



Daylighting Control Photocell Sensors  
DLCPCI, DLCPCO-DLCPCA and DLCPCS

Installation Instructions

DESCRIPTION

Current Lighting Controls’ daylighting control photocell sensor series, the DLCPC-, belong to a sensor family that monitors either task or ambient light levels precisely. The light level measurement is converted to an analog signal that is sent to the controller of the Energy Management Systems (EMS.)

The DLCPC- series allow the Heating, Ventilation and Air Conditioning Energy Management System (HVAC/EMS) to control area lighting by switching banks of light on and off, or provide continuous signals to electronic dimming ballasts for fluorescent fixtures.

The indoor sensor has a flat Fresnel lens that looks downward in a 60 degree cone of reference to measure actual light on the work surface. The Fresnel lens is used to reduce the influence of stray light striking the sensor from nearby windows or incidental side lighting. The outdoor sensor is shielded in a weatherproof housing with a visor for shading and lens protection. The atrium and skylight sensors both use diffusing dome lenses to provide a 180 degree angle of photodiode response.

ADJUSTABILITY

The sensor sensitivity is adjustable. The maximum output voltage can be matched to the maximum light level, in order to provide the highest resolution signal to the EMS. Model measurement ranges include 0-750, 2,500 or 7,500FC (foot candles.)

TECHNICAL DATA

Operating temperature: 13°F to 140°F (-11°C - 60°C)  
Sensor Type: Blue-enhanced photo diode  
Sensor Ranges:

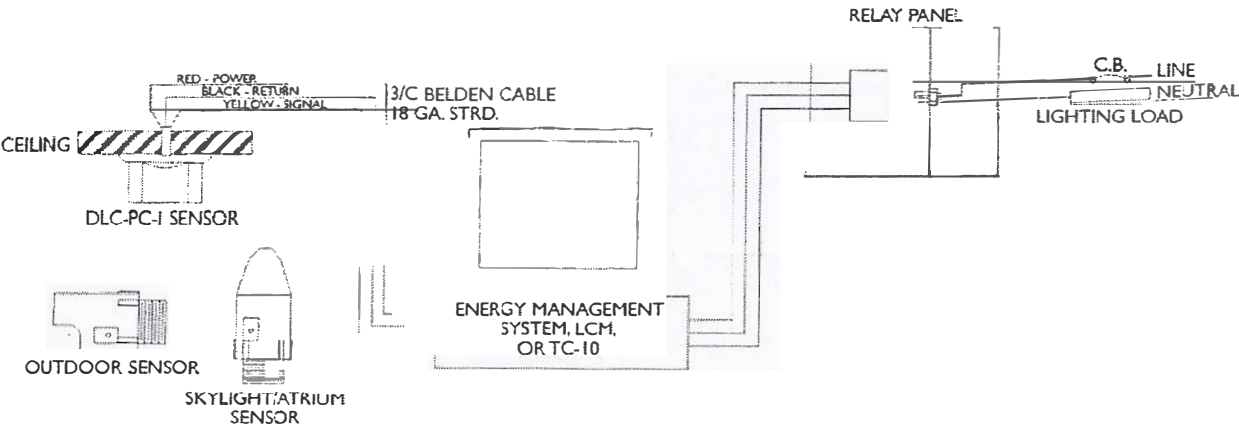
Model #	Housing	Minimum	Adjustable Maximum
DLCPCI	Indoor	0FC	5-750FC
DLCPCO	Outdoor	0FC	5-750FC
DLCPCA	Atrium	2FC	200-2,500FC
DLCPCS	Skylight	10FC	1,000-7,500FC

Input Voltage: 5, 10, 12, 24 VDC  
Output Voltage: 5 VDC or 10VDCfull output  
Output Offset: 0 VDC or 1VDC as total darkness  
Wiring: Three conductor 18 gauge standard cable  
Red: Positive DC input  
Black: DC Common  
Yellow: Output to EMS

DLCPC- SENSOR SELECTION

Model#	Lens	Filter	Mounting	Housing	Orientation	Height	Diameter
DLCPCI	Fresnel	Clear	Ceiling	Indoor	Downward	2.00"	1.23"
DLCPCO	Flat	Clear	1/2' IPT	Outdoor	Horizontal	1.85"	1.28"
DLCPCA	Dome	Opaque	1/2' IPT	Atrium	Upward	2.25"	1.28"
DLCPCS	Dome	Dark	1/2' IPT	Skylight	Upward	2.25"	1.28"

WIRING SCHEMATIC



Nela Park, 1975 Noble Road  
East Cleveland, OH 44112 USA  
currentlighting.com