



Smart solutions.
Strong relationships.

CG Drive-SK

0.25kW to 45kW
Simple and Compact



CG Drive-SK

Simple to Use... Compact to fit
Power to Perform

0.25kW to 45kW

AC inverter

SIMPLE TO USE...

CG Drive-SK is an easy drive – easy to connect, easy to configure and easy to install.

Easy to connect - All connectors are generously sized and clearly labelled.

Easy to configure - The configuration settings you need for most applications are detailed on the front facia of the drive.

Easy to install - Flexibility allows you to install the drive in the best way for your application.

- All drive sizes can be mounted on a flat surface
- DIN rail fixing integrated on small sizes
- Provision for “through hole mounting” is standard above 4kW. This allows the heat from the drive to be dissipated externally meaning the size of the cubicle can be greatly reduced

SIMPLE & COMPACT YET POWERFUL

- Easy to set up – all the parameters you need for typical applications are shown on the front facia – it could not be easier
- Easy installation – choose between simple panel mounting and DIN-rail mounting (up to 1.5 kW/ 2hp)
- Simple connections – easy access terminals with clear marking
- Simple start up – simple push button set up – no need for complex programming
- Built in EMC filter
- Display Keypad included as standard
- Software and Documentation CD included as standard
- Communications Port RS485 – Modbus RTU as standard
- Available up to 45 kW / 60 hp
- Unbeatable Performance – Try it! Compare it!

General Characteristics

- Maximum overload 150% of rated current for 60s
- Intelligent Thermal Management (ITM) optimises switching frequency
- 8 preset speeds
- Flying start
- Mains dip ride through
- Automatic no-spin autotune for fast performance optimisation
- Keypad access to all parameters for more demanding set-ups



COMPACT TO FIT...

CG Drive-SK is a compact drive -

A compact footprint with space saving features.

CG Drive-SK gives you back valuable space with its compact footprint and extra features that can eliminate the requirement for additional components such as EMC filters. In simple applications the onboard PLC feature saves you money by removing the need for an external PLC and power supplies. Integrated fieldbus options minimise the need for external I/O to interface with the drive.

POWER TO PERFORM...

CG Drive-SK

Reliable and productive with exceptional motor performance as you would expect from a Crompton Greaves drive.

CG Drive-SK is designed with the same principles to give you an easy to apply performance drive for your standard AC motors. Technology is used to achieve this, on power-up the drive automatically measures the motor characteristics to ensure you get the best motor performance straight out of the box, every time - how could we make it easier?

Environment

- IP20
- UL Type 1 kit and cover kit options up to 4kW
- Ambient temperature -10°C to 40°C
- Electromagnetic Immunity complies with EN61800-3 and EN61000-6-3 and 4
- Humidity 95% maximum (non-condensing)
- Electromagnetic Emissions (second environment) as Complies with EN61000-6-3 (residential) EN61000-6-4 (industrial) standards with optional EMC filter

SIMPLICITY OF SET UP TO DRIVE YOUR MACHINE AT OPTIMUM EFFICIENCY

- Automatic no-spin autotune for rapid performance optimisation
- 8 preset speeds available
- Keypad access to all parameters – basic and advanced menus
- Open loop vector control. Speed or Torque control
- Speed reference input: 0-10V, 0-20mA, 4-20mA (-10V to +10V SM-I/O Lite option)
- Switching frequency from 3kHz up to 18kHz – quiet motor operation
- Output frequency from 0 to 1500 Hz
- Linear and S type acceleration and deceleration ramps
- Modbus RTU RS485 via RJ45 connector as standard
- DC injection braking as standard
- Dynamic braking transistor as standard
- Energy savings with dynamic motor flux V/Hz
- Fan and pump optimisation with quadratic motor flux V/Hz

Protection

- Undervoltage, supply and DC Link overvoltage, Phase loss, Drive overload, Instantaneous overcurrent, Short circuit, Ground fault, Drive thermal, Watchdog, Motor thermal

Replace PLCs

The CG Drive-SK from Crompton Greaves establishes its dominant status in simple general purpose drives providing a level of performance and flexibility not found in any other low-cost, open loop AC drive. It is the first economical drive that a user can add PLC functionality into, to save both space and cost on systems. The LogicStick and the free of charge SyPTLite programming software can be used to replace a nano or micro PLC, or to replace relays and timers.

TRANSFORMING ENERGY INTO MOVEMENT IS ONE THING. CONTROLLING THE MOVEMENT WITH CG DRIVE-SK IS ANOTHER....

THE MOST POWERFUL EASY AC DRIVE IN THE WORLD...

Dynamic Performance that Exceeds Expectations

Though simple to operate, CG Drive-SK has the performance characteristics to allow it to solve applications normally requiring more complex and expensive drives. CG Drive-SK is robust and ideal for industrial applications demanding high cycle rates and tight speed control, such as indexers and fuel pumps. Its superior shaft performance makes it incredibly responsive to either demand or load changes. The ability to hold torque down to 1Hz makes it ideal for material handling applications. Selectable switching frequencies allow for quiet motor operation.



Lower Cost Solution from Premium Technology

CG Drive-SK includes premium functionalities as standard: logic functions, comparators, motorised potentiometer, PID regulator, dynamic braking transistor with optional external braking resistor and DC injection braking as standard. Optional functions include SM-I/O Lite that can control an external encoder and even allow real-time clock functions with SM-I/O Timer.

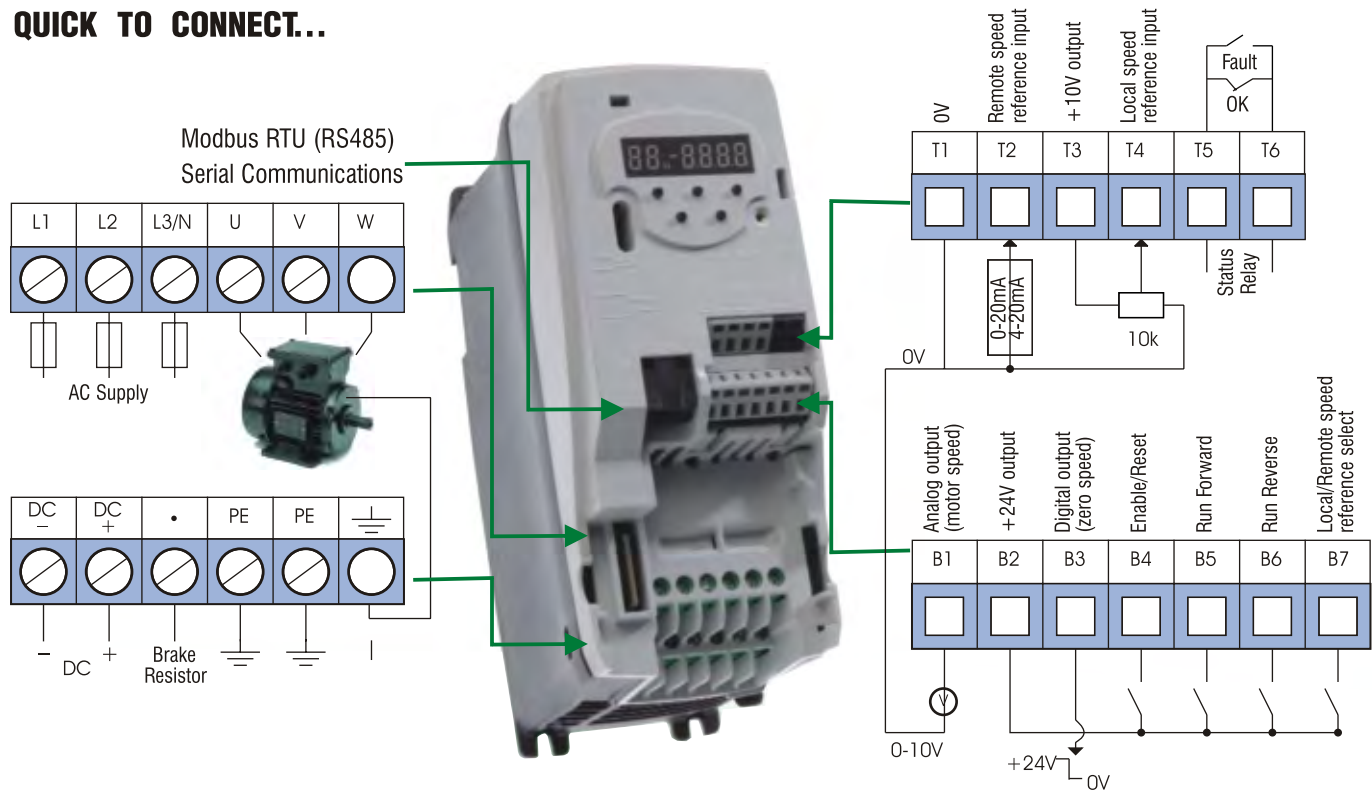
Dynamic performance, PLC functionality, Premium functionalities and Plug-in options ensure that in more complex applications CG Drive-SK can deliver more than the average general purpose drive – giving you lower cost solutions and better productivity in your motor control applications.

Powerful and Reliable

CG Drive-SK has been developed, tested and proven in the harshest operating conditions by dedicated electrical, mechanical and software engineering groups. The result: a strong drive that gets your machine running quickly and consistently with the highest productivity.

CG Drive-SK

QUICK TO CONNECT...



CG DRIVE-SK CAN DO EVEN MORE...

CG Drive-SK is delivered to you ready to run, however, a comprehensive range of accessories allow you to expand the features to achieve even more with your drive.

Operator Interface Options

Interface with your CG Drive-SK with a comprehensive range of optional remote keypads and operator interfaces; these can be used to commission and control the drive.

- SK Keypad – A simple LED keypad with a high IP65 rating
- SM-Keypad Plus – A plain text, multi-language LCD keypad
- HMI Panels – A range of fully configurable LCD touch screen displays

Communication, Programming and Control Options

Add intelligence and connectivity to your drive with a range of integration accessories. As an example Ethernet and Internet connectivity allows you to connect your PC to a drive located anywhere in the world, CG Drive-SK is as simple or sophisticated as you need it to be.

- Communications – All major fieldbus communications are supported through click-in option modules
- I/O Modules – A range of click-in I/O options are available that allow you to further extend the functionality of the drive
- SmartStick – Inserting the SmartStick into the front fascia of the drive enables



parameters to be copied from one drive to another. This is especially useful for replicating a configuration across multiple drives

- LogicStick – Inserting the LogicStick into the front fascia of the drive adds the required memory storage for the use of the onboard PLC features. This is an advantage in applications where traditionally a small external PLC would normally be used
- Serial cable – This is a safe isolated cable to link your PC with the drive
- PC software tools – Included with the drive, these provide the means to gain easy access to the advanced features

Installation Options

Flexible installation accessories help you to optimise the drive for your application.

- An internal braking transistor is standard on CG Drive-SK, by fitting an optional braking resistor you can decelerate even heavier loads more rapidly
- Additional EMC Filters supplement the drives internal filter to allow you to meet even more stringent standards
- The robust SK Cable Bracket makes it easier to support heavy cables and conduit glands to the drives
- UL Type 1 kit and cover kit options up to 4kW



Note: Click in option modules may only be fitted on drives above 0.75kW.

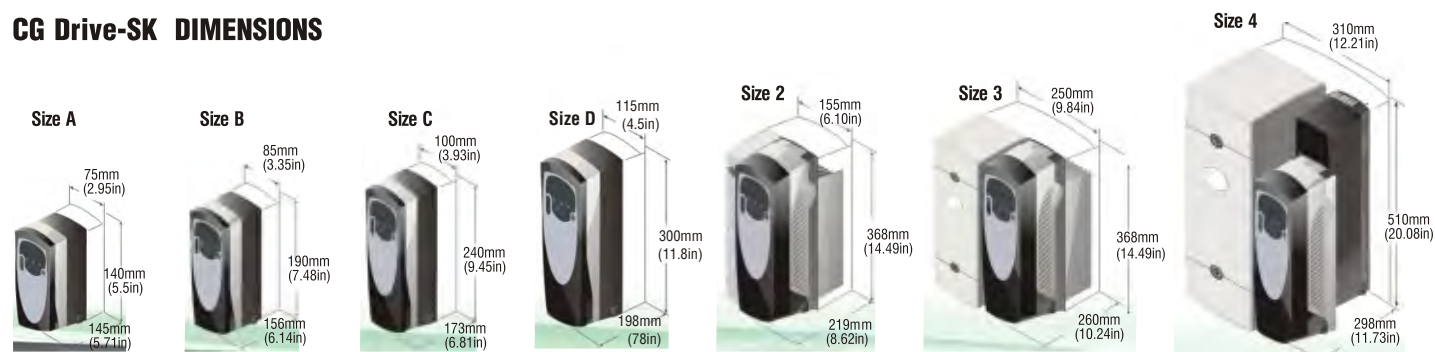
CG Drive-SK ORDER CODES

380 / 480 VAC +/- 10% 3 phase		Normal Duty			Heavy Duty		
		Max Continuous Current (A)	Typical Output (kW)	Motor Power (HP)	Max Continual Current (A)	Typical Output (kW)	Motor Power (HP)
Order Code	Size						
CGK4300037	B				1.3	0.37	0.5
CGK4300055	B				1.7	0.55	0.75
CGK4300075	B				2.1	0.75	1
CGK4300110	B				2.8	1.1	1.5
CGK4300150	B				3.8	1.5	2
CGK4300220	C				5.1	2.2	3
CGK4300400	C				9	4	5
CGK4300750	D				16.5	7.5	10
CGK4301100	2	21	11	15	16.5	7.5	10
CGK4301500	2	29	15	20	25	11	15
CGK4301850	3				29	15	20
CGK4302200	3	43	22	30	40	18.5	25
CGK4303000	3	56	30	40	46	22	30
CGK4303700	4	68	37	50	60	30	40
CGK4304500	4	83	45	60	74	37	50

200 / 240 VAC +/- 10% 1 phase		Normal Duty			Heavy Duty		
		Max Continuous Current (A)	Typical Output (kW)	Motor Power (HP)	Max Continual Current (A)	Typical Output (kW)	Motor Power (HP)
Order Code	Size						
CGK2100025	A				1.7	0.25	0.33
CGK2100037	A				2.2	0.37	0.5
CGK2100055	A				3	0.55	0.75
CGK2100075	A				4	0.75	1
CGK2D00110	B				5.2	1.1	1.5
CGK2D00150	B				7	1.5	2
CGK2D00220	C				9.6	2.2	3

Normal Duty	For applications which use self-ventilated induction motors and require a low overload capability (e.g. fans, pumps)
Heavy Duty	150% overload current for 60 s. For constant torque applications which require a high overload capability (e.g. cranes, hoists).








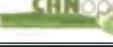















CG Drive-SK DIMENSIONS



CG Drive-SK

Options:

Functionality at your fingertips allows CG Drive SK to be configured to integrate into your machine or process easily and cost effectively.

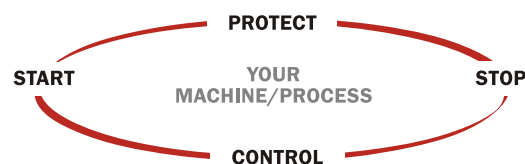
	Order code	Description	
Remote Keypad	SK-Keypad Remote	Remote panel mounting LED display to IP54 (NEMA 12) with additional function key	
	SM-Keypad Plus	Remote panel mounting LED multilingual text keypad display to IP54 (NEMA 12) with additional help key. A PC software tool enables you to set up your own text lines)	
Parameter Storage	SmartStick	Upload drive parameters to the SmartStick for storage or for easy setup of identical drives or downloading to replacement drives	
Fieldbuses	SM-PROFIBUS DP		
	SM-DeviceNet		
	SM-CANopen		
	SM-INTERBUS		
	SM-Ethernet	Ethernet TCP/IP	
Extra I/O	SM-I/O Lite	Additional I/O (1 x AI (\pm IOV bi-polar or 4-20mA), 1 x AO or 4-20 mA), 3x DI and 1 x Relay) as well as a speed reference input to connect a standard incremental encoder for accurate speed holding	
	SM-I/O Timer	As per SM-I/O Lite but with the addition of a Real Time Clock for scheduling drive running	
	SM-PELV	Isolated I/O to NUMUR NE37 specifications for chemical industry applications - from February 2005	
Software	CTSoft	Software for your PC or Laptop which allows you to commission and store parameter settings. Use with CT Comms Cable	
	CT Comms Cable	Cable with isolation RS232 to RS485 converter. For connecting PC/Laptop to the drive when using CTSoft or SyPTLite	
PLC Functions	SyPTLite	Software for your PC or Laptop which allows you to program PLC functions within the drive. Use LogicStick with CT Comms Cable	
	LogicStick	The LogicStick plugs into the front of the drive and enables you to program PLC functions within the drive	
Power Hardware	Additional EMC Filters	These additional filters are designed to operate together with the drive's own integral EMC filter in areas of sensitive equipment	
	Braking Resistors	For heavy or repetitive braking or deceleration duties	
	Grand Cover Size A, B or C	Bottom metal gland plate cover for installations using conduit entry	
	Top Cover Size A, B or C	Top cover for NEMA I installations	

Solutions at your door step.....peace of mind!

We at CG offer smart solutions to our customer which help them optimize their process and get value for their money. With myriad options and ability to provide system solution, we offer our customers simply the best which industry can offer. We understand your needs, from power supply to process and hence our solutions involving transformers, motor and drive guarantees you peace of mind!



Solution based on know how and positive attitude



Shaft power monitors

Softstarters

Variable speed drives



For further details please visit us at:
www.cgglobal.com