

CSCA-A Series

SPECIFICATIONS (all specifications are at ± 15 Vdc supply and $25\text{ }^{\circ}\text{C}$ [$77\text{ }^{\circ}\text{F}$] ambient temperature unless otherwise specified)

Characteristic	Symbol	Parameter
Nominal current	I_{PN}	See product selection guide
Peak measuring range (ac peak)	I_{PK}	See product selection guide
Nominal output voltage at I_{PN}	V_{SN}	$4\text{ V} \pm 1\%$
Supply voltage	V_{CC}	$\pm 15\text{ Vdc} \pm 5\%$
Supply current	I_{CC}	17 mA typ.
Accuracy at I_{PN} ¹	X	$\leq \pm 2\%$ of I_{PN}
Linearity ²	E_I	$< \pm 1\%$
Zero current offset	V_O	$\leq \pm 20\text{ mV}$
Residual offset after I_{PN}	V_{OR}	$\leq \pm 20\text{ mV}$
Thermal drift of offset	V_{OT}	$\leq \pm 3\text{ mV}/^{\circ}\text{C}$ @ $I_{PN} = 50\text{ A}$ $\leq \pm 1.5\text{ mV}/^{\circ}\text{C}$ @ $I_{PN} = 100\text{ A to } 600\text{ A}$
Thermal drift of gain	V_{ST}	$\leq \pm 4\text{ mV}/^{\circ}\text{C}$
Response time ³	t_R	3 μs to 7 μs
di/dt accuracy followed	di/dt	$\geq 50\text{ A}/\mu\text{s}$
Bandwidth	f	dc to 50 kHz
Isolation voltage	V_D	3 kV, 50 Hz, 60 sec
Rated insulation voltage	V_I	849 V reinforced
Output resistance	R_S	$\geq 10\text{ k}\Omega$
Ambient operating temperature	T_A	$-10\text{ }^{\circ}\text{C}$ to $80\text{ }^{\circ}\text{C}$ [$14\text{ }^{\circ}\text{F}$ to $176\text{ }^{\circ}\text{F}$]
Ambient storage temperature	T_S	$-25\text{ }^{\circ}\text{C}$ to $85\text{ }^{\circ}\text{C}$ [$-13\text{ }^{\circ}\text{F}$ to $185\text{ }^{\circ}\text{F}$]

NOTES:

¹ For $I_P > I_{PN}$ then X is the same percentage value but of I_P

² Independent linearity per the Instrument Society of America

³ At 90% of I_P

⁴ Appropriate specification items defined using the guidance of EN50178

Hall-Effect Based Open Loop Current Sensors

MOUNTING DIMENSIONS (For reference only. mm)

CSCA-A-001	CSCA-A-002
Pins arrangement	Pins arrangement
1. + 15 V	1. + 15 V
2. - 15 V	2. - 15 V
3. Output	3. Output
4. Ground	4. Ground

ORDER GUIDE

Catalog listing	Description
CSCA0050A000B15B01	Hall-effect based, open-loop current sensor, Molex-type connector, 50 A rms nominal, ± 150 A range
CSCA0100A000B15B01	Hall-effect based, open-loop current sensor, Molex-type connector, 100 A rms nominal, ± 300 A range
CSCA0200A000B15B01	Hall-effect based, open-loop current sensor, Molex-type connector, 200 A rms nominal, ± 600 A range
CSCA0300A000B15B01	Hall-effect based, open-loop current sensor, Molex-type connector, 300 A rms nominal, ± 900 A range
CSCA0400A000B15B01	Hall-effect based, open-loop current sensor, Molex-type connector, 400 A rms nominal, ± 900 A range
CSCA0500A000B15B01	Hall-effect based, open-loop current sensor, Molex-type connector, 500 A rms nominal, ± 900 A range
CSCA0600A000B15B01	Hall-effect based, open-loop current sensor, Molex-type connector, 600 A rms nominal, ± 900 A range
CSCA0050A000B15B02	Hall-effect based, open-loop current sensor, Gallant connector, 50 A rms nominal, ± 150 A range
CSCA0100A000B15B02	Hall-effect based, open-loop current sensor, Gallant connector, 100 A rms nominal, ± 300 A range
CSCA0200A000B15B02	Hall-effect based, open-loop current sensor, Gallant connector, 200 A rms nominal, ± 600 A range
CSCA0300A000B15B02	Hall-effect based, open-loop current sensor, Gallant connector, 300 A rms nominal, ± 900 A range
CSCA0400A000B15B02	Hall-effect based, open-loop current sensor, Gallant connector, 400 A rms nominal, ± 900 A range
CSCA0500A000B15B02	Hall-effect based, open-loop current sensor, Gallant connector, 500 A rms nominal, ± 900 A range
CSCA0600A000B15B02	Hall-effect based, open-loop current sensor, Gallant connector, 600 A rms nominal, ± 900 A range

WARNING

PERSONAL INJURY

DO NOT USE these products as safety or emergency stop devices or in any other application where failure of the product could result in personal injury.

Failure to comply with these instructions could result in death or serious injury.

WARNING

MISUSE OF DOCUMENTATION

- The information presented in this product sheet is for reference only. Do not use this document as a product installation guide.
- Complete installation, operation, and maintenance information is provided in the instructions supplied with each product.

Failure to comply with these instructions could result in death or serious injury.

WARRANTY/REMEDY

Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Honeywell's standard product warranty applies unless agreed to otherwise by Honeywell in writing; please refer to your order acknowledgement or consult your local sales office for specific warranty details. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace, at its option, without charge those items it finds defective. **The foregoing is buyer's sole remedy and is in lieu of all other warranties, expressed or implied, including those of merchantability and fitness for a particular purpose. In no event shall Honeywell be liable for consequential, special, or indirect damages.**

While we provide application assistance personally, through our literature and the Honeywell web site, it is up to the customer to determine the suitability of the product in the application.

Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this printing. However, we assume no responsibility for its use.

SALES AND SERVICE

Honeywell serves its customers through a worldwide network of sales offices, representatives and distributors. For application assistance, current specifications, pricing or name of the nearest Authorized Distributor, contact your local sales office or:

E-mail: info.sc@honeywell.com

Internet: www.honeywell.com/sensing

Phone and Fax:

Asia Pacific +65 6355-2828
+65 6445-3033 Fax
Europe +44 (0) 1698 481481
+44 (0) 1698 481676 Fax
Latin America +1-305-805-8188
+1-305-883-8257 Fax
USA/Canada +1-800-537-6945
+1-815-235-6847
+1-815-235-6545 Fax

Sensing and Control

Honeywell

1985 Douglas Drive North

Golden Valley, Minnesota 55422

www.honeywell.com/sensing

005872-1-EN IL50 GLO Printed in USA
February 2007

Copyright © 2007 Honeywell International Inc. All rights reserved.

Honeywell