



EL7031 | Stepper motor terminal 24 V DC, 1.5 A

The EL7031 EtherCAT Terminal is intended for the direct connection of different small stepper motors. The slimline PWM output stages for two motor coils are located in the EtherCAT Terminal together with two inputs for limit switches. The EL7031 can be adjusted 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	EL7031 ES7031
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	24 V DC (internally via power contacts)
Output current	max. 1.5 A
Step frequency	configurable up to 8000 full steps/s
Step pattern	64-fold micro stepping
Current controller frequency	approx. 25 kHz
Resolution	approx. 5000 positions in typ. applications (per revolution)
Current consumption power contacts	typ. 30 mA + motor current
Current consumption E-bus	typ. 120 mA
Distributed clocks	yes
Special features	travel distance control
Electrical isolation	500 V (E-bus/field potential)
Weight	approx. 50 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
Pluggable wiring	for all ESxxx terminals
Approvals	CE, UL

Accessories	
EL9576	brake chopper terminal, 72 V, 155 µF
AS20xx AS10xx	product overview stepper motors
Cables and gears	prefabricated connecting cables in IP 20 and IP 67 protection for AS10xx stepper motors

Related products	
EL7037	stepper motor EtherCAT Terminal, with vector control, 24 V DC, $I_{\max} = 1.5$ A
EL7041	stepper motor EtherCAT Terminal, $I_{\max} = 5.0$ A, 50 V, IP 20
EL7047	stepper motor EtherCAT Terminal, with vector control, 50 V DC, $I_{\max} = 5.0$ A
EP7041-0002	stepper motor EtherCAT Box (industrial housing), $I_{\max} = 5$ A, 50 V, IP 67
KL2531	stepper motor Bus Terminal, $I_{\max} = 1.5$ A, 24 V, IP 20
KL2541	stepper motor Bus Terminal, $I_{\max} = 5$ A, 50 V, IP 20