



EL7041-0052 | Stepper motor terminal 50 V DC, 5 A

The EL7041-0052 EtherCAT Terminal is intended for stepper motors in the medium performance range. The PWM output stages cover a wide range of voltages and currents. Together with two inputs for limit switches, they are located in the EtherCAT Terminal. The EL7041-0052 can be adapted to the motor and the application by changing just a few parameters. 64-fold micro-stepping ensures particularly quiet and precise motor operation.

Technical data	EL7041-0052
Technology	Compact Drive Technology
Load type	2-phase stepper motor (uni-/bipolar)
Number of channels	1
Number of outputs	1 x stepper motor
Number of inputs	2 x end position
Connection method	direct motor connection
Supply voltage electronics	24 V DC (via power contacts)
Supply voltage power	8...50 V DC (external)
Output current	max. 5.0 A
Step frequency	configurable up to 8000 full steps/s
Step pattern	64-fold micro stepping
Current controller frequency	approx. 30 kHz
Resolution	approx. 5000 positions in typ. applications (per revolution)
Current consumption power contacts	typ. 50 mA
Current consumption E-bus	typ. 140 mA
Distributed clocks	yes
Special features	travel distance control
Electrical isolation	500 V (E-bus/field potential)
Weight	approx. 90 g
Operating/storage temperature	0...+55 °C/-25...+85 °C
Relative humidity	95 %, no condensation
Vibration/shock resistance	conforms to EN 60068-2-6/EN 60068-2-27
EMC immunity/emission	conforms to EN 61000-6-2/EN 61000-6-4
Protect. class/installation pos.	IP 20/see documentation
Approvals	CE

Accessories	
EL9576	brake chopper terminal, 72 V, 155 µF
AS20xx AS10xx	Product overview stepper motors
ZK4000-6200-2xxx	Motor cable for AS1000, assembled at both ends, 4 x 0.5 mm ² , 4 million bending cycles, bending radius = 55 mm (10 x OD)
ZK4000-6700-2xxx	motor cable for AS1000, assembled at both ends, (4 x 0.5 mm ²), shielded, 4 million bending cycles, bending radius = 55 mm (10 x OD)
ZK4000-5100-2xxx	encoder cable for ASxxxx, IP 67, PUR, (5 x 0.25 mm ²), shielded, flex, M12, plug, straight, male, 5-pin, A-coded – open end

Related products	
EL7031	stepper motor EtherCAT Terminal, 24 V DC, $I_{\max} = 1.5 \text{ A}$
EL7037	stepper motor EtherCAT Terminal, with vector control, 24 V DC, $I_{\max} = 1.5 \text{ A}$
EL7047	stepper motor EtherCAT Terminal, with vector control, 50 V DC, $I_{\max} = 5.0 \text{ A}$
EP7041-0002	stepper motor EtherCAT Box (industrial housing), $I_{\max} = 5 \text{ A}$, 50 V, IP 67
KL2531	stepper motor Bus Terminal, $I_{\max} = 1.5 \text{ A}$, 24 V, IP 20
KL2541	stepper motor Bus Terminal, $I_{\max} = 5 \text{ A}$, 50 V, IP 20