

DESCRIPTION

The model CTA8xx-x series of signal conditioners is designed to interface with the CTF, CTFB, CTFG and UFG series current sensors. All models provide a $\pm 15\text{Vdc}$ power supply to power the current sensor.

Two types of signal conditioning are available:

Direct - this type is recommended for dc applications, but may also be used in ac applications to provide an output which is a scaled replica of the input.

RMS - this type is recommended for ac and ac/dc applications, and provides a dc output proportional to the true RMS value of the input.

The model **CTA800-P** provides a $\pm 15\text{Vdc}$ power supply only.



5 YEAR WARRANTY

MODEL SELECTION

CTA8 - -

INPUT FROM SENSOR		SIGNAL CONDITIONING TYPE		OUTPUT TYPE		INSTRUMENT POWER	
0	100mA	0	Direct (output is a scaled replica of the input)	B	0- $\pm 1\text{mAdc}$, $\pm 15\text{Vdc}$ Supply	(blank)	115Vac
1	150mA			D	0- $\pm 10\text{Vdc}$, $\pm 15\text{Vdc}$ Supply	22	230Vac
2	300mA	1	RMS (output is proportional to the RMS value of the input)	X5	0- $\pm 5\text{Vdc}$, $\pm 15\text{Vdc}$ Supply		
				E	4-20mAdc, $\pm 15\text{Vdc}$ Supply		
				EA	0-20mAdc, $\pm 15\text{Vdc}$ Supply		
				P	$\pm 15\text{Vdc}$ Supply Only		

ORDERING INFORMATION
 EXAMPLE: Signal conditioner for use with CTFG-101 sensor (100mA output), 0-10Vdc output proportional to RMS value of the input and 115Vac instrument power.
CTA801-D

SPECIFICATIONS

INPUT (From current sensor)

Range..... See Table
 Frequency RMS models (all).....dc-100kHz
 Direct models
 "B" models.....dc-10kHz
 "D", "X5" models.....dc-100kHz
 "E", "EA" models dc

OUTPUT

Signal Conditioning and Output Type See Table
 Loading "B" models..... $\leq 10\text{k}\Omega$
 "D", "X5" models..... $\geq 2\text{k}\Omega$
 "E", "EA" models $\leq 500\Omega$
 Ripple (RMS models @ dc, $\geq 50\text{Hz}$) $< 0.5\%$ F.S.
 Response (to 90%)
 Direct "X5", "D" models..... $1\mu\text{s}$
 "B", "E", "EA" models $30\mu\text{s}$
 RMS (all) 100ms
 Field Adjustment (Gain)..... $\pm 10\%$
 Power Supply $\pm 15\text{Vdc} \pm 5\%$, $\pm 325\text{mA}$

INSTRUMENT POWER

Standard..... 115Vac $\pm 10\%$, 50/60Hz, 12VA
 "-22" models 230Vac $\pm 10\%$, 50/60Hz, 12VA

ACCURACY (Setpoint/ Linearity/ Repeatability @ 25°C)

Stand-alone (CTA8xx-x unit only)
 RMS models dc-60Hz sinewave $\pm 0.1\%$ F.S.
 dc-100kHz sinewave $\pm 1.0\%$ F.S.
 Direct models
 "D", "X5" dc-60Hz sinewave $\pm 0.1\%$ F.S.
 dc-100kHz sinewave $\pm 1.0\%$ F.S.
 "B" dc-60Hz sinewave $\pm 0.1\%$ F.S.
 dc-10kHz sinewave $\pm 1.0\%$ F.S.
 "E", "EA" dc $\pm 0.1\%$ F.S.
 Calibrated Sets (CTA8xx-x with Sensor)
 CTF(x)-xxx dc-60Hz same as sensor
 UFG-xxx dc-60Hz $\pm 0.1\%$ F.S.
 (For best accuracy use CTA800-P with separate load resistor. Reference UFG-xxx specification sheet.)

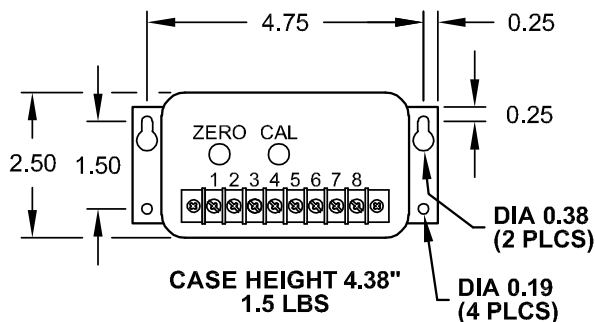
DIELECTRIC TEST

Inst. Power to Input/Output/Enclosure 2200Vac
 Enclosure to Input/Output 500Vac

TEMPERATURE

Operating Range 0 to 70°C
 Effect $\pm 0.01\%/^{\circ}\text{C}$
 Storage..... Range -25 to 85°C

DIMENSIONS

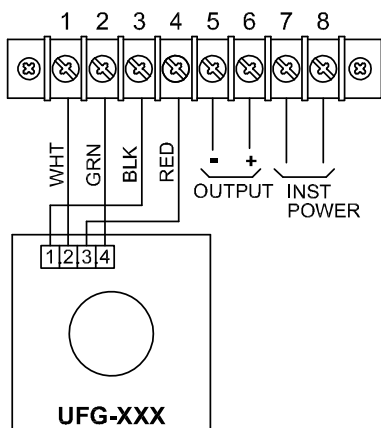


All dimensions in inches. Tolerance = ± 0.03 (unless otherwise specified)

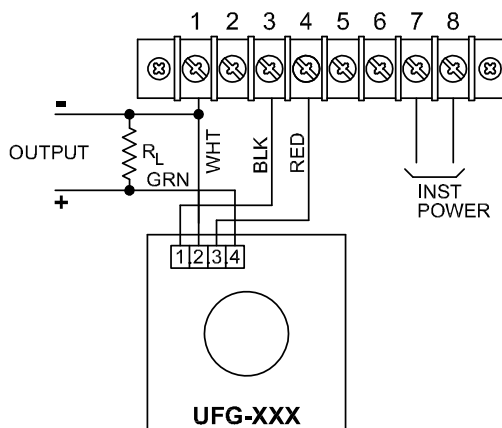
Dwg# 0902-01005-B Rev -A

UFG-xxx CONNECTION DIAGRAMS

**WITH SIGNAL CONDITIONING
CTA8XX-X**



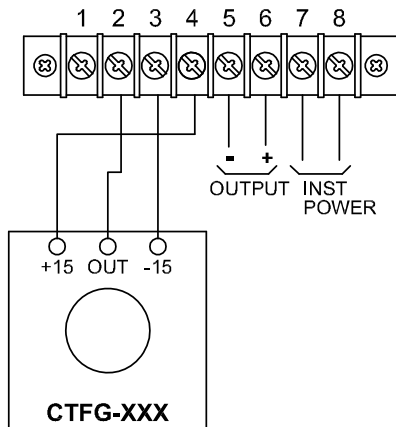
**WITH POWER SUPPLY ONLY
CTA800-P**



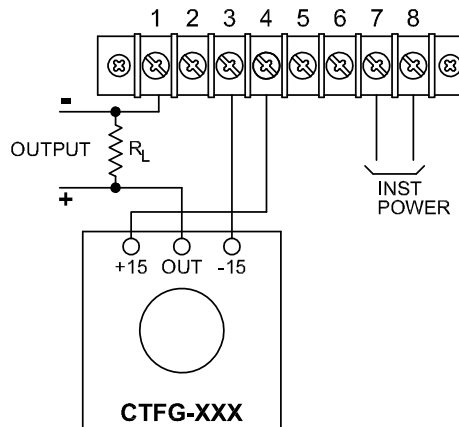
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CTFG-xxx CONNECTION DIAGRAMS

**WITH SIGNAL CONDITIONING
CTA8XX-X**



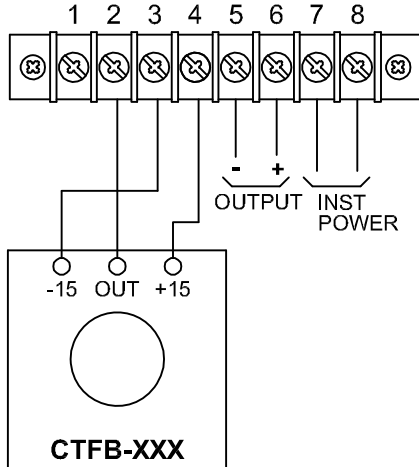
**WITH POWER SUPPLY ONLY
CTA800-P**



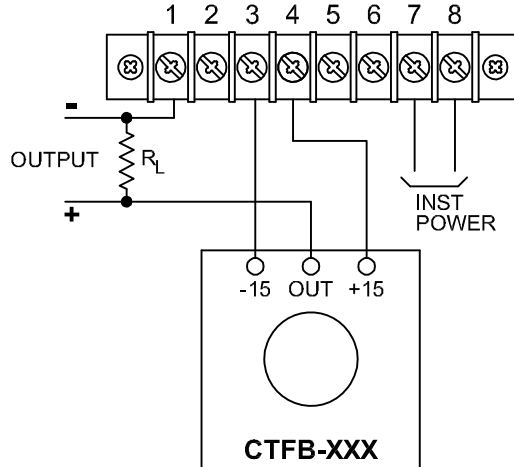
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CTFB-xxx CONNECTION DIAGRAMS

**WITH SIGNAL CONDITIONING
CTA8XX-X**



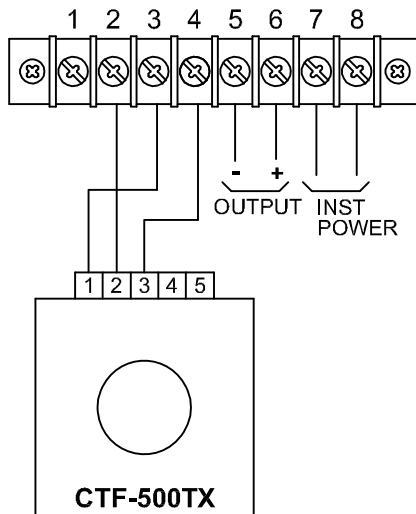
**WITH POWER SUPPLY ONLY
CTA800-P**



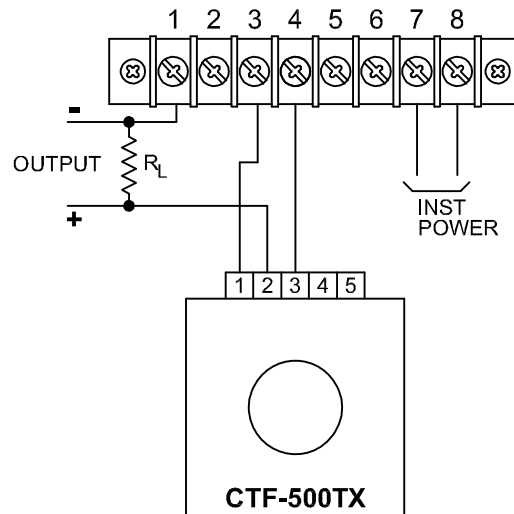
Dwg# 0902-01005-B Rev -A

CTF-500Tx CONNECTION DIAGRAMS

**WITH SIGNAL CONDITIONING
CTA8XX-X**



**WITH POWER SUPPLY ONLY
CTA800-P**



Dwg# 0902-01005-B Rev -A