

Open Loop Current Sensor

ELECTRICAL DATA/INPUT :

Primary Nominal R.M.S. Current Ir(A)	Primary Current Measuring Range Ip(A) at Vcc=±15V	Part Name Type	Part Number
3~50	±Ir*3	NCTH0030~NCTH0500	CT008CXXXXXX
Vcc	Supply Voltage		±15V ±5%
Ic	Current Consumption		<20*3mA
Iis	R.M.S. Voltage for 2.5KVAC Isolation test, 50/60Hz, 1min		<10mA
Ris	Isolation Resistance at 500 VDC		>500Mohm

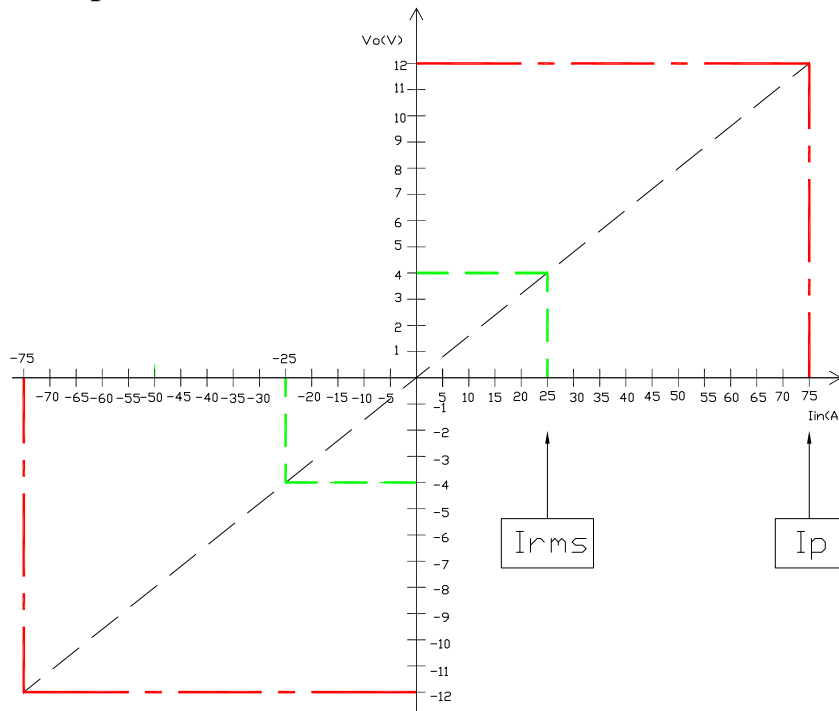
ELECTRICAL DATA/OUTPUT

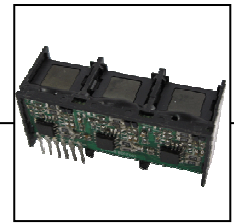
Vout	Output voltage at Ir , TA=25°C	4V±1%
Rout	Output Impedance	<150 ohm
RL	Load Resistor	>10Kohm
X	Accuracy at Ir , TA=25°C (without offset)	<±1%
EL	Linearity from 0 to Ir , TA=25°C	<±1%
Voe	Electrical Offset Voltage , TA=25°C	<±40mV
Vom	Magnetic Offset Voltage (Ir→0)	<±15mV
Vot	Thermal Drift of Offset Voltage	<±2mV/°C
T.C.	Thermal Drift (-10°C to 50°C)	<±0.1%/°C
Tr	Response Time to 90% of Ir(f=1KHz)	<3us
FB	Frequency Bandwidth (-3dB)	50KHz

GENERAL DATA :

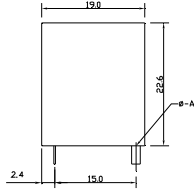
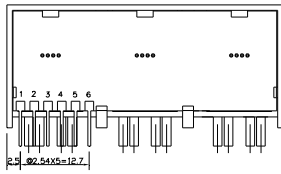
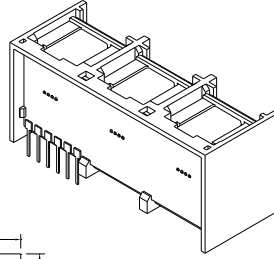
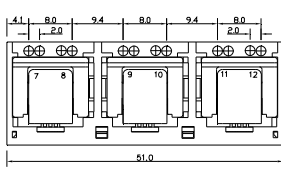
TA	Ambient Operating Temperature	-10 ~ +80°C
Ts	Ambient Storage Temperature	-25 ~ +85°C

Output voltage v.s. Input current: Ex: Irms=25A ; Ip=25*3=75A, Vcc=±15V(Dual power)





Outline dimension & Pin definition (all tolerance:±0.5mm)



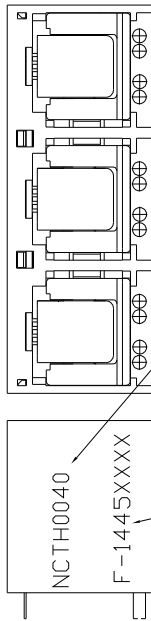
Terminal Pin Identification

- 1. Ground
- 2. V-
- 3. V+
- 4. Vo1
- 5. Vo2
- 6. Vo3
- 7. lin+(1)
- 8. lin-(1)
- 9. lin+(2)
- 10. lin-(2)
- 11. lin+(3)
- 12. lin-(3)

Primary Conductor Terminal

NCTH0030	∅0.6
NCTH375B	∅0.6
NCTH0040	∅0.6
NCTH0050	∅0.8
NCTH625B	∅0.8
NCTH075A	∅1.0
NCTH0100	∅1.0
NCTH125A	∅1.6
NCTH0150	∅1.6
NCTH185A	∅1.6
NCTH0200	∅1.6
NCTH0250	∅1.6
NCTH0300	∅1.6
NCTH0350	∅1.6X2
NCTH375A	∅1.6X2
NCTH0400	∅1.6X2
NCTH0450	∅1.6X2
NCTH0500	∅1.6X2

Marking & Description



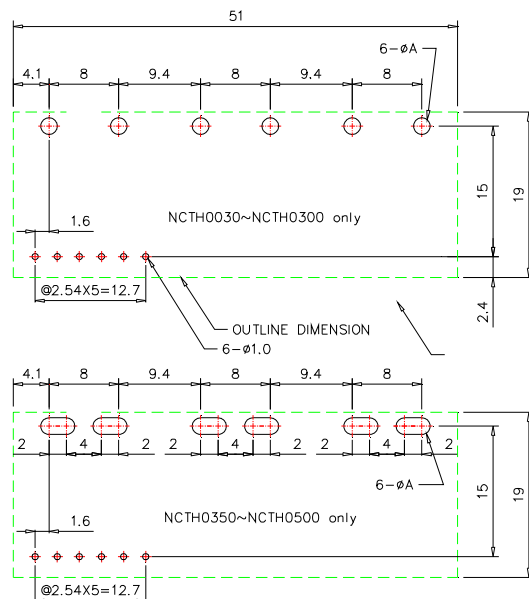
NCTH0040

- Nominal Input Current exp.: B=>-2; A=>-1; 0~9
- Nominal Input Current value
- Ex: (1) 004-0 = 4x10⁰ = 4 (Amp)
- (2) 075-A = 75x10⁻¹ = 7.5 (Amp)
- CTH: Current Transducert Type H(3in1)
- N: New Layout

F-1445XXXX

- Manufacture series number
- 45: Week 45th
- 14: Year 2014
- F: LEAD FREE

Layout Recommend:



Part Name	∅A(mm)
NCTH0030	∅1.0
NCTH375B	∅1.0
NCTH0040	∅1.0
NCTH0050	∅1.2
NCTH625B	∅1.2
NCTH075A	∅1.4
NCTH0100	∅1.4
NCTH125A	∅2.0
NCTH0150	∅2.0
NCTH185A	∅2.0
NCTH0200	∅2.0
NCTH0250	∅2.0
NCTH0300	∅2.0
NCTH0350	∅2.0X2
NCTH375A	∅2.0X2
NCTH0400	∅2.0X2
NCTH0450	∅2.0X2
NCTH0500	∅2.0X2