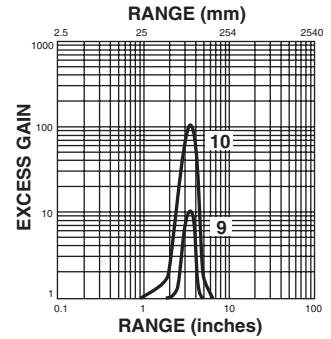
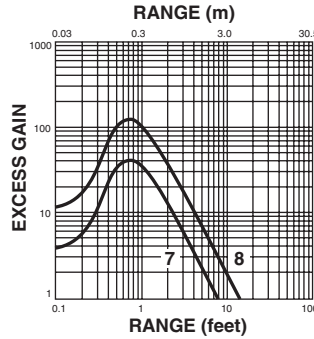
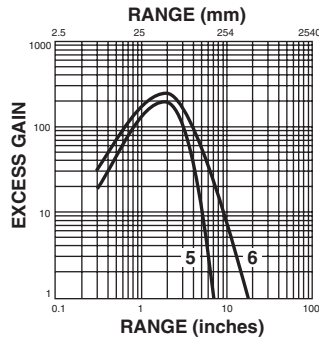


August 2007


Excess Gain

Diffuse Reflective
Ranges based on a 90% reflectance white card.

- 5. 1380B
- 6. 1381B
- 7. 1382B
- 8. 1384B
- 9. 1383R
- 10. 1383B




Model Selection — Control Units (Connection is by Terminal Wiring)

	Type	Input		Output					Catalog Number	
		Voltage	VA	Type/Response Time	ON-State	Maximum Load Current	OFF-State Leakage	Surge Current		
	High Current	97 – 130V AC, 50/60 Hz	Less than 4.5 VA	TRIAC — Operates as a SPST solid-state relay for switching non-capacitive AC loads up to 1A; response time is 8 mS maximum	< 1.5V from 100 mA to 1A	1A at 75°F — derated linearly to 0.5A at 130°F	< 2 mA at 120V AC	30A max. for 1/2 cycle; 10A for 1/2 second	8880C-6501	
		204 – 255V AC, 50/60 Hz	Less than 4.5 VA				< 4 mA at 230V AC			8881C-6501
		22 – 26V AC, 50/60 Hz	Less than 4.5 VA				< 0.35 mA at 24V AC			
	Low Leakage ^①	22 – 26V AC, 50/60 Hz	Less than 4.5 VA	VMOS — Operates as a SPST solid-state switch for loads up to 50 mA — switches up to 188V DC or 132V AC; response time is 2 mS maximum	< 2.5V from 5 mA to 50A	50 mA _{RMS}	< 20 μA at 24V _{RMS}	250 mA for 1 cycle; 100 mA for 1 second	8884C-6502	
		97 – 130V AC, 50/60 Hz	Less than 4.5 VA				< 50 μA at 110V _{RMS}			8880C-6502
		204 – 255V AC, 50/60 Hz	Less than 4.5 VA				< 200 μA at 240V _{RMS}			
DC	10 – 30V DC ^②		Complementary NPN; response time is instantaneous	< 0.5V at max. current rating 200 mA	200 mA	Output shuts off up to 30V DC at less than 20 μA leakage	—	8882B-6501		

① Extremely low leakage in OFF-state makes this unit ideal for use as an input to a programmable controller.

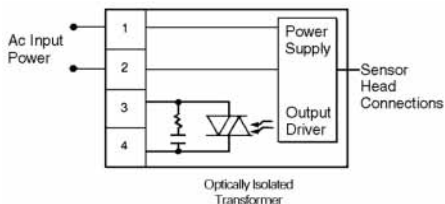
② Unregulated, derated to 10 – 20V DC above 115°F, less than 90 mA.

 Fast turn product with typical one business day lead-time to shipment.

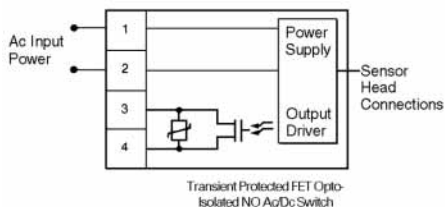
August 2007

Wiring Diagrams — Control Units

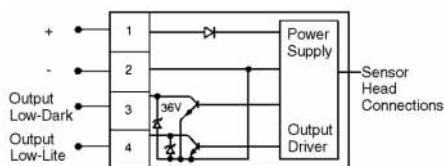
Triac Output:
8880C-6501,
8881C-6501,
8881C-6502 and
8884C-6501



VMOS Output:
8880C-6502 and
8884C-6502



DC: 8882B-6501



Specifications — Assembled Sensors

Description	Specification
Response Time: High Current Low Leakage Except Cat. No. 8881C-6502 Cat. No. 8881C-6502 DC	8 mS maximum 2 mS maximum 8 mS maximum Instantaneous
Sensitivity Adjustment	20:1 ratio nominal
Operating Temperature	-4° to 131°F (-20° to 55°C)
Humidity	95% relative humidity, non-condensing
Material of Construction	Housing: Noryl® ①; Lens: Clear polycarbonate ①
Sunlight Immunity	10,000 foot-candles
Vibration	5g or 0.06 inch displacement, whichever is less, over 20 Hz to 2 kHz
Shock	15g minimum for 1 mS
Enclosure Ratings	NEMA 1, 3, 4, 12 and 13 ②
Power On Condition	No False Pulse

① Avoid exposing to chlorinated, halogenated or aromatic hydrocarbons.

② NOTE: Our products conform to NEMA tests as indicated, however, some severe washdown applications can exceed these NEMA test specifications. If you have questions about a specific application, contact Eaton's Cutler-Hammer Sensor Applications Department at 1-800-426-9184.