



## 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	direct motor connection
Number of outputs	1 stepper motor, 2 phases
Number of inputs	2
Number of channels	1 stepper motor, 2 digital inputs
Load type	uni- or bipolar stepper motors
Nominal voltage	24 V DC (-15 %/+20 %)
Power supply	24 V DC via the power contacts, via the E-bus
Max. output current	1.5 A (overload- and short-circuit-proof)
Max. step frequency	1000, 2000, 4000 or 8000 full steps/s (configurable)
Step pattern	64-fold micro stepping
Current controller frequency	approx. 25 kHz
Diagnostics LED	error phase A and B, loss of step/stagnation, power, enable
Resolution	approx. 5000 positions in typ. applications (per revolution)
Electrical isolation	500 V (E-bus/signal voltage)
Current consumption power contacts	typ. 30 mA + motor current
Current consumption E-bus	typ. 120 mA
Distributed clocks	yes
Control resolution	approx. 5000 positions in typ. applications (per revolution)
Special features	travel distance control
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 ESxxxx terminals
Approvals	CE, UL

Accessories	
<b>EL9576</b>	brake chopper terminal, 72 V, 155 µF
<b>AS20xx   AS10xx</b>	Product overview stepper motors
<b>Leitungen und Getriebe</b>	Prefabricated connecting cables in IP 20 and IP 67 protection for AS10xx stepper motors

Related products	
<b>EL7037</b>	stepper motor EtherCAT Terminal, I <sub>MAX</sub> = 1.5 A, 24 V, IP 20, vector control
<b>EL7041</b>	stepper motor EtherCAT Terminal, I <sub>MAX</sub> = 5 A, 50 V, IP 20
<b>EL7047</b>	stepper motor EtherCAT Terminal, I <sub>MAX</sub> = 5 A, 50 V, IP 20, vector control
<b>EP7041-0002</b>	stepper motor EtherCAT Box (industrial housing), I <sub>MAX</sub> = 5 A, 50 V, IP 67
<b>KL2531</b>	stepper motor Bus Terminal, I <sub>MAX</sub> = 1.5 A, 24 V, IP 20
<b>KL2541</b>	stepper motor Bus Terminal, I <sub>MAX</sub> = 5 A, 50 V, IP 20