Media Release

ESCON 36/2 DC
One-Two-Go! Startup made easy.

The ESCON 36/2 DC is the first product in the new servo controller range by maxon motor and shows how user-friendly drive technology can be. The extremely compact, powerful 4-quadrant PWM servo controller offers efficient control of brushed permanent-magnet activated DC motors up to approx. 72 W. With its unsurpassed power density, it is the embodiment of the degree of miniaturization that is currently possible in the field of servo controller technology. It is hardly possible to pack more power, more functionality, more convenience and more protection in such small dimensions with today's level of technology.

The ESCON 36/2 DC has excellent control properties and a very fast digital current controller with an enormous bandwidth for optimal motor current/torque control. The drift-free yet extremely dynamic speed behavior enables a speed range of 1 to 150,000 rpm. The little miracle provides a wide range of functions, with fully configurable digital and analog inputs and outputs. It is perfectly matched to maxon's range of motors and thus allows dynamic drive solutions that meet the highest demands. Furthermore it can be run in various operating modes (speed controller (closed loop), speed controller (open loop), current controller).

The ultra-compact servo controller is controlled by means of an analog set value. This value can be specified by means of analog voltage, an external or internal potentiometer, a defined value or by means of a PWM signal with variable duty cycle. Other interesting functions are for instance the ability to enable or disable the power stage depending on the direction of rotation, or to use speed ramps for acceleration and deceleration. The speed can be regulated by means of a digital incremental encoder (2-channel, with/without line driver), DC tacho or without encoder (IxR compensation).

Startup made easy

Top performance should not be a matter of practice makes perfect. Therefore the servo controller has been designed specifically with easy startup and user-friendliness in mind - no in-depth knowledge of drive technology is required. When the servo controller is connected to a PC via a USB port, it can easily and efficiently be configured with the "ESCON Studio" graphical user interface. During startup and configuration of the inputs and outputs, monitoring, data recording and diagnostics, the user has access to a large variety of functions and is assisted by user-friendly software wizards, as well as a well-designed automatic procedure for fine-tuning the controller. On the hardware side, the ESCON 36/2 DC comes fully equipped with everything that is needed. For example, no additional external filters or motor chokes are required and pre-assembled cables for the startup are available as accessories.

Top-notch protection

The ESCON 36/2 DC has protective circuits against overcurrent, excess temperature, under- and over-voltage, against voltage transients and against short-circuits in the motor cable. Furthermore it is equipped with protected digital inputs and outputs and an adjustable current limitation for protecting the motor and the load. The motor current and the actual speed of the motor shaft can be monitored by means of the analog output voltage.
No-compromise flexibility and efficiency

The large range for the input voltage and the operating temperature allows flexible use in almost all drive applications, in automation technology, in small machine manufacturing and equipment engineering, and in mechatronics. With its exceptional efficiency of 95%, the inexpensive ESCON 36/2 DC is a first-class choice for mobile, highly efficient yet consumption-optimized applications.

For more information on ESCON, the new servo controller range of maxon motor, visit http://escon.maxonmotor.com.

Length of the press release: 3816 characters, 581 words

The media release is available as download on the Internet: www.maxonmotor.com

maxon motor ag
Brünigstrasse 220
P.O. Box 263
CH-6072 Sachseln

Phone   +41 41 666 15 00
Fax      +41 41 666 16 50
Web      www.maxonmotor.com

ESCON 36/2 DC – digital servo controller for DC motors up to 72 W, dimensions 55 x 40 x 16.1 mm