The PCR Series of photo control is a combination of precision electronic circuitry, electromechanical output, and unique molded plastic housing. Designed and built to meet the demands of the most rigorous requirement of tower and obstruction lighting control, each unit is factory calibrated to meet FAA and FCC specifications. Electronic circuit, output contactor, and terminal block are all contained within front plastic housing. Edge support molded into the bottom edge of housing allows easy wiring of new and existing installations. Available with or without cast aluminum junction box.

For more information see:
Appendix B, page 167, Figure 33 for dimensional drawing.
Appendix C, page 172, Figure 36 for connection diagram.

Operation

When the amount of light sensed falls below the actuation level for energization, the output relay energizes. Conversely, when the amount rises above the actuation level for de-energization, the output relay de-energizes.

Features:

- Automatic lighting circuit operation: dusk to dawn
- Meets FAA/FCC requirements for obstruction lighting
- Two 20A load contacts
- Direct replacement of popular photo controls
- Time delay eliminates contact chatter

Available Models:

PCR10
PCR11
PCR12
PCR13

Order Table:

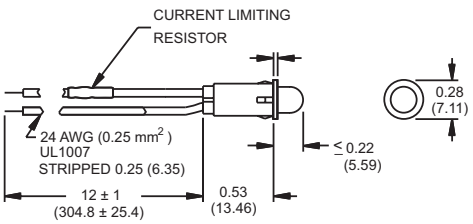
Input	Description	Part Number
120VAC	Photo Control without aluminum box	PCR10
230VAC	Photo Control without aluminum box	PCR12
120VAC	Photo Control with aluminum box	PCR11
230VAC	Photo Control with aluminum box	PCR13

Conversion Chart		
	REPLACES	
Part Number	Hughey & Phillips	Crouse Hinds
PCR11	PC800 120V	PEC52010
PCR13	PC800 240V	PEC52010-1

Specifications

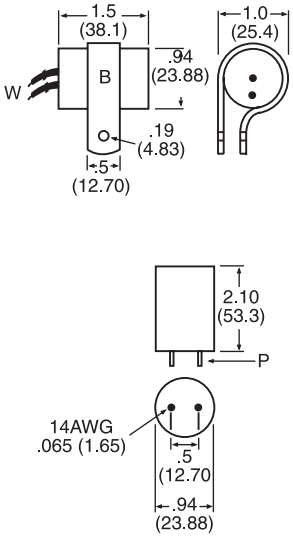
Indication	LED indicates power is applied
Light Actuation Levels (Factory Calibrated)	Energized: ≤ 35 fc De-energized: ≥ 60 fc
Voltage	120VAC or 230VAC
AC Line Frequency	50/60Hz
Tolerance 120 & 230VAC	-20% - 10%
Output Rating	Two SPST NO 20A contacts 1 hp @ 120VAC 2.5 hp @ 240VAC
Termination	Screw terminals for up to #8 (M4 x 0.7) AWG wire
Dimensions	ABS plastic housing with gasket seal. Multiple knockout holes for optional mounting to Crouse Hinds or Hughey & Phillips cast aluminum electrical boxes.

FIGURE 24



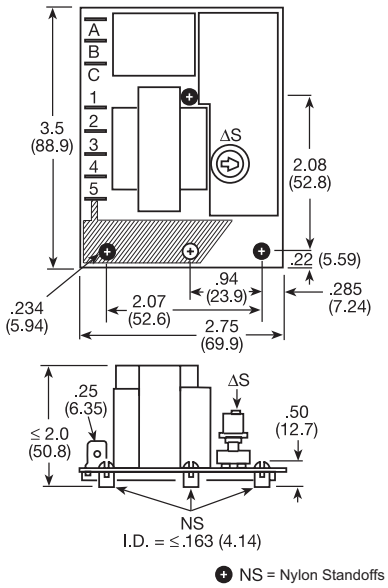
LPM

FIGURE 25



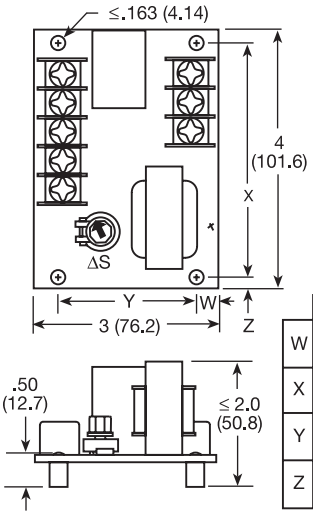
MSM

FIGURE 26



LLC1

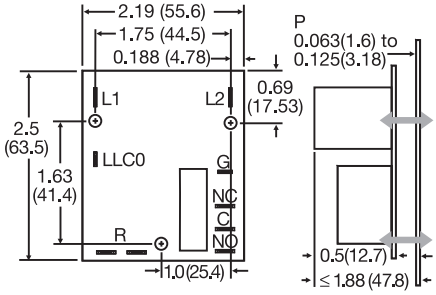
FIGURE 27



	N	C
W	.44 (11.35)	.25 (6.35)
X	3.62 (91.9)	3.5 (88.9)
Y	2.12 (53.8)	2.5 (63.5)
Z	.19 (4.83)	.25 (6.35)

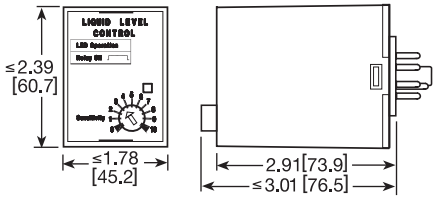
LLC2

FIGURE 28



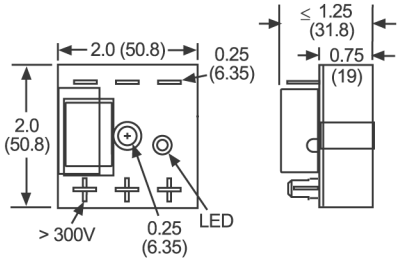
LLC8

FIGURE 29



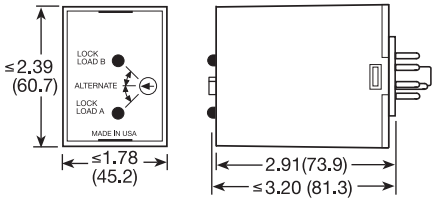
LLC5

FIGURE 30



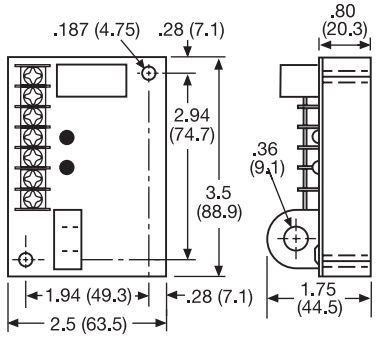
TVM; TVW

FIGURE 31



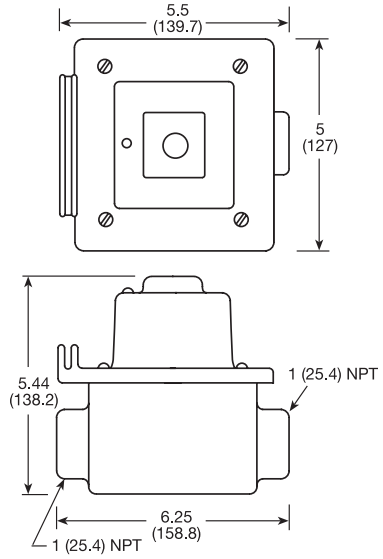
ARP

FIGURE 32



FB; SCR

FIGURE 33

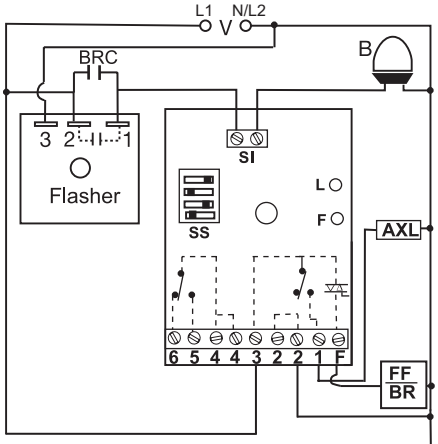


PCR

inches (millimeters)

Appendix C - Connection Diagrams

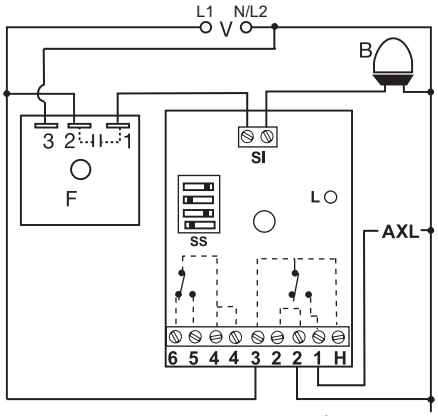
FIGURE 34 - FB9L



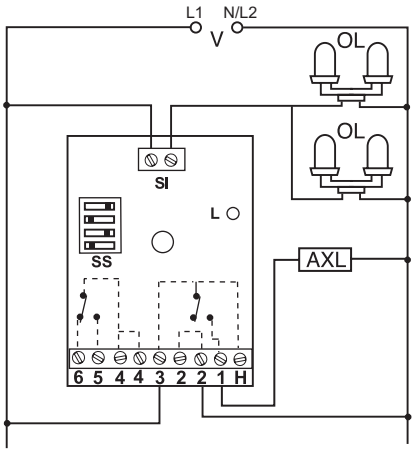
V = Voltage
B = LED Beacon
SS = Selector Switch
SI = Sensor Input
L = Indicator
F = Flasher Failure LED
AXL = Auxiliary Load/Alarm
FF = Flasher Failure/Bypass Relay
BRC = Bypass Relay Contacts

FIGURE 35 - SCR9L

Beacon Connection Diagram



Obstruction Lamp Connection Diagram



V = Voltage
B = Beacon Lamps
SS = Selector Switch
L = LED Indicator
F = Flasher
AXL = Auxiliary Load/Alarm
OL = Obstruction Lamps
SI = Sensor Input
H = "3" Spare AC Hot Connection (2A max.)

FIGURE 36 - PCR Series

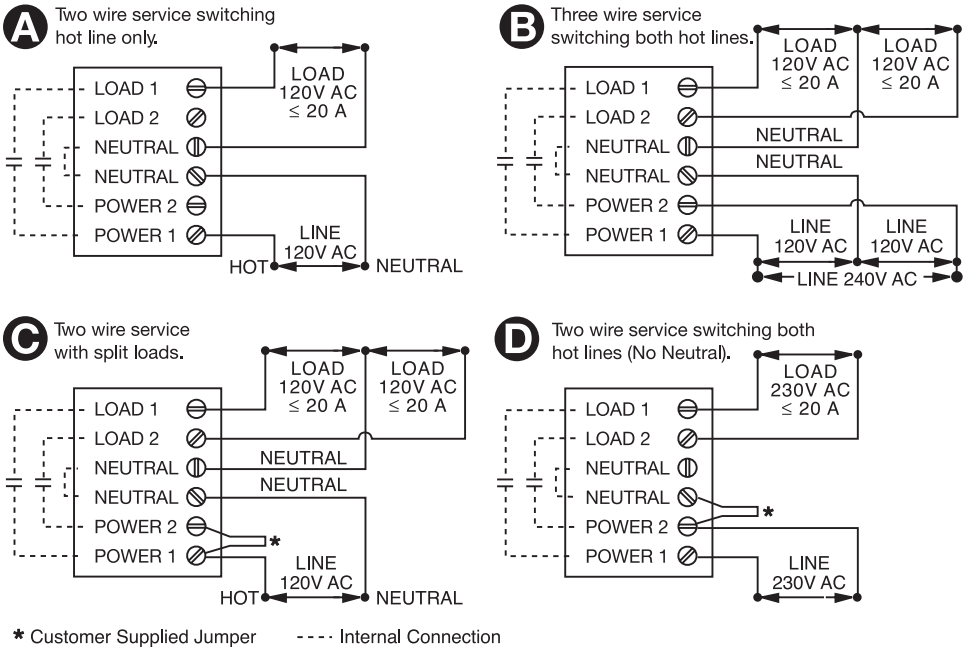
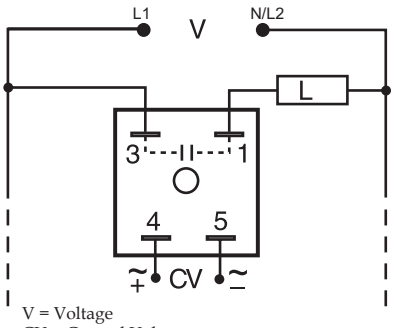


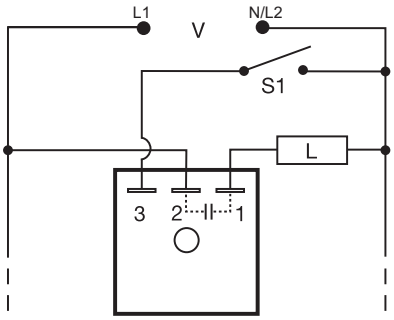
FIGURE 37 - SIR1/SIR2 Series



V = Voltage
CV = Control Voltage
R = Reset
NC = Normally Closed Output
NO = Normally Open Output
= Undefined time

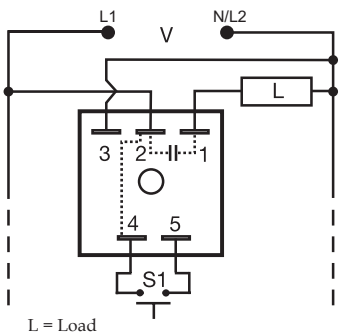
Load may be connected to terminal 3 or 1. Note: Normally open output is shown. Normally closed output is also available.

FIGURE 38- SLR Series



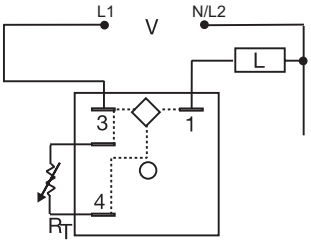
L = Load
S1 = Initiate Switch
Note: Normally open output is shown. Normally closed output is also available.

FIGURE 39 - NLF1/NLF2 Series



L = Load
S1 = Control Switch
Internal connections between terminals 2 & 4.

FIGURE 40 - PHS Series



Triac Output Device
V = Voltage
L = Load
R_T = External Adjustment