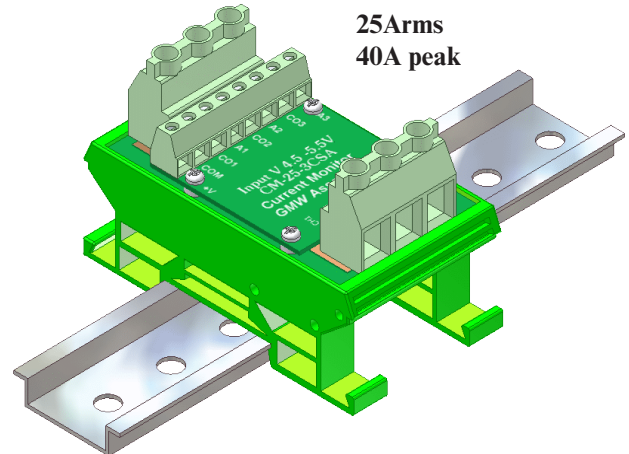


The CM-25A-3CSA is a three channel current sensing module which demonstrates the use of the Sentron CSA-1VG Hall Effect magnetic sensor IC to monitor DC or AC currents in three adjacent conductors. The CM-25A-3CSA operates from a 4.5 to 5.5VDC power source and provides an analog voltage proportional to the current for three adjacent conductors.

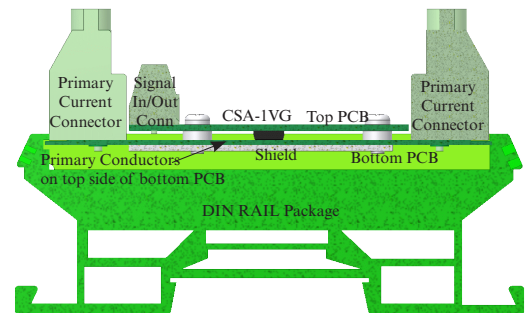
The CM-25A-3CSA current monitor consists of two stacked PCBs mounted in a standard DIN Rail package. The lower PCB has the three current conducting traces on the top side with a magnetic shield on the bottom side. The top PCB includes three CSA-1VG sensors positioned over the center of the three traces located on the lower PCB. There is 5kVrms isolation between the primary current conductors and the sensor electronic circuitry.



CM-25A-3CSA shown on a 35mm DIN Rail

### Features

- Three 25A Primary Current Channels
- Analog Output of Primary AC & DC Current
- High Dielectric Isolation >5kVrms
- DIN RAIL package



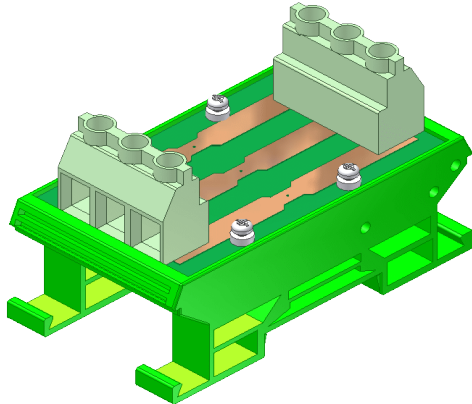
Cutaway side view of CM-25A-3CSA

### Specifications - Electrical CH1, CH2 & CH3

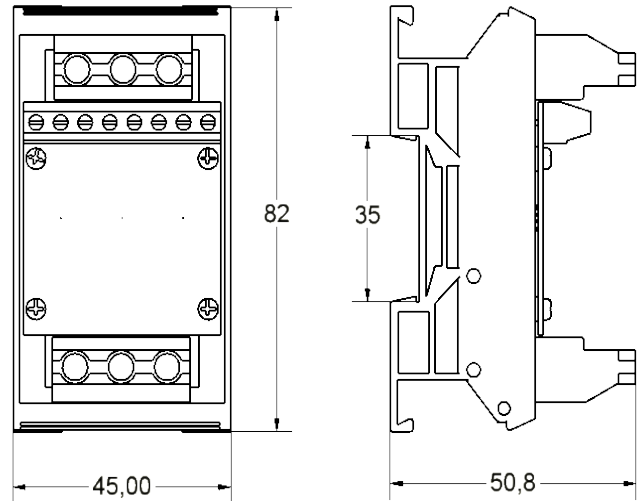
Symbol	Parameter	Units	CM-25A-3CSA
$I_{PN}$	Primary Current, nominal continuous	Arms	25
$I_{PM}$	Primary Current, max peak	A	40
$S_A$	Analog Output Sensitivity of Primary Current	mV/A	50
$V_O$	Analog Output Voltage Range - Ref to Common	V	$2.5 \pm 2.0$
$V_O$	Analog Output Voltage Range - Ref to CO_OUT	V	$0 \pm 2.0$
$V_{OS}$	Offset Voltage, $I_{pri} = 0A$ - Ref to CO_OUT	mV	$\pm 15$
CO_OUT	Reference Voltage	V	$0.5V_{sup} \pm 0.02$
X	Accuracy, $I < 25Arms$ , DC to 60Hz	%	5
$X_L$	Non Linearity, $I < 25Arms$ , 60Hz	%	<0.8
$TC_{V_o}$	Temperature Coefficient, Offset Voltage	mV/°C	<0.2
$TC_{V_s}$	Temperature Coefficient, Sensitivity	ppm/°C	<200
r	Resolution, Primary Current	mA	25
$V_{DD}$	Supply Voltage	V	4.5 to 5.5
$I_{DD}$	Supply Current Draw	mA	35 max
$V_D$	Voltage for AC Isolation Test	kVrms	5
$BW_{V_o}$	Bandwith- Analog Output	Hz	DC to 10k

Revision Date: 10 FEB 2009

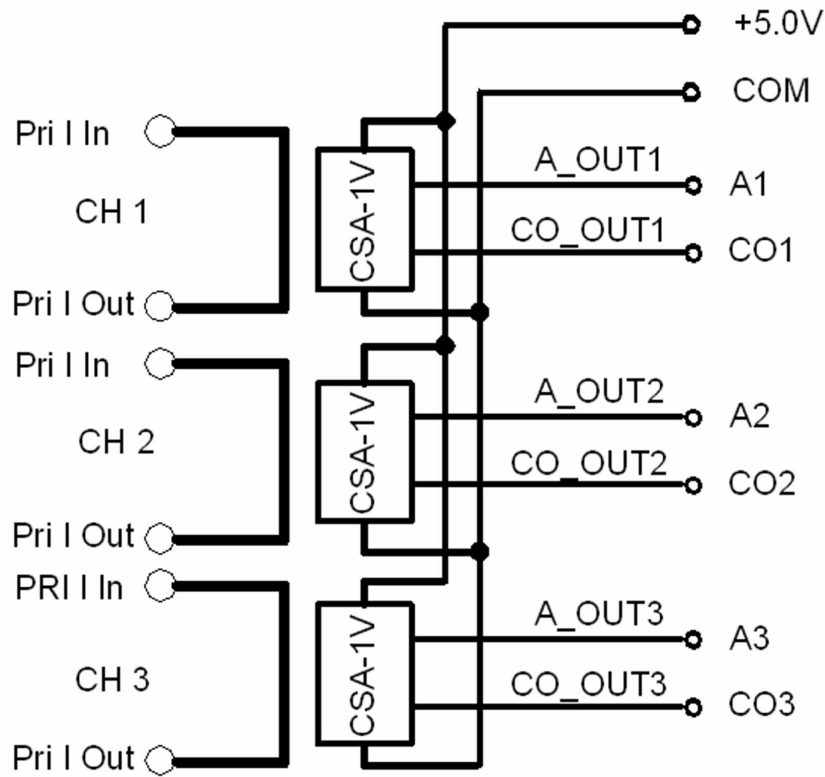
Temperature			
Sym	Parameter	Units	
TA	Ambient Operating Temperature	°C	-40 to 85
TS	Ambient Storage Temperature	°C	-40 to 100



CM-25A-3CSA with top PCB removed to show primary current conductors



CM-25A-3CSA Outline Drawing, dimensions in mm



CM-25A-3CSA Block Diagram

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