Options for Commander SK

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Options for Commander SK

Commander SK has many option possibilities
which compliment the standard features and
functions making it the most flexible general
purpose AC drive.

All the options described on the following pages are
supported by all three frame sizes of Commander SK.
The exception is the SM range of option modules
which is only supported by sizes B & C.

Size C

Size B

Size A

Size	A	B	C
200 to 240V +/-10%	0.25 to 0.75 kW	1.1 to 1.5 kW	2.2 kW
380 to 480 V +/-10%	-	0.37 to 1.5 kW	2.2 to 4.0 kW

Commander SK

LED Remote Mounting Keypad

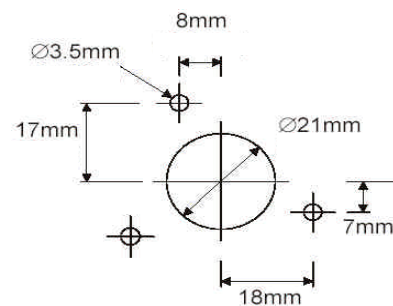**Ordering Code: SK-Keypad Remote**

Description:

Remote panel mounting LED keypad display to IP54 (NEMA12) with additional function key.

•Selectable function key with LED to indicate function selected.

  –   Hand-Off-Auto, Jog, Reverse, etc.

•Connects to the RS485 Modbus RTU port on the drive via a standard RJ45 connector

•Connecting cable (up to 30m)

•Simple panel cut-out - 21mm hole

•Fixed keypad on drive remains active.

Compatibility:

• **Commander SK only – all sizes**

LCD Remote Mounting Keypad

Ordering Code: SM-Keypad Plus

Description:

**Remote panel mounting LCD multilingual text keypad display to IP54 (NEMA12) with the additional "Help" key.**

•For remote panel mounting only

•Multi-lingual – 3 lines of text
(English, French, Spanish, German & Italian)

•Help function key

•Connects to the RS485 Modbus RTU port on the drive via standard RJ45 connector

•Simple panel cut-out - 21mm hole

•Fixed keypad on drive remains active

•A PC software tool enables you to set up your own text lines.

•Exactly the same LCD keypad as used by Unidrive SP

Compatibility:
- **Commander SK – all sizes**
- **Unidrive SP**
- **Commander SX (IP66)**
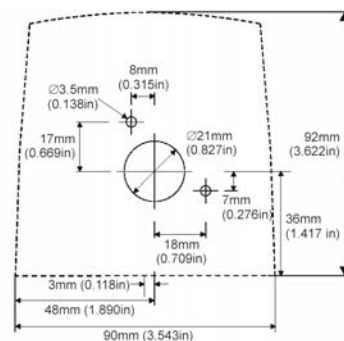
Parameter Memory Stick

Ordering Code: SmartStick

Description:

Upload drive parameters to the SmartStick for storage or for easy setup of identical drives or for downloading to replacement drives.

•**SmartStick**

- 1 parameter configures as:

•*Read* **- program the drive with contents**

•*Program* **- Drive parameter set loaded onto SmartStick**

•*Boot* **- Loads parameters at power up (and can then be removed) - Read only and can't be changed!**

Compatibility:

• **Commander SK – all sizes**

Fieldbus Option Modules

Ordering Code: SM-PROFIBUS DP

SM-DeviceNet

SM-CANopen

SM-INTERBUS

SM-Ethernet (end 2004)

Description:

The most popular industrial fieldbus protocols are available in the SM range of option modules.

One option slot in sizes **B & C** allows an SM fieldbus option and other specified SM option modules to be fitted.

Use fieldbus firmware version 3.0 or higher for complete compatibility for the entire range of AC drives.
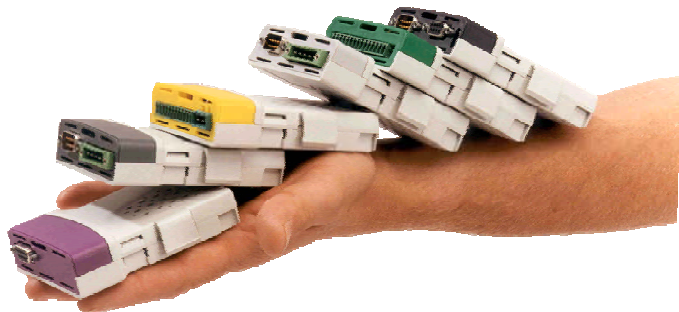
ETHERNET
(TCP/IP)

Compatibility:

• **Commander SK sizes B & C**

• **Unidrive SP**

• **Commander SX (IP66)**

Extended I/O

Ordering Code: SM-I/O Lite

Description:

Additional I/O option with the following connections:

- 0V
- ±10V **bi-polar** or 4-20mA Analogue input
- 0-10V or 4-20mA Analogue output
- +24V
- Digital input
- Digital input
- **Encoder B** or Digital input
- **Encoder B**
- **Encoder A**
- **Encoder A**
- **0V**
- **Encoder +5V**
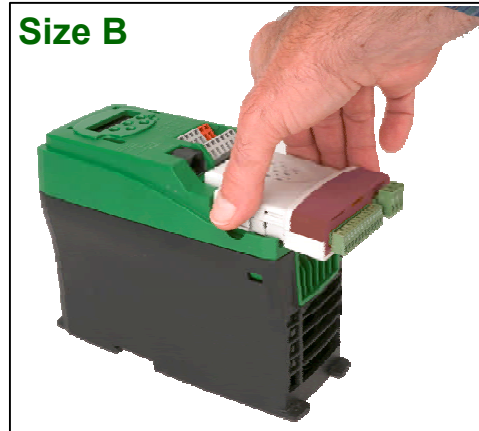
- Relay
- Relay
- Relay

This **"Encoder Speed Reference"** input is not a true quadrature counter - therefore applications which require accuracy when operating close to zero speed will not be possible. Therefore, generally this option cannot be used for position applications but is more suited to applications that require accurate speed holding and speed following.

Compatibility:
- **Commander SK sizes B & C**
- **Unidrive SP**

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CONTROL TECHNIQUES

THE BENCHMARK in simple drives

Extended I/O with Real-time-clock

Ordering Code: SM-I/O Timer

Description:

Real-time-clock for scheduling drive running as well as the following additional I/O connections:

Size B

- 0V
- ±10V **bi-polar** or 4-20mA Analogue input
- 0-10V or 4-20mA Analogue output
- +24V
- Digital input
- Digital input
- **Encoder B** or Digital input
- **Encoder B**
- **Encoder A**
- **Encoder A**
- **0V**
- **Encoder +5V**

- Relay
- Relay
- Relay

This **"Encoder Speed Reference"** input is not a true quadrature counter - therefore applications which require accuracy when operating close to zero speed will not be possible. Therefore, generally this option <u>cannot</u> be used for position applications but is more suited to applications that require accurate speed holding and speed following.

Real Time Clock
(Year, Month, Date, Week day, Hour, Minute, Second)

Size C

Compatibility:
- **Commander SK sizes B & C**
- **Unidrive SP**

Commissioning Software

Ordering Code: CTSoft

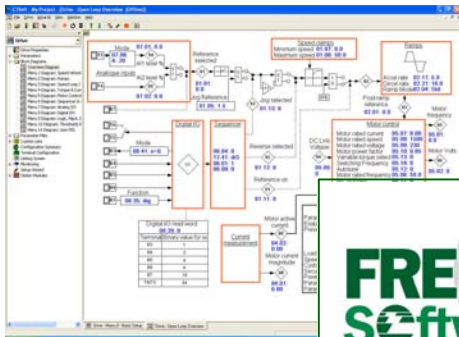(comes free-of-charge with product CD ROM)

Description:

Software for your PC or laptop which allows you to commission and store parameter settings.

Use with **CT Comms Cable.**

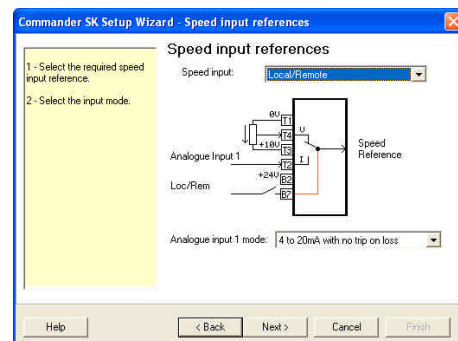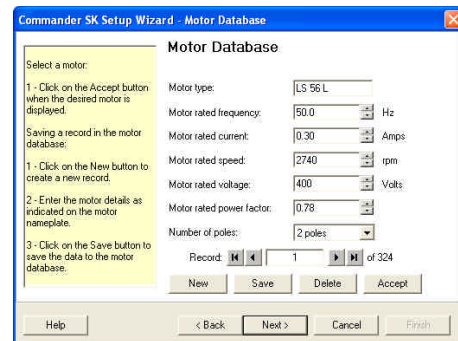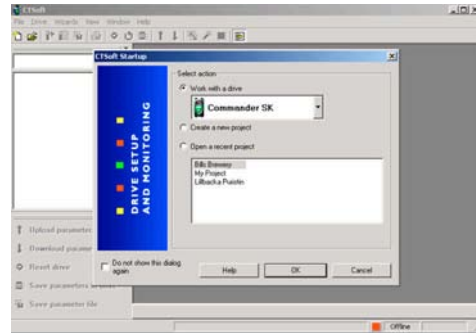•Drive Set up & Monitoring Software Tool - this one software package handles all key CT drive products

•Upload / download / store parameter set-ups

•Easy set up Wizards

Compatibility:
- **Commander SK – all sizes**
- **Unidrive SP**

CONTROL TECHNIQUES

Commander SK

THE BENCHMARK
in simple drives

PLC Function Programming Software

Ordering Code: SyPTLite

(comes free-of-charge with product CD ROM)

Description:

Software for your PC or laptop which allows you to program PLC functions within the Drive.

Use with **LogicStick** and **CT Comms Cable.**

•SyPTLite: A ladder diagram editor allowing the development of application programs (*30-50 rungs typical)*

•IEC 61131-3 environment - same as leading PLC programmers
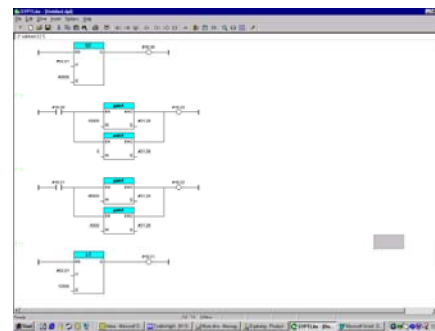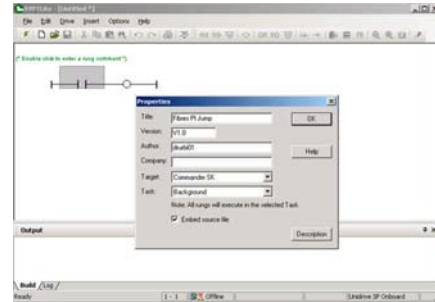
•Library of Standard Function Blocks
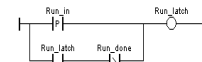
•Self Documenting

•Fully Compatible with   Unidrive SP

FREE Software

Compatibility:
* **Commander SK – all sizes**
* **Unidrive SP**

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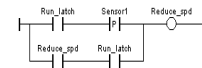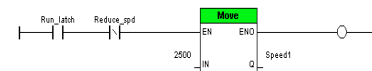
PLC Function Stick

Ordering Code: LogicStick

Description:

The LogicStick plugs into the front of the drive and enables you to program PLC functions within the drive.

Use with **SyPTLite software** and the **CT Comms Cable.**

•Nano and micro PLCs can be easily replaced by LogicStick

•Memory storage for application or customer specific functionality

• Application Programming using SyPT Lite - IEC61131-3 (Industry Standard Ladder)
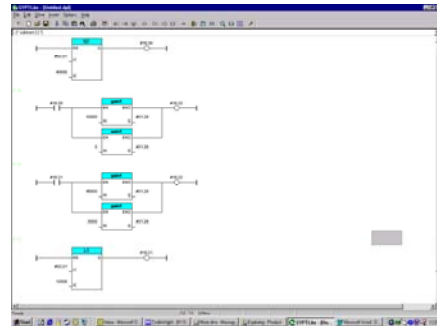
Compatibility:

•   **Commander SK – all sizes**

Connecting Cable for PC

Ordering Code: CT Comms Cable

Description:

Cable with isolated RS232 to RS485 converter. For connecting your PC / laptop to the drive when using CTSoft or SyPTLite.

Use with **SyPTLite PLC** Function software **or CTSoft** commissioning software.

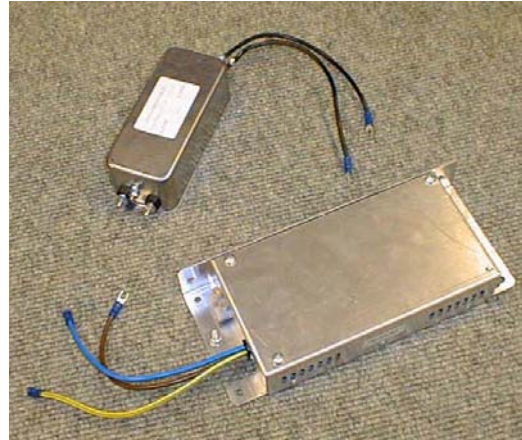SELV isolation rated for safety and reliability.

Compatibility:
- **Commander SK – all sizes**
- **Unidrive SP**
- **Commander SX (IP66)**

Additional EMC Filters

Ordering Code:

EMC Footprint Filters:
•**Size A - 1 Phase EMC Filter**
•**Size B - 1 Phase EMC Filter**
•**Size B - 3 Phase EMC Filter**
•**Size C - 1 Phase EMC Filter**
•**Size C - 3 Phase EMC Filter**

Low Earth Leakage EMC Filters:
•**Size A - 1 Phase Low Earth Leakage EMC Filter**
•**Size B - 1 Phase Low Earth Leakage EMC Filter**

Description:

The EMC footprint filters are designed to operate together with the drive's own internal EMC filter in areas of sensitive equipment.
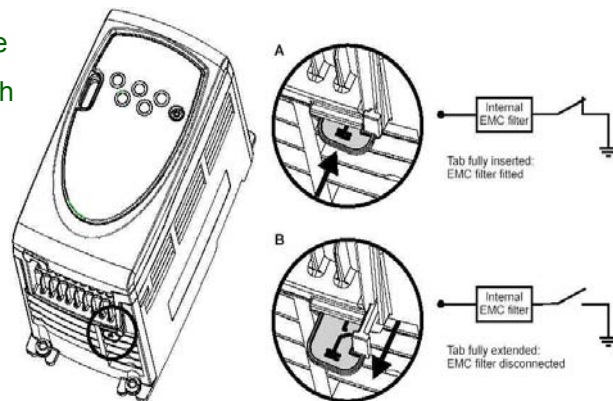
In areas where EMC filtering is required and earth leakage current interferes with the protection equipment (i.e. RCD circuit breakers) the range of low earth leakage EMC filters can be used.

The drive's integral EMC filter must be disconnected when using the low earth leakage EMC filters.

Compatibility:
•   **Commander SK – all sizes**

Top NEMA 1 Cover

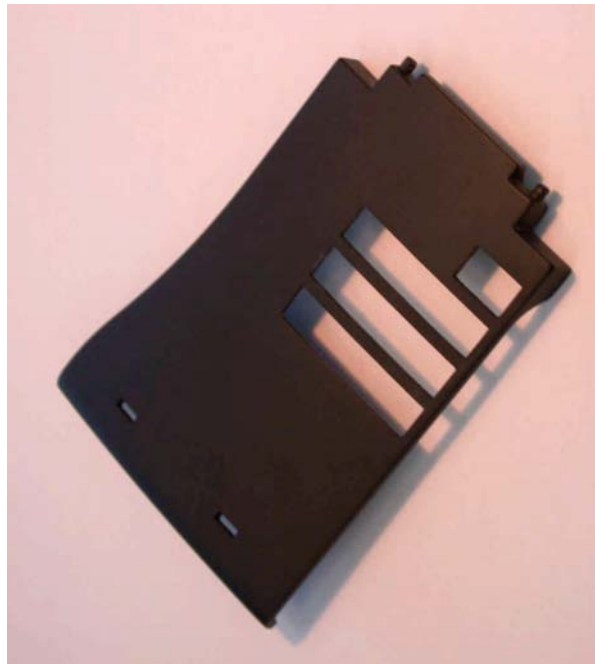**Ordering Code:**

EMC Footprint Filters:
•**Size A – NEMA 1 Top Cover**
•**Size B – NEMA 1 Top Cover**
•**Size C - NEMA 1 Top Cover**

Description:

These plastic top covers give the drives a NEMA 1 rating when fitted. They are designed to simply clip on to the top of the drive giving additional protection for falling dust or falling water droplets.

Compatibility:

•   **Commander SK – all sizes**

Commander SK

Bottom Glanding Metal Cover

Ordering Code:

EMC Footprint Filters:

•**Size A – Gland Cover**

•**Size B – Gland Cover**

•**Size C - Gland Cover**

Description:

These metal bottom glanding covers are ideal for Commander SK installations using cable conduit entry or for terminating incoming cables using gland fittings.

Compatibility:

• **Commander SK – all sizes**

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