



Building Automation, Inc.

Daylighting Control Photocell Sensors DLCPCI, DLCPCO-DLCPCA and DLCPCS

Installation Instructions

DESCRIPTION

Hubbell Building Automation's 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 10VDC full output

Output Offset: 0 VDC or 1VDC as total darkness

Wiring: Three conductor 18 gauge standard cable

Red: Positive DC input

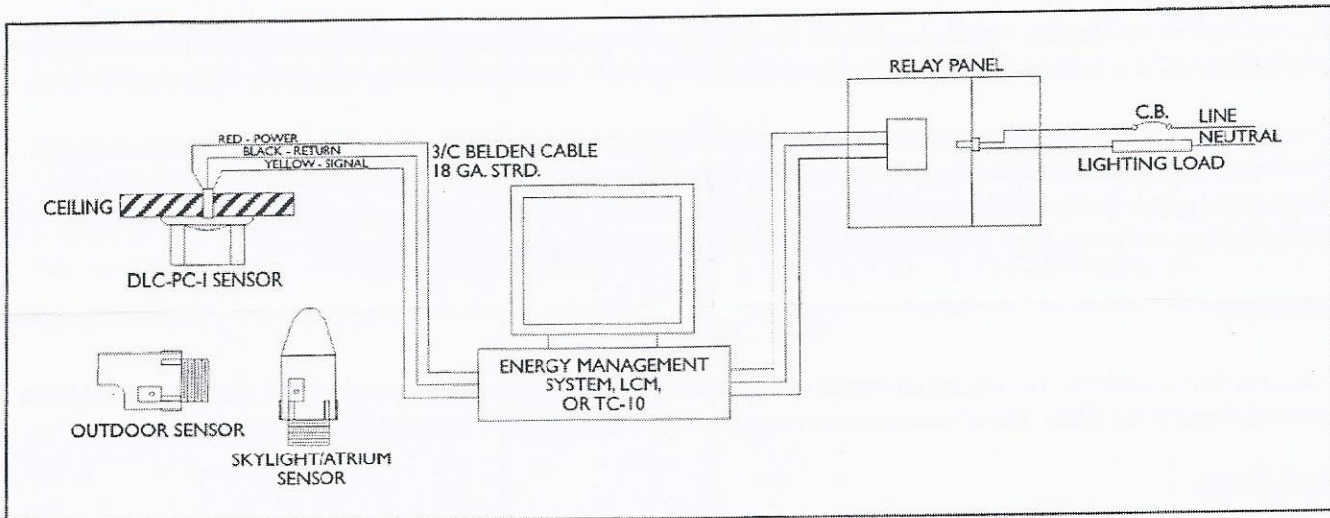
Black: DC Common

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



Building Automation, Inc.

Hubbell Building Automation, Inc.
 9601 Dessau Road • Building One • Suite 100 • Austin, Texas 78754
 512-450-1100 • 512-450-1215 Fax
www.hubbell-automation.com