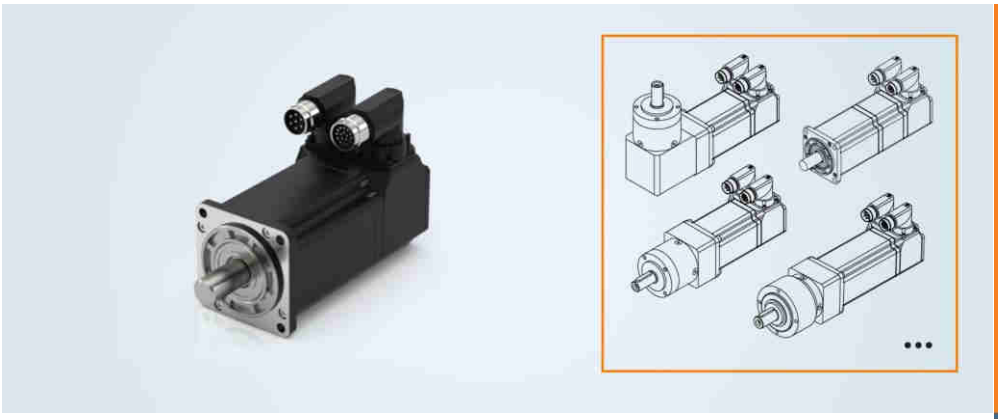
JAT JENAER ANTRIEBSTECHNIK

ECOSPEED® Servo Motors Series 60D5x

Maximum performance at the 60 V DC link



Maximum torque available at speeds up to 3000 rpm

With servo amplifiers ECOVARIO® 114D or ECOMODUL

Various mechanical options

Optimal adaptation to your application from quantity 1

Electrical adaptation

Customer-specific adaptation of the winding for an optimal operating point

Optimized magnetic circuit with 5 pole pairs

For less cogging and better synchronization

Flange:
60 mm

Encoder:
Incremental encoder
Standard 8000 to 160 000 inc/rev,
up to 256 000 inc/rev possible
Absolute value encoder
17 bit/rev and 12 bit revolutions
up to 19 bit/rev possible
Protocols: BiSS-B, BiSS-C, HIPERFACE®
SinCos encoder 1000 periods/rev

Protection class:
IP65

Choice of mechanical options:
Holding brake
Gear
Shaft with key
Shaft seal ring IP54

Appropriate servo amplifiers:
ECOVARIO® 114(D)
ECOMODUL
ECOeasy

www.jat-gmbh.de

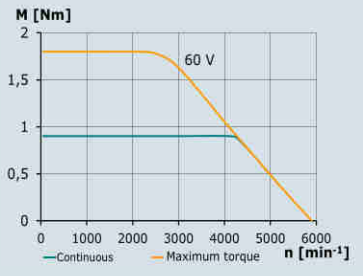
ECOSPEED® Servo Motors Series 60D5x

→ Technical data

		60D51-0710	60D52-0710
Rated Values with DC link voltage 60 V			
Peak torque*	Nm	1,82	3,25
Stall torque*	Nm	0,90	1,56
Rated torque*	Nm	0,87	1,55
Rated speed	min^{-1}	2500	1500
Maximum speed	min^{-1}	6000	3000
Peak current (per phase)*	A_{RMS}	14,1	14,1
Stall current (per phase)*	A_{RMS}	7,1	7,1
Rated current (per phase)*	A_{RMS}	7,1	7,1
Rated power	W	228	243
at DC link voltage	V_{DC}	60	60
*) Mounting flange 250 x 250 x 20 mm			
Technical Data Motor			
Torque constant (rated)	Nm/A	0,123	0,218
Voltage constant (EMK, 25 °C, U-V)	$V/1000min^{-1}$	8,31	14,75
Winding resistance (at 25 °C, U-V)	Ω	0,59	0,69
Winding inductivity (at 25 °C, 1 kHz, U-V)	mH	0,84	1,56
Number of motor phases		3	3
Number of pole pairs		5	5
Motor inertia without brake	$kgm^2 \times 10^{-3}$	0,0304	0,0454
Mass	kg	1,2	1,8
Motor length (L)	mm	126	155
Shaft diameter (D)	mm	14	14
Insulations class		F, 155°	
Ambient temperature	°C	-20 ... +40	
Protection class		IP65 (Shaft gland: IP54)	
Max. axial load	N	90	90
Max. radial load	N	180	180

Encoder options see next page.

Characteristic 60D51 /ECOVARIO® 114D



Characteristic 60D52 /ECOVARIO® 114D

