

MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

HONEYWELL

CSNK500M-600

CLOSED-LOOP CURRENT SENSOR

Used with the applicable Honeywell CSNK current sensors configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: Honeywell official manufacturer documentation

CURRENT SENSORS

Product Range Guide

Honeywell

CURRENT
SENSORS
CLOSED
LOOP

Closed loop current sensors use feedback control to provide output proportional to measured current. Engineered with enhanced accuracy and linearity to deliver fast response. Output relatively immune to electrical noise. Potential applications include variable speed drives, Servo, overcurrent protection, ground fault detectors, robotics, power supplies, and wattmeters.



Series	CSNX	CSNA	CSNF	CSNB	CSNC	CSNE	CSNG	CSNJ
Rated current	25 A	50 A	100 A	50 A	50 A	25 A, 50 A	100 A	300 A
Sensing current range	±56 A	±70 A, ±90 A, ±100 A	±150 A, ±180 A, ±200 A	±100 A	±90 A	±36 A, ±90 A	±180 A, ±200 A	±600 A
Sensed current type	ac, dc, impulse	ac, dc, impulse	ac, dc, impulse	ac, dc	ac, dc	ac, dc, impulse	ac, dc	ac, dc, impulse
Output	current	current	current	current	current	current	current	current
Coil turns	2000 (50 Ohm coil)	1000 (90 or 50 Ohm coil) 2000 (160 or 130 Ohm coil)	1000 (30 Ohm coil) 2000 (100 Ohm coil)	2000	1000 (50 Ohm coil)	1000 (110 Ohm or 66 Ohm coil)	2000	2000
Response time	< 0.2 µs	< 1 µs	< 0.5 µs	< 1 µs	< 1 µs	< 1 µs	< 0.5 µs	< 0.5 µs
Accuracy	±0.24 %	±0.5 %	±0.5 %	±0.5 %	±0.5 %	±0.5 %	±0.5 %	±0.5 %
Mounting	pcb on 11-pins	pcb on 3-pins	pcb on 3-pins	pcb on 3 pins	pcb on 3 pins	pcb on 13 pins	pcb on 3 pins	panel
Pinout style	unipolar	offset	center	offset	offset	5-pin	offset	spade terminals (x 3)
Operating temperature range	-40 °C to 85 °C [-40 °F to 185 °F]	0 °C to 70 °C [32 °F to 158 °F]	-40 °C to 85 °C [-40 °F to 185 °F]	0 °C to 70 °C [32 °F to 158 °F]	-25 °C to 85 °C [-13 °F to 185 °F]	-40 °C to 85 °C [-40 °F to 185 °F]	-40 °C to 85 °C [-40 °F to 185 °F]	-40 °C to 85 °C [-40 °F to 185 °F]
Supply voltage	4.75 Vdc to 5.25 Vdc	±13 Vdc, ±15 Vdc	±12 Vdc to ±15 Vdc	±15.0 Vdc	±13.0 Vdc	±12 Vdc to ±15 Vdc	±15.0 Vdc	±12.0 Vdc to ±18.0 Vdc
Measurements (H x W x D)	25.45 mm x 34.0 mm x 12.55 mm [1.002 in x 1.34 in x 0.494 in]	25.70 mm x 40.5 mm x 18.0 mm [1.012 in x 1.595 in x 0.709 in]	29.6 mm x 25.4 mm x 14.45 mm [1.165 in x 1.0 in x 0.569 in]	25.70 mm x 40.5 mm x 18.0 mm [1.012 in x 1.595 in x 0.709 in]	25.70 mm x 40.5 mm x 18.0 mm [1.012 in x 1.595 in x 0.709 in]	20.3 mm x 31.8 mm x 12.7 mm [0.80 in x 1.25 in x 0.5 in]	29.6 mm x 27.94 mm x 14.45 mm [1.165 in x 1.10 in x 0.569 in]	58.0 mm x 93.0 mm x 112.0 mm [2.28 in x 3.66 in x 4.41 in]
Features	rapid response, reduced overshoot, high overload capability	rapid response, reduced overshoot, high overload capability	rapid response, reduced overshoot, high overload capability	rapid response, reduced overshoot, high overload capability	rapid response, reduced overshoot, high overload capability	rapid response, reduced overshoot, high overload capability	rapid response, reduced overshoot, high overload capability	rapid response, reduced overshoot, high overload capability



Series	CSNK	CSNL	CSNM	CSNP	CSNS	CSNR	CSNT
Rated current	500 A	300 A	500 A	50 A	100 A, 200 A, 300 A	125 A	50 A
Sensing current range	±1200 A	±600 A	±1000 A	±90 A	±320 A, ±600 A	±200 A	±150 A
Sensed current type	ac, dc, impulse	ac, dc	ac, dc	ac, dc	ac, dc, impulse	ac, dc	ac, dc
Output	current	current	current	current	current	current	current
Coil turns	5000 (50 Ohm coil)	2000	3000	1000	2000	1000, 2000	2000
Response time	< 1 µs	< 0.5 µs	< 1 µs	< 0.5 µs	< 0.5 µs	< 0.5 µs	< 0.5 µs
Accuracy	±0.5 %	±0.5 %	±0.5 %	±0.5 %	±0.5 %	±0.5 %	±0.5 %
Mounting	panel	panel	panel	pcb on 3 pins	panel	pcb on 3 pins	pcb on 3 pins
Pinout style	Molex (3-way)	Molex (3-way)	Molex (3-way)	offset	Molex (3-way)	center, offset	offset
Operating temperature range	-40 °C to 85 °C [-40 °F to 185 °F]	-40 °C to 85 °C [-40 °F to 185 °F]	-40 °C to 85 °C [-40 °F to 185 °F]	-40 °C to 85 °C [-40 °F to 185 °F]	-40 °C to 85 °C [-40 °F to 185 °F]	-40 °C to 85 °C [-40 °F to 185 °F]	-40 °C to 85 °C [-40 °F to 185 °F]
Supply voltage	±15 Vdc to ±18 Vdc	±12.0 Vdc to ±18.0 Vdc	±12.0 Vdc to ±18.0 Vdc	±12.0 Vdc to ±15.0 Vdc	±12 Vdc to ±18 Vdc	±12.0 Vdc to ±15.0 Vdc	±12.0 Vdc to ±15.0 Vdc
Measurements (H x W x D)	58.0 mm x 93.0 mm x 112.0 mm [2.28 in x 3.66 in x 4.41 in]	95.0 mm x 45.0 mm x 21.5 mm [3.75 in x 1.81 in x 0.85 in]	110.0 mm x 64.0 mm x 31.0 mm [4.33 in x 2.52 in x 1.22 in]	29.6 mm x 27.94 mm x 14.45 mm [1.165 in x 1.10 in x 0.569 in]	67.5 mm x 60.7 mm x 19.0 mm [2.66 in x 2.39 in x 0.75 in]	29.6 mm x 25.4 mm x 14.45 mm [1.165 in x 1.0 in x 0.569 in]	29.6 mm x 27.94 mm x 14.45 mm [1.165 in x 1.10 in x 0.569 in]
Features	rapid response, reduced overshoot, high overload capability	rapid response, reduced overshoot, high overload capability	rapid response, reduced overshoot, high overload capability	rapid response, reduced overshoot, high overload capability	rapid response, reduced overshoot, high overload capability	rapid response, reduced overshoot, high overload capability	rapid response, reduced overshoot, high overload capability