CAS

ROPE ANGLE LIMIT SENSOR & CONTROLLER



360°
X/Y CONE CONTROL

< 50 ms
RESPONSE TIME

2
RELAY OUTPUTS

IP65
PROTECTION

OVERVIEW

CAS is a high-performance inclination sensor and controller that can be connected to CLL, CLB or CED units to prevent lifting at prohibited rope angles on electric cranes and to give an audible warning.

Operating principle: the system calculates the angular difference between the X and Y axes and defines a cone-shaped zone in which the working limits and warnings of the lifting system are set. It can be configured to protect X, Y, X and Y, or the resulting angle (360°). CAS can be supplied with different mounting brackets to suit various installations on electric cranes.

Benefits: prevents accidents caused by load displacement when lifting off the ground, reduces the risk of rope guide wear and breakage and of rope failure, and extends the service life of the rope, rope guide and gearbox.

ORDERING CODE

EXAMPLE **CAS-1-2-M-0-3**

CAS PRODUCT FAMILY	1 FUNCTION	2 RELAYS	M COMMUNICATION	0 WIRELESS	3 CABLE LENGTH
Angle limit	1 – Angle limit sensor 2 – Angle limit controller	1 – No relay 2 – 2 × relay	M – Modbus	0 – None (cable)	2 – 2 m 3 – 3 m 4 – 4 m 5 – 5 m

KEY FEATURES

SCM® FUNCTIONS

- All functions can be controlled remotely via the iOS and Android apps when used with the CLB control unit
- Angle limitation with alarm and pre-alarm thresholds
- When the angle approaches the set value the 1st warning relay switches; at the set value the final relay prevents side-pull lifting
- Individual configuration of the 2 relay outputs
- Communication with frequency inverters via Modbus
- Real-time logging of angle faults
- Continuous one-way data transmission via MODBUS
- Set-up via keypad or Android / iOS app
- Alarm signal if the angle sensor connection is lost
- 3-key keypad

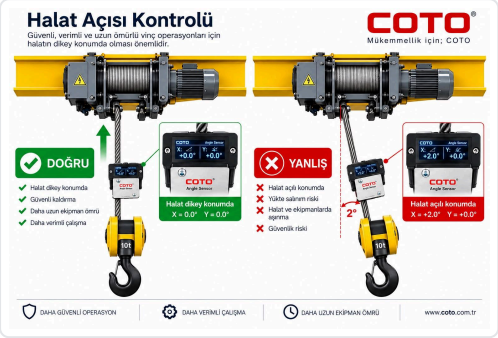
TECHNICAL SPECIFICATIONS

Supply & power consumption	1.5 W (24 VDC supply) / 2 W (220 VAC supply)

Control axes	X / Y, or X and Y simultaneously in a 360° conical zone
Linearity	< 0.01
Thermal drift	< 0.002% / °C
Response time	< 50 ms
Measuring range	Adjustable – default 2°
Remote connection	Bluetooth
Display	OLED, 0.96 inch
Communication	Modbus RTU
Relay outputs	2 × relay: 30 VDC / 250 VAC, 2 A
Humidity (non-condensing)	85%
Storage temperature	−30 °C ... +60 °C
Operating temperature	−20 °C ... +55 °C
Protection rating	IP65

CERTIFICATIONS & COMPLIANCE

- CE certification for European Union countries.
- Category 2 as per EN 13849-1, PL d (comparable to SIL 2 level, EN 62061) (LCD3PL).
- Lead (Pb) free.



The company reserves the right to change technical data, drawings and images without prior notice.