARSHAL

## YOUR DRIVE EXPERT IN THE FIELD

### 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 are available in the parameter setting section of the app
- Pre-set application configurations

### Cloning

- Parameters can be easily transferred from one drive to another - just tap to write to 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 customized 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

## Registration

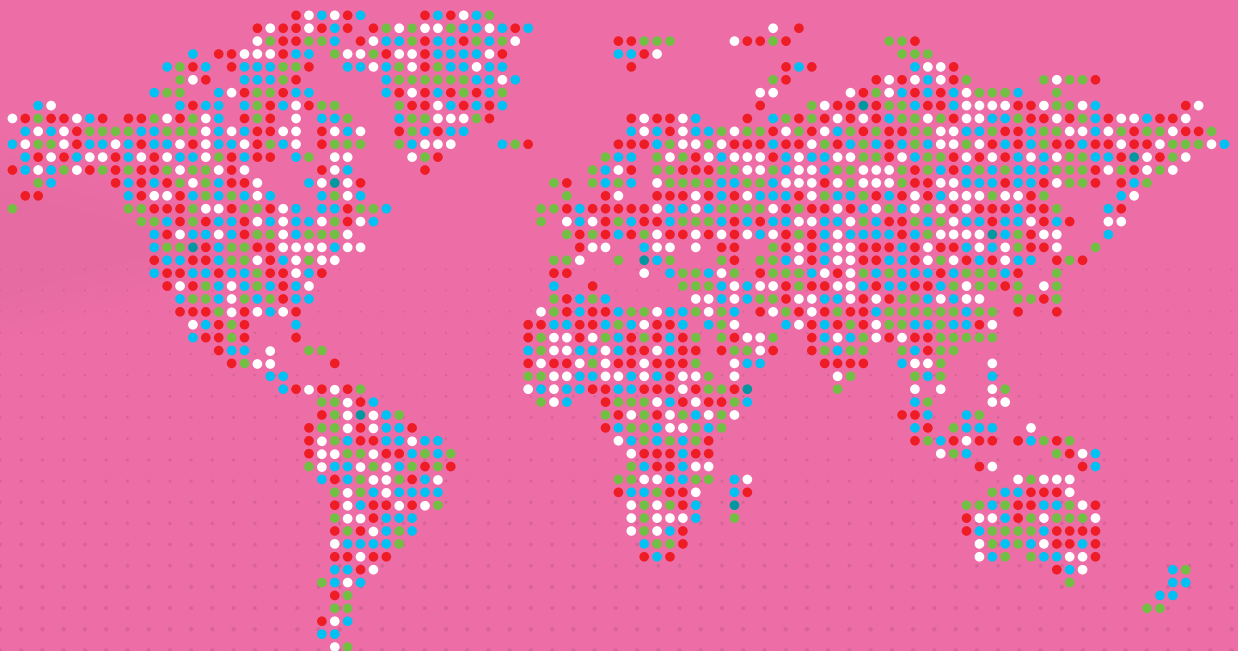
- Activate the 5 Year Warranty via the app
- Access & download support materials via your CT account

## Monitoring and security

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

## Contact us

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



# COMMANDER S





## 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 enclosure 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

- 100% conformal coating ensures moisture, corrosion and dust protection
- Free 5 Year Warranty 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 FEATURES

QR code to download  
MARSHAL App

Accessible NFC location  
for communicating with  
mobile app MARSHAL

Fixed display with 4 control buttons  
for quick and easy commissioning  
and monitoring drive performance

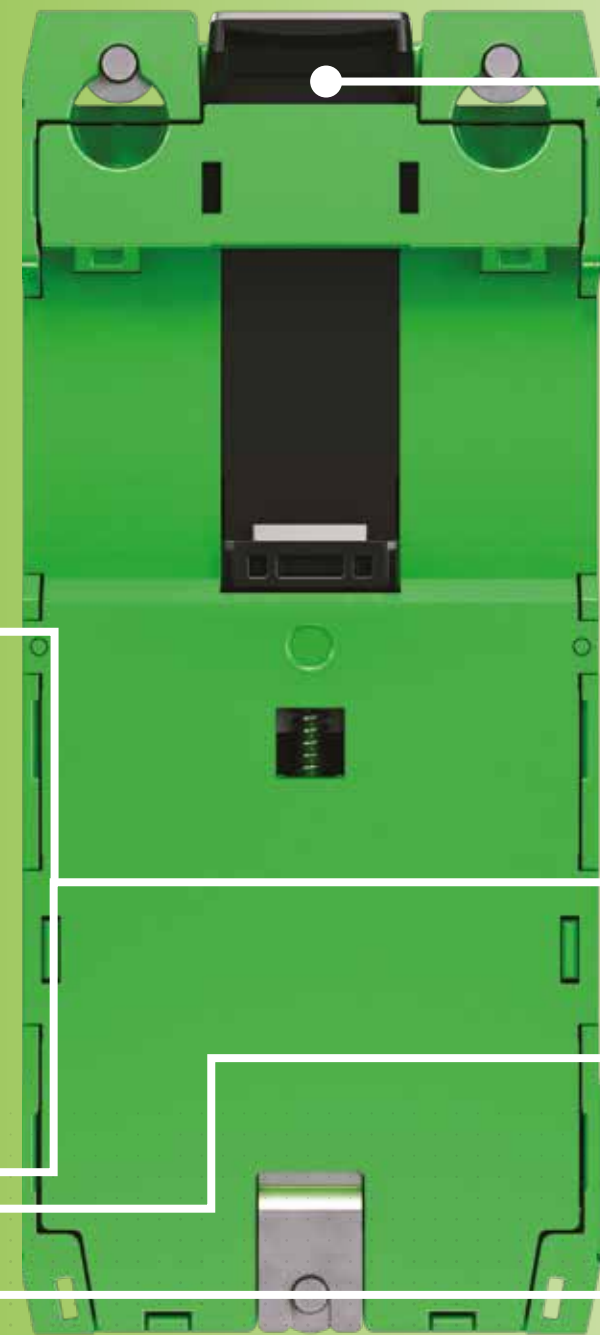
Drive identification information  
clearly marked

RJ45 connector for ModbusRTU  
communication

Angled and offset screw terminal  
connectors for easy access

Internal EMC filter to meet  
C3/C1 requirements. C3 filter can be  
disconnected if necessary.





**Click-on/click-off DIN rail mounting  
AND / OR**

**Installation with bolts and washers.  
Drive drops down into position for  
a secure installation**

**Finger proof power and relay screw  
terminals**

**Labeled power terminals**

**Ground / protective earth connections**

# FastStart

## STEP BY STEP ASSISTANCE TO

Only 4 simple steps to get your motor running

1

### Motor

Confirm/change motor information: voltage, current, rated speed, power factor

2

### Control

Confirm/change control mode: via terminals or keypad

### 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**



# GET YOU UP AND RUNNING

3

## Speed

Confirm/change max & min speed and acceleration & deceleration time

4

## GO!

Summary of settings.  
Drive ready to run



Connect

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

The dynamic drive logic diagrams allow the visualization 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 Control Techniques' common PC Tool for all CT AC drives.

# COMMANDER S

# SPECIFICATIONS

## Power & Control

Supply Requirements/Power Range	100 V drive: 100 V to 120 V $\pm 10\%$ , 0.25 to 1.5 HP (0.18 to 1.1 kW) 200 V drive: 200 V to 240 V $\pm 10\%$ , 0.25 to 3 HP (0.18 to 2.2 kW) 400 V drive: 380 V to 480 V $\pm 10\%$ , 0.5 to 5 HP (0.37 to 4 kW) Maximum supply imbalance: 2 % negative phase sequence (equivalent to 3 % voltage imbalance between phases)
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, NEMA 4 (IP66) HMI (available as an accessory)
User Software Tools (Free To Download)	MARSHAL (Mobile App), Connect (PC commissioning tool)

## Inputs & Outputs

Analog	2 x Analog inputs / Digital inputs Possible settings: 0-10 V, 0-20 mA, 4-20 mA (No Alarm), 4-20 mA (Alarm), 4-20 mA (Error), Digital 1 x Analog output Possible settings: 0-10 V, 0-20 mA, 4-20 mA
Digital	4 x Digital inputs (1 frequency input - 100 kHz max.) 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 (Form C)
Resolution	Output frequency resolution: 0.1 Hz Analog input 1: 11 bit Analog input 2: 11 bit Current: The resolution of the current feedback is 10 bit plus sign

## Mounting & Environment

IP Rating	IP20
Storage Temperature	-40 °F to 140 °F (-40 °C to 60 °C)
Operating Temperature Without De-Rate	14 °F to 104 °F (-10 °C to 40 °C)
Operating Temperature With De-Rate	14 °F to 140 °F (-10 °C to 60 °C)
Cooling	Natural convection (frame 1 $\leq$ 0.33 HP / 0.25 kW), Integral cooling fan (all other drives)
Altitude	$\leq$ 9,943 ft or 3000 m (3,281 ft to 9,943 ft derate 1 % over 328 ft (1000 m to 3000 m derate 1 % over 100 m))
Humidity	95 % non-condensing at 104 °F / 40 °C - EN61800-2(3k3)
Pollution	Pollution degree 2 - dry, non-conducting pollution only

**Mounting & Environment continued**

Vibration	Tested to IEC 60068-2-6
Mounting Methods	Surface mount, click-on/click-off DIN rail mount
Mounting Clearance	0 in (0 mm) either side, 1.8 in (45 mm) above and below (3.94 in (100 mm) above and below for frame 1 drives ≤0.33 HP (0.25 kW)
Overvoltage Category	Category III (IEC/EN/KN/UL 61800-5-1)
Corrosive Environments	EN 60721-3-3 ISO9223 Class C3
Maximum Motor Cable Length	164 ft (50 m) all variants

**Standards**

Approvals	CE, UKCA, cUL, C-Tick, EAC, KC
	    
Product Safety Standards	IEC/EN/KN/UL 61800-5-1, CSA C22.2 No.274, GB12668.501-2013, IEC/EN/KN 61800-3 Adjustable speed electrical power drive systems, Part 3: EMC requirements and specific test methods
Product Emc Standards	GB12668.3-2012
Immunity Compliance	Second environment (Industrial)
Emission Compliance	Category C3 (internal filters only) Category C1 & C2 (external EMC filters) Category C1, (internal filters only, for selected 1Φ 200 V variants)
Generic Immunity Compliance	EN61000-6-1: Generic immunity standard for residential, commercial and light industrial environments 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 164 ft (50 m)	C2 with an external filter
Emission Compliance for Motor Cable Length up to 65.6 ft (20 m)	C1 with an external filter C3 without a filter
Emission Compliance for Motor Cable Length up to 16.4 ft (5 m)	C1 only for drive variants with internal C1 filter (S100-xxxx1)

**Warranty**

Warranty	5 Years (warranty terms and conditions apply)
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**Accessories**

Remote Interfaces	Remote keypad NEMA 4 (IP66), HMI
Filters & Cables	EMC filter, Cable management bracket, CT comms cable
Environmental Protection	Fiber filter

**Protection**

Conformal Coating	100 % Coverage nano-coating
DC Bus Undervoltage Error Level	100 V Drives = 175 V 200 V Drives = 175 V 400 V Drives = 330 V
DC Bus Overvoltage Error Level	100 V Drives = 400 V 200 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
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 Control Techniques 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
Favorite Parameters	Favorite parameters visited often
Guides And Manuals	Quick access to drive documentation

## Modbus RTU Communications

## Logic function control

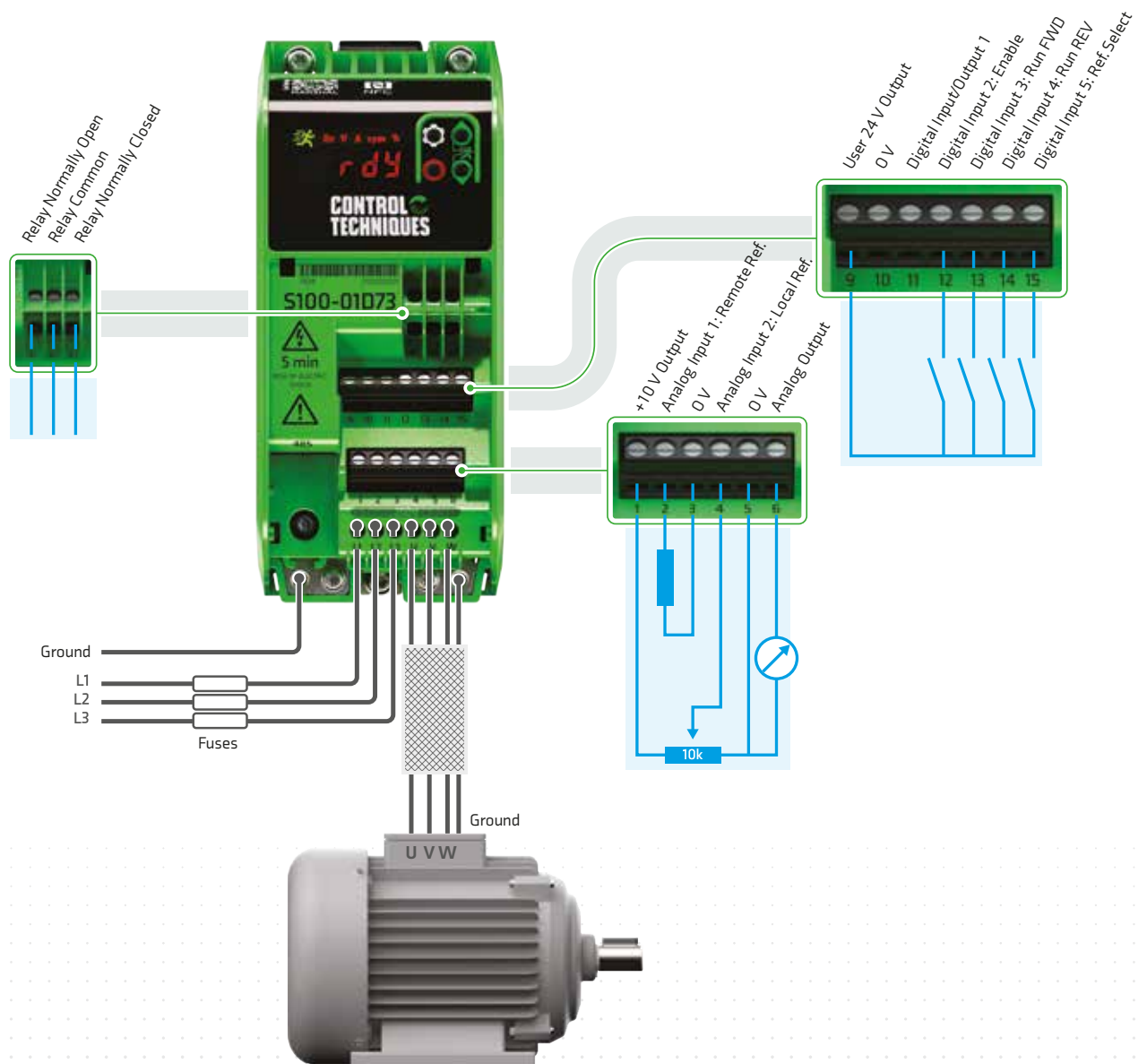
Control Word Control	✓
Cloning	✓
Serial Baud Rate	600 to 115000 bps
Modbus Rtu Protocol	8.2NP, 8.1NP, 8.1EP, 8.1OP

## Reference

Selectable References	4
Jog Reference	✓
Up / Down % Reference (Motorized Pot)	✓
Bi-Polar Reference	✓
Preset Speeds	4
Skip Frequencies	1
Skip Frequencies Dead Band	✓
Local/Remote	✓
S-Ramp	✓
Acceleration Rates	2
Deceleration Rates	2
Frequency Input Reference (Pulse Train)	0 Hz to 100 kHz
Run Reverse	✓

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	✓
Energy Optimization Mode (Dynamic V to F)	✓
Motor Stability Optimizer	✓
Slip Compensation	✓
Auto-Tune: Static	✓
Switching Frequency	4 or 12 kHz
Catch An Already Spinning Motor	✓
Stop Mode: Ramp	✓
Stop Mode: Coast	✓
Stop Mode: Distance Stop	✓ when selected motor stops in the same distance from any speed based on the programmed deceleration rate
Dc Injection Braking	✓
Supply Loss Detection	✓
Programmable Output Current Limit	✓
General	
Diagnostics	✓
Error History Log	4
Parameters Saved On Error	3 (Selectable)
Auto-Reset After Trip	✓
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)

Frame 01



Frame 02



Frame 03



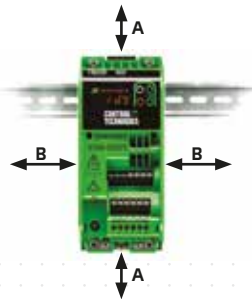
## Dimensions

Model Number	Overall Dimensions (±0.02 in / ±0.5 mm)				Mounting Dimensions (±0.02 in / ±0.5 mm)					
	Height	Width	Depth	Weight	DIN*	M1	M2	M3	M4	Φ
S100-01	6.14 in 156 mm	2.70 in 68 mm	5.12 in 130 mm	1.54 lb 0.7 kg	1.81 in 46 mm	5.71 in 145 mm	1.77 in 45 mm	0.89 in 22.5 mm	0.89 in 22.5 mm	0.19 in 4.8 mm
S100-02	7.56 in 192 mm	2.70 in 68 mm	5.20 in 132 mm	1.76 lb 0.8 kg	1.81 in 46 mm	7.11 in 180 mm	1.77 in 45 mm	0.89 in 22.5 mm	0.89 in 22.5 mm	0.19 in 4.8 mm
S100-03	7.56 in 192 mm	3.54 in 90 mm	5.20 in 132 mm	2.2 lb 1.0 kg	1.81 in 46 mm	7.11 in 180 mm	2.56 in 65 mm	1.48 in 37.5 mm	1.08 in 27.5 mm	0.19 in 4.8 mm

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

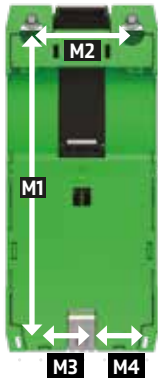


## Drive Clearances



Drive Clearances	S100-01x13, S100-01x23	All other drives
A	3.94 in (100 mm)	1.77 in (45 mm)
B	0 in (0 mm)	

Mounting Dimensions



## Documentation and downloads

Product documentation and PC tools available for download from:

[www.controltechniques.com/support](http://www.controltechniques.com/support)



## COMMANDER S

## MODEL NUMBER AND RATINGS

## Variants with C3 built-in EMC filter

Product Code	Input Phases	Frame Size	Internal EMC Filter Performance	Heavy Duty			Optional External EMC Filters*
				Max Cont. Current (A)	Motor Shaft Power (kW)	Motor Shaft Power (HP)	
100/120 Vac +/-10%							
S100-01113-0B0000	1	01	C3	1.2	0.18	0.25	4200-0026
S100-01123-0B0000	1	01	C3	1.4	0.25	0.33	4200-0026
S100-01133-0B0000	1	01	C3	2.2	0.37	0.5	4200-0026
S100-03113-0B0000	1	03	C3	3.2	0.55	0.75	4200-0028
S100-03123-0B0000	1	03	C3	4.2	0.75	1	4200-0028
S100-03133-0B0000	1	03	C3	6	1.1	1.5	4200-0028
200/240 Vac +/-10%							
S100-01S13-0B0000	1	01	C3	1.4	0.18	0.25	4200-0026
S100-01213-0B0000	3	01	C3	1.4	0.18	0.25	4200-0031
S100-01S23-0B0000	1	01	C3	1.6	0.25	0.33	4200-0026
S100-01223-0B0000	3	01	C3	1.6	0.25	0.33	4200-0031
S100-01S33-0B0000	1	01	C3	2.4	0.37	0.50	4200-0026
S100-01233-0B0000	3	01	C3	2.4	0.37	0.50	4200-0031
S100-01S43-0B0000	1	01	C3	3.5	0.55	0.75	4200-0026
S100-01243-0B0000	3	01	C3	3.5	0.55	0.75	4200-0031
S100-01S53-0B0000	1	01	C3	4.6	0.75	1	4200-0026
S100-01253-0B0000	3	01	C3	4.6	0.75	1	4200-0031
S100-01D63-0B0000	1	01	C3	6.6	1.1	1.5	4200-0029
	3	01	C3	6.6	1.1	1.5	4200-0032
S100-01D73-0B0000	1	01	C3	7.5	1.5	2	4200-0029
	3	01	C3	7.5	1.5	2	4200-0032
S100-03D13-0B0000	1	03	C3	10.6	2.2	3	4200-0028
	3	03	C3	10.6	2.2	3	4200-0033
380/480 Vac +/-10%							
S100-02413-0B0000	3	02	C3	1.2	0.37	0.5	4200-0034
S100-02423-0B0000	3	02	C3	1.7	0.55	0.75	4200-0034
S100-02433-0B0000	3	02	C3	2.2	0.75	1	4200-0034
S100-02443-0B0000	3	02	C3	3.2	1.1	1.5	4200-0034
S100-02453-0B0000	3	02	C3	3.7	1.5	2	4200-0034
S100-02463-0B0000	3	02	C3	5.3	2.2	3	4200-0034
S100-03413-0B0000	3	03	C3	7.2	3	3	4200-0033
S100-03423-0B0000	3	03	C3	8.8	4	5	4200-0033

\*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

Product Code	Input Phases	Frame Size	Internal EMC Filter Performance	Heavy Duty		
				Max Cont. Current (A)	Motor Shaft Power (kW)	Motor Shaft Power (HP)
200/240 Vac ±10%						
S100-02S11-0B0000	1	02	C1	1.2	0.18	0.25
S100-02S21-0B0000	1	02	C1	1.4	0.25	0.33
S100-02S31-0B0000	1	02	C1	2.2	0.37	0.5
S100-02S41-0B0000	1	02	C1	3.2	0.55	0.75
S100-02S51-0B0000	1	02	C1	4.2	0.75	1
S100-02S61-0B0000	1	02	C1	6	1.1	1.5
S100-02S71-0B0000	1	02	C1	6.8	1.5	2

## PRODUCT CODE STRUCTURE

S100-	01	4	2	3	-	0	B	0000
Series:	Frame Size 01 – Frame 1 02 – Frame 2 03 – Frame 3	Voltage Rating & Input Phase 1 – 100V, 1 $\Phi$ 2 – 200V, 3 $\Phi$ S – 200V, 1 $\Phi$ D – 200V, 1/3 $\Phi$ 4 – 400V, 3 $\Phi$	Frame Size, Power Step	Built-in EMC Filter 1 – C1 Internal Filter 3 – C3 Internal Filter	Generation Reference 0 – 2022 Release	Regional Defaults A – EMEA & APAC B – Americas - 60 Hz C – LS K – Customer Specific	Reserved	

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

# ACCESSORIES ORDERING GUIDE

Remote Interface		Product Code
Remote Keypad NEMA 4 (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)
		REMOTE-KEYPAD
HMI		The MCh panels and MChMobile Software have been designed for the easy development of HMI applications including factory and building automation.
		ESMART04-MCH040
		ESMART07M-MCH070
Optional Extras		Product Code
Cable Management Bracket		Optional cable bracket provides cable strain relief and convenient cable shielding connection
		3470-0207
Fiber Filter		The optional fiber filter allows the drive to operate efficiently even in environments prone to airborne fibers (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





RS485

11 12 13 14 15

1 2 3 4 5 6

200V

L1

L2

L3

U

V

M

FF

# DRIVE OBSESSED



**Control Techniques has been designing and manufacturing the best variable speed drives in the world since 1973.**

**Our customers reward our commitment to building drives that outperform the market. They trust us to deliver on time every time with our trademark outstanding service.**

**More than 45 years later, we're still in pursuit of the best motor control, reliability and energy efficiency you can build into a drive. That's what we promise to deliver, today and always.**

**1.5K+**

**Employees**

**70**

**Countries**

# #1 FOR ADVANCED MOTOR AND DRIVE TECHNOLOGY



**Nidec Corporation is a global manufacturer of electric motors and drives.**

**Nidec was set up in 1973. The company made small precision AC motors and had four employees. Today, it's a global corporation that develops, builds and installs cutting-edge drives, motors and control systems in over 70 countries with a workforce of more than 110,000.**

You'll find its innovations in thousands of industrial plants, IoT products, home appliances, cars, robotics, mobile phones, haptic devices, medical apparatus and IT equipment all over the world.

**112K**

**Employees**

**\$14.2B**

**Group Turnover**

**44+**

**Countries**

**337+**

**Companies**



## CONTROL TECHNIQUES IS YOUR GLOBAL DRIVES SPECIALIST.

With operations in over 70 countries, we're open for business wherever you are in the world.

For more information, or to find your local drive center representatives, visit:

[www.controltechniques.com](http://www.controltechniques.com)

Connect with us



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