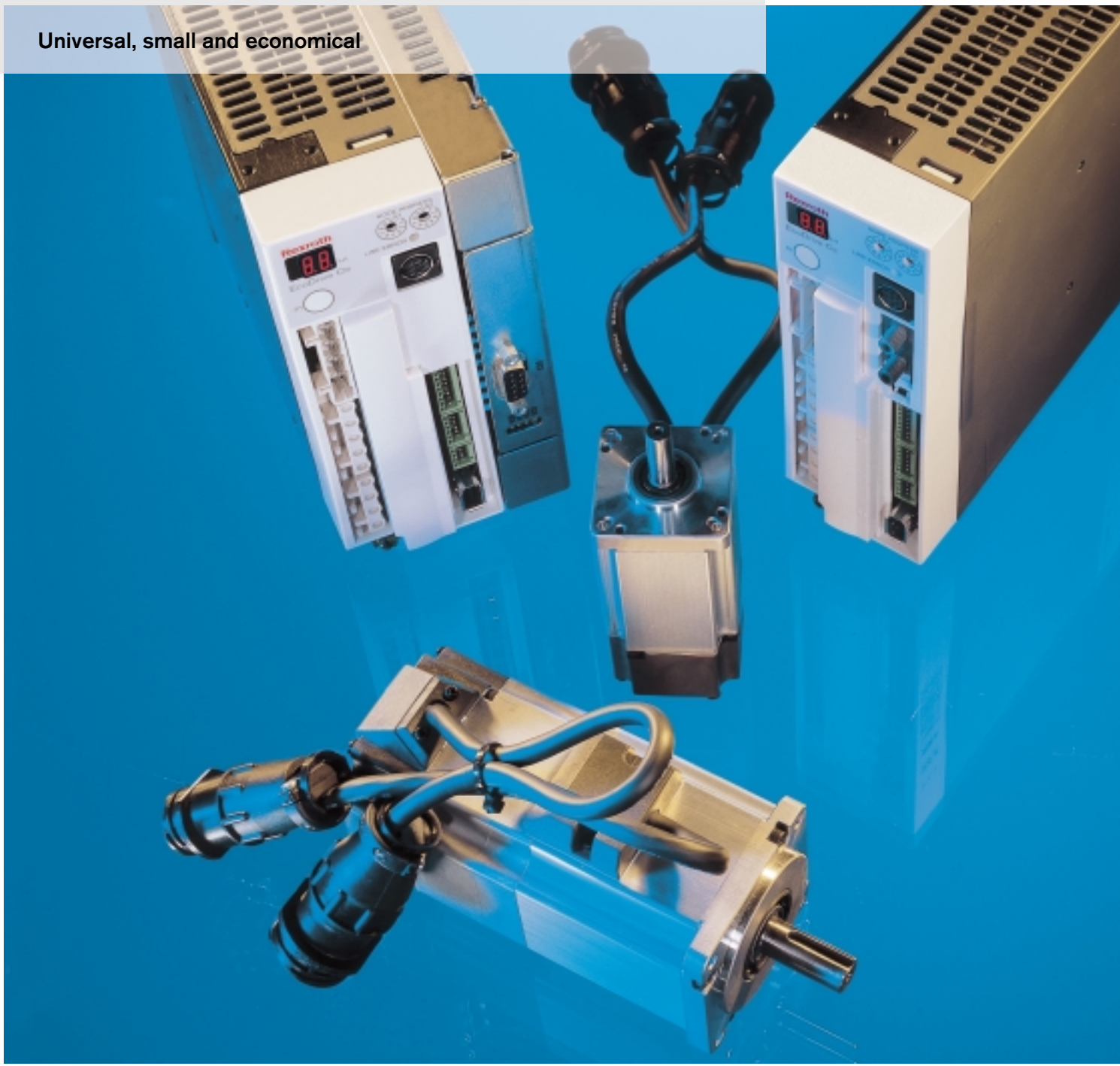


# Rexroth EcoDrive Cs

## The compact servo drive solution

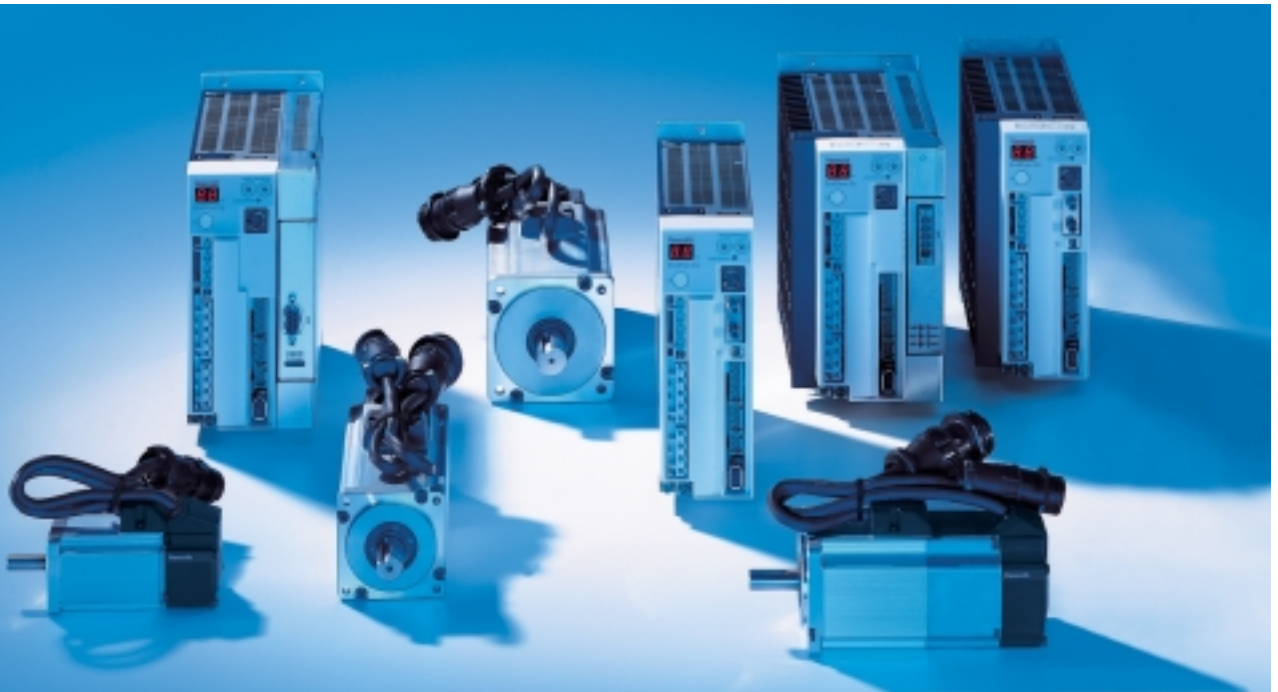
Universal, small and economical



# Rexroth EcoDrive Cs

## – digital servo drives for your automation

**EcoDrive Cs is the new, extremely compact generation of drives from Rexroth.** It extends the internationally successful EcoDrive drive system in the lower power range from 100 W to 750 W and therefore completes the wide range of digital drives for economical automation.



Space-saving construction, outstanding performance, sector-specific technology functions and internationally standardised interfaces earmark EcoDrive Cs in this power class for the whole world of automation.

With analogue/parallel interface, SERCOS, PROFIBUS-DP, DeviceNet and CANopen interfaces, this drive system is ideally suited to complex multi-axis and intelligent single-axis applications in the digital communication network.

No matter whether you use this system as a component of the industry-specific solutions SYNAX 200, VisualMotion, IndraControl MTX and RhoMotion, or as an independent automation solution – EcoDrive Cs simplifies the engineering, speeds up integration, optimises the production processes and makes you competitive, even in the future.

Use the impressive advantages of EcoDrive Cs in these applications:

- printing and converting
- food and packaging
- machine tools
- woodworking
- assembly and handling
- robotics
- and many other applications

### Your advantages

- compact design
- high power density
- short assembly times
- rapid installation
- simple commissioning
- direct AC input
- 100 percent plug-in connectivity
- built-in bleeder resistor
- internationally standardised interfaces
- absolute feedback encoder evaluation
- automatic motor identification via electronic nameplate
- electronic motor brake control
- UL certification

### Intelligent technology functions

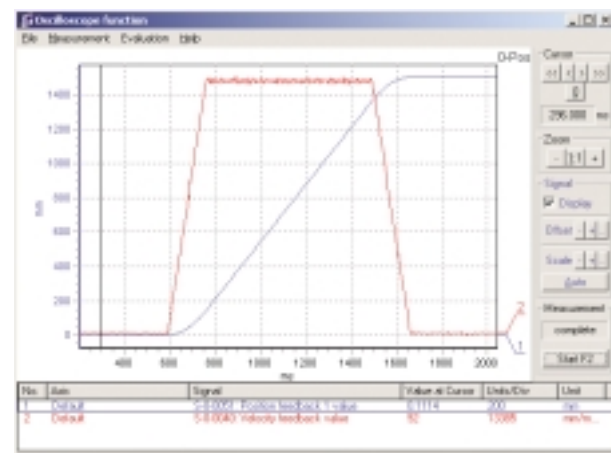
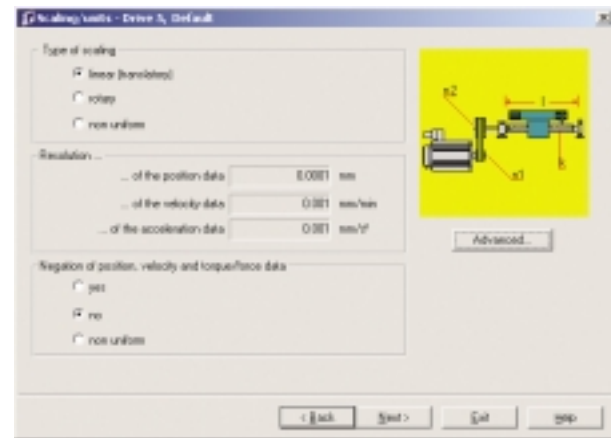
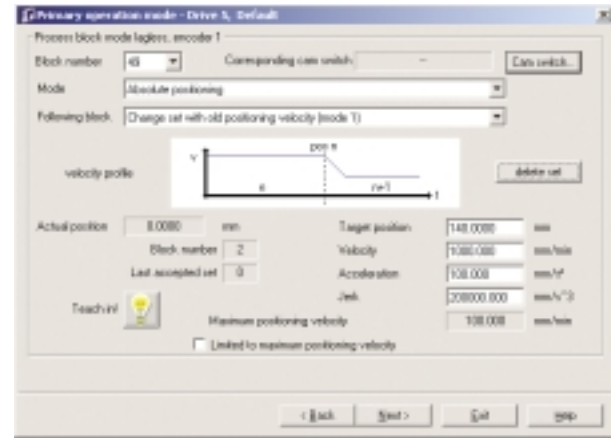
- positioning block mode via field bus
- cyclical position, speed and torque control via SERCOS interface
- position and speed synchronisation
- cam tables and cam switch groups built into the drive
- fast digital I/O (e.g. probe)

### Rapid commissioning – safe operation

For particularly easy commissioning you can get EcoDrive Cs with the optional 5-language DriveTop program – the convenient tool with built-in oscilloscope function.

The drive's automatic self-optimisation takes account of all load-dependent data in the machine and drive system. In addition, technology-oriented firmware functions enable you to implement preventive maintenance via data acquisition and evaluation.

The intelligent control units continuously inform you about all operating states via a display. They store the last warning messages for targeted trouble shooting, enabling them to be digitally processed for a rapid resumption of production.



### The drive electronics – digital and compact

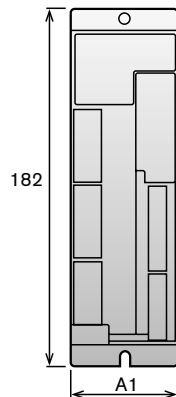
The DKC control units are available in 4 power ratings and contain all power supply, control and regulation electronics in the smallest space. With a 230 volt input voltage, they can be run on both single-phase and three-phase supplies.

The control units are available with the following interface options:

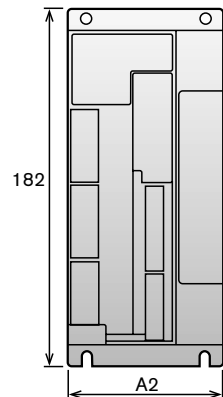
- analogue/parallel interface
- SERCOS interface
- PROFIBUS-DP
- DeviceNet
- CANopen



DKC with analogue/parallel interface,  
SERCOS interface



DKC with PROFIBUS-DP, DeviceNet,  
CANopen



#### General data

$P_N$	Watt	100	200	400	750
$U_{mains}$	V	1 x 230 / 3 x 230			

#### Dimensions analogue/parallel interface, SERCOS interface

Control unit		DKC01.3-004	DKC01.3-008	DKC01.3-012	DKC01.3-018
Control unit		DKC02.3-004	DKC02.3-008	DKC02.3-012	DKC02.3-018
<b>A1</b>	mm	55	55	55	70
Depth	mm	170			

#### Dimensions PROFIBUS-DP, DeviceNet, CANopen

Control unit		DKC10.3-004	DKC10.3-008	DKC10.3-012	DKC10.3-018
<b>A2</b>	mm	79	79	79	94
Depth	mm	170			

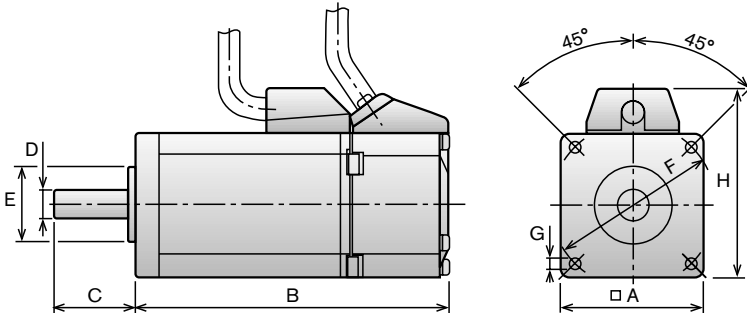


### The motors – dynamic and compact

The MSM maintenance-free motors are available in 4 sizes. The high power density, short overall length and reduced flange dimensions earmark them for machine concepts in fast-response processes. The enhanced type IP65 motor protection allows them to be used in a wide variety of process environments.

The motors are available in the following versions:

- with or without holding brake
- incremental or absolute encoder
- shaft with and without keyway



#### General data and dimensions

Motor		MSM 020B	MSM 030B	MSM 030C	MSM 040B
$P_N$	W	100	200	400	750
$M_0$	Nm	0.32	0.64	1.30	2.40
$M_{max}$	Nm	0.95	1.91	3.80	7.10
$n_{max}$	rpm	5,000	5,000	5,000	4,500
A	mm	□ 42	□ 60	□ 60	□ 80
B without brake, with incremental encoder	mm	92.5	96.0	123.5	142.5
B with brake, with incremental encoder	mm	124.0	129.0	156.5	176.5
B without brake, with absolute value encoder	mm	109	111	138.5	157.5
B with brake, with absolute value encoder	mm	140.5	144	171.5	191.5
C	mm	24	30	30	35
D	mm	ø 8	ø 11	ø 14	ø 19
E	mm	ø 22	ø 50	ø 50	ø 70
F	mm	ø 48	ø 70	ø 70	ø 90
G	mm	ø 3.4	ø 4.5	ø 4.5	ø 6
H	mm	55	73	73	93

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Presented by:

