

A - Servo



COMBIVERT

disai
automatismos industriales, sl
T// 962 448 450 / www.disai.net

F5

KEB

KEB COMBIVERT F5-A-Servo

compact single axis servo system in plug- and play-technology.



- Supply voltages: 1/3 phase 240 V AC
3 phase 400 V AC / 340 V DC / 560 V DC
- Integrated braking transistor „GTR7“
- ++ / - - DC-bus-connection
- Thermal motor protection via thermistor
- Integrated RFI-Filter compliant with EN 55011/B-10m
- -10V...0...+10V analog reference input
- Pluggable terminal blocks for
 - control
 - mains
 - motor connections
- Two feedback interfaces in RJ45 technology for
 - resolver
 - encoder connection
- Input for external 24 V supply
- Pre-assembled motor and feedback cables
- KEB software package COMBIVIS for easy commissioning and diagnosis
- CE, UL and cUL listed
- Allows connection of synchronous and asynchronous motors
- Compatible with all common field bus protocols, i. e.

The compact actuator

- providing speed and torque control for use with external positioning control.
- Reaction times: Current control 125 μ s
Speed control 250 μ s

The dynamic stepper driver

- speed reference via analog input, digital input or serial communication.
- Sample times: Analog inputs: 1 ms / Min: 125 μ s
Analog outputs: 1 ms
Digital inputs and outputs: 1 ms
Serial communication up to 115 kBaud

The speed or angular synchronous follower drive

- with adjustable master-slave ratio
and on the fly referencing

The single axis positioning drive

- providing up to 15 positions with 8 adjustable profiles

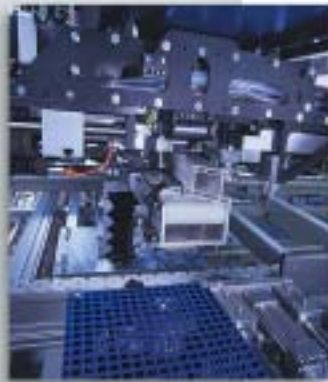
The versatile drive for stand alone process automation solutions

- with PID-process-control on board as well as comprehensive input and output functionality in 8 parameter sets

with display and keypad incorporated in the operator

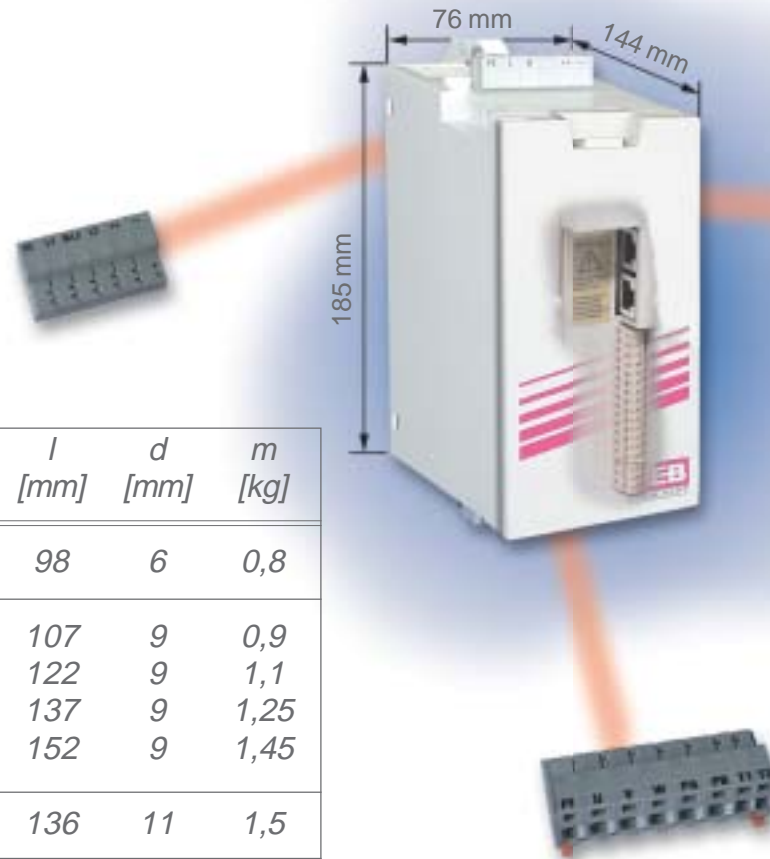
- via free programmable CP parameters and scaling function

PROFIBUS
INTERBUS Remote
CAN
SERCOS
DEVICE NET
KEB-HSP 5 /
DIN 66019-II



**F5- A- Servo -
System 1/3 ph. 230 V**

**F5- A- Servo -
System 3 ph. 400 V**



Motor-size	T_n [Nm]	T_{max} [Nm]	$n_{nominal}$ [min ⁻¹]	J_{Rotor} [kgcm ²]	l [mm]	d [mm]	m [kg]
12.*	0,18	0,8	6000	0,12	98	6	0,8
21.	0,19	0,8	4500	0,06	107	9	0,9
22.	0,36	1,6	4500	0,08	122	9	1,1
23.	0,55	2,4	4500	0,11	137	9	1,25
24.	0,72	3,2	4500	0,14	152	9	1,45
B1.	0,60	2,2**	4000	0,22	136	11	1,5
31.	0,55	2,6	3000	0,45	116	14	1,9
32.	1,15	5,2	3000	0,7	134	14	2,3

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21.	0,19	0,8	4500	0,06	107	9	0,9
22.	0,36	1,6	4500	0,08	122	9	1,1
23.	0,55	2,4	4500	0,11	137	9	1,25
24.	0,72	3,2	4500	0,14	152	9	1,45
B1.	0,60	3,1	4000	0,22	136	11	1,5
B2.	1,30	4,2	4000	0,36	160	11	2,1
31.	0,55	2,6	3000	0,45	116	14	1,9
32.	1,15	5,2	3000	0,7	134	14	2,3

* Motor and feedback cables with flying leads 1.400 mm
 ** limited by max. controler current

available options:

- backlash-free planetary gear boxes

- helical worm boxes

- helical shaft mounted gear boxes

- helical inline gear boxes

Options:

Braking resistor with thermal protection

200V: 07.BR.100- 1180, 182 Ohm, $P_{\theta} = 800\text{Watt}$

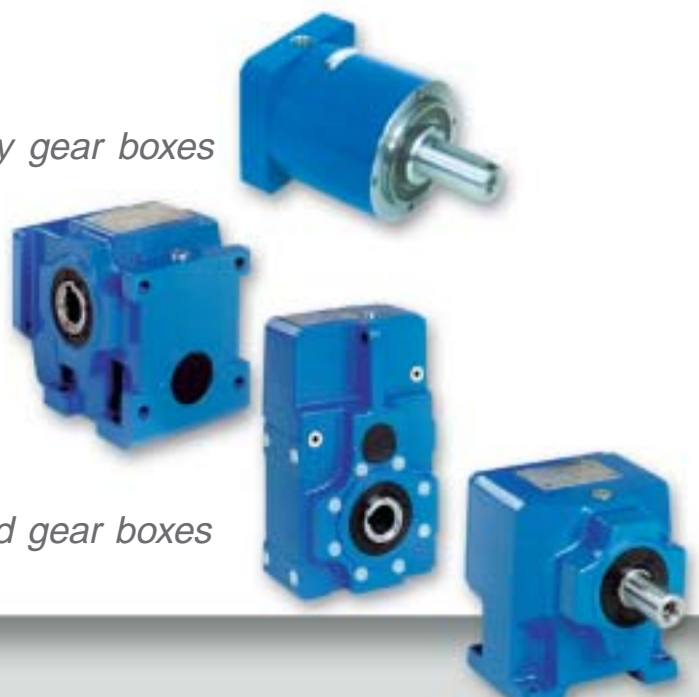
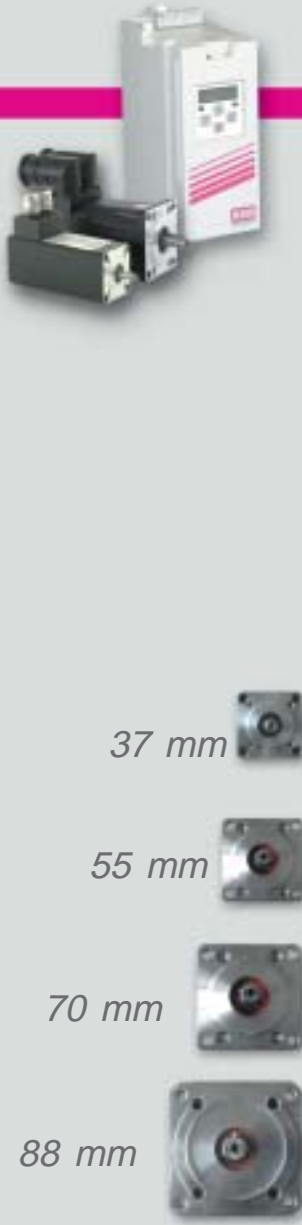
400V: 07.BR.100- 6620, 620 Ohm, $P_{\theta} = 900\text{Watt}$

Input choke

200V: 05.DR.F08-4951 (1-phase)

05.DR.A08-4251 (3-phase)

400V: 05.DR.B08-7351



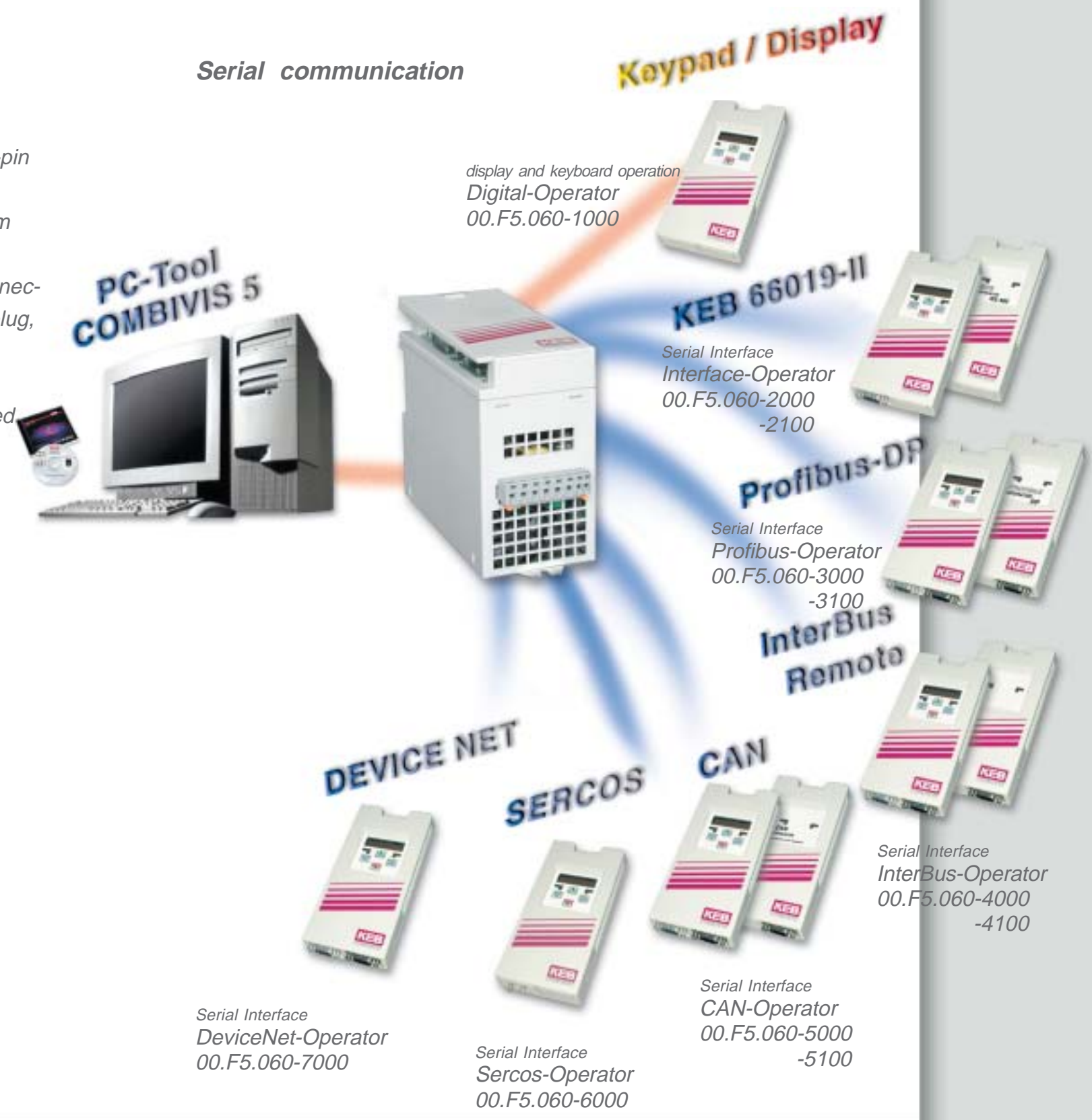
Pre-configured systems

- Resolver feedback cable, screened, twisted pairs, 12-pin resolver plug, RJ45 plug for F5-A-Servo
00.F5.0C1-00 __, Standard sizes: 2 m, 3 m, 5 m, 10 m
- Motorcable 1.5 mm², screened, twisted pairs, incl. connection of mechanical brake and thermistor, 8-pin motor plug,
00.S4.019-00 __, Standard sizes: 2 m, 3 m, 5 m, 10 m
- Incremental encoder feedback cable, screened, twisted pairs, 12-pin resolver plug, RJ45 plug for F5-A-Servo
00.F5.0C1-30 __, Standard sizes: 2 m, 3 m, 5 m, 10 m
- Master cable RJ45 - RJ45, l = 0,5 m
00.F5.0C1-20P5
- Adapter RJ45 - SubminD9-female, l = 0,05 m
00.F5.0C0-0009
- Adapter RJ45 - SubminD15-female, l = 0,05 m
00.F5.0C0-0008

for motor size 12.SM.202-62NO

- Encoder cable connector - 12pin
00.90.912-0007
- Mains cable connector - 8pin
00.90.912-0008

Serial communication



people in motion



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