Product data sheet
Characteristics

SD328AU68S2
motion control stepper motor drive - SD328 - <= 6.8 A



Main

Range of product	Lexium SD3
Product or component type	Motion stepper drive
Device short name	SD328
Supply voltage limits	200…240 V 100…120 V
Bus type	Fieldbus

Complementary

Format of the drive	Block
Network number of phases	Single phase
[Us] rated supply voltage	100...120 V - 15...10 % 200...230 V - 15...10 %
Supply voltage type	AC/DC
Network frequency limits	50…60 Hz (- 15...10 %)
Communication interface	Analogue input, integrated Modbus fieldbus, integrated CANopen fieldbus, integrated
Maximum motor phase current	6.8 A
Current consumption	5 A 230 V main supply 7 A 115 V main supply <= 0.2 mA 24 V control voltage
Nominal power	280 W at 115 V 420 W at 230 V
Short-circuit current	0.5 KA
Power losses	<= 65 W
Associated fuse rating	10 A at 115 V 6 A at 230 V
Overvoltage category	III
Inrush current	60 A
Maximum leakage current	30 MA <10 m IEC 60990-3
Voltage state 0 guaranteed	-3...5 V for 24 V input signals
Voltage state 1 guaranteed	15...30 V for 24 V input signals
Input current	10 MA for 24 V input signals
Maximum input frequency	200 KHz for signal input ENC_A, ENC_B, ENC_I - control type pulse/direction 400 KHz for signal input ENC_A, ENC_B, ENC_I - control type A/B
Maximum output frequency	400 KHz for pulse/direction interface A/B 200 KHz for pulse/direction interface pulse/direction
Maximum switching current	50 MA (24 V output signals)
Maximum voltage drop	<1 V 50 mA load for 24 V output signals

Physical interface	2-wire RS 485 Modbus: RS422 - pulse/direction interface RS422 - signal input ENC_A, ENC_B, ENC_I
Output voltage	<= 30 V (24 V output signals) 4.75...5.25 V (ENC+5V_OUT signal output)
Input voltage	24 V -15 %/+20 % for 24 V control voltage -10...10 V for analogue input signals
Residual ripple	< 5 % (24 V control voltage)
Resistance	5 KOhm (pulse/direction interface) 10 KOhm (analogue input signals)
Analogue input type	Voltage - 10...10 V, resolution: 14 bits, duration: 0.25 ms
Electrical connection	Connector RJ45 for CANopen interface Connector RJ45 for Modbus interface Spring terminal for CANopen interface
Mode of transmission	RTU for Modbus
Method of access	Slave CANopen
Transmission rate	125 kbps, 250 kbps, 500 kbps, 1 Mbps for CANopen 9600, 19200, 38400 bps for Modbus
Number of addresses	1…127 for CANopen 1…247 for Modbus
Installed device	127 stepper motor drives for CANopen 31 stepper motor drives for Modbus
Data format	8 bits, 1 stop, even parity for Modbus 8 bits, no parity, 1 stop for Modbus 8 bits, no parity, 2 stop for Modbus 8 bits, odd parity, 1 stop for Modbus
Communication service	1 PDO configurable for CANopen 2 SDOs receive for CANopen 2 SDOs send for CANopen 3 PDOs as per DSP 402 for CANopen CiA DSP 402 profile for CANopen Diagnostics (08) for Modbus Emergency for CANopen Note guarding, heartbeat for CANopen Read device identification (43) for Modbus Read hold register (03), maximum 63 words for Modbus Read/Write multiple registers (23), maximum 63/59 words for Modbus Write multiple registers (16), maximum 61 words for Modbus Write single register (06) for Modbus
Local signalling	1 LED - ERR for CANopen 1 LED - RUN for CANopen
Safety function	Safe torque off safety function for machine conforming to IEC/EN 61800-5-2 Safe torque off safety function for machine conforming to ISO 13849-1 level d Safe torque off safety function for system process conforming to EN/IEC 61508 level SIL2 Safe torque off safety function for system process conforming to IEC/EN 61800-5-2
Type of cooling	Fan
Maximum mechanical speed	3000 Rpm
Height	145 Mm
Width	72 Mm
Depth	140 Mm
Shock resistance	15 gn for 11 ms conforming to IEC 60068-2-27
Net weight	1.2 Kg

Environment

Electromagnetic compatibility	Electrostatic discharge level 3 conforming to IEC 61000-4-2 Immunity to electrical transients level 4 conforming to IEC 61000-4-4 Immunity to radiated radio-electrical interference level 3 conforming to IEC 61000-4-3 Voltage/Current impulse level 3 conforming to IEC 61000-4-5
Standards	EN/IEC 61800-3 EN/IEC 61800-5-1
Product certifications	UL[RETURN]cUL[RETURN]TÜV
Marking	CE
Ambient air temperature for operation	0…50 °C
Ambient air temperature for storage	-25…70 °C
Pollution degree	Level 2
Relative humidity	5…85 % without condensation

Operating altitude	<= 1000 m without derating > 1000...< 2000 m without derating (maximum ambient temperature 40°C, no protective film, la
Vibration resistance	1 gn (f= 13…150 Hz) conforming to IEC 60068-2-6 1.5 mm (f= 3…13 Hz) conforming to IEC 60068-2-6
IP degree of protection	IP20 On upper part: IP40 (without removal of protective film)

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	20.500 Cm
Package 1 Width	20.500 Cm
Package 1 Length	23.500 Cm
Package 1 Weight	1.332 Kg
Unit Type of Package 2	S04
Number of Units in Package 2	6
Package 2 Height	30.000 Cm
Package 2 Width	40.000 Cm
Package 2 Length	60.000 Cm
Package 2 Weight	8.822 Kg

Offer Sustainability

Recyclability potential, in %	98
Total lifecycle Carbon footprint	1 119 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	96.95598796910491
Carbon footprint of the manufacturing phase [A1 to A3]	97 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.4679202592766975
Carbon footprint of the distribution phase [A4]	0.5 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.5082038485444439
Carbon footprint of the installation phase [A5]	0.5 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	1019.3826348537897
Carbon footprint of the use phase [B2, B3, B4, B6]	1 019 kg CO2 eq.
Mercury free	Yes
Sustainable packaging	No
Carbon footprint of the end-of-life phase [C1 to C4]	2.0016309243406663
Carbon footprint of the end-of-life phase [C1 to C4]	2 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile
Total lifecycle Carbon footprint	1119
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
SCIP Number	19ee4950-c76c-48d9-8353-203688a9f056
REACh Regulation	Reference contains Substances of Very High Concern above the threshold
EU RoHS Directive	Compliant By Exemption
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, w
PVC free	Yes
End of life manual availability	End Of Life Information
Take-back	No

Contractual warranty

Warranty (in months)	18

Product Life Status : Commercialised