



SCANCON®



Industrial Encoders

Scandinavian Construction company a/s
Tranevang 1, 3450 Alleroed, Denmark

Pho: +45 48172702 Fax: +45 48172284
www.scancon.dk info@scancon.dk

Absolute CanOpen – Shaft

SAG-CAZ3B-0013-C10S-CAW





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Interface

Interface	CANopen
Profile	DS-406
Programming Functions	Resolution, preset, 2 limit switches, 8 CAMS, baud rate, CAN-Identifier, bootloader, transmission modes: polled, cyclic, sync
Manual Functions	Address selector switch 0-99 and terminal resistor (with connection cap)
Transmission Rate	min. 20 kBaud, max. 1 MBaud
Interface Cycle Time	>1 ms

Outputs

Output Driver	Transceiver (ISO 11898), Galvanically Isolated by Opto-Couplers
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Electrical Data

Supply Voltage	10 – 30 VDC (On power supplies comply with EN 50178)
Current Consumption	≤ 230 mA @ 10 V DC, ≤ 100 mA @ 24 V DC
Power Consumption	≤ 2.5 W
Start-Up Time	< 250 ms
Reverse Polarity Protection	Yes
Short Circuit Protection	Yes
EMC: Emitted Interference	DIN EN 61000-6-4
EMC: Noise Immunity	DIN EN 61000-6-2
MTTF	13.5 years @ 40 °C
Electrical Lifetime	>10 ⁵ h





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Sensor

Technology	Optical
Resolution Singleturn	13 bit
Accuracy (INL)	$\pm 0.0220^\circ$ (14 – 16 bit), $\pm 0.0439^\circ$ (<13 bit)
Code	Binary

Environmental Specifications

Protection Class (Shaft)	IP54, IP64 – IP67 (EN 60529)
Protection Class (Housing)	IP54, IP64 – IP67 (EN 60529)
Operating Temperature	-30 °C fixed (-22 °F), -5 °C flexible (+23 °F) - +70 °C (+158 °F)
Storage Temperature	-40 °C (-40 °F) – +85 °C (+185 °F)
Humidity	98% RH, no condensation

Mechanical Data

Connection Cap Material	None
Housing Material	Steel
Housing Coating	Cathodic corrosion protection (>720 hrs salt spray resistance)
Flange Type	Clamp, \varnothing 58 mm (C)
Flange Material	Aluminum
Shaft Type	Solid, Single Flat, Length = 20 mm
Shaft Diameter	\varnothing 10 mm (\varnothing 0.39")
Shaft Material	Stainless Steel V2A (1.4305, 303)
Max. Shaft Load	Axial 40 N, Radial 110 N
Minimum Mechanical Lifetime (10^8 revolutions with Fa/Fr)	430 (20 N / 40 N), 150 (40 N / 60 N), 100 (40 N / 80 N), 55 (40 N / 110 N)
Rotor Inertia	≤ 30 gcm ² [≤ 0.17 oz-in ²]
Friction Torque	≤ 5 Ncm @ 20 °C, (0.11 oz-in @ 68 °F)
Max. Permissible Mechanical Speed	≤ 12000 1/min
Shock Resistance	≤ 100 g (half sine 6 ms, EN 60068-2-27)
Permanent Shock Resistance	≤ 10 g (half sine 16 ms, EN 60068-2-29)
Vibration Resistance	≤ 10 g (10 Hz – 1000 Hz, EN 60068-2-6)
Length	52,7 mm (2.07")
Weight	290 g (0.64 lb)





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Electrical Connection

Connection Orientation	Axial
Connection Type	Cable / Connector
Cable Length	1 m [39"]
Wire Cross Section	0.14 mm ² / AWG 26
Material / Type	PVC
Cable Diameter	7.1 mm (0.28 in)
Minimum Bend Radius	35 mm (1.38) fixed, 70 mm (2.76)

