16246.000 Minnesota Multi-Purpose Stadium

Submittal Number: 262726-PD001
Title: Wiring Devices

HKS

401 Chicago Ave
Minneapolis MN 55415

Project ID: 16246.000
Owner: Minnesota Sports Facility Authority
Construction Team: Mortenson
Design Team: HKS Inc.

Date Due: 01/26/2015
Date Issued: 01/12/2015
Substitution: No

Information

Types: Product Data
Trades: Electrical - Division 26
Categories: N/A
Subcontractor/Manufacturer:

Stamps

NO EXCEPTION TAKEN ☐ MAKE CORRECTIONS NOTED ☒
REJECTED ☐ REVISE AND RESUBMIT ☐
SUBMIT SPECIFIED ITEM ☐

CHECKING IS ONLY FROM GENERAL CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT AND GENERAL COMPLIANCE WITH THE INFORMATION GIVEN IN THE CONTRACT DOCUMENTS. ANY ACTION SHOWN IS SUBJECT TO THE REQUIREMENTS OF THE PLANS AND SPECIFICATIONS. CONTRACTOR IS RESPONSIBLE FOR: DIMENSIONS WHICH SHALL BE CONFIRMED AND CORRELATED AT THE JOB SITE; FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION; COORDINATION OF HIS WORK WITH THAT OF ALL OTHER TRADES AND THE SATISFACTORY PERFORMANCE OF HIS WORK.

M-E ENGINEERS, INC.
CONSULTING MECHANICAL &
ELECTRICAL ENGINEERS

DATE 01/16/15 BY Matt O'Boyle

Device colors were provided by Mark Timm.

Receptacle Comments:
All receptacles to be white with stainless steel cover plates unless otherwise noted.
Receptacles to be black when they are in a wood panel, with black cover plates.
Receptacles to be grey when they are in CMU walls, with stainless steel cover plates.
Submit duplex/USB receptacle in next submittal.

Special Receptacles:
Food Service equipment provider is to match receptacle configurations/manufacturer provided in this submittal.

Light Switches:
Normal power light switches to be white with stainless steel cover plates.
Emergency power light switches to be red with stainless steel cover plates.

Wiring Devices

Minnesota Multi-Purpose Stadium

Minneapolis, MN

Specification 26 27 26

1/9/15

Submitted To:
Ben Dupslaff
Mortenson Construction
700 Meadow Lane
Minneapolis, MN

Submitted By:
Scott Smith
Construction Executive
Build 23

APPROVED AS NOTED
Date 1/9/15 Initials SPS

BUILD 23
Approval of these shop drawings does not release the supplier/subcontractor from its obligation to furnish the materials/equipment in complete accordance with the plans and specifications for this project.

CHECKED
By: ebecker
M.A. Mortenson Company
01/12/2015

This check is only for conformance to and compliance with the Contract documents, and does not in any way relieve the Subcontractor or Supplier of the responsibility to verify accuracy of details, quantities and dimensions. The Subcontractor or Supplier remains responsible for dimensions to be confirmed and correlated at the Project Site, for information that pertains solely to fabrication process or to techniques of construction and for cordination of its work with others.

Wiring Devices Submittal - Mort Review.pdf

HUBBELL
Wiring Device-Kellems

Submittal

Table of Contents

Straight Blade Devices
20A, 125V, 2 Pole, 3 Wire Grounding
HBL® Extra Heavy Duty Specification Grade Duplex Receptacle

HUBBELL

Features

- Back wired ground terminal allows faster, easier installation
- One-piece brass integral ground strap
- Finder Groove Face
- Deep body design with circuit ID face

Ordering Information

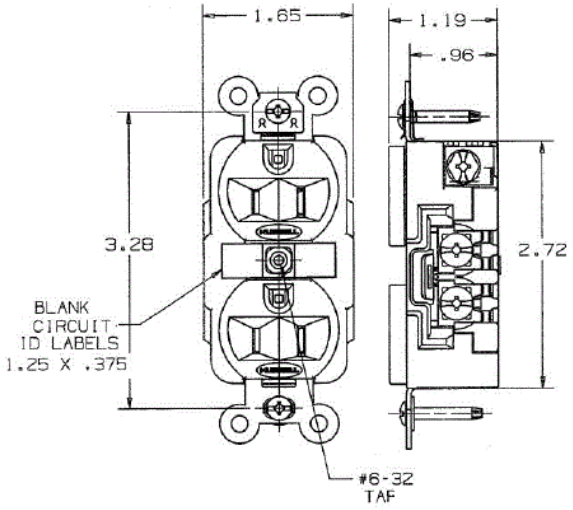
Description	Device Color	UPC	Catalog Number
Deep body design with circuit ID face. Back and side wired.	Ivory	783585435282	HBL5362I

Listings

UL Listed to UL498 File No. E2186
Certified to CSA 22.2, No. 42 File 285
Fed. Spec. W-C-596
NEMA® WD-6 Compliant

Specifications

Face	Nylon
Base	PBT
By-Pass Power Contacts	.036". (.9) Brass
Ground Contacts	.031 in. (.8) Brass
Clamping Plate	Nickel plated brass
Terminal Screws	Plated brass
Mounting Strap	.050 in. (1.3) Brass
Automatic Self-grounding Clip	Stainless steel
Mounting Screws	Zinc plated steel



Performance

Electrical

Current Interrupting	Certified for current interrupting at full rated current
Dielectric Voltage	Withstands 2,000V minimum

Mechanical

Product Identification	Ratings are a permanent part of the device
Terminal Accommodation	#14-#10 AWG copper stranded or solid conductor only
Terminal Identification	Terminals identified in accordance with UL 498 and CSA

Environmental

Flammability	Top: UL 94V-2, Base: UL 94V-0
Operating Temperatures	Maximum continuous 75°C; minimum -40°C (w/o impact)

Accessories

Wallplate or Weatherproof Cover Duplex Opening

Resources

Customer Use Drawing
eCatalog

Dimensions in Inches (mm)

Hubbell Wiring Device-Kellems • Hubbell Incorporated (Delaware) • 40 Waterview Drive • Shelton, CT 06484
Phone (800) 288-6000 • Fax (800) 255-1031 • Specifications subject to change without notice.

HUBBELL® Wiring Device-Kellems

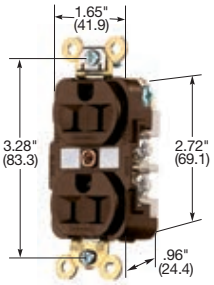
HBL® Extra Heavy Duty, Specification Grade, Receptacles

15A 125V
NEMA 5-15R
UL CSA
0.5 HP

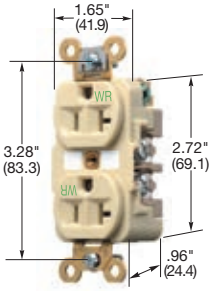
20A 125V
NEMA 5-20R
UL CSA
1 HP

Duplex

Description	Color	Catalog Number	
Flush, nylon face, back and side wired.	Black	**HBL5262BK**	**HBL5362BK**
	Blue	**–**	**HBL5362BL**
	Brown	**HBL5262**	**HBL5362**
	Gray	**HBL5262GY**	**HBL5362GY**
	Ivory	**HBL5262I**	**HBL5362I**
	Red	**HBL5262R**	**HBL5362R**
	White	**HBL5262W**	**HBL5362W**
Isolated ground[Δ].	Gray	**IG5262GY**	**IG5362GY**
	Ivory	**IG5262I**	**IG5362I**
	Orange	**IG5262**	**IG5362**
	Red	**IG5262R**	**IG5362R**
	White	**–**	**IG5362W**
Non-isolated ground, bulk pack of 100.	Orange	**–**	**HBL5362M4**
Weather Resistant, flush, nylon face, back and side wired.	Black	**HBL5262BKWR**	**HBL5362BKWR**
	Brown	**HBL5262WR**	**HBL5362WR**
	Gray	**HBL5262GYWR**	**HBL5362GYWR**
	Ivory	**HBL5262IWR**	**HBL5362IWR**
	Red	**HBL5262RWR**	**HBL5362RWR**
	White	**HBL5262WWR**	**HBL5362WWR**
Corrosion resistant.	Ivory	**HBL52CM62I**	**–**
	Yellow	**HBL52CM62**	**HBL53CM62**
Weather Resistant, Isolated ground[Δ].	Gray	**IG5262GYWR**	**IG5362GYWR**
	Ivory	**IG5262IWR**	**IG5362IWR**
	Orange	**IG5262WR**	**IG5362WR**
	Red	**IG5262RWR**	**IG5362RWR**
	White	**–**	**IG5362WWR**
On 4 in. (101.6) round cover.	Brown	**HBL5282**	**–**



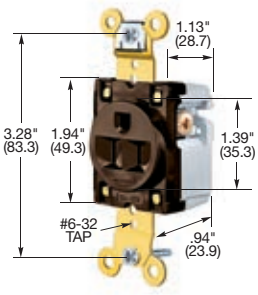
HBL5262



HBL5362IWR

Single

Description	Color	Catalog Number	
Flush, nylon face, back and side wired.	Black	**HBL5261BK**	**HBL5361BK**
	Brown	**HBL5261**	**HBL5361**
	Gray	**–**	**HBL5361GRY**
	Ivory	**HBL5261I**	**HBL5361I**
	White	**–**	**HBL5361W**
Isolated ground[Δ].	Orange	**IG5261**	**IG5361**
Weather Resistant, Isolated ground[Δ].	Orange	**IG5261WR**	**IG5361WR**
Ring terminal connection.	Brown	**HBL5261RT**	**HBL5361RT**
	White	**HBL5261WRT**	**–**
	Yellow	**HBL5261YRT**	**–**
Weather Resistant, flush, nylon face, back and side wired.	Brown	**HBL5261WR**	**HBL5361WR**
	Gray	**–**	**HBL5361GRYWR**
	Ivory	**HBL5261IWR**	**HBL5361IWR**
Corrosion resistant.	Yellow	**HBL52CM61**	**HBL53CM61**
Panel mount on 1.94 in. (49.3) centers.	Brown	**HBL5284**	**HBL5357**



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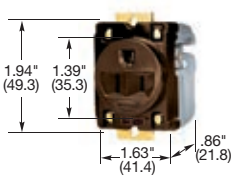
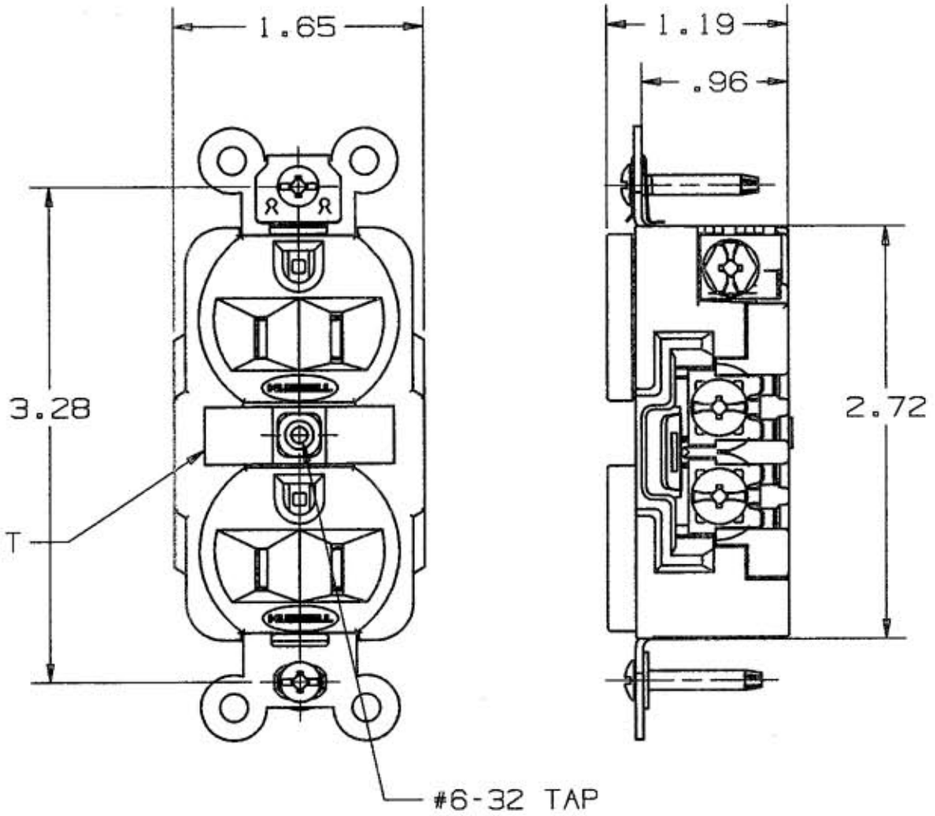


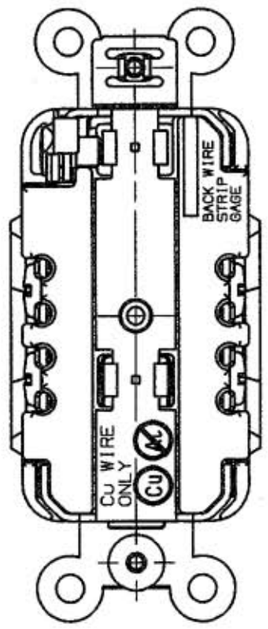
HBL5284

Note: [Δ]*See section M for additional information on isolated ground devices..*
See pages A-46 and A-47 for accessories.
See page Tech-10 for Weather Resistant descriptions.
See section N for wallplates.

Dimensions in Inches (mm)

M-8225 3





CORROSION RESISTANT (SEE NOTE 1)		HEAVY DUTY INDUSTRIAL							
YELLOW	IVORY	BROWN	BLACK	GRAY	IVORY	RED	WHITE	CONFIGURATION	RATING
HBL52CM62	HBL52CM62I	HBL5262	HBL5262BK	HBL5262GY	HBL5262I	HBL5262R	HBL5262W		15A, 125V
HBL53CM62	———	HBL5362	HBL5362BK	HBL5362GY	HBL5362I	HBL5362R	HBL5362W		20A, 125V
———	———	HBL5662	———	———	HBL5662I	———	———		15A, 250V
———	———	HBL5462	———	HBL5462GY	HBL5462I	———	———		20A, 250V

NOTE 1: THE CM VERSION RECEPTACLES HAVE NICKEL PLATED BRASS BRIDGES. CLAMP PLATES AND CONTACTS ARE BRASS WITH NICKEL-TIN PLATING. MOUNTING SCREWS ARE STAINLESS STEEL AND RIVETS ARE SILICON BRONZE.

CODE 74545

LIST OF PARTS

DESCRIPTION	MATERIAL	FINISH
FACE	NYLON	
BRIDGE	BRASS	SEE NOTE 1
CONTACTS	BRASS	SEE NOTE 1
CLAMP PLATES	BRASS	SEE NOTE 1
BASE	REINF.POLYESTER	
WASHER	FIBER	
GROUND CLIP	STAIN. STL.	
MOUNTING SCREWS	STEEL	SEE NOTE 1
RIVET	BRASS	SEE NOTE 1
BINDING SCREWS	BRASS	

DIMENSION SHEET FOR CAT. NO.
SEE TABLE

REPAIRABLE ☐ NON-REPAIRABLE ☒

SYM	REVISIONS	APP	DATE
3	6/25/01 ADDED NOTE 1 TO DWG. IN TABLE, ADDED "CORROSION RESISTANT SEE NOTE 1" TITLE TO YELLOW AND IVORY. ADDED "SEE NOTE 1" TO BILL OF MATERIAL. PER DCN 8698 SPN	DB	6/26/01
2	ADDED ID LABELS & TABLE PER DCN #7773. AMZ	DB	7/25/00
1	RELEASED PER DCN7433	NB	2/9/00

THE DESIGN AND DIMENSIONS OF THE PRODUCT SHOWN ON THIS DRAWING ARE SUBJECT TO CHANGE WITHOUT NOTICE

TITLE

DUPLEX RECEPTACLE

B

M-8225

3

TOLERANCES UNLESS OTHERWISE SPECIFIED
FRACTIONS ±1/64
DECIMALS ±.005
ANGLES ±2°

WIRING DEVICE-KELLEMS
HUBBELL INCORPORATED
BRIDGEPORT, CT

DR. BY SRE	APP. BY NB
TR. BY	SCALE 1:1
CHK'D BY NB	DATE 2/9/00

STRAIGHT BLADE RECEPTACLES

Installation Instructions

English

GENERAL INFORMATION

NOTICE For installation by a qualified electrician in accordance with national and local electric codes and the following instructions.

⚠WARNING RISK OF ELECTRICAL SHOCK

- Disconnect power before installing.
- Never wire energized electrical components.
- Use copper conductors only.
  CU AL

GENERAL RECEPTACLE WIRING INSTRUCTIONS

SIDEWIRE - Remove 3/4 inch (19 mm) of insulation from conductors. Wrap conductor securely around terminal screw.

BACKWIRE - Strip conductors to gage on device and insert in holes on back.

TERMINAL CAPACITY

15A : 14 – 10 AWG
20A : 12 – 10 AWG

Tighten terminal screws securely to 12 - 14 lb-in.

FOR ISOLATED GROUND RECEPTACLES

The grounding contact on an isolated ground device has been purposely insulated from the mounting means to reduce electromagnetic interference. The mounting strap is provided with an approved grounding clip for use with grounded metallic boxes. For proper use, the mounting strap must be grounded.

NOTICE Care is important in specifying a system with receptacle insulated grounds since the grounding impedance is controlled only by the grounding wires and does not benefit functionally from any parallel grounding paths.

PRISES À LAME DROITE

Directives de Montage

Français

RENSEIGNEMENTS GÉNÉRAUX

AVIS Doit être installé par un électriciens qualifiés conformément aux codes nationaux et locaux de l'électricité et selon les instructions suivantes. instructions.

⚠AVERTISSEMENT RISQUE DE CHOC ÉLECTRIQUE

- Débracher le circuit avant l'installation.
- Ne jamais câbler des composants électriques sous tension.
- Employer uniquement des conducteurs en cuivre.
  CU AL

INSTRUCTIONS GENERALES DE CÂBLAGE

CÂBLAGE LATÉRAL - Enlever l'isolant des conducteurs 19mm. Enrouler solidement le conducteur autour de la vis de borne.

CÂBLAGE ARRIÈ - Enlever l'isolant des conducteurs de jauger sur le dispositif et l'insert des trous sur le dos.

CALIBRES DE CONDUCTEURS ASMISSIBLES

15A : 14 – 10 AWG
20A : 12 – 10 AWG

Serrer les vis de borne á un couple de 1.4 - 1.6 N-M.

POUR PRISE DE TERRE D'ISOLEMENT

Le contact de terre sur un dispositif de terre isolée a été délibérément isolée des moyens de montage pour réduire les interférences électromagnétiques. L'étrier de montage est fourni avec un clip de mise à la terre approuvé pour une utilisation avec des boîtes métalliques à la terre. Pour une bonne utilisation, la sangle de fixation doit être mis à la terre.

AVIS Soins est important dans la spécification d'un système avec motifs isolés prise depuis l'impédance de mise à la terre est contrôlé uniquement par les fils de mise à la terre et ne bénéficie pas fonctionnellement de tous les chemins de terre parallèles.

TOMACORRIENTES DE HOJA RECTA

Instrucciones de Instalación

Español

INFORMACIÓN GENERAL

AVISO Para ser instalado por un electricista calificado, de acuerdo con los códigos eléctricos nacionales y locales, y siguiendo estas instrucciones.

⚠ ADVERTENCIA RIESGO DE CHOQUE ELÉCTRICO

- Desconectar la corriente antes de la instalación.
- No conectar nunca componentes eléctricos en un circuito con corriente.
- Usar solamente conductores de cobre.
  CU AL

INSTRUCCIONES GENERALES DE CABLEADO

CABLEADO LATERAL - Quitar el aislamiento de los conductores 19mm. Enrollar firmemente el conductor alrededor del tornillo del borne.

CABLEADO POSTERIOR - Quitar el aislamiento de los conductores para calibrar el dispositivo e insertar en lo agujeros en la parte posterioir.

CALIBRES DE CONDUCTORES ASMISIBLES

15A : 14 – 10 AWG
20A : 12 – 10 AWG

Adjustar los tornillos de los bornes con un par de 1.4 - 1.6 N-M.

PARA LOS RECEPTÁCULOS CON TIERRA AISLADA

El contacto de puesta a tierra en un dispositivo de toma de tierra aislada ha sido deliberadamente aislado de los medios de montaje para reducir la interferencia electromagnética. La correa de montaje está provisto con un clip de conexión a tierra aprobado para su uso con cajas metálicas conectadas a tierra. Para un uso adecuado, la correa de montaje debe estar conectado a tierra.

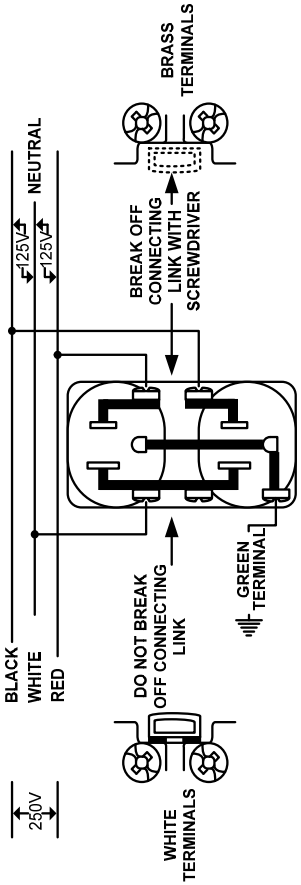
AVISO El cuidado es importante en la especificación de un sistema con motivos aislados receptáculo ya que la impedancia de puesta a tierra es controlada únicamente por los cables de puesta a tierra y no se beneficia funcionalmente de los caminos paralelos a tierra.

Wiring Device-Kellems
Hubbell Incorporated (Delaware)
Shelton, CT 06484
1-800-288-6000
www.hubbell-wiring.com

STRAIGHT BLADE RECEPTACLES

English

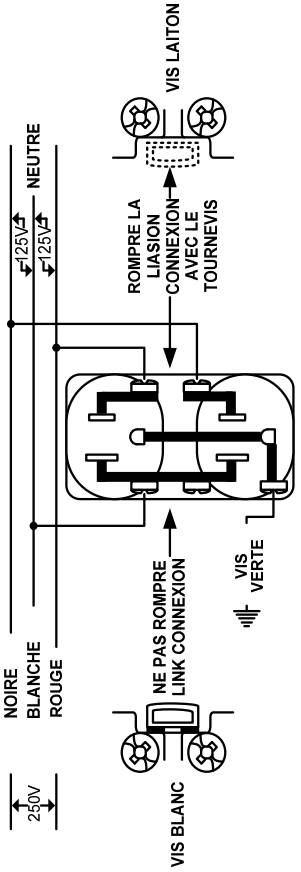
SPLIT CIRCUIT RECEPTACLE WIRING DIAGRAM



PRISES À LAME DROITE

Français

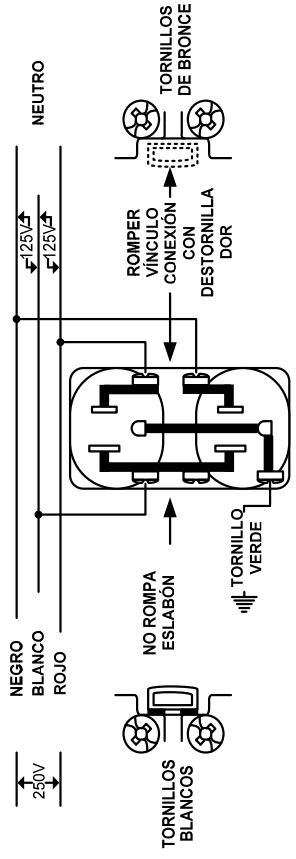
SCHÉMA ÉLECTRIQUE DE PRISE SE DIVISER



TOMACORRIENTES DE HOJA RECTA

Español

RECEPTÁCULO DIAGRAMA DE CABLEADO DEL CIRCUITO PARTIDOS



Wiring Device-Kellems
Hubbell Incorporated (Delaware)
Shelton, CT 06484
1-800-288-6000
www.hubbell-wiring.com

Straight Blade Devices
20A, 125V, 2 Pole, 3 Wire Grounding
HBL® Extra Heavy Duty Specification Grade Duplex Receptacle

HUBBELL

Features

- Back wired ground terminal allows faster, easier installation
- One-piece brass integral ground strap
- Finder Groove Face
- Deep body design with circuit ID face

Ordering Information

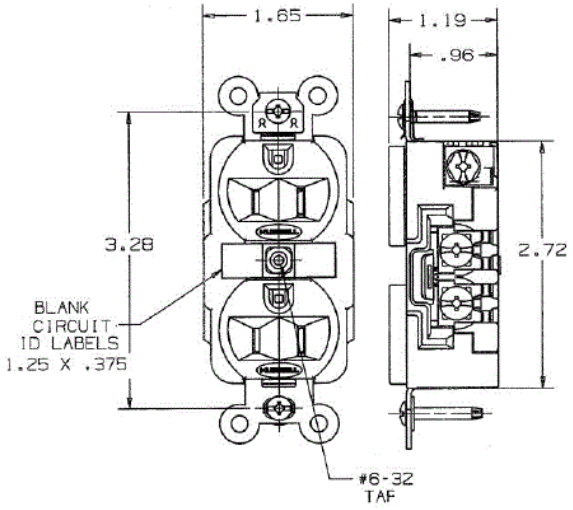
Description	Device Color	UPC	Catalog Number
Deep body design with circuit ID face. Back and side wired.	Red	783585435305	HBL5362R

Listings

UL Listed to UL498 File No. E2186
Certified to CSA 22.2, No. 42 File 285
Fed. Spec. W-C-596
NEMA® WD-6 Compliant

Specifications

Face	Nylon
Base	PBT
By-Pass Power Contacts	.036". (.9) Brass
Ground Contacts	.031 in. (.8) Brass
Clamping Plate	Nickel plated brass
Terminal Screws	Plated brass
Mounting Strap	.050 in. (1.3) Brass
Automatic Self-grounding Clip	Stainless steel
Mounting Screws	Zinc plated steel



Performance

Electrical

Current Interrupting	Certified for current interrupting at full rated current
Dielectric Voltage	Withstands 2,000V minimum

Mechanical

Product Identification	Ratings are a permanent part of the device
Terminal Accommodation	#14-#10 AWG copper stranded or solid conductor only
Terminal Identification	Terminals identified in accordance with UL 498 and CSA

Environmental

Flammability	Top: UL 94V-2, Base: UL 94V-0
Operating Temperatures	Maximum continuous 75°C; minimum -40°C (w/o impact)

Accessories

Wallplate or Weatherproof Cover Duplex Opening

Resources

Customer Use Drawing
eCatalog

Dimensions in Inches (mm)

Hubbell Wiring Device-Kellems • Hubbell Incorporated (Delaware) • 40 Waterview Drive • Shelton, CT 06484
Phone (800) 288-6000 • Fax (800) 255-1031 • Specifications subject to change without notice.

HUBBELL® Wiring Device-Kellems

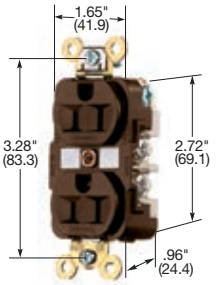
HBL® Extra Heavy Duty, Specification Grade, Receptacles

15A 125V
NEMA 5-15R
UL CSA
0.5 HP

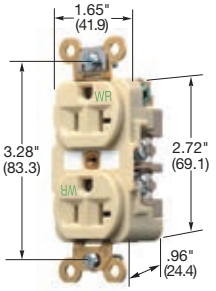
20A 125V
NEMA 5-20R
UL CSA
1 HP

Duplex

Description	Color	Catalog Number	
Flush, nylon face, back and side wired.	Black	**HBL5262BK**	**HBL5362BK**
	Blue	**–**	**HBL5362BL**
	Brown	**HBL5262**	**HBL5362**
	Gray	**HBL5262GY**	**HBL5362GY**
	Ivory	**HBL5262I**	**HBL5362I**
	Red	**HBL5262R**	**HBL5362R**
	White	**HBL5262W**	**HBL5362W**
Isolated ground[Δ].	Gray	**IG5262GY**	**IG5362GY**
	Ivory	**IG5262I**	**IG5362I**
	Orange	**IG5262**	**IG5362**
	Red	**IG5262R**	**IG5362R**
	White	**–**	**IG5362W**
Non-isolated ground, bulk pack of 100.	Orange	**–**	**HBL5362M4**
Weather Resistant, flush, nylon face, back and side wired.	Black	**HBL5262BKWR**	**HBL5362BKWR**
	Brown	**HBL5262WR**	**HBL5362WR**
	Gray	**HBL5262GYWR**	**HBL5362GYWR**
	Ivory	**HBL5262IWR**	**HBL5362IWR**
	Red	**HBL5262RWR**	**HBL5362RWR**
	White	**HBL5262WWR**	**HBL5362WWR**
Corrosion resistant.	Ivory	**HBL52CM62I**	**–**
	Yellow	**HBL52CM62**	**HBL53CM62**
Weather Resistant, Isolated ground[Δ].	Gray	**IG5262GYWR**	**IG5362GYWR**
	Ivory	**IG5262IWR**	**IG5362IWR**
	Orange	**IG5262WR**	**IG5362WR**
	Red	**IG5262RWR**	**IG5362RWR**
	White	**–**	**IG5362WWR**
On 4 in. (101.6) round cover.	Brown	**HBL5282**	**–**



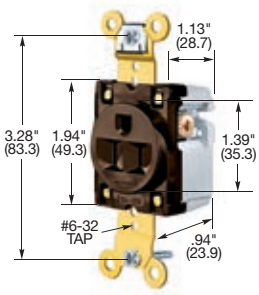
HBL5262



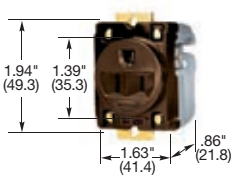
HBL5362IWR

Single

Description	Color	Catalog Number	
Flush, nylon face, back and side wired.	Black	**HBL5261BK**	**HBL5361BK**
	Brown	**HBL5261**	**HBL5361**
	Gray	**–**	**HBL5361GRY**
	Ivory	**HBL5261I**	**HBL5361I**
	White	**–**	**HBL5361W**
Isolated ground[Δ].	Orange	**IG5261**	**IG5361**
Weather Resistant, Isolated ground[Δ].	Orange	**IG5261WR**	**IG5361WR**
Ring terminal connection.	Brown	**HBL5261RT**	**HBL5361RT**
	White	**HBL5261WRT**	**–**
	Yellow	**HBL5261YRT**	**–**
Weather Resistant, flush, nylon face, back and side wired.	Brown	**HBL5261WR**	**HBL5361WR**
	Gray	**–**	**HBL5361GRYWR**
	Ivory	**HBL5261IWR**	**HBL5361IWR**
Corrosion resistant.	Yellow	**HBL52CM61**	**HBL53CM61**
Panel mount on 1.94 in. (49.3) centers.	Brown	**HBL5284**	**HBL5357**



HBL5261

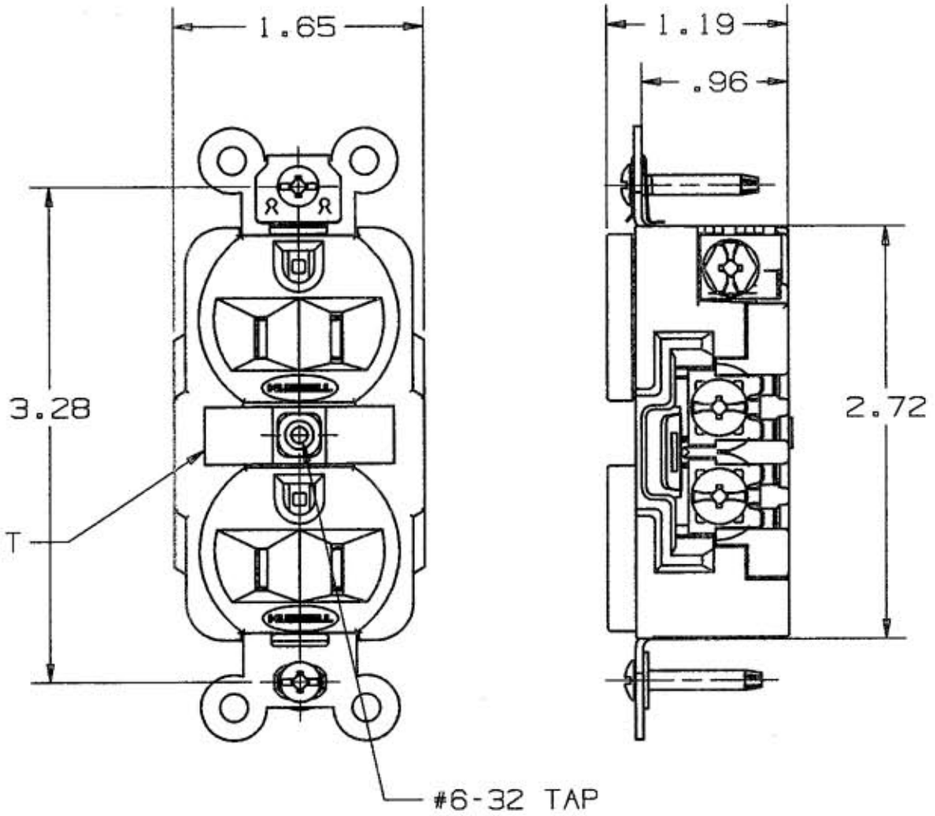


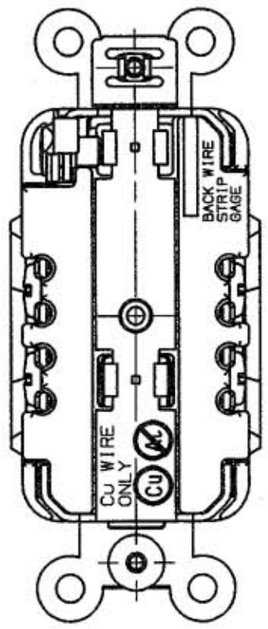
HBL5284

Note: [Δ]See section M for additional information on isolated ground devices..
See pages A-46 and A-47 for accessories.
See page Tech-10 for Weather Resistant descriptions.
See section N for wallplates.

Dimensions in Inches (mm)

M-8225 3





CORROSION RESISTANT (SEE NOTE 1)		HEAVY DUTY INDUSTRIAL							
YELLOW	IVORY	BROWN	BLACK	GRAY	IVORY	RED	WHITE	CONFIGURATION	RATING
HBL52CM62	HBL52CM62I	HBL5262	HBL5262BK	HBL5262GY	HBL5262I	HBL5262R	HBL5262W		15A, 125V
HBL53CM62	———	HBL5362	HBL5362BK	HBL5362GY	HBL5362I	HBL5362R	HBL5362W		20A, 125V
———	———	HBL5662	———	———	HBL5662I	———	———		15A, 250V
———	———	HBL5462	———	HBL5462GY	HBL5462I	———	———		20A, 250V

NOTE 1: THE CM VERSION RECEPTACLES HAVE NICKEL PLATED BRASS BRIDGES. CLAMP PLATES AND CONTACTS ARE BRASS WITH NICKEL-TIN PLATING. MOUNTING SCREWS ARE STAINLESS STEEL AND RIVETS ARE SILICON BRONZE.

CODE 74545

LIST OF PARTS

DESCRIPTION	MATERIAL	FINISH
FACE	NYLON	
BRIDGE	BRASS	SEE NOTE 1
CONTACTS	BRASS	SEE NOTE 1
CLAMP PLATES	BRASS	SEE NOTE 1
BASE	REINF.POLYESTER	
WASHER	FIBER	
GROUND CLIP	STAIN. STL.	
MOUNTING SCREWS	STEEL	SEE NOTE 1
RIVET	BRASS	SEE NOTE 1
BINDING SCREWS	BRASS	

DIMENSION SHEET FOR CAT. NO.
SEE TABLE

REPAIRABLE ☐ NON-REPAIRABLE ☒

SYM	REVISIONS	APP	DATE
3	6/25/01 ADDED NOTE 1 TO DWG. IN TABLE, ADDED "CORROSION RESISTANT SEE NOTE 1" TITLE TO YELLOW AND IVORY. ADDED "SEE NOTE 1" TO BILL OF MATERIAL. PER DCN 8698 SPN	DB	6/26/01
2	ADDED ID LABELS & TABLE PER DCN #7773. AMZ	DB	7/25/00
1	RELEASED PER DCN7433	NB	2/9/00

THE DESIGN AND DIMENSIONS OF THE PRODUCT SHOWN ON THIS DRAWING ARE SUBJECT TO CHANGE WITHOUT NOTICE

TITLE

DUPLEX RECEPTACLE

B

M-8225

3

TOLERANCES UNLESS OTHERWISE SPECIFIED
FRACTIONS ±1/64
DECIMALS ±.005
ANGLES ±2°

WIRING DEVICE-KELLEMS
HUBBELL INCORPORATED
BRIDGEPORT, CT

DR. BY SRE	APP. BY NB
TR. BY	SCALE 1:1
CHK'D BY NB	DATE 2/9/00

STRAIGHT BLADE RECEPTACLES

Installation Instructions

English

GENERAL INFORMATION

NOTICE For installation by a qualified electrician in accordance with national and local electric codes and the following instructions.

⚠WARNING RISK OF ELECTRICAL SHOCK

- Disconnect power before installing.
- Never wire energized electrical components.
- Use copper conductors only.
  CU AL

GENERAL RECEPTACLE WIRING INSTRUCTIONS

SIDEWIRE - Remove 3/4 inch (19 mm) of insulation from conductors. Wrap conductor securely around terminal screw.

BACKWIRE - Strip conductors to gage on device and insert in holes on back.

TERMINAL CAPACITY

15A : 14 – 10 AWG
20A : 12 – 10 AWG

Tighten terminal screws securely to 12 - 14 lb-in.

FOR ISOLATED GROUND RECEPTACLES

The grounding contact on an isolated ground device has been purposely insulated from the mounting means to reduce electromagnetic interference. The mounting strap is provided with an approved grounding clip for use with grounded metallic boxes. For proper use, the mounting strap must be grounded.

NOTICE Care is important in specifying a system with receptacle insulated grounds since the grounding impedance is controlled only by the grounding wires and does not benefit functionally from any parallel grounding paths.

PRISES À LAME DROITE

Directives de Montage

Français

RENSEIGNEMENTS GÉNÉRAUX

AVIS Doit être installé par un électriciens qualifiés conformément aux codes nationaux et locaux de l'électricité et selon les instructions suivantes. instructions.

⚠AVERTISSEMENT RISQUE DE CHOC ÉLECTRIQUE

- Débracher le circuit avant l'installation.
- Ne jamais câbler des composants électriques sous tension.
- Employer uniquement des conducteurs en cuivre.
  CU AL

INSTRUCTIONS GENERALES DE CÂBLAGE

CÂBLAGE LATÉRAL - Enlever l'isolant des conducteurs 19mm. Enrouler solidement le conducteur autour de la vis de borne.

CÂBLAGE ARRIÈ - Enlever l'isolant des conducteurs de jauger sur le dispositif et l'insert des trous sur le dos.

CALIBRES DE CONDUCTEURS ASMISSIBLES

15A : 14 – 10 AWG
20A : 12 – 10 AWG

Serrer les vis de borne á un couple de 1.4 - 1.6 N-M.

POUR PRISE DE TERRE D'ISOLEMENT

Le contact de terre sur un dispositif de terre isolée a été délibérément isolée des moyens de montage pour réduire les interférences électromagnétiques. L'étrier de montage est fourni avec un clip de mise à la terre approuvé pour une utilisation avec des boîtes métalliques à la terre. Pour une bonne utilisation, la sangle de fixation doit être mis à la terre.

AVIS Soins est important dans la spécification d'un système avec motifs isolés prise depuis l'impédance de mise à la terre est contrôlé uniquement par les fils de mise à la terre et ne bénéficie pas fonctionnellement de tous les chemins de terre parallèles.

TOMACORRIENTES DE HOJA RECTA

Instrucciones de Instalación

Español

INFORMACIÓN GENERAL

AVISO Para ser instalado por un electricista calificado, de acuerdo con los códigos eléctricos nacionales y locales, y siguiendo estas instrucciones.

⚠ ADVERTENCIA RIESGO DE CHOQUE ELÉCTRICO

- Desconectar la corriente antes de la instalación.
- No conectar nunca componentes eléctricos en un circuito con corriente.
- Usar solamente conductores de cobre.
  CU AL

INSTRUCCIONES GENERALES DE CABLEADO

CABLEADO LATERAL - Quitar el aislamiento de los conductores 19mm. Enrollar firmemente el conductor alrededor del tornillo del borne.

CABLEADO POSTERIOR - Quitar el aislamiento de los conductores para calibrar el dispositivo e insertar en lo agujeros en la parte posterioir.

CALIBRES DE CONDUCTORES ASMISIBLES

15A : 14 – 10 AWG
20A : 12 – 10 AWG

Adjustar los tornillos de los bornes con un par de 1.4 - 1.6 N-M.

PARA LOS RECEPTÁCULOS CON TIERRA AISLADA

El contacto de puesta a tierra en un dispositivo de toma de tierra aislada ha sido deliberadamente aislado de los medios de montaje para reducir la interferencia electromagnética. La correa de montaje está provisto con un clip de conexión a tierra aprobado para su uso con cajas metálicas conectadas a tierra. Para un uso adecuado, la correa de montaje debe estar conectado a tierra.

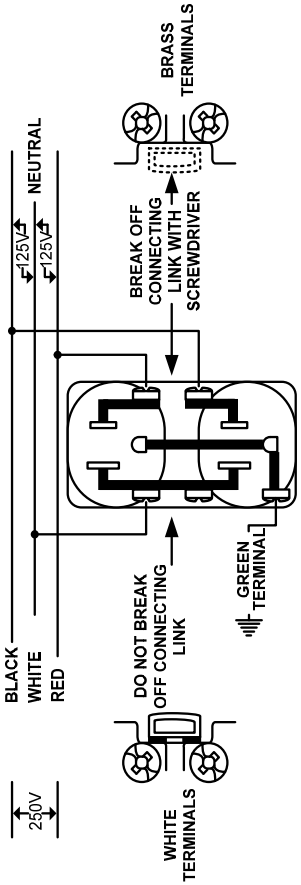
AVISO El cuidado es importante en la especificación de un sistema con motivos aislados receptáculo ya que la impedancia de puesta a tierra es controlada únicamente por los cables de puesta a tierra y no se beneficia funcionalmente de los caminos paralelos a tierra.

Wiring Device-Kellems
Hubbell Incorporated (Delaware)
Shelton, CT 06484
1-800-288-6000
www.hubbell-wiring.com

STRAIGHT BLADE RECEPTACLES

English

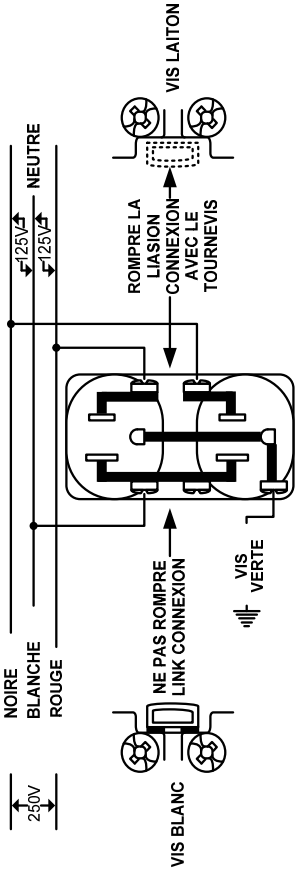
SPLIT CIRCUIT RECEPTACLE WIRING DIAGRAM



PRISES À LAME DROITE

Français

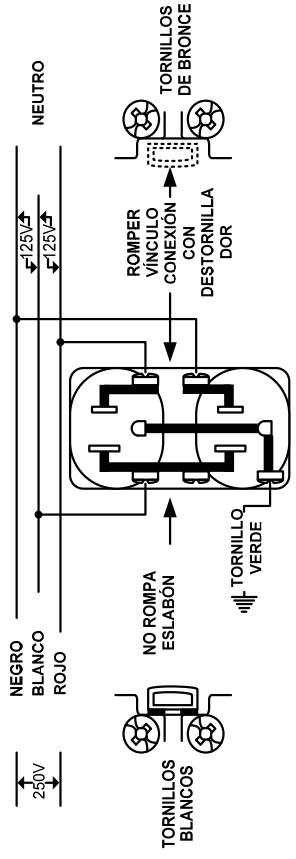
SCHÉMA ÉLECTRIQUE DE PRISE SE DIVISER



TOMACORRIENTES DE HOJA RECTA

Español

RECEPTÁCULO DIAGRAMA DE CABLEADO DEL CIRCUITO PARTIDOS



Wiring Device-Kellems
Hubbell Incorporated (Delaware)
Shelton, CT 06484
1-800-288-6000
www.hubbell-wiring.com

Heavy Duty Commercial & Hospital Grade GFCI Receptacles LED with Auto Grounding

Meets UL Standard [illegible] Class A GFCI

GF15ILA

10kA Short Circuit Current Rating

Comprehensive diagnostics
- When test button is actuated, both the electronic components and mechanical trip mechanism are functionally tested

Ground fault EOL indicator
- Flashing **RED** indicates device has lost capability to provide protection

No power at face if reverse wired
- Open circuit condition eliminates false assumption of protection at face

Installation ease
- Internal back wiring
- Automatic self-grounding staple
- Captive mounting screws

GF15ALLA

Circuit Guard® GFCI Receptacles

Description	Rating	Color	15A 125V NEMA 5-15R UL CSA 0.5 HP	20A 125V NEMA 5-20R UL CSA 1 HP
Flush, nylon face, back and side wired, multiple drive screws, self-grounding staple.	15 and 20A 125V AC	Black	**GF15BKLA**	**GF20BKLA**
		Brown	**GF15LA**	**GF20LA**
		Gray	**GF15GYLA**	**GF20GYLA**
		Ivory	**GF15ILA**	**GF20ILA**
		Light Almond	**GF15LALA**	**GF20LALA**
		Red	**GF15RLA**	**GF20RLA**
		White	**GF15WLA**	**GF20WLA**

GF20WLA3

Circuit Guard® GFCI Receptacles - 3 Pack

Description	Rating	Color	Catalog Number	
3 Pack, flush, nylon face, back and side wired, multiple drive screws, self-grounding staple.	15 and 20A 125V AC	Ivory	**GF15ILA3**	**GF20ILA3**
		Light Almond	**GF15LALA3**	**GF20LALA3**
		White	**GF15WLA3**	**GF20WLA3**

Note: Consult factory for availability of other colors.

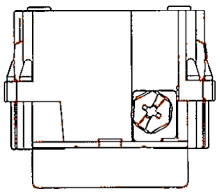
GFR8200HRLA

Hospital Grade ● Circuit Guard® GFCI Receptacles

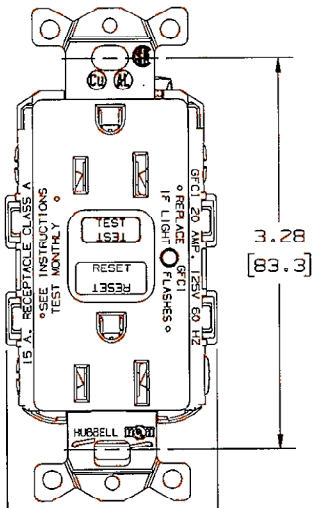
Description	Rating	Color	15A 125V NEMA 5-15R UL CSA 0.5 HP	20A 125V NEMA 5-20R UL CSA 1 HP
Flush, nylon face, back and side wired, multiple drive screws, self-grounding staple.	15 and 20A 125V AC	Black	**GFR8200HBKLA**	**GFR8300HBKLA**
		Brown	**GFR8200HLA**	**GFR8300HLA**
		Gray	**GFR8200HGYLA**	**GFR8300HGYLA**
		Ivory	**GFR8200HILA**	**GFR8300HILA**
		Light Almond	**GFR8200HLAA**	**GFR8300HLAA**
		Red	**GFR8200HRLA**	**GFR8300HRLA**
		White	**GFR8200HWLA**	**GFR8300HWLA**

Note: GFCI type receptacles should not be used in critical care patient areas or for electrical life support equipment applications because of the possibility of power interruption. All GFCI receptacles listed above are furnished with a matching color nylon wallplate. 20 amp feed-through capability.

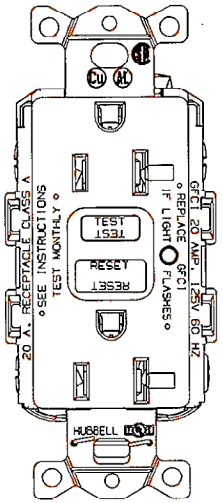
M-10735 12



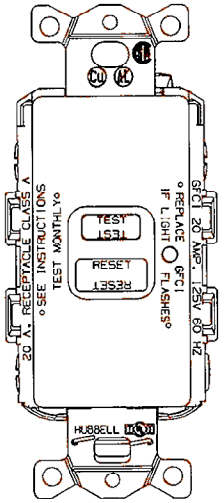
15AMP DEVICE

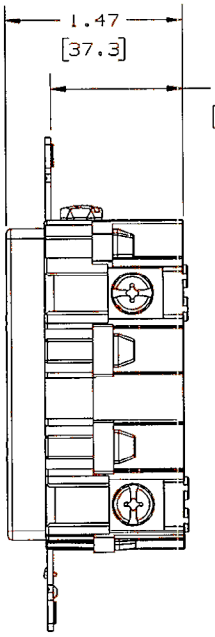


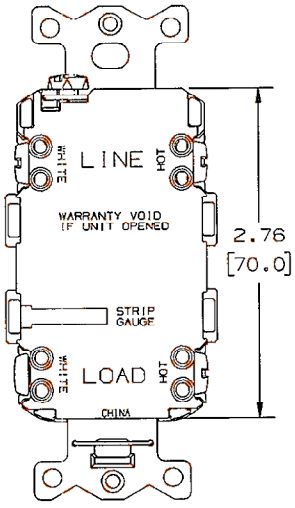
20AMP DEVICE



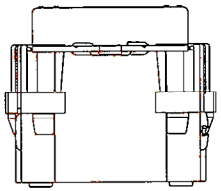
BLANK FACE DEVICE







NOTE: RANDOM CONFIGURATIONS SHOWN.



CODE 74545

COMMERCIAL UPGRADE, SPEC GRADE GFCI									
BROWN	IVORY	WHITE	GRAY	BLACK	RED	OFFICE WHITE	ALMOND	LT. ALMOND	RATING
GF15LA	GF15ILA	GF15WLA	GF15GYLA	GF15BKLA	GF15RLA	GF15OWLA	GF15ALLA	GF15LALA	15A, 125V
GF20LA	GF20ILA	GF20WLA	GF20GYLA	GF20BKLA	GF20RLA	GF20OWLA	GF20ALLA	GF20LALA	20A, 125V
GFBF20LA	GFBF20ILA	GFBF20WLA	GFBF20GYLA	GFBF20BKLA	GFBF20RLA	GFBF20OWLA	GFBF20ALLA	GFBF20LALA	20A, 125V
GF15LABULK	GF15ILABULK	GF15WLABULK	GF15GYLABULK	GF15BKLABULK	GF15RLABULK	GF15OWLABULK	GF15ALLABULK	GF15LALABULK	15A, 125V
GF20LABULK	GF20ILABULK	GF20WLABULK	GF20GYLABULK	GF20BKLABULK	GF20RLABULK	GF20OWLABULK	GF20ALLABULK	GF20LALABULK	20A, 125V
GFBF20LABULK	GFBF20ILABULK	GFBF20WLABULK	GFBF20GYLABULK	GFBF20BKLABULK	GFBF20RLABULK	GFBF20OWLABULK	GFBF20ALABULK	GFBF20LALABULK	20A, 125V
WGF52LA	WGF52ILA	WGF52WLA	-	WGF52BKLA	-	-	-	WGF52LALA	15A, 125V
WGF53LA	WGF53ILA	WGF53WLA	-	GF20MBLT	-	-	-	WGF53LALA	20A, 125V
GF15LDEN	GF15ILEA	GF15WLEA	-	-	-	-	-	-	15A, 125V
GF20LDEN	GF20ILEA	GF20WLEA	-	-	-	-	-	-	20A, 125V
GFR5252W50L	GF15ILAMP	GF15WLAMP	-	-	-	-	-	GF15LALAMP	15A, 125V

LIST OF PARTS

DESCRIPTION	MATERIAL	FINISH
FACE	ZYTEL	
BRIDGE	STEEL	GALVANIZED
CONTACTS	BRASS	
CLAMP PLATES	BRASS	
BASE	ZYTEL	
MOUNTING SCREWS(NOT SHOWN)	STEEL	ZINC PLATE
BINDING SCREWS	STEEL	ZN & BRASS PLT W/MOLYKOTE

SYM	REVISIONS	APP	DATE
12	ADDED CATALOG GF20MBLT TO TABLE, ADDED "NOTE: RANDOM CONFIGURATIONS SHOWN". PER DCN 19668 DDL PJB	PJB	03/05/13
11	UPDATED VIEWS WITH REVISED LOCATION OF BRIDGE MARKINGS TO REFLECT CURRENT PRODUCTION. PER DCN 19213 DDL	PJB	12/07/12
10	ADDED TOP AND BOTTOM VIEWS TO DWG. PER DCN 19110 SPN	PJB	10/8/12
9	TITLE OF TABLE: COMMERCIAL UPGRADE SPEC GRADE GFCI WAS COMMERCIAL GRADE LED GFCI TITLE BLOCK: GFCI, COMMERCIAL UPGRADE SPEC GRADE WAS GFCI, INTERNAL BACKWIRE COMMERCIAL GRADE WITH LED PER DCN 19639	KP	2-9-12

THE DESIGN AND DIMENSIONS OF THE PRODUCT SHOWN ON THIS DRAWING ARE SUBJECT TO CHANGE WITHOUT NOTICE

TITLE
GFCI, COMMERCIAL UPGRADE SPEC GRADE

TOLERANCES UNLESS OTHERWISE SPECIFIED
.XX = ±.01
.XXX = ±.005
ANGLES = ±2°

WIRING DEVICE-KELLEMS
HUBBELL INCORPORATED
SHELTON, CT

DR. BY AMM | APP. BY
TR. BY | SCALE 1:1
CHK. BY | DATE 8-2-07

DIMENSION SHEET FOR CAT. NO. SEE TABLE

REPAIRABLE ☐ NON-REPAIRABLE ☒

B

M-10735

12

Wiring Systems

Installing and Testing a GFCI Receptacle

Please read this leaflet completely before getting started

⚠ CAUTION

- **To prevent severe shock or electrocution, always turn the power OFF at the service panel before working with wiring.**
- **Use this GFCI receptacle with copper or copper-clad wire. Do not use it with aluminum wire.**
- **Do not install this GFCI receptacle on a circuit that powers life support equipment because if the GFCI trips it will shut down the equipment.**
- **For installation in wet locations, protect the GFCI receptacle with a weatherproof cover that will keep both the receptacle and any plugs dry.**
- **Must be installed in accordance with national and local electrical codes.**

1. What is a GFCI?

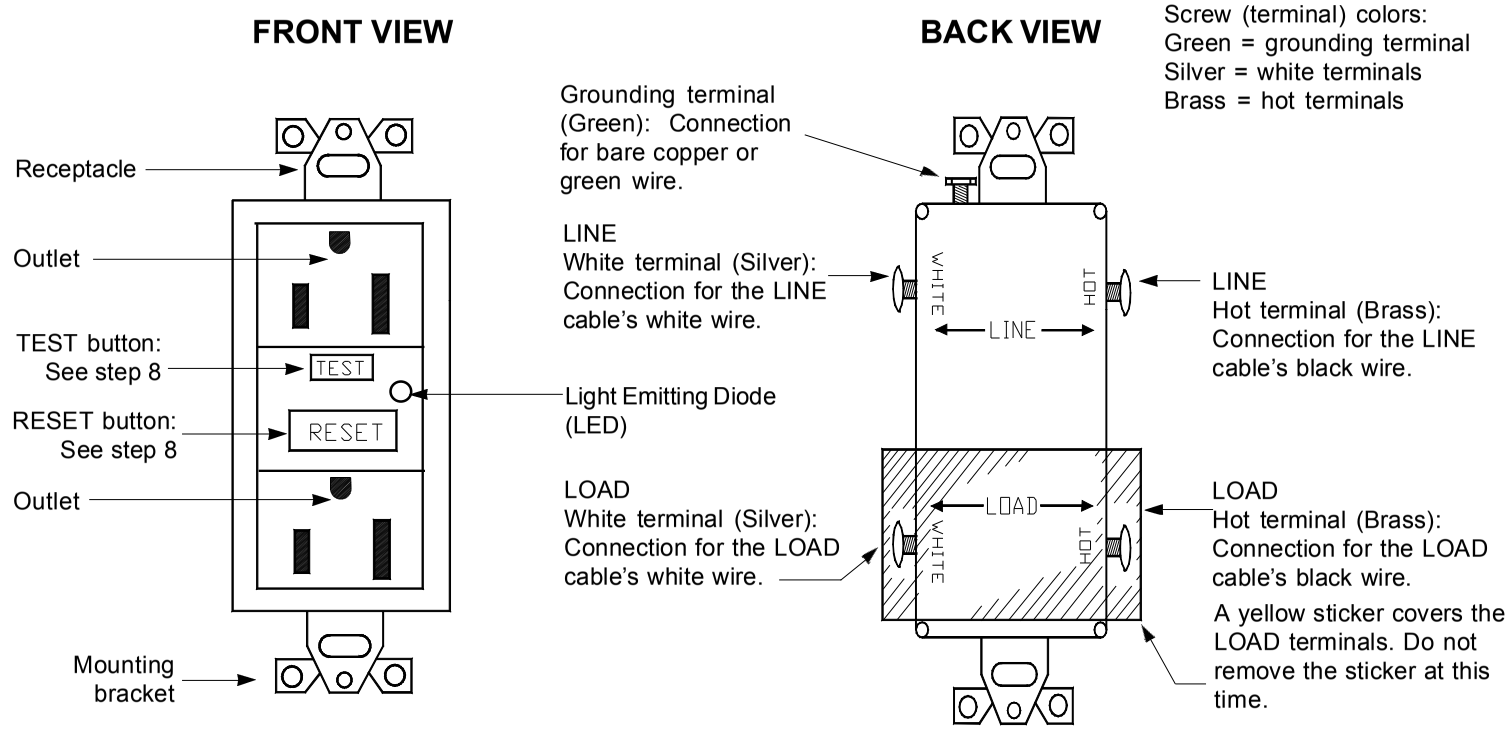
A GFCI receptacle is different from conventional receptacles. In the event of a ground fault, a GFCI will trip and quickly stop the flow of electricity to prevent serious injury.

Definition of a ground fault:

Instead of following its normal safe path, electricity passes through a person's body to reach the ground. For example, a defective appliance can cause a ground fault.

A GFCI receptacle does not protect against circuit overloads, short circuits, or shocks. For example, you can still be shocked if you touch bare wires while standing on a non-conducting surface, such as a wood floor.

2. The GFCI's features



3. Should you install it?

Installing a GFCI receptacle can be more complicated than installing a conventional receptacle.

Make sure that you:

- Understand basic wiring principles and techniques
- Can interpret wiring diagrams
- Have circuit wiring experience
- Are prepared to take a few minutes to test your work, making sure that you have wired the GFCI receptacle correctly

4. LINE vs. LOAD

A cable consists of 2 or 3 wires.

LINE cable:

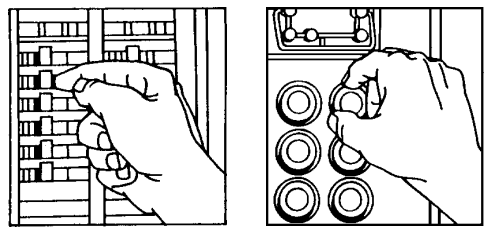
Delivers power from the service panel (breaker panel or fuse box) to the GFCI. If there is only one cable entering the electrical box, it is the LINE cable. This cable should be connected to the GFCI's LINE terminals only.

LOAD cable:

Delivers power from the GFCI to another receptacle in the circuit. This cable should be connected to the GFCI's LOAD terminals only. The LOAD terminals are under the yellow sticker. Do not remove the sticker at this time.

5. Turn the power OFF

Plug an electrical device, such as a lamp or radio, into the receptacle on which you are working. Turn the lamp or radio on. Then, go to the service panel. Find the breaker or fuse that protects that receptacle. Place the breaker in the OFF position or completely remove the fuse. The lamp or radio should turn OFF.



Next, plug in and turn ON the lamp or radio at the receptacle's other outlet to make sure the power is OFF at both outlets. If the power is not OFF, stop work and call an electrician to complete the installation.

6. Identify cables/wires

Important:
Do not install the GFCI receptacle in an electrical box containing (a) more than 4 wires (not including the grounding wires) or (b) cables with more than two wires (not including the grounding wire). Contact a qualified electrician if either (a) or (b) is true.

If you are replacing an old receptacle, pull it out of the electrical box without disconnecting the wires.

- If you see one cable (2-3 wires), it is the LINE cable. The receptacle is probably in position C (see diagram to the right). Remove the receptacle and go to step 7A.
- If you see two cables (4-6 wires), the receptacle is probably in position A or B (see diagram to the right). Follow steps a-e of the procedure to the right.

Procedure: box with two cables (4-6 wires)

(a) Detach one cable's white and hot wires from the receptacle and cap each one separately with a wire connector. Make sure that they are from the same cable.

(b) Re-install the receptacle in the electrical box, attach the faceplate, then turn the power ON at the service panel.

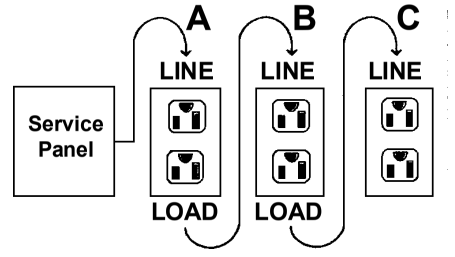
(c) Determine if power is flowing to the receptacle. If so, the capped wires are the LOAD wires. If not the capped wires are the LINE wires.

(d) Turn the power OFF at the service panel, label the LINE and LOAD wires, then remove the receptacle.

(e) Go to step 7B.

Placement in circuit:
The GFCI's place in the circuit determines if it protects other receptacles in the circuit.

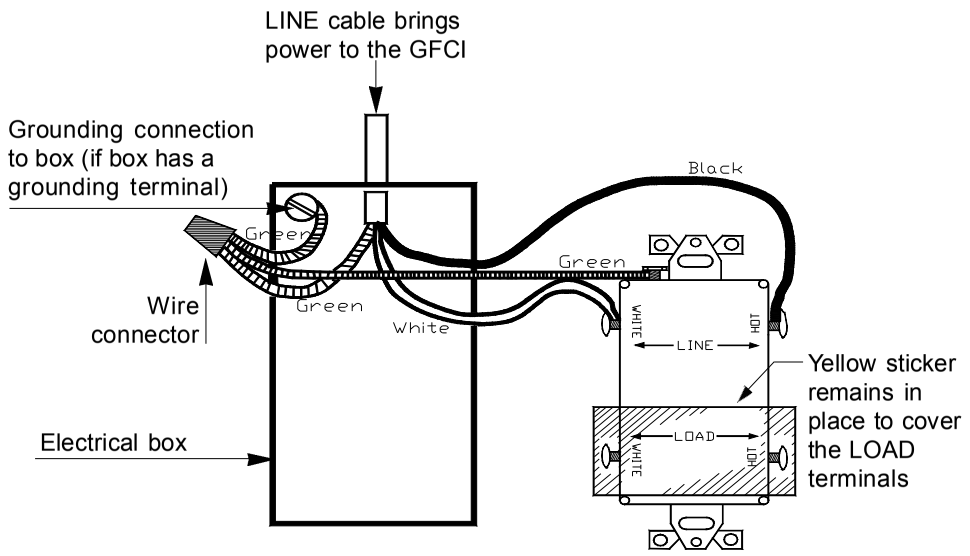
Sample circuit



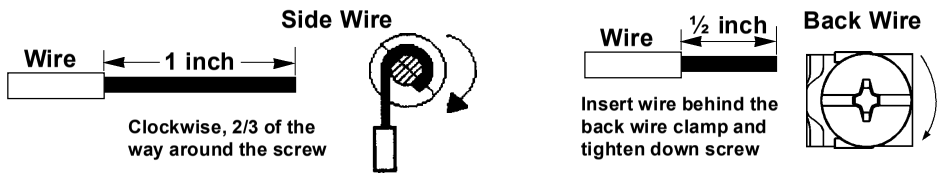
Placing the GFCI in position A will also provide protection to "load side" receptacles B and C. On the other hand, placing the GFCI in position C will not provide protection to receptacles A or B. Remember that receptacles A, B, and C can be in different rooms.

7. Connect the wires (choose A or B) ... only after reading other side completely

A: One cable (2 or 3 wires) entering the box OR B: Two cables (4 or 6 wires) entering the box



About wire connections



Connect the LINE cable wires to the LINE terminals:

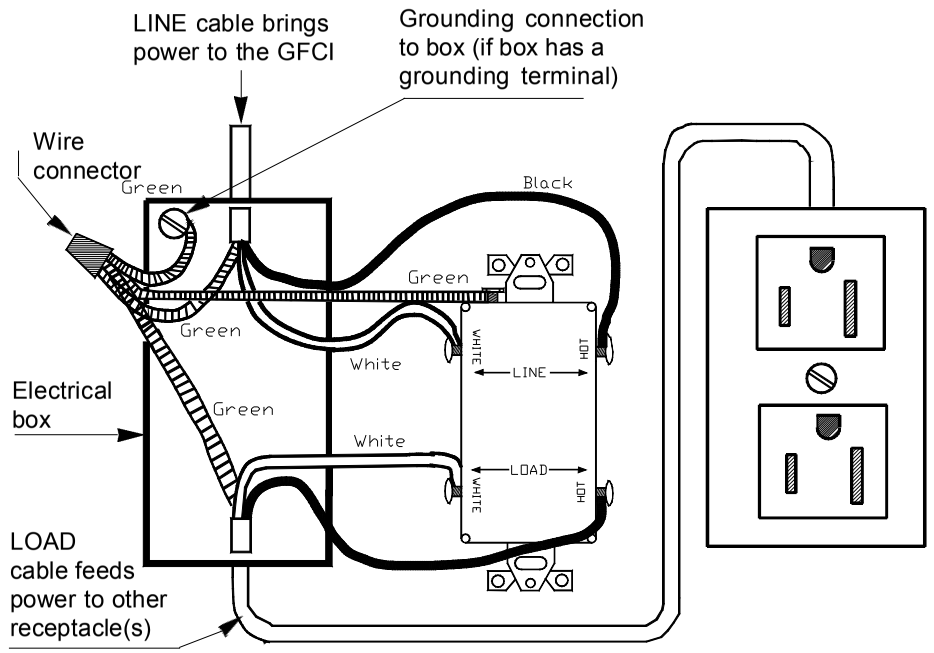
- The white wire connects to the White terminal (Silver)
- The black wire connects to the Hot terminal (Brass)

Connect the grounding wire (only if there is a grounding wire):

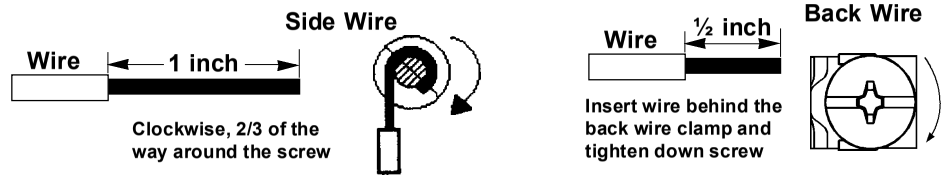
- For a box with no grounding terminal: (diagram not shown) Connect the LINE cable's bare copper (or green) wire directly to the grounding terminal on the GFCI receptacle.
- For a box with a grounding terminal: (diagram shown above) Connect a 6-inch bare copper (or green) 12 or 14 AWG wire to the grounding terminal on the GFCI. Also connect a similar wire to the groundomg terminal on the box. Connect the ends of these wires to the LINE cable's bare copper (or green) wire using a wire connector. If these wires are already in place, check the connections.

Complete the installation:

- Fold the wires into the box, keeping the grounding wire away from the White and Hot terminals. Screw the receptacle to the box and attach the faceplate.
- Go to step 8



About wire connections



Connect the LINE cable wires to the LINE terminals:

- The white wire connects to the White terminal (Silver)
- The black wire connects to the Hot terminal (Brass)

Connect the LOAD cable wires to the LOAD terminals:

- Remove the yellow sticker to reveal the LOAD terminals
- The white wire connects to the White terminal (Silver)
- The black wire connects to the Hot terminal (Brass)

Connect the grounding wires as shown above (only if there is a grounding wire):

- Connect a 6-inch bare copper (or green) 12 or 14 AWG wire to the grounding terminal on the GFCI. If the box has a grounding terminal, also connect a similar wire to the grounding terminal on the box. Connect the ends of these wires to the LINE and LOAD cable's bare copper (or green) wire using a wire connector. If these wires are already in place, check the connections.

Complete the installation:

- Fold the wires into the box, keeping the grounding wire away from the White and Hot terminals. Screw the receptacle to the box and attach the faceplate.
- Go to step 8

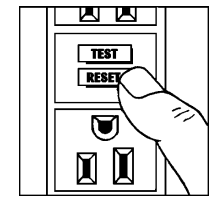
8. Test your work

Why perform this test?

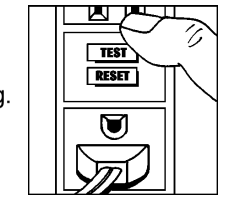
- If you miswired the GFCI it may not prevent personal injury or death due to a ground fault (electrical shock).

Procedure:

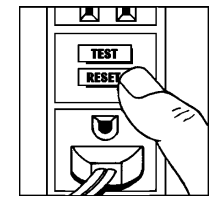
(a) Turn the power ON at the service panel. Press the RESET button fully. The GFCI cannot be reset until it is wired correctly and power is supplied to the device. Plug a lamp or radio into the GFCI (and leave it plugged-in) to verify that the power is ON. If there is no power, go to Troubleshooting.



(b) Press the TEST button in order to trip the device. This should stop the flow of electricity, making the radio or lamp shut OFF. Note that the RESET button will pop-out. If the power stays ON, go to Troubleshooting. If the power goes OFF, you have installed the GFCI receptacle correctly. To restore power, press the RESET button. If the red Light Emitting Diode (LED) begins to flash, or if the GFCI cannot be reset, the receptacle has lost its GFCI protection and should be replaced immediately.



(c) If you installed your GFCI using step 7B, plug a lamp or radio into surrounding receptacles to see which one(s), in addition to the GFCI, lost power when you pressed the TEST button. Do not plug life saving devices into any receptacles that lost power. Place a "GFCI Protected" sticker on every receptacle that lost power.



(d) Press the TEST button (then RESET button) every month to assure proper operation.

RESET BUTTON MUST BE FULLY DEPRESSED FOR FULL ENGAGEMENT.

TROUBLESHOOTING

Turn the power OFF and check the wire connections against the appropriate wiring diagram in step 7A or 7B. Make sure that there are no loose wires or loose connections. Also, it is possible that you reversed the LINE and LOAD connections. LINE/LOAD reversal will be indicated by power remaining OFF at the GFCI and by the Reset Button not staying in. Reverse the LINE and LOAD connections if necessary. Start the test from the beginning of step 8 if you rewired any connections to the GFCI.

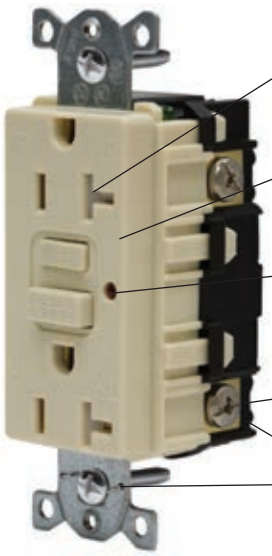
GENERAL INFORMATION

GFCI receptacle rating: 20 Amps, 120 Volts 60 Hz

Wiring Device-Kellems
Hubbell Incorporated (Delaware)
Shelton, CT 06484
1-800-288-6000
www.hubbell-wiring.com

Heavy Duty Commercial & Hospital Grade GFCI Receptacles
Tamper-Resistant and Weather Resistant with Auto Grounding

Meets UL Standard 943 Class A GFCI



10kA Short Circuit Current Rating

Limits improper access to energized contacts
- Patented shutter design for tamper-resistant protection

No power at face if reverse wired
- Open circuit condition eliminates false assumption of protection at face

Ground fault EOL indicator
- Flashing **RED** indicates device has lost capability to provide protection

Accepts fork terminals
- Open terminal design

Installation ease
- Internal back wiring
- Automatic self-grounding staple
- Captive mounting screws

GFTR20I

Circuit Guard® GFCI Receptacles
Tamper-Resistant and Weather Resistant

15A 125V NEMA 5-15R UL CSA 0.5 HP | 20A 125V NEMA 5-20R UL CSA 1 HP

Description	Rating	Color	Catalog Number	
Flush, nylon face, back and side wired, multiple drive screws, self-grounding staple.	15 and 20A 125V AC	Black	**GFTR15BK**	**GFTR20BK**
		Brown	**GFTR15**	**GFTR20**
		Gray	**GFTR15GY**	**GFTR20GY**
		Ivory	**GFTR15I**	**GFTR20I**
		Light Almond	**GFTR15LA**	**GFTR20LA**
		Red	**GFTR15R**	**GFTR20R**
		White	**GFTR15W**	**GFTR20W**

GFTR15AL

Circuit Guard® GFCI Receptacles - 3 Pack
Tamper-Resistant and Weather Resistant

Description	Rating	Color	Catalog Number	
3 Pack, flush, nylon face, back and side wired, multiple drive screws, self-grounding staple.	15 and 20A 125V AC	Ivory	**GFTR15I3**	**GFTR20I3**
		Light Almond	**GFTR15LA3**	**GFTR20LA3**
		White	**GFTR15W3**	**GFTR20W3**

Note: Consult factory for availability of other colors.

GFTR20W3

Circuit Guard® GFCI Receptacles
Tamper-Resistant and Weather Resistant

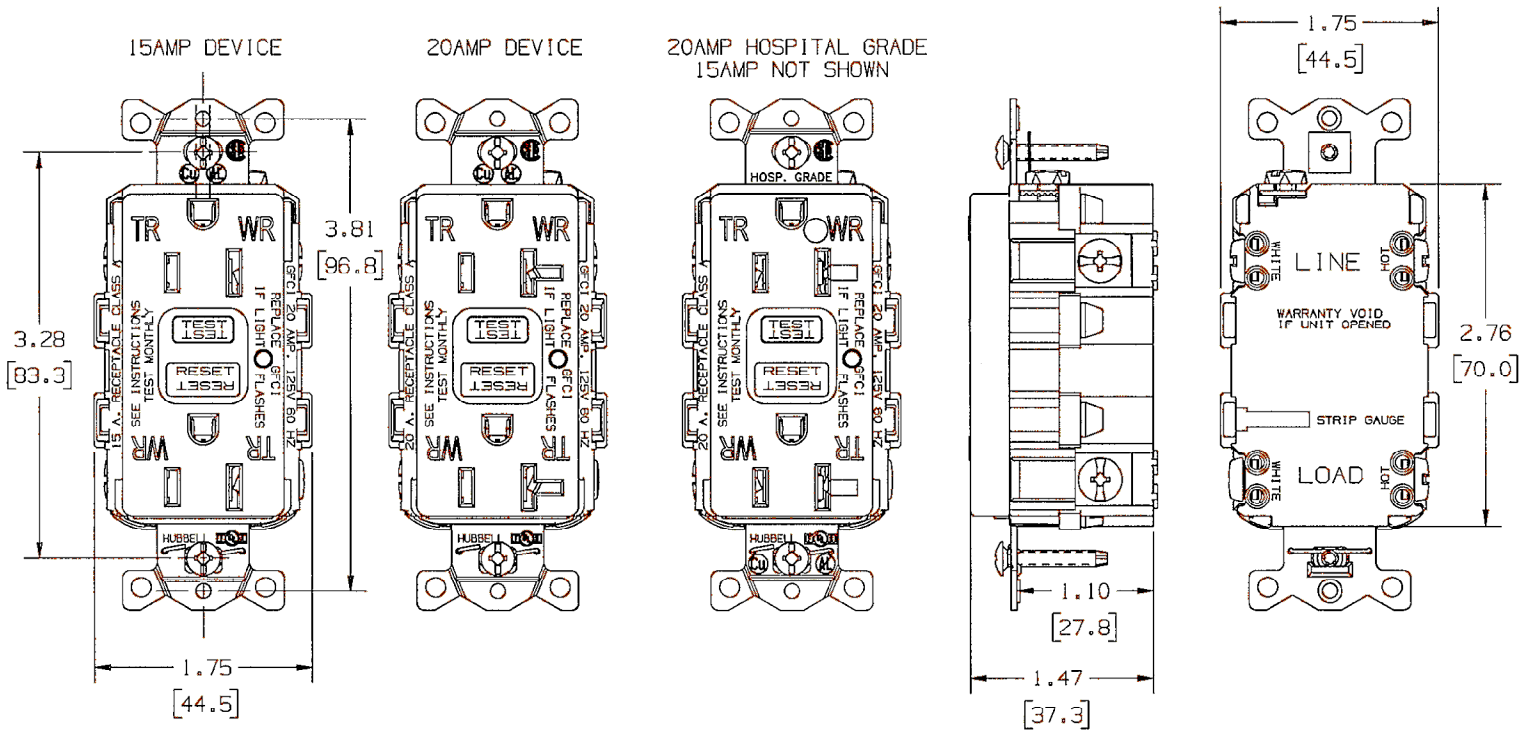
15A 125V NEMA 5-15R UL CSA 0.5 HP | 20A 125V NEMA 5-20R UL CSA 1 HP

Description	Rating	Color	Catalog Number	
Hospital Grade ● Flush, nylon face, back and side wired, multiple drive screws, self-grounding staple.	15 and 20A 125V AC	Black	**GFR8200HBKTR**	**GFR8300HBKTR**
		Brown	**GFR8200HTR**	**GFR8300HTR**
		Gray	**GFR8200HGYTR**	**GFR8300HGYTR**
		Ivory	**GFR8200HITR**	**GFR8300HITR**
		Light Almond	**GFR8200HLATR**	**GFR8300HLATR**
		Red	**GFR8200HRTR**	**GFR8300HRTR**
		White	**GFR8200HWTR**	**GFR8300HWTR**

Note: GFCI type receptacles should not be used in critical care patient areas or for electrical life support equipment applications because of the possibility of power interruption. All GFCI receptacles listed above are furnished with a matching color nylon wallplate. 20 amp feed-through capability.
See page Tech-10 for Tamper-Resistant and Weather Resistant descriptions.

GFR8300HRTR

M-10454 | 6



COMMERCIAL GRADE LED TAMPER RESISTANT GFCI									
BROWN	IVORY	WHITE	GRAY	BLACK	RED	OFFICE WHITE	ALMOND	LT. ALMOND	RATING
GFTR15	GFTR15I	GFTR15W	GFTR15GY	GFTR15BK	GFTR15R	GFTR15OW	GFTR15AL	GFTR15LA	15A, 125V
GFTR20	GFTR20I	GFTR20W	GFTR20GY	GFTR20BK	GFTR20R	GFTR20OW	GFTR20AL	GFTR20LA	20A, 125V

HOSPITAL GRADE LED TAMPER RESISTANT GFCI									
GFR8200HTR	GFR8200HITR	GFR8200HWTR	GFR8200HGYTR	GFR8200HBKTR	GFR8200HRTR	GFR8200HOWTR	GFR8200HALTR	GFR8200HLATR	15A, 125V
GFR8300HTR	GFR8300HITR	GFR8300HWTR	GFR8300HGYTR	GFR8300HBKTR	GFR8300HRTR	GFR8300HOWTR	GFR8300HALTR	GFR8300HLATR	20A, 125V
GF82TR	GF82ITR	GF82WTR	GF82GYTR	GF82BKTR	GF82RTR	GF820WTR	GF82ALTR	GF82LATR	15A, 125V
GF83TR	GF83ITR	GF83WTR	GF83GYTR	GF83BKTR	GF83RTR	GF830WTR	GF83ALTR	GF83LATR	20A, 125V

NOTES:
1. DIMENSIONS IN INCHES [MM].
2. MEETS UL943 CLASS A GFCI'S AND UL498 FOR RECEPTACLES.
3. TERMINAL ACCOMADATIONS #14-10 AWG. STRANDED OR SOLID COPPER CONDUCTORS ONLY.

CODE 74545

LIST OF PARTS

DESCRIPTION	MATERIAL	FINISH
FACE	ZYTEL	
BRIDGE	STEEL	GALVANIZED
BRIDGE-HOSPITAL GRADE ONLY	BRASS	
CONTACTS	BRASS	
CONTACTS	BRASS	SILVER PLATED
CLAMP PLATES	BRASS	
BASE	ZYTEL	
MOUNTING SCREWS (NOT SHOWN)	STEEL	
BINDING SCREWS	STEEL	
SHUTTER MECHANISM	ZYTEL	

SYM	REVISIONS	APP	DATE
6	UPDATED VIEWS WITH REVISED LOCATION OF BRIDGE MARKINGS TO REFLECT CURRENT PRODUCTION. PER DCN 19213 DDL	PJB PJB	12/07/12
5	1.47 WAS 1.43 1.10 WAS 1.06 PER DCN 15457	AMM	1-30-09
4	UPDATED LIST OF PARTS TO INCLUDE: BRIDGE-HOSPITAL GRADE ONLY, MAT'L: BRASS PER DCN 15389 AMM 12-18-08	AMM	12-18-08
3	UPDATED PART MODEL TO INCLUDE: A/G BRIDGE ASSY, MOUNTING SCREW & WASHER PER DCN 14489	AMM	12-18-07
2	CHANGED RESET BUTTON ASSY FROM: D58558 TO: D62128 PER DCN 14356	AMM	12-6-07
1	INITIAL RELEASE FOR PER DCN 13675	AMM	1-31-07

THE DESIGN AND DIMENSIONS OF THE PRODUCT SHOWN ON THIS DRAWING ARE SUBJECT TO CHANGE WITHOUT NOTICE

TITLE
GFCI, INTERNAL BACKWIRE
COMMERCIAL & HOSPITAL GRADE
WITH LED

TOLERANCES UNLESS OTHERWISE SPECIFIED
.XX = ±.01
.XXX = ±.005
ANGLES = ±2°

WIRING DEVICE-KELLEMS
HUBBELL INCORPORATED
SHELTON, CT

DR. BY AMM	APP. BY CAC
TR. BY	SCALE 1:1
CHK. BY CAC	DATE 1-31-07

DIMENSION SHEET FOR CAT. NO. SEE TABLE
REPAIRABLE ☐ NON-REPAIRABLE ☒
B
M-10454

Wiring Systems

Installing and Testing a GFCI Receptacle

Please read this leaflet completely before getting started

⚠ CAUTION

- **To prevent severe shock or electrocution, always turn the power OFF at the service panel before working with wiring.**
- **Use this GFCI receptacle with copper or copper-clad wire. Do not use it with aluminum wire.**
- **Do not install this GFCI receptacle on a circuit that powers life support equipment because if the GFCI trips it will shut down the equipment.**
- **For installation in wet locations, protect the GFCI receptacle with a weatherproof cover that will keep both the receptacle and any plugs dry.**
- **Must be installed in accordance with national and local electrical codes.**

1. What is a GFCI?

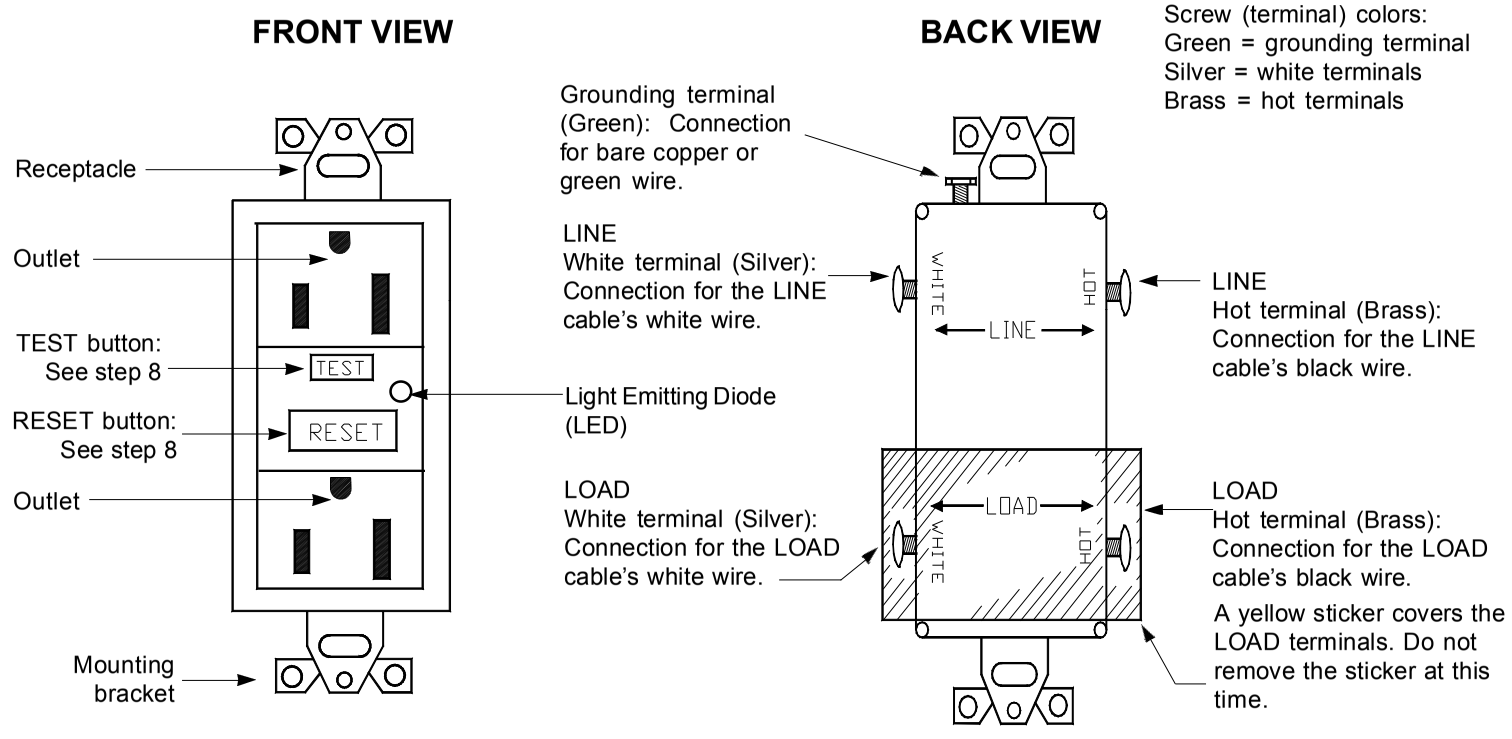
A GFCI receptacle is different from conventional receptacles. In the event of a ground fault, a GFCI will trip and quickly stop the flow of electricity to prevent serious injury.

Definition of a ground fault:

Instead of following its normal safe path, electricity passes through a person's body to reach the ground. For example, a defective appliance can cause a ground fault.

A GFCI receptacle does not protect against circuit overloads, short circuits, or shocks. For example, you can still be shocked if you touch bare wires while standing on a non-conducting surface, such as a wood floor.

2. The GFCI's features



3. Should you install it?

Installing a GFCI receptacle can be more complicated than installing a conventional receptacle.

Make sure that you:

- Understand basic wiring principles and techniques
- Can interpret wiring diagrams
- Have circuit wiring experience
- Are prepared to take a few minutes to test your work, making sure that you have wired the GFCI receptacle correctly

4. LINE vs. LOAD

A cable consists of 2 or 3 wires.

LINE cable:

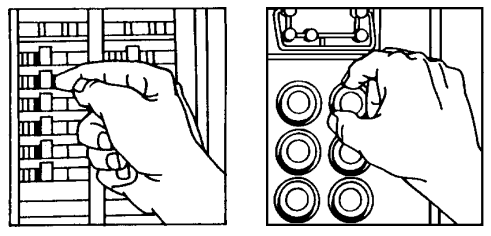
Delivers power from the service panel (breaker panel or fuse box) to the GFCI. If there is only one cable entering the electrical box, it is the LINE cable. This cable should be connected to the GFCI's LINE terminals only.

LOAD cable:

Delivers power from the GFCI to another receptacle in the circuit. This cable should be connected to the GFCI's LOAD terminals only. The LOAD terminals are under the yellow sticker. Do not remove the sticker at this time.

5. Turn the power OFF

Plug an electrical device, such as a lamp or radio, into the receptacle on which you are working. Turn the lamp or radio on. Then, go to the service panel. Find the breaker or fuse that protects that receptacle. Place the breaker in the OFF position or completely remove the fuse. The lamp or radio should turn OFF.



Next, plug in and turn ON the lamp or radio at the receptacle's other outlet to make sure the power is OFF at both outlets. If the power is not OFF, stop work and call an electrician to complete the installation.

6. Identify cables/wires

Important:
Do not install the GFCI receptacle in an electrical box containing (a) more than 4 wires (not including the grounding wires) or (b) cables with more than two wires (not including the grounding wire). Contact a qualified electrician if either (a) or (b) is true.

If you are replacing an old receptacle, pull it out of the electrical box without disconnecting the wires.

- If you see one cable (2-3 wires), it is the LINE cable. The receptacle is probably in position C (see diagram to the right). Remove the receptacle and go to step 7A.
- If you see two cables (4-6 wires), the receptacle is probably in position A or B (see diagram to the right). Follow steps a-e of the procedure to the right.

Procedure: box with two cables (4-6 wires)

(a) Detach one cable's white and hot wires from the receptacle and cap each one separately with a wire connector. Make sure that they are from the same cable.

(b) Re-install the receptacle in the electrical box, attach the faceplate, then turn the power ON at the service panel.

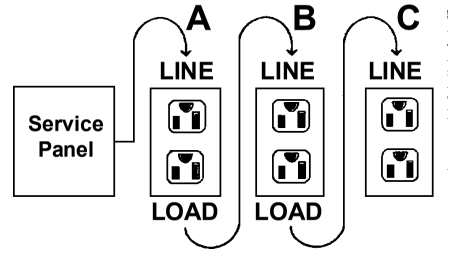
(c) Determine if power is flowing to the receptacle. If so, the capped wires are the LOAD wires. If not the capped wires are the LINE wires.

(d) Turn the power OFF at the service panel, label the LINE and LOAD wires, then remove the receptacle.

(e) Go to step 7B.

Placement in circuit:
The GFCI's place in the circuit determines if it protects other receptacles in the circuit.

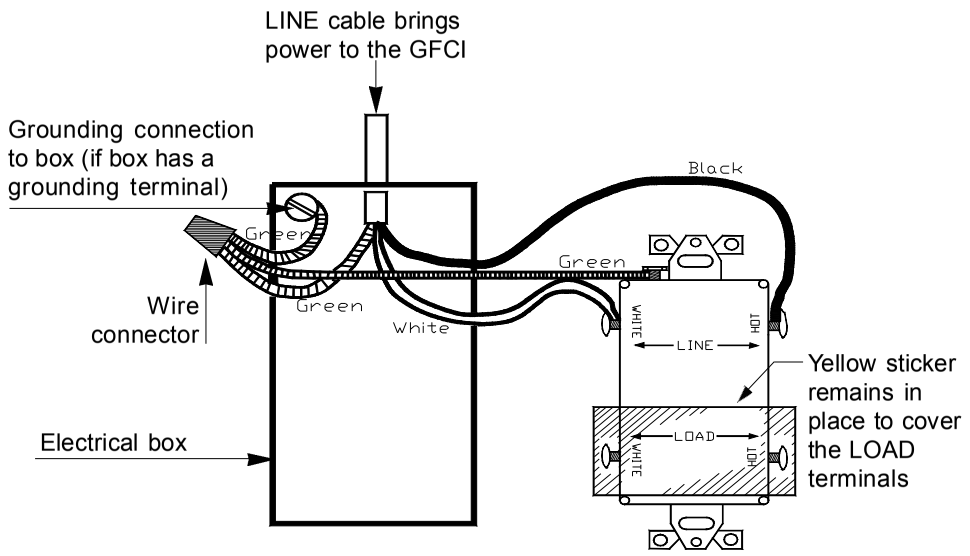
Sample circuit



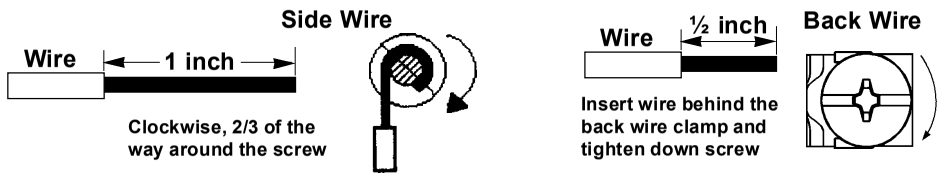
Placing the GFCI in position A will also provide protection to "load side" receptacles B and C. On the other hand, placing the GFCI in position C will not provide protection to receptacles A or B. Remember that receptacles A, B, and C can be in different rooms.

7. Connect the wires (choose A or B) ... only after reading other side completely

A: One cable (2 or 3 wires) entering the box OR B: Two cables (4 or 6 wires) entering the box



About wire connections



Connect the LINE cable wires to the LINE terminals:

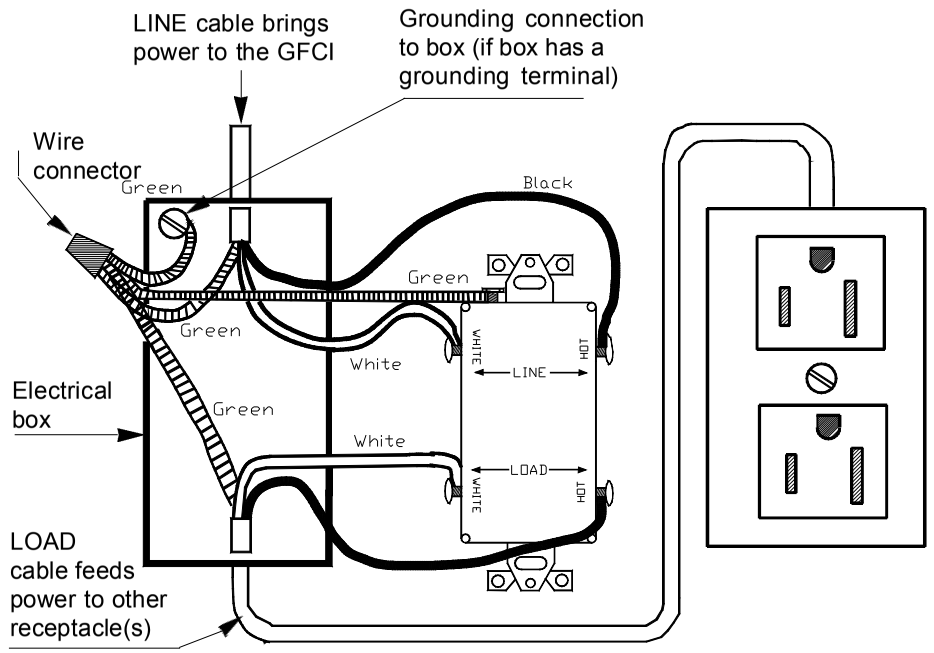
- The white wire connects to the White terminal (Silver)
- The black wire connects to the Hot terminal (Brass)

Connect the grounding wire (only if there is a grounding wire):

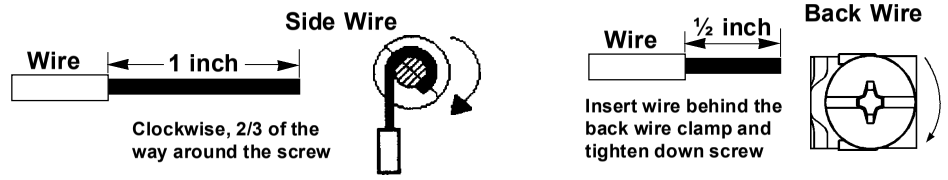
- For a box with no grounding terminal: (diagram not shown) Connect the LINE cable's bare copper (or green) wire directly to the grounding terminal on the GFCI receptacle.
- For a box with a grounding terminal: (diagram shown above) Connect a 6-inch bare copper (or green) 12 or 14 AWG wire to the grounding terminal on the GFCI. Also connect a similar wire to the groundomg terminal on the box. Connect the ends of these wires to the LINE cable's bare copper (or green) wire using a wire connector. If these wires are already in place, check the connections.

Complete the installation:

- Fold the wires into the box, keeping the grounding wire away from the White and Hot terminals. Screw the receptacle to the box and attach the faceplate.
- Go to step 8



About wire connections



Connect the LINE cable wires to the LINE terminals:

- The white wire connects to the White terminal (Silver)
- The black wire connects to the Hot terminal (Brass)

Connect the LOAD cable wires to the LOAD terminals:

- Remove the yellow sticker to reveal the LOAD terminals
- The white wire connects to the White terminal (Silver)
- The black wire connects to the Hot terminal (Brass)

Connect the grounding wires as shown above (only if there is a grounding wire):

- Connect a 6-inch bare copper (or green) 12 or 14 AWG wire to the grounding terminal on the GFCI. If the box has a grounding terminal, also connect a similar wire to the grounding terminal on the box. Connect the ends of these wires to the LINE and LOAD cable's bare copper (or green) wire using a wire connector. If these wires are already in place, check the connections.

Complete the installation:

- Fold the wires into the box, keeping the grounding wire away from the White and Hot terminals. Screw the receptacle to the box and attach the faceplate.
- Go to step 8

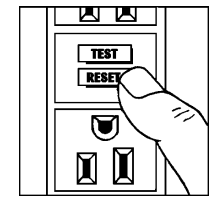
8. Test your work

Why perform this test?

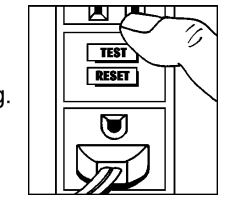
- If you miswired the GFCI it may not prevent personal injury or death due to a ground fault (electrical shock).

Procedure:

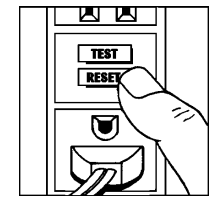
(a) Turn the power ON at the service panel. Press the RESET button fully. The GFCI cannot be reset until it is wired correctly and power is supplied to the device. Plug a lamp or radio into the GFCI (and leave it plugged-in) to verify that the power is ON. If there is no power, go to Troubleshooting.



(b) Press the TEST button in order to trip the device. This should stop the flow of electricity, making the radio or lamp shut OFF. Note that the RESET button will pop-out. If the power stays ON, go to Troubleshooting. If the power goes OFF, you have installed the GFCI receptacle correctly. To restore power, press the RESET button. If the red Light Emitting Diode (LED) begins to flash, or if the GFCI cannot be reset, the receptacle has lost its GFCI protection and should be replaced immediately.



(c) If you installed your GFCI using step 7B, plug a lamp or radio into surrounding receptacles to see which one(s), in addition to the GFCI, lost power when you pressed the TEST button. Do not plug life saving devices into any receptacles that lost power. Place a "GFCI Protected" sticker on every receptacle that lost power.



(d) Press the TEST button (then RESET button) every month to assure proper operation.

RESET BUTTON MUST BE FULLY DEPRESSED FOR FULL ENGAGEMENT.

TROUBLESHOOTING

Turn the power OFF and check the wire connections against the appropriate wiring diagram in step 7A or 7B. Make sure that there are no loose wires or loose connections. Also, it is possible that you reversed the LINE and LOAD connections. LINE/LOAD reversal will be indicated by power remaining OFF at the GFCI and by the Reset Button not staying in. Reverse the LINE and LOAD connections if necessary. Start the test from the beginning of step 8 if you rewired any connections to the GFCI.

GENERAL INFORMATION

GFCI receptacle rating: 20 Amps, 120 Volts 60 Hz

Wiring Device-Kellems
Hubbell Incorporated (Delaware)
Shelton, CT 06484
1-800-288-6000
www.hubbell-wiring.com

Twist-Lock® Devices

30A, 3 Phase Y 120/208V AC, 4 Pole, 5 Wire Grounding

Single Flush Receptacle

30A 3ØY
120/208V AC
NEMA L21-30R
UL/CSA
3 HP

Features

- High-impact, abuse-resistant nylon face
- Wire restraint recess for both back and side wiring, greatly reduces the possibility of loosening the terminal connection
- Face color coding by voltage facilitates locating and mating of proper devices
- All-brass mounting and grounding system provides a lower resistance ground path and greater resistance to corrosion than steel mounting systems

Ordering Information

Description	Device Color	UPC	Catalog Number
Nylon face, back and side wire.	Black	783585236230	HBL2810

Listings

Listed to UL 498
Fed.Spec. W-C-596
Certified to CSA C22.2 No.42

Specifications

Face	Nylon
Base	Glass-Reinforced thermoplastic polyester (RTP)
Contacts	Brass
Terminal Screws	#10 - 32 Brass
Mounting Strap	Brass

Performance

Electrical

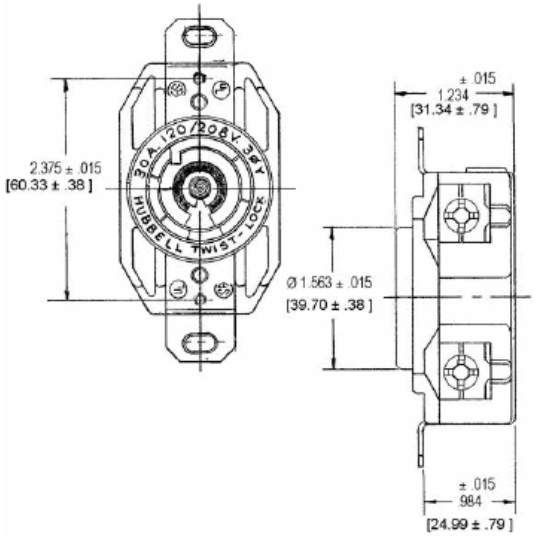
Current Interrupting	Certified for current interrupting at full rated current
Dielectric Voltage	Withstands 2,000V minimum

Mechanical

Flammability	V2 or better per UL94/CSA 22.2 No.0.17
Terminal Accommodation	#16 AWG - #8 AWG solid or stranded copper wire only.
Terminal Identification	Terminals identified in accordance with UL 498

Environmental

Moisture Resistance	IP20 Suitability
Operating Temperatures	Maximum Continuous 75°C; Minimum -40°C (w/o impact)



Accessories

Plug	HBL2811
Wallplate or Weatherproof Cover	1.60" Opening
Switched Enclosure	SETL3

Resources

Customer Use Drawing
eCatalog

Dimensions in Inches (mm)

Wiring Device-Kellems

30A 3ØY
120/208V AC
NEMA L21-30R
UL/CSA
3 HP

30A 3ØY
277/480V AC
NEMA L22-30R
UL/CSA
10 HP

30A 3ØY
347/600V AC
NEMA L23-30R
UL/CSA

Connector Bodies

Watertight Safety-Shroud®

IP66 SUITABILITY — UL Type 4x, 12

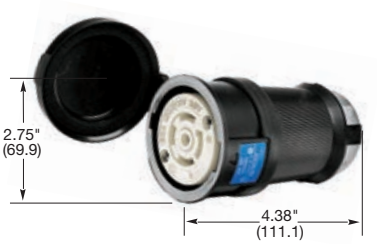
Description	Cord Dia.	Catalog Number		
Black Valox® housing, white Valox® clamps.	.350"-1.150" (9-29)	**HBL2813SW**	**HBL2823SW**	–

Insulgrip®

IP20 SUITABILITY

Description	Cord Dia.	Catalog Number		
Black and white nylon.	.350"-1.150" (9-29)	**HBL2813**	**HBL2823**	**HBL2833**
Corrosion resistant, yellow nylon.	.350"-1.150" (9-29)	**HBL28CM13**	–	–
Black and white for flat cable.	.350"-1.150" (9-29)	**HBL2813FC**	–	–
All black nylon.	.350"-1.150" (9-29)	**HBL2813BK**	–	–

Note: See page B-53 for accessories.



HBL2813SW

HBL2813

Receptacles

Watertight Safety-Shroud®

IP66 SUITABILITY — UL Type 4x, 12

Description	Catalog Number		
Gray Valox® housing and flange, back wired.	**HBL2810SW**	**HBL2820SW**	**HBL2830SW**

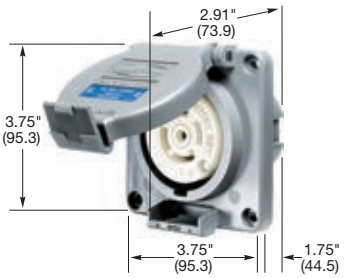
Note: See page B-54 for accessories.

Safety-Shroud® Twist-Lock®

IP20 SUITABILITY

Description	Catalog Number		
Gray Valox® angle housing, one gang, back wired.	**HBL2810AR**	–	–
Gray Valox® surface mounting, one gang, back wired.	**HBL2810SR**	–	–
Gray Valox® semi-flush, two gang, back wired.	**HBL2810SR2**	–	–

Note: See page B-54 for accessories.



HBL2810SW

Single Flush Receptacles

IP20 SUITABILITY

Description	Catalog Number		
Black nylon face, back and side wired.	**HBL2810**	**HBL2820**	**HBL2830**
Isolated ground, orange nylon face, back and side wired.	**IG2810**	–	–
Ring terminal connection.	**HBL2810RT**	–	–

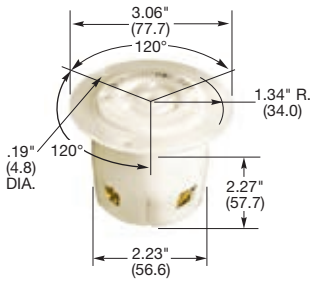
Note: See page B-52 for accessories.

HBL2810AR

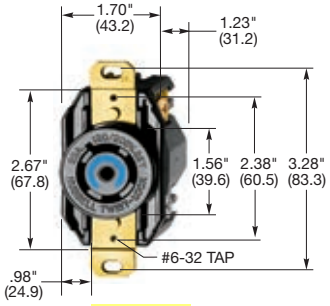
Insulgrip® Flanged Receptacles

Description	Catalog Number		
Nylon casing, back wired.	**HBL2816**	**HBL2826**	**HBL2836**

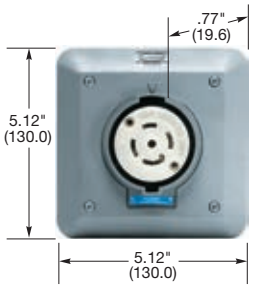
Note: See page B-52 for accessories.



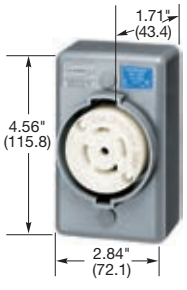
HBL2816



HBL2810



HBL2810SR2

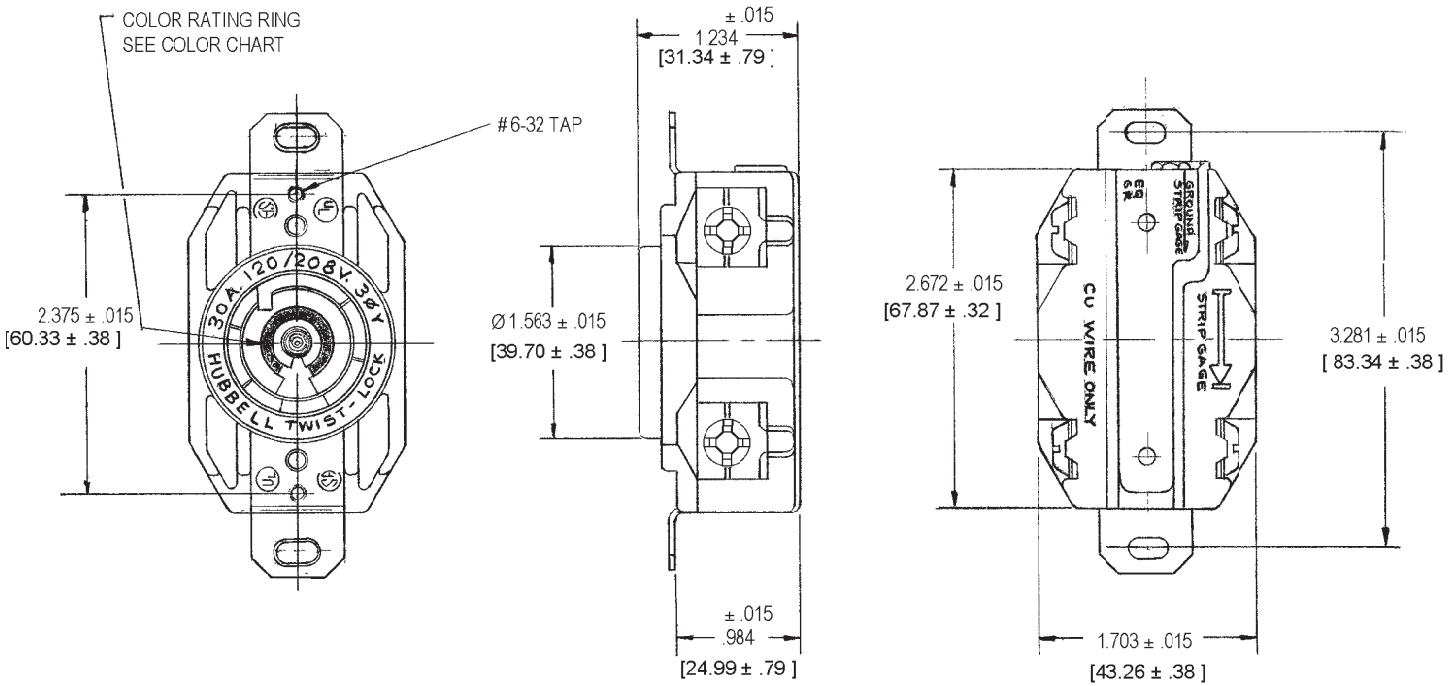


HBL2810SR

Valox® is a trademark of SABIC Innovative Plastics, acquired from General Electric Company.

Dimensions in Inches (mm)

M-6476 | 4



CAT. NO.	CONFIGURATION	RATING	RATING RING COLOR
HBL2810 HBL2810RT	NEMA L-21-30R	30A. 120/208V 3ØY	BLUE
HBL2820	NEMA L-22-30R	30A. 277/480V 3ØY	RED
HBL2830	NEMA L-23-30R	30A. 347/600V 3ØY	———

NOTES:
1. CATALOG NUMBERS WITH SUFFIX "RT" ARE CSA CERTIFIED AND UL RECOGNIZED FOR USE WITH RING TERMINALS.
2. CONDUCTOR RANGE: #14 AWG TO #8 AWG.
3. INCHES [mm].

LIST OF PARTS

DESCRIPTION	MATERIAL	FINISH
BASE	POLYESTER	TAN
COVER	NYLON	BLACK
CONTACT SPRINGS	.040 BRASS	
CLAMP	.040 BRASS	
BINDING SCREWS	BRONZE	*
HEX. HD. BIND. SCREW	BRONZE	GREEN
BACK PLATE	.040 BRASS	
END PLATE	.050 BRASS	
RIVET	BRASS	
GR. CLAMP	STEEL	** NI. PL.

* WHITE FINISH ON NEUTRAL SCREW WHEN USED.

** USED ON FIVE WIRE DEVICES

SYM	REVISIONS	APP	DATE
4	ADDED HBL2810RT TO TABLE ADDED NOTES 1-3, ADDED [mm] DIMS PER DCN10718. MYA	RDK	4/23/03
3	CONVERTED ALL DIMS TO 3 FL DECIMAL, REVISED VIEW TO SHOW TRI-DRIVE SCREWS PER DCN#7772. AMZ DB		7-5-00
2	CHD FINISH BASE, ADDED HBL TO CAT # EC 725E PLM	mfk	10-3-99
1	CONTACT FORMS MATL. WAS .040 BRASS AJL		8-6-86

THE DESIGN AND DIMENSIONS OF THE PRODUCT SHOWN ON THIS DRAWING ARE SUBJECT TO CHANGE WITHOUT NOTICE

TITLE
30A. 5-WIRE GROUNDING
TWIST-LOCK RECEPTACLE

TOLERANCES UNLESS OTHERWISE SPECIFIED
FRACTIONS ± 1/64
DECIMALS ± .005
ANGLES ± 2°

WIRING DEVICE DIVISION
HARVEY HUBBELL, INC.
BRIDGEPORT, CONN.

DR. BY A.J.L.	APP. BY
TR. BY	SCALE 1:1
CHK'D. BY	DATE 1-22-86

CODE 74545

DIMENSION SHEET FOR CAT. NO. SEE TABLE

REPAIRABLE ☐ NON-REPAIRABLE ☒

B M-6476 4

Straight Blade Devices
60A, 125/250V, 3 Pole, 4 Wire Grounding
Single Receptacle

HUBBELL

Features

- Catalog number, ratings and certifications molded in face
- Sequenced contacts assure protection
- One piece design power and ground contacts

Ordering Information

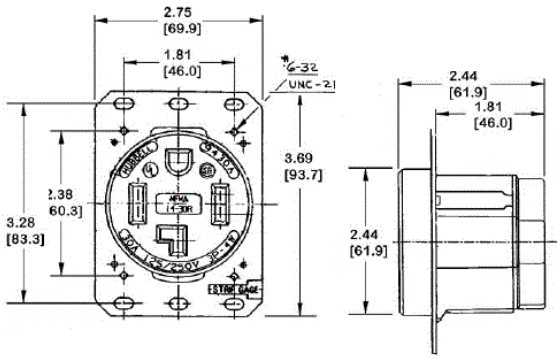
Description	Device Color	UPC	Catalog Number
Receptacle, black RTP	Black	783585015347	HBL9460A

Listings

UL Listed File E2186
CSA Certified
NEMA® WD-6 Compliant

Specifications

Housing	Reinforced Thermoplastic Polyester
Mounting Plate	.062 in. (1.5) Pre-Plated Steel
Contacts	Brass
Ground Shunt	Brass
Box Terminals	Copper



Performance

Electrical

Current Interrupting	Certified for current interrupting at full rated current
Dielectric Voltage	Withstands 2,000V minimum

Mechanical

Product Identification	Ratings are a permanent part of the device
Terminal Accommodation	#12 AWG through #4 AWG copper wire only
Terminal Identification	Terminals identified in accordance with UL 498 and CSA

Environmental

Flammability	UL 94 V-0
IP Suitability	IP20
Operating Temperatures	Maximum continuous 75°C; minimum -40°C (w/o impact)

Accessories

Wallplate or Weatherproof Cover 2.48" Opening

Resources

Customer Use Drawing
eCatalog

Dimensions in Inches (mm)

HUBBELL® Wiring Device-Kellems

HBL96067
Shown with receptacle
(sold separately)

HBL6187
Shown with receptacle
and back box
(sold separately)

Brass Locking Cover Plate

Description	Catalog Number
Locking cover plate for single 15 and 20A straight blade receptacles and 15A Twist-Lock® receptacles. Straight cylinder type lock. All cylinder locks keyed alike.	**HBL96067**

Weather Shield Plate

Description	Catalog Number
20° angle plate for duplex receptacles.	**HBL6187**

Catalog Number of Receptacles in Groups A through E below

Group A		Group B			Group C	Group D	Group E
Boss diameter 1.36" to 1.39" (34.5 to 35.3)		Boss diameter 1.55" to 1.58" (39.4 to 40.1)			Boss diameter 1.68" to 1.72" (42.7 to 43.7)	Boss diameter 2.09" to 2.13" (53.1 to 54.1)	Boss diameter 2.28" to 2.44" (57.9 to 62.0)
HBL23000HG	**HBL5661**	**HBL23CM10**	**HBL2530**	**HBL2770**	**HBL45105**	**HBL7962**	**HBL7301A**
HBL23030	**HBL6810**	**HBL2310**	**HBL26CM10**	**HBL2810**	**HBL45205**	**HBL9350**	**HBL8330A**
HBL4560	**HBL7210B**	**HBL2320**	**HBL2610**	**HBL2820**	**HBL45305**	**HBL9308**	**HBL8350A**
HBL4710	**HBL7250**	**HBL2330**	**HBL2620**	**HBL2830**	**HBL45905**	**HBL9315**	**HBL8430A**
HBL4760	**HBL7310B**	**HBL2340**	**HBL2630**	**HBL3330**		**HBL9330**	**HBL8450A**
HBL5251	**HBL7310BG**	**HBL2410**	**HBL2640**	**HBL3330G**		**HBL9360•**	**HBL8460A**
HBL52CM61	**HBL7535**	**HBL2420**	**HBL2650**	**HBL3430**		**HBL9365•**	**HBL9430A**
HBL5261	**HBL7582**	**HBL2430**	**HBL2710**	**HBL3430G**		**HBL9367•**	**HBL9450A**
HBL53CM61	**HBL8210**	**HBL2440**	**HBL2720**	**HBL3520**			**HBL9460A**
HBL5361	**HBL8310**	**HBL2450**	**HBL2730**	**HBL7410B**			
HBL5461	**HBL8410**	**HBL2460**	**HBL2740**	**HBL7410BG**			
HBL5552B	**HBL8420**	**HBL2510**	**HBL2750**				
		HBL2520	**HBL2760**				

Note: •50A 2P 3W.

Wallplates for Single Receptacles

Description	Group A		Group B		Group C		Group D		Group E
	Boss diameter 1.36" to 1.39" (34.5 to 35.3)		Boss diameter 1.55" to 1.58" (39.4 to 40.1)		Boss diameter 1.68" to 1.72" (42.7 to 43.7)		Boss diameter 2.09" to 2.13" (53.1 to 54.1)		Boss diameter 2.28" to 2.44" (57.9 to 62.0)
	1-Gang	2-Gang	1-Gang	2-Gang	1-Gang	2-Gang	1-Gang	2-Gang	2-Gang
Smooth nylon, brown.	**NP7***	**–**	**NP720***	**–**	**–**	**–**	**NP724***	**NP703***	**–**
Cast aluminum.	**HBL7320**	**–**	**HBL7320**	**–**	**HBL3394**	**–**	**HBL9419**	**–**	**–**
Stainless steel, 302/304, smooth.	**SS7****	**SS72**	**SS720**	**–**	**SS725**	**–**	**SS723**	**SS703**	**SS701**

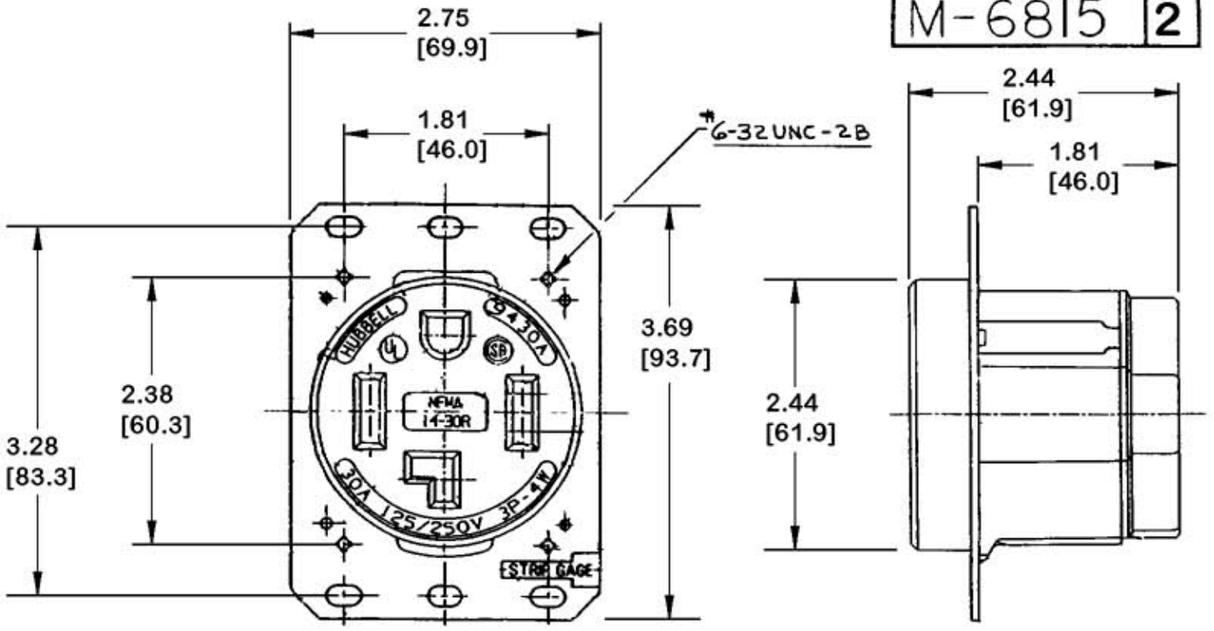
Note: See pages N-6 and N-7 for complete plate descriptions.
Catalog number indicated is Brown, add with the following to designate color: "AL**" (Almond), "**BK**" (Black), "**GY**" (Gray), "**I**" (Ivory), and "**W**" (white).*
***Catalog number indicated is Stainless Steel, replace "**SS**" with the following prefix to designate material: "**SA**" for Anodized Aluminum, "**SB**" for Solid Brass.*

Weatherproof Lift Covers for WDL "Closed" and WDL "Open", Wet Locations, 1-Gang

Description	Group A	Group B	Group C	Group D		
	Boss diameter 1.36" to 1.39" (34.5 to 35.3)	Boss diameter 1.55" to 1.58" (39.4 to 40.1)	Boss diameter 1.68" to 1.72" (42.7 to 43.7)	Boss diameter 2.09" to 2.13" (53.1 to 54.1)	50A Twist-Lock® Receptacles	30A 4W Hubbellock® Receptacles
Thermoplastic, with cover "open", gray.	**HBL7423WO**	**HBL7425WOA**	**HBL7424WO**	**–**	**HBL7774WO▲**	**–**
Thermoplastic, with cover "open", yellow.	**HBL74CM23WO**	**HBL74CM25WOA**	**HBL74CM24WO**	**–**	**HBL77CM74WO▲**	**–**
Cast aluminum, with cover "closed".	**HBL7420**	**HBL7420**	**HBL3393**	**HBL9420** **HBL9425•**	**HBL7770**	**HBL20405†** **HBL20446†**

Note: •50A 2P 3W.
▲The "CS" versions of 50A Twist-Lock® receptacles will only fit these thermoplastic plates.
†HBL20446 plate painted red for use with HBL20443 only. HBL20405 plate is for use with HBL20403 only. See page B-65 for devices.

M-6815 | 2



NOTE:

1) BOX TERMINAL WILL ACCEPT #12 THRU #4 GA. WIRE.
2) TERMINAL SCREWS ARE 3/16" ALLEN HEAD.
3) MOUNTS TO 2 1/8 DEEP TWO GANG BOX.
4) DIMENSION FORMAT IS: INCHES [mm]
5) DIMENSIONS SHOWN ON THIS DRAWING ARE NOMINAL VALUES FOR GENERAL USE ONLY. ACTUAL PART TOLERANCES MUST BE OBTAINED FROM HUBBELL ENGINEERING.

CAT. NO.	CONFIGURATION	RATING	WIRE	C.S.A.	U.L.	FED. SPEC.
HBL9430A	NEMA 14-30R	30A-125/250V	3P-4W	YES	YES	NO
HBL9450A	NEMA 14-50R	50A-125/250V	3P-4W	YES	YES	NO
HBL9460A	NEMA 14-60R	60A-125/250V	3P-4W	YES	YES	YES
HBL8430A	NEMA 15-30R	30A-3Ø-250V	3P-4W	YES	YES	NO
HBL8450A	NEMA 15-50R	50A-3Ø-250V	3P-4W	YES	YES	YES
HBL8460A	NEMA 15-60R	60A-3Ø-250V	3P-4W	YES	YES	YES
HBL8330A	NEMA 18-30R	30A-3ØY-120/208V	4P-4W	NO	YES	NO
HBL8350A	NEMA 18-50R	50A-3ØY-120/208V	4P-4W	NO	YES	NO
HBL7301A	NEMA 18-60R	60A-3ØY-120/208V	4P-4W	NO	YES	NO

CODE 74545

LIST OF PARTS

DESCRIPTION	MATERIAL	FINISH
HOUSING	POLYESTER	
BACK COVER	POLYESTER	
MOUNTING PLATE	.062 C.R.S.	ZINC PL.
CONTACTS	BRASS	
GROUND SHUNT	BRASS	
TERMINAL SCREW	STEEL	ZINC PL.
BOX TERMINAL	COPPER	

SYM	REVISIONS	APP	DATE
2	DUAL DIMENSIONS WERE FRACTIONAL ONLY; ADDED "HBL" TO ALL CATALOG NUMBERS; ADDED NOTES 4 & 5; IN NOTE #3; "TWO" WAS "DOUBLE"; PER DCN #8682. JMN	TCM	12/11/01
1	NOTE-1 CHANGED #2 THRU #4 GA WIRE TO #12 THRU #4 SOLID/STR.		8-20-90 ANL ZMM

THE DESIGN AND DIMENSIONS OF THE PRODUCT SHOWN ON THIS DRAWING ARE SUBJECT TO CHANGE WITHOUT NOTICE.

TITLE

30A, 50A, 60A STRAIGHT BLADE RECEPTACLE

TOLERANCES UNLESS OTHERWISE SPECIFIED
FRACTIONS ± 1/64
DECIMALS ± .005
ANGLES ± 2°

WIRING DEVICE DIVISION
HARVEY HUBBELL, INC.
BRIDGEPORT, CONN.

DR. BY ANL | APP. BY
TR. BY | SCALE 2
CHK'D. BY | DATE 4-4-90

DIMENSION SHEET FOR CAT. NO. SEE TABLE

REPAIRABLE ☐ NON-REPAIRABLE ☒

B M-6815 2

30, 50, 60 AMP STRAIGHT BLADE 4-WIRE RECEPTACLES

INSTALLATION INSTRUCTIONS

English

GENERAL INFORMATION

1. **NOTICE**: For installation by a qualified electrician in accordance with national and local electrical codes and the following instructions.
2. **CAUTION**: RISK OF ELECTRIC SHOCK. Disconnect power before installing. Never wire energized electrical components.
3. **CAUTION**: USE COPPER CONDUCTORS ONLY.
4. Check that the device's type and rating are suitable for the application. Device must be mounted in a two gang or larger outlet box.
5. Terminal Capacity: #12 AWG to #6 AWG, solid or stranded building wire.
6. Select conductors having 90ºC or higher rated insulation having sufficient ampacity in accordance with the 60ºC column of National Electrical Code® Table 310-16 or Canadian Electrical Code Table 2.
7. **Wiring Instructions**
   a) Strip conductors using strip gage on receptacle. DO NOT TIN CONDUCTORS.
   b) Loosen terminal screws and insert conductors fully into proper terminals as identified in Table 1.

Table 1

TERMINAL	CONDUCTOR
Green, Gnd, G	Equipment grounding conductor, (bare, green or green/yellow)
White, W	Grounded circuit conductor, Neutral (White or Gray)
X, Y, Z or Blank (Other Than White or Green)	Ungrounded Circuit Conductor, Line (NOT White, NOT Green)

   c) **TAKE EXTRA CAUTION THAT THERE ARE NO LOOSE STRANDS**
   d) Using a 3/16 inch Allen Wrench, tighten terminal screws to 75 lb-in (8.5 N•m).
8. Mount receptacle in box with screws provided and enclose with cover/wall plate (not provided with receptacle).

PRISES À LAMES DROITES de 30, 50 et 60 A, 4 FILS

DIRECTIVES DE MONTAGE

Français

RENSEIGNEMENTS GÉNÉRAUX

1. **AVIS** - Doit être installé par un électricien qualifié conformément aux codes de l'électricité nationaux et locaux et selon les directives suivantes.
2. **ATTENTION** - RISQUE DE CHOC ÉLECTRIQUE. Débrancher le circuit avant de procéder au montage. Ne jamais câbler des composants électriques dans un circuit sous tension.
3. **ATTENTION** - EMPLOYER UNIQUEMENT DES CONDUCTEURS EN CUIVRE.
4. S'assurer que le type et les caractéristiques nominales de ce dispositif conviennent à l'application. Ce dispositif doit être monté dans une boîte double ou plus grande.
5. Conducteurs admissibles : Nº 12 AWG à Nº 6 AWG, conducteurs massifs ou toronnés.
6. Choisir des conducteurs dont l'isolant à une résistance thermique de 90ºC ou plus et de capacité de courant admissible suffisante selon le tableau 2 du Code canadien de l'électricité.
7. **Méthode de câblage**
   a) Dénuder les conducteurs selon le gabarit gravé sur la prise. NE PAS ÉTAMER LES CONDUCTEURS.
   b) Desserrer les vis de borne. Insérer les conducteurs à fond dans les bornes appropriées selon le Tableau 1.

Tableau 1

BORNE	CONDUCTEUR
Verte, Gnd, G	Conducteur de MALT[1] de l'appareil, (nu, vert ou vert et jaune)
Blanche, W	Conducteur d'alimentation mis à la terre, conducteur neutre (blanc ou gris)
X, Y, Z ou autre (NI blanche, NI verte)	Conducteur d'alimentation non mis à la terre, conducteur vivant (NI blanc, NI vert)

   c) **S'ASSURER QUE TOUS LES BRINS SONT BIEN INSÉRÉS**
   d) Au moyen d'une clef Allen de 4,8 mm (3/16 po), serrer les vis de borne à un couple de 8,5 N•m.
8. Fixer la prise dans la boîte au moyen des vis fournies et refermer avec un couvercle ou une plaque murale (non fournis avec la prise).

[1]MALT = Mise à la terre

TOMACORRIENTES DE PATAS RECTAS DE 30, 50 y 60 A, 4 HILOS

INSTRUCCIONES DE INSTALACIÓN

Español

INFORMACIÓN GENERAL

1. **AVISO** - Para ser instalado por un electricista calificado, de acuerdo con los códigos eléctricos nacionales y locales, y siguiendo estas instrucciones.
2. **CUIDADO** - RIESGO DE CHOQUE ELÉCTRICO. Desconectar la corriente antes de la instalación. No conectar nunca componentes eléctricos en un circuito energizado.
3. **CUIDADO** - UTILIZAR SOLAMENTE CONDUCTORES DE COBRE.
4. Asegurarse de que el tipo y las características nominales del dispositivo sean apropiados para la aplicación. Este dispositivo debe ser fijado en una caja doble o más grande.
5. Conductores admisibles: Nº 12 AWG a Nº 6 AWG, conductores sólidos o trenzados.
6. Elegir conductores con una resistencia térmica del aislante de 90°C o más y de capacidad eléctrica suficiente según la columna 60°C de la Tabla 310-16 de la Norma oficial mexicána NOM-001-SEMP.
7. **instrucciones de cableado**
   a) Pelar los conductores según la plantilla moldeada en el tomacorriente. NO ESTAÑAR LOS CONDUCTORES.
   b) Aflojar los tornillos de los bornes. Insertar los conductores a fondo en los bornes correspondientes como se indica en la Tabla 1.

Tabla 1

BORNE	CONDUCTOR
Verde, Gnd, G	Conductor de puesta a tierra del equipo, (desnudo, verde o verde y amarillo)
Blanco, W	Conductor de alimentación puesto a tierra, conductor neutro (blanco o gris)
X, Y, Z u otro (NI blanco, NI verde)	Conductor de alimentación no puesto a tierra, vivo (NI blanco, NI verde)

   c) **ASEGURARSE DE QUE NO QUEDEN HILOS SUELTOS**
   d) Utilizando una llave tipo Allen de 4,8 mm (3/16"), ajustar los tornillos de los bornes con un par de 8,5 N•m.
8. Instalar el tomacorriente en la caja utilizando los tornillos provistos y cerrar con una tapa o una placa de pared (no provista con el tomacorriente).

Wiring Device-Kellems
Hubbell Incorporated
Bridgeport, CT 06605
(203) 337-3100
PD1186 PRINTED IN U.S.A. 5/95

WIRING INSTRUCTIONS
30,50,60 AMP. STRAIGHT BLADE RECEPTACLES

WARNING: BE SURE POWER IS OFF BEFORE STARTING. THIS DEVICE IS INTENDED FOR INSTALLATION BY A QUALIFIED ELECTRICIAN. USE COPPER WIRE ONLY.
ATTENTION: EMPLOYER UNIQUEMENT AVEC FIL DE CUIVRE.

1. Check to see that the rating, molded-on face of device, is correct for the installation.

2. Select conductor of suitable ampacity, service, and temperature rating. Refer to N.E.C., Table 310 or applicable listing or certification requirements. Do not tin conductors. Device terminals will accept 12 to 4 AWG solid or stranded building wire.

3. Strip individual conductors 11/16" (See strip gage on mounting plate).

4. Insert the conductors into the proper terminal. (Note terminal identification molded onto back of receptacle.) Make sure wires are fully engaged. TAKE EXTRA CAUTION THAT THERE ARE NO LOOSE WIRE STRANDS.

5. Using a 3/16" Allen wrench, tighten terminal screws to approximately 75 lb.-in.

6. Push wired receptacle into a 2 gang outlet box and secure with screws provided.

7. Install wall plate (not included with receptacle).

PD1075 Printed in USA Bridgeport, CT 06605 Rev. 9/90

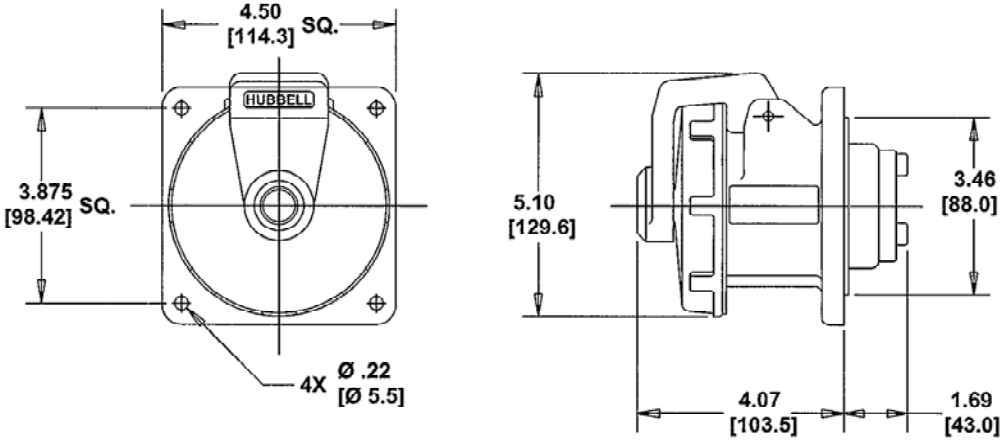
HUBBELL®
Wiring Device Division

IP67
SUITABILITY

Rating					Watertight Devices				Accessories			Replacement Interiors	
Amps	Poles and Wires	Configuration Recep./ Conn.	Plug/ Inlet	AC Voltage	Receptacle	Plug	Connector	Inlet	Back Boxes Non-Metallic	Back Boxes Metallic	Closure Caps	Recep./ Conn.	Plug/ Inlet
60	2P 3W			125V	HBL360R4W	HBL360P4W	HBL360C4W	HBL360B4W	BB60N	BB601W BB602W	PC60	IN360AF	IN360AM
	2P 3W			250V	HBL360R6W	HBL360P6W	HBL360C6W	HBL360B6W	BB60N	BB601W BB602W	PC60	IN360BF	IN360BM†
	2P 3W			480V	HBL360R7W	HBL360P7W	HBL360C7W	HBL360B7W	BB60N	BB601W BB602W	PC60	IN360BF	IN360BM†
	3P 4W			125/250V	HBL460R12W	HBL460P12W	HBL460C12W	HBL460B12W	BB60N	BB601W BB602W	PC60	IN460CF	IN460CM
	3P 4W			3Ø 250V	HBL460R9W	HBL460P9W	HBL460C9W	HBL460B9W	BB60N	BB601W BB602W	PC60	IN460DF	IN460DM
	3P 4W			3Ø 480V	HBL460R7W	HBL460P7W	HBL460C7W	HBL460B7W	BB60N	BB601W BB602W	PC60	IN460DF	IN460DM
	3P 4W			3Ø 600V	HBL460R5W	HBL460P5W	HBL460C5W	HBL460B5W	BB60N	BB601W BB602W	PC60	IN460DF	IN460DM
	4P 5W			3ØY 120/208V	HBL560R9W	HBL560P9W	HBL560C9W	HBL560B9W	BB60N	BB601W BB602W	PC60	IN560EF	IN560EM†
	4P 5W			3ØY 277/480V	HBL560R7W	HBL560P7W	HBL560C7W	HBL560B7W	BB60N	BB601W BB602W	PC60	IN560EF	IN560EM†
	4P 5W			3ØY 347/600V	HBL560R5W	HBL560P5W	HBL560C5W	HBL560B5W	BB60N	BB601W BB602W	PC60	IN560EF	IN560EM†
63	2P 3W			220–240V	HBL363R6W	HBL363P6W	HBL363C6W	HBL363B6W	BB60N	BB601W BB602W	PC60	IN360BFS	IN360BMS†
	3P 4W			380–415V	HBL463R6W	HBL463P6W	HBL463C6W	HBL463B6W	BB60N	BB601W BB602W	PC60	IN460DFS	IN460DMS
	4P 5W			220/380V 240/415V	HBL563R6W	HBL563P6W	HBL563C6W	HBL563B6W	BB60N	BB601W BB602W	PC60	IN560EFS†	IN560EMS
100	2P 3W			125V	HBL3100R4W	HBL3100P4W	HBL3100C4W	HBL3100B4W	BB100N	BB1001W BB1002W	PC100	IN3100AF	IN3100AM
	2P 3W			250V	HBL3100R6W	HBL3100P6W	HBL3100C6W	HBL3100B6W	BB100N	BB1001W BB1002W	PC100	IN3100BF	IN3100BM†
	2P 3W			480V	HBL3100R7W	HBL3100P7W	HBL3100C7W	HBL3100B7W	BB100N	BB1001W BB1002W	PC100	IN3100BF	IN3100BM†
	3P 4W			125/250V	HBL4100R12W	HBL4100P12W	HBL4100C12W	HBL4100B12W	BB100N	BB1001W BB1002W	PC100	IN4100CF†	IN4100CM
	3P 4W			3Ø 250V	HBL4100R9W	HBL4100P9W	HBL4100C9W	HBL4100B9W	BB100N	BB1001W BB1002W	PC100	IN4100DF	IN4100DM
	3P 4W			3Ø 480V	HBL4100R7W	HBL4100P7W	HBL4100C7W	HBL4100B7W	BB100N	BB1001W BB1002W	PC100	IN4100DF	IN4100DM
	3P 4W			3Ø 600V	HBL4100R5W	HBL4100P5W	HBL4100C5W	HBL4100B5W	BB100N	BB1001W BB1002W	PC100	IN4100DF	IN4100DM
	4P 5W			3ØY 120/208V	HBL5100R9W	HBL5100P9W*	HBL5100C9W	HBL5100B9W	BB100N	BB1001W BB1002W	PC100	IN5100EF	IN5100EM
	4P 5W			3ØY 277/480V	HBL5100R7W	HBL5100P7W	HBL5100C7W	HBL5100B7W	BB100N	BB1001W BB1002W	PC100	IN5100EF	IN5100EM
	4P 5W			3ØY 347/600V	HBL5100R5W	HBL5100P5W	HBL5100C5W	HBL5100B5W	BB100N	BB1001W BB1002W	PC100	IN5100EF	IN5100EM
125	2P 3W			220–240V	HBL3125R6W	HBL3125P6W	HBL3125C6W	HBL3125B6W	BB100N	BB1001W BB1002W	PC100	IN3100BFS†	IN3100BMS†
	3P 4W			380–415V	HBL4125R6W	HBL4125P6W	HBL4125C6W	HBL4125B6W	BB100N	BB1001W BB1002W	PC100	IN4100DFS	IN4100DMS
	4P 5W			220/380V 240/415V	HBL5125R6W	HBL5125P6W	HBL5125C6W	HBL5125B6W	BB100N	BB1001W BB1002W	PC100	IN5100EFS	IN5100EMS

Note: See page G-10 and G-11 for back boxes and accessories, G-12 and G-13 for product dimensions, G-14 and G-15 for product specifications and HP ratings.
All 63A and all 125A devices have pilot pins or contacts.
See page G-11 for closure caps, purchased separately. PC60 and PC100 are not UL or CSA.
**See page G-12 for additional information on short housing plug. IP22 suitability - length 8.30" (210.8).*
†Consult factory.

M-6093 | 8



CAT. NO.	CONFIGURATION	RATING	COMMENTS	HOUSING	
				MATERIAL	COLOR
HBL560B9R		60A 3ØY 120/208 VAC		NYLON	BLUE
HBL560R5W		60A 3ØY 347/600 VAC		NYLON	BLACK
HBL563R6W		63A 220/380VAC 240/415 VAC		NYLON	RED
HBL560R6V02		60A 3ØY 200/346 VAC 240/415 VAC		VALOX	RED

CAT. NO.	CONFIGURATION	RATING	COMMENTS	HOUSING	
				MATERIAL	COLOR
HBL560R6W		60A 3ØY 200/346 VAC 240/415 VAC		NYLON	RED
HBL560R7W		60A 3ØY 277/480 VAC		NYLON	RED
HBL560R9W		60A 3ØY 120/208 VAC		NYLON	BLUE

NOTES (UNLESS OTHERWISE SPECIFIED)
1) TOLERANCES ARE:
DECIMALS ± .03
ANGLES ± 2°
2) DIMENSIONS ARE: INCHES
[MILLIMETERS]

CODE 74545

LIST OF PARTS

DESCRIPTION	MATERIAL	FINISH
HOUSING	SEE TABLE	
INTERIOR	THERMOSET	
SLEEVES	BRASS	
SLEEVE INSERTS	BERR. COPPER	SILVER
TERMINAL SCREWS	ST. STEEL	
COVER	POLYESTER	
COVER SCREW	BRASS	NICKEL
COVER SPRING	ST. STEEL	
GASKET	NEOPRENE	
DISC	POLYCARBONATE	
ARM	POLYESTER	
HINGE PIN	ST. STEEL	
HINGE SPRING	ST. STEEL	
ASSEMBLY SCREWS	ST. STEEL	

DIMENSION SHEET FOR CAT. NO. SEE TABLE

REPAIRABLE ☐ NON-REPAIRABLE ☒

SYM	REVISIONS	APP	DATE
8	ADDED CAT. # HBL560R6V02 AND SPECS. TO TABLE. PER DCN 18699 DDL	CAC	04/24/12
7	ADDED "& IEC INLET REVERSE" TO TITLE; ADDED "HBL560B9R" TO TABLE PER DCN 17643 RCM	PJB	5/4/11
6	ADDED CAT # HBL560R6W TO TABLE PER DCN 17478. MYA	TLS	3/11/11
5	REDRAWN ON CAD WITH CHANGES. ADDED "HOUSING" & "COMMENTS" COLUMNS TO TABLE AND NOTES 1 & 2. IN TABLE, ADDED "240/415 VAC" TO HBL563R6W AND "A" WAS "AMP". IN LIST OF PARTS, "SEE TABLE" WAS "NYLON" AND "NEOPRENE WAS "RUBBER". .22 DIM. WAS 7/32; "Ø" WAS "DIA." AND "[XX.X]" WAS "MM". SUPERSEDES DRAWING DATED 4/28/80. PER DCN #12944 JMN	DJP	6/28/06

THE DESIGN AND DIMENSIONS OF THE PRODUCT SHOWN ON THIS DRAWING ARE SUBJECT TO CHANGE WITHOUT NOTICE

TITLE 60A & 63A 4 POLE 5 WIRE PIN AND SLEEVE RECEPTACLES & IEC INLET REVERSE

TOLERANCES UNLESS OTHERWISE SPECIFIED
FRACTIONS ± 1/64
DECIMALS ± .005
ANGLES ± 2°

WIRING DEVICE-KELLEMS
HUBBELL INCORPORATED
BRIDGEPORT, CT

DR. BY	WTC	APP. BY	DJP
TR. BY	JMN	SCALE	NONE
CHK'D BY	DJP	DATE	6/28/06

B

M-6093

8

PIN & SLEEVE RECEPTACLES & INLETS

INSTALLATION INSTRUCTIONS

English

NOTICE - READ BEFORE INSTALLING THIS DEVICE.

This pin-and-sleeve device conforms to International Electrotechnical Commission Standards IEC 309-1 and 309-2. DO NOT USE non-IEC devices in the same premises as IEC devices, unless assured that no improper mating can occur.

GENERAL INFORMATION

1. **NOTICE**: For installation by a qualified electrician in accordance with national and local electrical codes and the following instructions.
2. **CAUTION**: RISK OF ELECTRIC SHOCK. Disconnect power before installing. Never wire energized electrical components.
3. **CAUTION**: USE COPPER CONDUCTORS ONLY.
4. Check that the device's type and rating are suitable for the application.
5. Select conductors having 90°C or higher rated insulation and sufficient ampacity in accordance with the 60°C column of National Electrical Code® Table 310-16 or Canadian Electrical Code Table 2.
6. The pilot contact (if installed) is rated A600 pilot duty, 600 VAC 10A.

PRISES et ENTRÉES de COURANT PLOT et DOUILLE

DIRECTIVES DE MONTAGE

Français

AVIS - LIRE AVANT D'INSTALLER CE DISPOSITIF.

Ce dispositif à plot et douille se conforme aux normes CEI 309-1 et 309-2 de la Commission Électrotechnique Internationale. NE PAS UTILISER des dispositifs à plot et douille non CEI dans des locaux dotés de dispositifs CEI, à moins d'être assuré qu'il est impossible d'établir un raccordement impropre.

RENSEIGNEMENTS GÉNÉRAUX

1. **AVIS** - Doit être installé par un électricien qualifié conformément aux codes de l'électricité nationaux et locaux et selon les directives suivantes.
2. **ATTENTION** - RISQUE DE CHOC ÉLECTRIQUE. Débrancher le circuit avant de procéder au montage. Ne jamais câbler des composants électriques dans un circuit sous tension.
3. **ATTENTION** - EMPLOYER UNIQUEMENT DES CONDUCTEURS EN CUIVRE.
4. S'assurer que le type et les caractéristiques nominales de ce dispositif conviennent à l'application.
5. Choisir des conducteurs dont l'isolant a une résistance thermique de 90ºC ou plus et de capacité de courant admissible suffisante selon le tableau 2 du Code canadien de l'électricité.
6. Le contact pilot (s'il est installe) est classe circuit de commande A600, 600 V CA, 10A.

TOMAS y ENTRADAS de CORRIENTE de PERNO y MANGA

INSTRUCCIONES DE INSTALACIÓN

Español

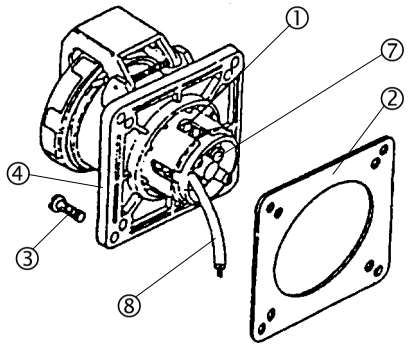
AVISO - LEER ANTES DE INSTALAR ESTE DISPOSITIVO

Este dispositivo de perno y manga se ajusta a los normas CEI 309-1 y 309-2 de la Comisión Electrotécnica Internacional. NO UTILIZAR dispositivos que no sean CEI en locales provistos con dispositivos CEI, a menos de asegurarse de que será imposible que se produzca un acoplamiento indebido.

INFORMACIÓN GENERAL

1. **AVISO** - Para ser instalado por un electricista calificado, de acuerdo con los códigos eléctricos nacionales y locales, y siguiendo estas instrucciones.
2. **CUIDADO** - RIESGO DE CHOQUE ELÉCTRICO. Desconectar la corriente antes de la instalación. No conectar nunca componentes eléctricos en un circuito energizado.
3. **CUIDADO** - UTILIZAR SOLAMENTE CONDUCTORES DE COBRE.
4. Asegurarse de que el tipo y las características nominales del dispositivo sean apropiados para la aplicación.
5. Elegir conductores con una resistencia térmica del aislante de 90ºC o más y de capacidad eléctrica suficiente según la columna 60ºC de la tabla 310-16 de la Norma oficial mexicana NOM-001-SEMP.
6. El contacto piloto (si existe instalado) esta clasificado para usarse como circuito de mando A600, 600 V CA, 10A

EXPLODED VIEWS — ÉCLATÉS — DIBUJOS DE DESPIECE



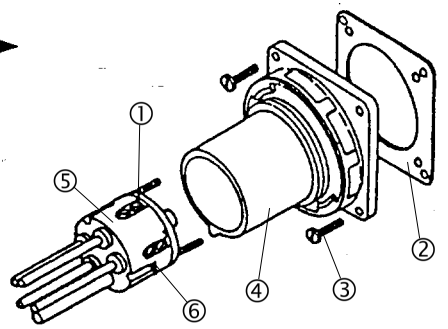
RECEPTACLE (OUTLET)
PRISE DE COURANT
TOMACORRIENTE

① Terminal screws
② Gasket
③ Mounting screws (4)
④ Body
⑤ Interior (Inlet)
⑥ Self-tapping screws (Inlet)
⑦ Terminal hole (Outlet)
⑧ Green & yellow grounding conductor (Outlet)

① Vis de borne
② Garniture de joint
③ Vis de fixation (4)
④ Carter
⑤ Intérieur (Entrée)
⑥ Vis autotaraudeuses (Entrée)
⑦ Orifice de borne (Prise)
⑧ File de MALT vert et jaune (Prise)

INLET
ENTRÉE DE COURANT
ENTRADA DE CORRIENTE

① Tornillos de borne
② Junta
③ Tornillos de fijación (4)
④ Envoltura
⑤ Interior (Entrada)
⑥ Tornillos autorroscantes (Entrada)
⑦ Orificio de borne (Tomacorriente)
⑧ Hilo de puesta a tierra verde y amarillo (Tomacorriente)



Wiring Device-Kellems
Hubbell Incorporated (Delaware)
185 Plains Road
Milford, CT 06460-8897
(203) 882-4800

PRINTED IN U.S.A. 3/09

English

INSTALLATION - Receptacle (Outlet)

Wiring Instructions

a) Strip each conductor as shown in Table 2. DO NOT TIN CONDUCTORS.
b) Feed conductors through the gasket
c) Twist wire strands together on each conductor.
d) Loosen terminal screws. Insert conductors fully into proper terminals as identified in Table 1.
e) Tighten terminal screws to torque shown in Table 2.
f) **TAKE CAUTION THAT THERE ARE NO STRAY WIRE STRANDS**.

INSTALLATION - Inlet

1. **Disassemble device**
   Remove the interior from the body (loosen two screws visible from front; screws may be captive in interior).
2. **Wiring Instructions**
   a) Strip each conductor as shown in Table 2. DO NOT TIN CONDUCTORS
   b) Feed conductors through the gasket and the body.
   c) Twist wire strands together on each conductor.
   d) Loosen terminal screws. Insert conductors fully into proper terminals as identified in Table 1.
   e) Tighten terminal screws to torque shown in Table 2.
   f) **TAKE CAUTION THAT THERE ARE NO STRAY WIRE STRANDS**.
3. **Reassemble device**
   Assemble interior by tightening two screws until interior is firmly seated in housing. Screws may continue to turn after interior is seated. This is normal and harmless.
4. **Mounting details**
   Tighten mounting screws to 15-20 lb•in (1.7-2.3 N•m)

Table 1

TERMINAL POLARITY IDENTIFICATION TABLE	
TERMINAL	**CONDUCTOR**
Green, Green Hex Head Screw ⏚	Equipment Grounding Conductor (Green or Green/Yellow or Bare)
W, White, **N**	Grounded Circuit Conductor Neutral (White or Gray)
L_1, L_2, L_3 or blank **R_1, S_2, T_3** or blank **X**, **Y**, **Z** or blank	Ungrounded Circuit Conductor, (Line, Hot).
Pilot	Control circuit conductor

Table 2

DEVICE RATING	DOMESTIC / FOREIGN	20 A / 16 A	30 A / 32 A	60 A / 63 A	100 A
Conductor Strip Length	inch	1	1	1	1½
	mm	25	25	25	40
Torque Terminal Screws	lb•in	20	20	75	75
	N•m	2.5	2.5	8.5	8.5
Torque Pilot terminal Screws	lb•in			20	20
	N•m			2.5	2.5

Français

INSTALLATION - Prise de courant

Méthode de câblage

a) Dénuder les conducteurs selon le Tableau 2. NE PAS ÉTAMER LES CONDUCTEURS.
b) Passer les conducteurs dans l'ouverture de la garniture de joint.
c) Torsader ensemble les brins de chaque conducteur.
d) Desserrer les vis de borne. Insérer les conducteurs à fond dans les bornes appropriées conformément au Tableau 1.
e) Serrer les vis de borne selon le couple indiqué au Tableau 2.
f) **S'ASSURER QUE TOUS LES BRINS SONT BIEN INSÉRÉS.**

INSTALLATION - Entrée de courant

1. **Démonter le dispositif**
   Retirer l'intérieur du carter (desserrer les deux vis visibles de l'avant; les vis peuvent être du type imperdable).
2. **Méthode de câblage**
   a) Dénuder les conducteurs selon le Tableau 2. NE PAS ÉTAMER LES CONDUCTEURS.
   b) Passer les conducteurs dans l'ouverture de la garniture de joint et le carter.
   c) Torsader ensemble les brins de chaque conducteur.
   d) Desserrer les vis de borne. Insérer les conducteurs à fond dans les bornes appropriées conformément au Tableau 1.
   e) Serrer les vis de borne selon le couple du Tableau 2.
   f) **S'ASSURER QUE TOUS LES BRINS SONT BIEN INSÉRÉS**.
3. **Remonter le dispositif**
   Assembler l'intérieur en serrant les deux vis jusqu'à ce qu'il repose solidement dans le carter. Il arrive qu'on puisse continuer à tourner les vis une fois l'intérieur en place. Cela est normal et sans conséquence.
4. **Détails de montage**
   Serrer les vis de fixation à un couple de 1,7 à 2,3 N•m

Tableau 1

TABLEAU DE REPÉRAGE DES BORNES	
BORNE	**CONDUCTEUR**
Vert. Vis verte à tête hexagonale ⏚	Conducteur de MALT[1] de l'appareil (Vert ou vert et jaune ou nu)
«W», blanc, **«N»**	Conducteur d'alimentation mis à la terre. Neutre (blanc ou gris)
L_1, L_2, L_3 ou sans marque **R_1, S_2, T_3** ou sans marque **X, Y, Z** ou sans marque	Conducteur d'alimentation non mis à la terre (Vivant).
Pilote	Conducteur du circuit de commande

[1]MALT = Mise à la terre

Tableau 2

CAPACITÉ du DISPOSITIF	NATIONAL / INTERNAT'L	20 A / 16 A	30 A / 32 A	60 A / 63 A	100 A
Longueur de dénudage -cond.	pouces	1	1	1	1½
	mm	25	25	25	40
Couple de serrage Vis de borne	lb•po	20	20	75	75
	N•m	2.5	2.5	8.5	8.5
Couple de serrage Vis de borne pilote	lb•po			20	20
	N•m			2.5	2.5

Español

INSTALACIÓN - Tomacorriente

Instrucciones de cableado

a) Pelar los conductores como se muestra en la Tabla 2. NO ESTAÑAR LOS CONDUCTORES.
b) Pasar los conductores por el hueco de la junta.
c) Torcer el conjunto de los hilos de cada conductor.
d) Aflojar los tornillos de los bornes. Insertar los conductores a fondo en los bornes correspondientes como se indica en la Tabla 1.
e) Ajustar los tornillos de los bornes como se indica en la Tabla 2.
f) **ASEGURARSE DE QUE NO QUEDEN HILOS SUELTOS.**

INSTALACIÓN - Entradas

1. **Desarmar el dispositivo** (Ver dibujo de despiece).
   Retirar el interior de la envoltura (aflojar los dos tornillos visibles desde el frente, que pueden ser de tipo cautivo).
2. **Instrucciones de cableado**
   a) Pelar los conductores como se muestra en la Tabla 2. NO ESTAÑAR LOS CONDUCTORES.
   b) Pasar los conductores por el hueco de la junta.
   c) Torcer el conjunto de los hilos de cada conductor.
   d) Aflojar los tornillos de los bornes. Insertar los conductores a fondo en los bornes correspondientes como se indica en la Tabla 1.
   e) Ajustar los tornillos de los bornes como se indica en la Tabla 2.
   f) **ASEGURARSE DE QUE NO QUEDEN HILOS SUELTOS.**
3. **Volver a armar el dispositivo**
   Armar el interior ajustando los dos tornillos hasta que apoye firmamente en la envoltura. Quizás los tornillos puedan seguir girando una vez colocado el interior en su lugar; se trata de algo normal y sin consecuencias.
4. **Detalles de montave**
   Ajustar los tornillos de fijación con un par de 1,7 a 2,3 N•m

Tabla 1

TABLA DE IDENTIFICACIÓN DE LOS BORNES	
BORNE	**CONDUCTOR**
Verde. Tornillo verde de cabeza hexagonal ⏚	Conductor de puesta a tierra del equipo (verde o verde y amarillo o desnudo)
«W», blanco, **«N»**	Conductor de alimentación puesto a tierra, Conductor neutro (blanco o gris)
L_1, L_2, L_3 o sin marca **R_1, S_2, T_3** o sin marca **X, Y, Z** o sin marca	Conductor de alimentación no puesto a tierra (Vivo).
Piloto	Conductor del circuito de control

Tabla 2

CAPACIDAD del DISPOSITIVO	NACIONAL / INTERNAC'L	20 A / 16 A	30 A / 32 A	60 A / 63 A	100 A
Pelar los conductores	mm	25	25	25	40
Ajustar los tornillos de bornes con un par de...	N•m	2.5	2.5	8.5	8.5
Ajustar los tornillos del piloto con un par de...	N•m			2.5	2.5

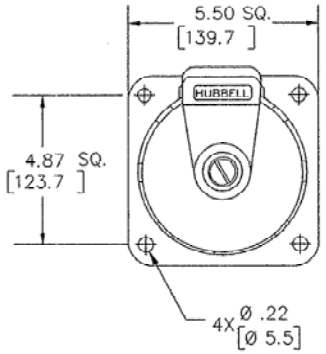
PRINTED IN U.S.A. 3/09

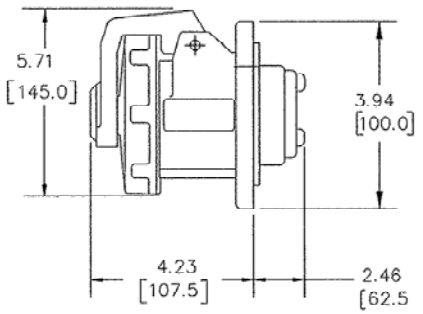
IP67
SUITABILITY

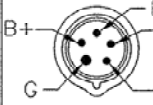
Rating					Watertight Devices				Accessories			Replacement Interiors	
Amps	Poles and Wires	Configuration Recep./ Conn.	Plug/ Inlet	AC Voltage	Receptacle	Plug	Connector	Inlet	Back Boxes Non-Metallic	Back Boxes Metallic	Closure Caps	Recep./ Conn.	Plug/ Inlet
60	2P 3W			125V	HBL360R4W	HBL360P4W	HBL360C4W	HBL360B4W	BB60N	BB601W BB602W	PC60	IN360AF	IN360AM
	2P 3W			250V	HBL360R6W	HBL360P6W	HBL360C6W	HBL360B6W	BB60N	BB601W BB602W	PC60	IN360BF	IN360BM†
	2P 3W			480V	HBL360R7W	HBL360P7W	HBL360C7W	HBL360B7W	BB60N	BB601W BB602W	PC60	IN360BF	IN360BM†
	3P 4W			125/250V	HBL460R12W	HBL460P12W	HBL460C12W	HBL460B12W	BB60N	BB601W BB602W	PC60	IN460CF	IN460CM
	3P 4W			3Ø 250V	HBL460R9W	HBL460P9W	HBL460C9W	HBL460B9W	BB60N	BB601W BB602W	PC60	IN460DF	IN460DM
	3P 4W			3Ø 480V	HBL460R7W	HBL460P7W	HBL460C7W	HBL460B7W	BB60N	BB601W BB602W	PC60	IN460DF	IN460DM
	3P 4W			3Ø 600V	HBL460R5W	HBL460P5W	HBL460C5W	HBL460B5W	BB60N	BB601W BB602W	PC60	IN460DF	IN460DM
	4P 5W			3ØY 120/208V	HBL560R9W	HBL560P9W	HBL560C9W	HBL560B9W	BB60N	BB601W BB602W	PC60	IN560EF	IN560EM†
	4P 5W			3ØY 277/480V	HBL560R7W	HBL560P7W	HBL560C7W	HBL560B7W	BB60N	BB601W BB602W	PC60	IN560EF	IN560EM†
	4P 5W			3ØY 347/600V	HBL560R5W	HBL560P5W	HBL560C5W	HBL560B5W	BB60N	BB601W BB602W	PC60	IN560EF	IN560EM†
63	2P 3W			220–240V	HBL363R6W	HBL363P6W	HBL363C6W	HBL363B6W	BB60N	BB601W BB602W	PC60	IN360BFS	IN360BMS†
	3P 4W			380–415V	HBL463R6W	HBL463P6W	HBL463C6W	HBL463B6W	BB60N	BB601W BB602W	PC60	IN460DFS	IN460DMS
	4P 5W			220/380V 240/415V	HBL563R6W	HBL563P6W	HBL563C6W	HBL563B6W	BB60N	BB601W BB602W	PC60	IN560EFS†	IN560EMS
100	2P 3W			125V	HBL3100R4W	HBL3100P4W	HBL3100C4W	HBL3100B4W	BB100N	BB1001W BB1002W	PC100	IN3100AF	IN3100AM
	2P 3W			250V	HBL3100R6W	HBL3100P6W	HBL3100C6W	HBL3100B6W	BB100N	BB1001W BB1002W	PC100	IN3100BF	IN3100BM†
	2P 3W			480V	HBL3100R7W	HBL3100P7W	HBL3100C7W	HBL3100B7W	BB100N	BB1001W BB1002W	PC100	IN3100BF	IN3100BM†
	3P 4W			125/250V	HBL4100R12W	HBL4100P12W	HBL4100C12W	HBL4100B12W	BB100N	BB1001W BB1002W	PC100	IN4100CF†	IN4100CM
	3P 4W			3Ø 250V	HBL4100R9W	HBL4100P9W	HBL4100C9W	HBL4100B9W	BB100N	BB1001W BB1002W	PC100	IN4100DF	IN4100DM
	3P 4W			3Ø 480V	HBL4100R7W	HBL4100P7W	HBL4100C7W	HBL4100B7W	BB100N	BB1001W BB1002W	PC100	IN4100DF	IN4100DM
	3P 4W			3Ø 600V	HBL4100R5W	HBL4100P5W	HBL4100C5W	HBL4100B5W	BB100N	BB1001W BB1002W	PC100	IN4100DF	IN4100DM
	4P 5W			3ØY 120/208V	HBL5100R9W	HBL5100P9W*	HBL5100C9W	HBL5100B9W	BB100N	BB1001W BB1002W	PC100	IN5100EF	IN5100EM
	4P 5W			3ØY 277/480V	HBL5100R7W	HBL5100P7W	HBL5100C7W	HBL5100B7W	BB100N	BB1001W BB1002W	PC100	IN5100EF	IN5100EM
	4P 5W			3ØY 347/600V	HBL5100R5W	HBL5100P5W	HBL5100C5W	HBL5100B5W	BB100N	BB1001W BB1002W	PC100	IN5100EF	IN5100EM
125	2P 3W			220–240V	HBL3125R6W	HBL3125P6W	HBL3125C6W	HBL3125B6W	BB100N	BB1001W BB1002W	PC100	IN3100BFS†	IN3100BMS†
	3P 4W			380–415V	HBL4125R6W	HBL4125P6W	HBL4125C6W	HBL4125B6W	BB100N	BB1001W BB1002W	PC100	IN4100DFS	IN4100DMS
	4P 5W			220/380V 240/415V	HBL5125R6W	HBL5125P6W	HBL5125C6W	HBL5125B6W	BB100N	BB1001W BB1002W	PC100	IN5100EFS	IN5100EMS

Note: See page G-10 and G-11 for back boxes and accessories, G-12 and G-13 for product dimensions, G-14 and G-15 for product specifications and HP ratings.
All 63A and all 125A devices have pilot pins or contacts.
See page G-11 for closure caps, purchased separately. PC60 and PC100 are not UL or CSA.
**See page G-12 for additional information on short housing plug. IP22 suitability - length 8.30" (210.8).*
†Consult factory.

M-6097 | 8





CAT NO.	CONFIGURATION	RATING	HOUSING		CAT. NO.	CONFIGURATION	RATING	HOUSING	
			MATERIAL	COLOR				MATERIAL	COLOR
					HBL5100R7W		100A 3ØY 277/480 VAC	NYLON	RED
					HBL5100R8WDC		100 A 400 VDC	NYLON	RED
					HBL5100R9W		100A 3ØY 120/208 VAC	NYLON	BLUE
HBL5100R5W		100A 3ØY 347/600 VAC	NYLON	BLACK					
HBL5125R6W		125A 220/380VAC 240/415VAC	NYLON	RED					

NOTES: (UNLESS OTHERWISE SPECIFIED

1) TOLERANCES ARE:
DECIMALS ±.03
ANGLES ± 2°

2) DIMENSIONS ARE INCHES
[MILLIMETERS]

CODE 74545

LIST OF PARTS

DESCRIPTION	MATERIAL	FINISH
HOUSING	SEE TABLE	
INTERIOR	THERMOSET	
SLEEVES	BRASS	
SLEEVE INSERT	BERR COPPER	SILVER
TERM. SCRS.	STAIN. STEEL	
COVER	POLYESTER	
COVER SCREWS	BRASS	NICKEL
COVER SPRING	STAIN. STEEL	
GASKET	NEOPRENE	
DISC	POLYCARBONATE	
ARM	POLYESTER	
HINGE PIN	STAIN. STEEL	
HNGE SPR.	STAIN. STEEL	
ASS'Y SCREWS	STAIN. STEEL	

SYM	REVISIONS	APP	DATE
8	ADDED POLARITY TO TO CATALOG # HBL5100R8WDC PER DCN16648 MYA TLS TLS	TLS	5/12/10
7	ADDED CAT. HBL5100R8V0DC PER DCN 16502 SPN TLS	MJM	4/13/10
6	REDRAWN ON CAD WITH CHANGES, ADDED "HOUSING" AND "COMMENTS" COLUMNS, TO TABLE AND NOTES 1& 2, IN TABLE, ADDED "240/415VAC" TO HBL5125R6W AND "A" WAS "AMP" IN LIST OF PARTS, "SEE TABLE" WAS "NYLON" AND "NEOPRENE" WAS "RUBBER". 22 DIM WAS 7/32, AND 4.37[123.7] SQ WAS 4.875/123.82MM SQ; "Ø" WAS "DIA." AND "(XX.X)" WAS "MM". SUPERSEDES DRAWING DATED 5/7/80 PER DCN #12944 JMN	DJP	6/28/06

THE DESIGN AND DIMENSIONS OF THE PRODUCT SHOWN ON THIS DRAWING ARE SUBJECT TO CHANGE WITHOUT NOTICE

TITLE
100A & 125A 4 POLE 5 WIRE
PIN & SLEEVE RECEPTACLE

TOLERANCES UNLESS OTHERWISE SPECIFIED
~~FRACTIONS ±1/64~~
DECIMALS ±.03
ANGLES ± 2°

WIRING DEVICE-KELLEMS
HUBBELL INCORPORATED
BRIDGEPORT, CT

DR. BY MJK	APP. BY DJP
TR. BY JMN	SCALE NONE
CHK'D BY DJP.	DATE 6/28/06

DIMENSION SHEET FOR CAT. NO. SEE TABLE
REPAIRABLE ☐ NON-REPAIRABLE ☐
B
M-6097
8

PIN & SLEEVE RECEPTACLES & INLETS

INSTALLATION INSTRUCTIONS

English

NOTICE - READ BEFORE INSTALLING THIS DEVICE.

This pin-and-sleeve device conforms to International Electrotechnical Commission Standards IEC 309-1 and 309-2. DO NOT USE non-IEC devices in the same premises as IEC devices, unless assured that no improper mating can occur.

GENERAL INFORMATION

1. **NOTICE**: For installation by a qualified electrician in accordance with national and local electrical codes and the following instructions.
2. **CAUTION**: RISK OF ELECTRIC SHOCK. Disconnect power before installing. Never wire energized electrical components.
3. **CAUTION**: USE COPPER CONDUCTORS ONLY.
4. Check that the device's type and rating are suitable for the application.
5. Select conductors having 90°C or higher rated insulation and sufficient ampacity in accordance with the 60°C column of National Electrical Code® Table 310-16 or Canadian Electrical Code Table 2.
6. The pilot contact (if installed) is rated A600 pilot duty, 600 VAC 10A.

PRISES et ENTRÉES de COURANT PLOT et DOUILLE

DIRECTIVES DE MONTAGE

Français

AVIS - LIRE AVANT D'INSTALLER CE DISPOSITIF.

Ce dispositif à plot et douille se conforme aux normes CEI 309-1 et 309-2 de la Commission Électrotechnique Internationale. NE PAS UTILISER des dispositifs à plot et douille non CEI dans des locaux dotés de dispositifs CEI, à moins d'être assuré qu'il est impossible d'établir un raccordement impropre.

RENSEIGNEMENTS GÉNÉRAUX

1. **AVIS** - Doit être installé par un électricien qualifié conformément aux codes de l'électricité nationaux et locaux et selon les directives suivantes.
2. **ATTENTION** - RISQUE DE CHOC ÉLECTRIQUE. Débrancher le circuit avant de procéder au montage. Ne jamais câbler des composants électriques dans un circuit sous tension.
3. **ATTENTION** - EMPLOYER UNIQUEMENT DES CONDUCTEURS EN CUIVRE.
4. S'assurer que le type et les caractéristiques nominales de ce dispositif conviennent à l'application.
5. Choisir des conducteurs dont l'isolant a une résistance thermique de 90ºC ou plus et de capacité de courant admissible suffisante selon le tableau 2 du Code canadien de l'électricité.
6. Le contact pilot (s'il est installe) est classe circuit de commande A600, 600 V CA, 10A.

TOMAS y ENTRADAS de CORRIENTE de PERNO y MANGA

INSTRUCCIONES DE INSTALACIÓN

Español

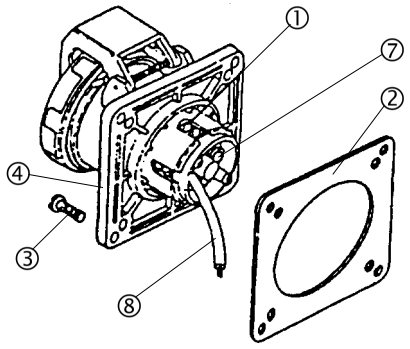
AVISO - LEER ANTES DE INSTALAR ESTE DISPOSITIVO

Este dispositivo de perno y manga se ajusta a los normas CEI 309-1 y 309-2 de la Comisión Electrotécnica Internacional. NO UTILIZAR dispositivos que no sean CEI en locales provistos con dispositivos CEI, a menos de asegurarse de que será imposible que se produzca un acoplamiento indebido.

INFORMACIÓN GENERAL

1. **AVISO** - Para ser instalado por un electricista calificado, de acuerdo con los códigos eléctricos nacionales y locales, y siguiendo estas instrucciones.
2. **CUIDADO** - RIESGO DE CHOQUE ELÉCTRICO. Desconectar la corriente antes de la instalación. No conectar nunca componentes eléctricos en un circuito energizado.
3. **CUIDADO** - UTILIZAR SOLAMENTE CONDUCTORES DE COBRE.
4. Asegurarse de que el tipo y las características nominales del dispositivo sean apropiados para la aplicación.
5. Elegir conductores con una resistencia térmica del aislante de 90ºC o más y de capacidad eléctrica suficiente según la columna 60ºC de la tabla 310-16 de la Norma oficial mexicana NOM-001-SEMP.
6. El contacto piloto (si existe instalado) esta clasificado para usarse como circuito de mando A600, 600 V CA, 10A

EXPLODED VIEWS — ÉCLATÉS — DIBUJOS DE DESPIECE



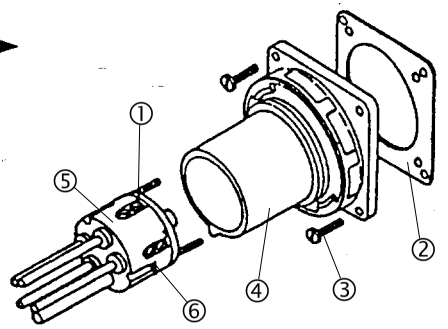
RECEPTACLE (OUTLET)
PRISE DE COURANT
TOMACORRIENTE

① Terminal screws
② Gasket
③ Mounting screws (4)
④ Body
⑤ Interior (Inlet)
⑥ Self-tapping screws (Inlet)
⑦ Terminal hole (Outlet)
⑧ Green & yellow grounding conductor (Outlet)

① Vis de borne
② Garniture de joint
③ Vis de fixation (4)
④ Carter
⑤ Intérieur (Entrée)
⑥ Vis autotaraudeuses (Entrée)
⑦ Orifice de borne (Prise)
⑧ File de MALT vert et jaune (Prise)

INLET
ENTRÉE DE COURANT
ENTRADA DE CORRIENTE

① Tornillos de borne
② Junta
③ Tornillos de fijación (4)
④ Envoltura
⑤ Interior (Entrada)
⑥ Tornillos autorroscantes (Entrada)
⑦ Orificio de borne (Tomacorriente)
⑧ Hilo de puesta a tierra verde y amarillo (Tomacorriente)



Wiring Device-Kellems
Hubbell Incorporated (Delaware)
185 Plains Road
Milford, CT 06460-8897
(203) 882-4800

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English

INSTALLATION - Receptacle (Outlet)

Wiring Instructions

a) Strip each conductor as shown in Table 2. DO NOT TIN CONDUCTORS.
b) Feed conductors through the gasket
c) Twist wire strands together on each conductor.
d) Loosen terminal screws. Insert conductors fully into proper terminals as identified in Table 1.
e) Tighten terminal screws to torque shown in Table 2.
f) **TAKE CAUTION THAT THERE ARE NO STRAY WIRE STRANDS**.

INSTALLATION - Inlet

1. **Disassemble device**
   Remove the interior from the body (loosen two screws visible from front; screws may be captive in interior).
2. **Wiring Instructions**
   a) Strip each conductor as shown in Table 2. DO NOT TIN CONDUCTORS
   b) Feed conductors through the gasket and the body.
   c) Twist wire strands together on each conductor.
   d) Loosen terminal screws. Insert conductors fully into proper terminals as identified in Table 1.
   e) Tighten terminal screws to torque shown in Table 2.
   f) **TAKE CAUTION THAT THERE ARE NO STRAY WIRE STRANDS**.
3. **Reassemble device**
   Assemble interior by tightening two screws until interior is firmly seated in housing. Screws may continue to turn after interior is seated. This is normal and harmless.
4. **Mounting details**
   Tighten mounting screws to 15-20 lb•in (1.7-2.3 N•m)

Table 1

TERMINAL POLARITY IDENTIFICATION TABLE	
TERMINAL	**CONDUCTOR**
Green, Green Hex Head Screw ⏚	Equipment Grounding Conductor (Green or Green/Yellow or Bare)
W, White, **N**	Grounded Circuit Conductor Neutral (White or Gray)
L_1, L_2, L_3 or blank **R_1, S_2, T_3** or blank **X**, **Y**, **Z** or blank	Ungrounded Circuit Conductor, (Line, Hot).
Pilot	Control circuit conductor

Table 2

DEVICE RATING	DOMESTIC / FOREIGN	20 A / 16 A	30 A / 32 A	60 A / 63 A	100 A
Conductor Strip Length	inch	1	1	1	1½
	mm	25	25	25	40
Torque Terminal Screws	lb•in	20	20	75	75
	N•m	2.5	2.5	8.5	8.5
Torque Pilot terminal Screws	lb•in			20	20
	N•m			2.5	2.5

Français

INSTALLATION - Prise de courant

Méthode de câblage

a) Dénuder les conducteurs selon le Tableau 2. NE PAS ÉTAMER LES CONDUCTEURS.
b) Passer les conducteurs dans l'ouverture de la garniture de joint.
c) Torsader ensemble les brins de chaque conducteur.
d) Desserrer les vis de borne. Insérer les conducteurs à fond dans les bornes appropriées conformément au Tableau 1.
e) Serrer les vis de borne selon le couple indiqué au Tableau 2.
f) **S'ASSURER QUE TOUS LES BRINS SONT BIEN INSÉRÉS.**

INSTALLATION - Entrée de courant

1. **Démonter le dispositif**
   Retirer l'intérieur du carter (desserrer les deux vis visibles de l'avant; les vis peuvent être du type imperdable).
2. **Méthode de câblage**
   a) Dénuder les conducteurs selon le Tableau 2. NE PAS ÉTAMER LES CONDUCTEURS.
   b) Passer les conducteurs dans l'ouverture de la garniture de joint et le carter.
   c) Torsader ensemble les brins de chaque conducteur.
   d) Desserrer les vis de borne. Insérer les conducteurs à fond dans les bornes appropriées conformément au Tableau 1.
   e) Serrer les vis de borne selon le couple du Tableau 2.
   f) **S'ASSURER QUE TOUS LES BRINS SONT BIEN INSÉRÉS**.
3. **Remonter le dispositif**
   Assembler l'intérieur en serrant les deux vis jusqu'à ce qu'il repose solidement dans le carter. Il arrive qu'on puisse continuer à tourner les vis une fois l'intérieur en place. Cela est normal et sans conséquence.
4. **Détails de montage**
   Serrer les vis de fixation à un couple de 1,7 à 2,3 N•m

Tableau 1

TABLEAU DE REPÉRAGE DES BORNES	
BORNE	**CONDUCTEUR**
Vert. Vis verte à tête hexagonale ⏚	Conducteur de MALT[1] de l'appareil (Vert ou vert et jaune ou nu)
«W», blanc, **«N»**	Conducteur d'alimentation mis à la terre. Neutre (blanc ou gris)
L_1, L_2, L_3 ou sans marque **R_1, S_2, T_3** ou sans marque **X, Y, Z** ou sans marque	Conducteur d'alimentation non mis à la terre (Vivant).
Pilote	Conducteur du circuit de commande

[1]MALT = Mise à la terre

Tableau 2

CAPACITÉ du DISPOSITIF	NATIONAL / INTERNAT'L	20 A / 16 A	30 A / 32 A	60 A / 63 A	100 A
Longueur de dénudage -cond.	pouces	1	1	1	1½
	mm	25	25	25	40
Couple de serrage Vis de borne	lb•po	20	20	75	75
	N•m	2.5	2.5	8.5	8.5
Couple de serrage Vis de borne pilote	lb•po			20	20
	N•m			2.5	2.5

Español

INSTALACIÓN - Tomacorriente

Instrucciones de cableado

a) Pelar los conductores como se muestra en la Tabla 2. NO ESTAÑAR LOS CONDUCTORES.
b) Pasar los conductores por el hueco de la junta.
c) Torcer el conjunto de los hilos de cada conductor.
d) Aflojar los tornillos de los bornes. Insertar los conductores a fondo en los bornes correspondientes como se indica en la Tabla 1.
e) Ajustar los tornillos de los bornes como se indica en la Tabla 2.
f) **ASEGURARSE DE QUE NO QUEDEN HILOS SUELTOS.**

INSTALACIÓN - Entradas

1. **Desarmar el dispositivo** (Ver dibujo de despiece).
   Retirar el interior de la envoltura (aflojar los dos tornillos visibles desde el frente, que pueden ser de tipo cautivo).
2. **Instrucciones de cableado**
   a) Pelar los conductores como se muestra en la Tabla 2. NO ESTAÑAR LOS CONDUCTORES.
   b) Pasar los conductores por el hueco de la junta.
   c) Torcer el conjunto de los hilos de cada conductor.
   d) Aflojar los tornillos de los bornes. Insertar los conductores a fondo en los bornes correspondientes como se indica en la Tabla 1.
   e) Ajustar los tornillos de los bornes como se indica en la Tabla 2.
   f) **ASEGURARSE DE QUE NO QUEDEN HILOS SUELTOS.**
3. **Volver a armar el dispositivo**
   Armar el interior ajustando los dos tornillos hasta que apoye firmamente en la envoltura. Quizás los tornillos puedan seguir girando una vez colocado el interior en su lugar; se trata de algo normal y sin consecuencias.
4. **Detalles de montave**
   Ajustar los tornillos de fijación con un par de 1,7 a 2,3 N•m

Tabla 1

TABLA DE IDENTIFICACIÓN DE LOS BORNES	
BORNE	**CONDUCTOR**
Verde. Tornillo verde de cabeza hexagonal ⏚	Conductor de puesta a tierra del equipo (verde o verde y amarillo o desnudo)
«W», blanco, **«N»**	Conductor de alimentación puesto a tierra, Conductor neutro (blanco o gris)
L_1, L_2, L_3 o sin marca **R_1, S_2, T_3** o sin marca **X, Y, Z** o sin marca	Conductor de alimentación no puesto a tierra (Vivo).
Piloto	Conductor del circuito de control

Tabla 2

CAPACIDAD del DISPOSITIVO	NACIONAL / INTERNAC'L	20 A / 16 A	30 A / 32 A	60 A / 63 A	100 A
Pelar los conductores	mm	25	25	25	40
Ajustar los tornillos de bornes con un par de...	N•m	2.5	2.5	8.5	8.5
Ajustar los tornillos del piloto con un par de...	N•m			2.5	2.5

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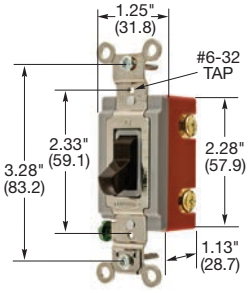

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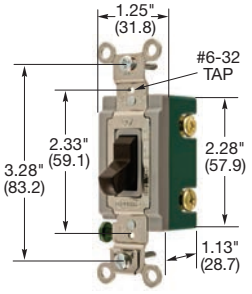

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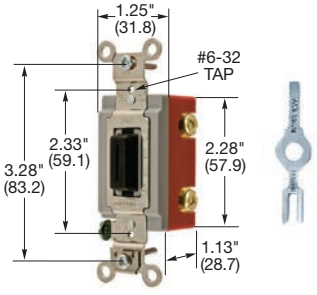

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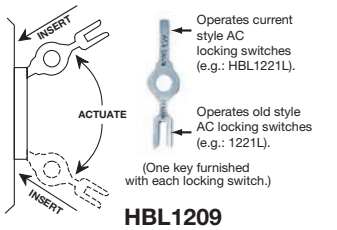

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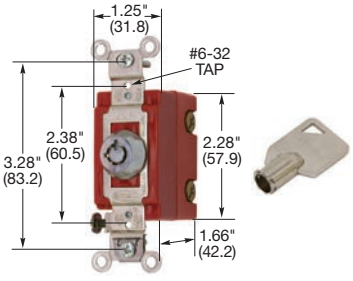

HBL1222RKL and Key

Dimensions in Inches (mm)

HBL Extra Heavy Duty Industrial Series, Back and Side Wired
15A, 120-277V AC

Description	Toggle Color	Single Pole	Double Pole	Three Way	Four Way
Toggle, back and side wired.	Black	**HBL1201BK**	—	**HBL1203BK**	**HBL1204BK**
	Brown	**HBL1201**	**HBL1202**	**HBL1203**	**HBL1204**
	Gray	**HBL1201GY**	—	**HBL1203GY**	**HBL1204GY**
	Ivory	**HBL1201I**	**HBL1202I**	**HBL1203I**	**HBL1204I**
	Light Almond	**HBL1201LA**	—	—	—
	Red	**HBL1201R**	—	—	—
	White	**HBL1201W**	—	**HBL1203W**	**HBL1204W**

20A, 120-277V AC

Description	Toggle Color	Single Pole	Double Pole	Three Way	Four Way
Toggle, back and side wired.	Black	**HBL1221BK**	**HBL1222BK**	**HBL1223BK**	**HBL1224BK**
	Brown	**HBL1221**	**HBL1222**	**HBL1223**	**HBL1224**
	Gray	**HBL1221GY**	**HBL1222GY**	**HBL1223GY**	**HBL1224GY**
	Ivory	**HBL1221I**	**HBL1222I**	**HBL1223I**	**HBL1224I**
	Light Almond	**HBL1221LA**	**HBL1222LA**	**HBL1223LA**	**HBL1224LA**
	Office White	**HBL1221OW**	**HBL1222OW**	**HBL1223OW**	**HBL1224OW**
	Red	**HBL1221R**	**HBL1222R**	**HBL1223R**	**HBL1224R**
	White	**HBL1221W**	**HBL1222W**	**HBL1223W**	**HBL1224W**

30A, 120-277V AC

Description	Key Guide Color	Single Pole	Double Pole	Three Way	Four Way
Nylon toggle.	Brown	**HBL3031**	**HBL3032**	**HBL3033**	—
	Ivory	**HBL3031I**	**HBL3032I**	**HBL3033I**	—
	White	—	**HBL3032W**	—	—

HBL Extra Heavy Duty Industrial Locking Series, Back and Side Wired
15A, 120-277V AC

Description	Key Guide Color	Single Pole	Double Pole	Three Way	Four Way
Key Guide, back and side wired.	Black	**HBL1201L**	**HBL1202L**	**HBL1203L**	**HBL1204L**
	Gray	**HBL1201LG**	**HBL1202LG**	**HBL1203LG**	**HBL1204LG**
	Ivory	**HBL1201LI**	**HBL1202LI**	**HBL1203LI**	**HBL1204LI**
	White	**HBL1201LW**	**HBL1202LW**	**HBL1203LW**	**HBL1204LW**
Key for Locking switch.		**HBL1209***			

20A, 120-277V AC

Description	Key Guide Color	Single Pole	Double Pole	Three Way	Four Way
Key Guide, back and side wired.	Black	**HBL1221L**	**HBL1222L**	**HBL1223L**	**HBL1224L**
	Gray	**HBL1221LG**	**HBL1222LG**	**HBL1223LG**	**HBL1224LG**
	Ivory	**HBL1221LI**	**HBL1222LI**	**HBL1223LI**	**HBL1224LI**
	White	**HBL1221LW**	**HBL1222LW**	**HBL1223LW**	**HBL1224LW**
Key for Locking switch.		**HBL1209***			

HBL Extra Heavy Duty Industrial AC Barrel Key Locking Switch†, Back and Side Wired
20A, 120-277V AC

Description	Key Guide Color	Single Pole	Double Pole	Three Way	Four Way
Chrome operator, back and side wired.	Chrome	**HBL1221RKL****	**HBL1222RKL****	**HBL1223RKL****	**HBL1224RKL****
Replacement Barrel Key.		**HBL1209RKL***			

Note: Keys are supplied with each locking switch. For extra keys order HBL1209.
**Not UL Listed, CSA Certified.*
***Not Fed. Spec.*
† See Wallplate section, page N-17 for wallplates.
See page D-13 for accessories.
See page D-15 for wallplates.
See page D-20 for technical information.

HP Conversion Chart

	120V	208V	240V	277V AC
15A	.5HP	1.5HP	2HP	2HP
20A	1HP	2HP	2HP	2HP
30A	2HP	2HP	2HP	2HP

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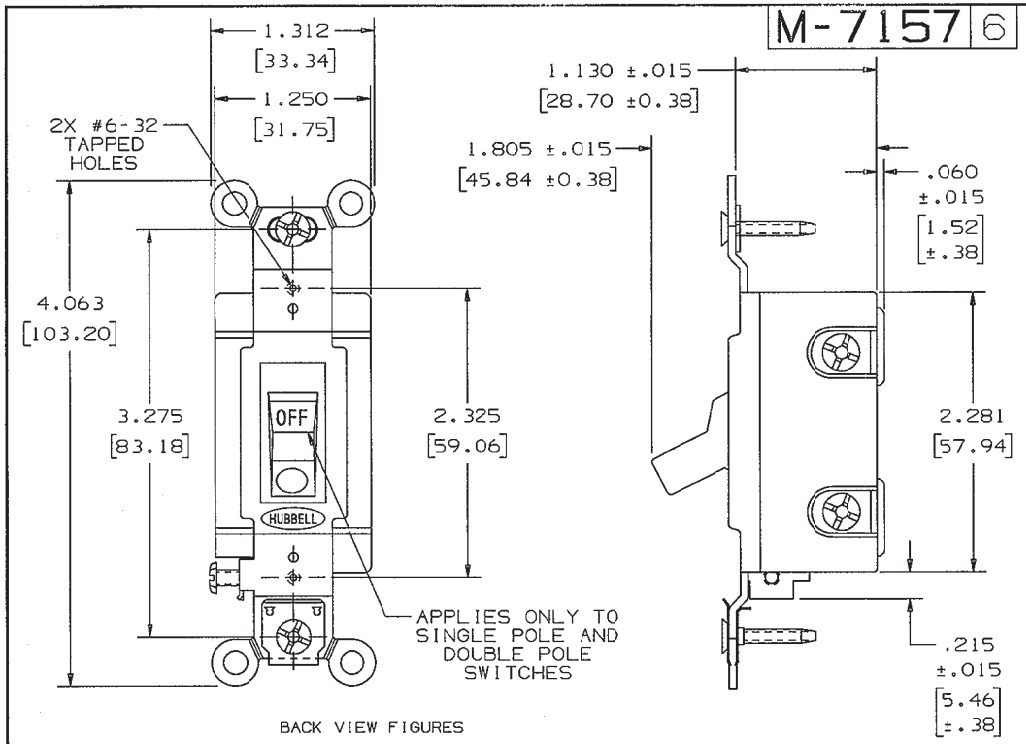
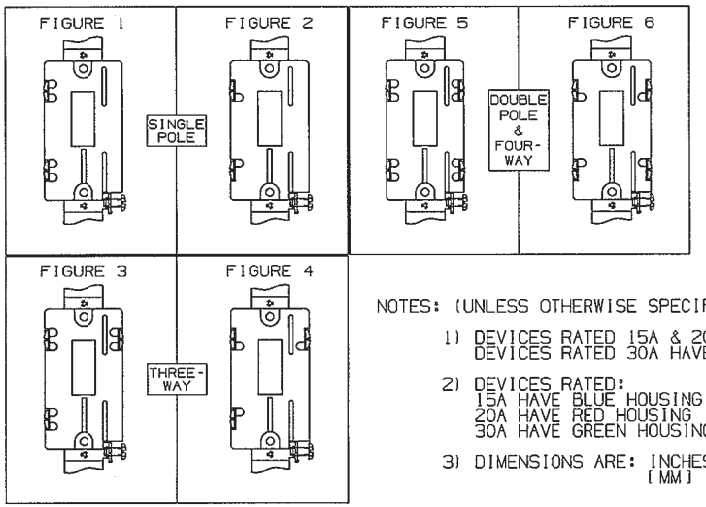


BACK VIEW FIGURES



NOTES: (UNLESS OTHERWISE SPECIFIED)

1) DEVICES RATED 15A & 20A HAVE PLAIN BRASS FINISH; DEVICES RATED 30A HAVE TIN PLATED FINISH.

2) DEVICES RATED:
15A HAVE BLUE HOUSING
20A HAVE RED HOUSING
30A HAVE GREEN HOUSING

3) DIMENSIONS ARE: INCHES
[MM]

CATALOG NO.	TOGGLE COLOR	RATING/TYPE	BACK VIEW FIGURE
HBL1201	BROWN	15A 120-277VAC S.P.	1
HBL1201GY	GRAY	15A 120-277VAC S.P.	1
HBL1201I	IVORY	15A 120-277VAC S.P.	1
HBL1201R	RED	15A 120-277VAC S.P.	1
HBL1201W	WHITE	15A 120-277VAC S.P.	1
HBL1202	BROWN	15A 120-277VAC D.P.	5
HBL1202I	IVORY	15A 120-277VAC D.P.	5
HBL1203	BROWN	15A 120-277VAC 3W	3
HBL1203BK	✓ BLACK	15A 120-277VAC 3W	3
HBL1203GY	GRAY	15A 120-277VAC 3W	3
HBL1203I	IVORY	15A 120-277VAC 3W	3
HBL1204	BROWN	15A 120-277VAC 4W	5
HBL1204BK	✓ BLACK	15A 120-277VAC 4W	5
HBL1204GY	GRAY	15A 120-277VAC 4W	5
HBL1204I	IVORY	15A 120-277VAC 4W	5
HBL1221	BROWN	20A 120-277VAC S.P.	1
HBL1221BK	BLACK	20A 120-277VAC S.P.	1
HBL1221GY	GRAY	20A 120-277VAC S.P.	1
HBL1221I	IVORY	20A 120-277VAC S.P.	1
HBL1221R	RED	20A 120-277VAC S.P.	1
HBL1221W	WHITE	20A 120-277VAC S.P.	1
HBL1221OW	OFFICE WHITE	20A 120-277VAC S.P.	1
HBL1222	BROWN	20A 120-277VAC D.P.	5
HBL1222GY	GRAY	20A 120-277VAC D.P.	5
HBL1222I	IVORY	20A 120-277VAC D.P.	5
HBL1222R	RED	20A 120-277VAC D.P.	5
HBL1222W	✓ WHITE	20A 120-277VAC D.P.	5
HBL1222OW	OFFICE WHITE	20A 120-277VAC D.P.	5
HBL1222AL	✓ ALMOND	20A 120-277VAC D.P.	5
HBL1222LA	✓LT. ALMOND	20A 120-277VAC D.P.	5
HBL1223	BROWN	20A 120-277VAC 3W	3
HBL1223BK	BLACK	20A 120-277VAC 3W	3
HBL1223GY	GRAY	20A 120-277VAC 3W	3
HBL1223I	IVORY	20A 120-277VAC 3W	3
HBL1223R	RED	20A 120-277VAC 3W	3
HBL1223W	WHITE	20A 120-277VAC 3W	3
HBL1223OW	OFFICE WHITE	20A 120-277VAC 3W	3
HBL1223LA	LT. ALMOND	20A 120-277VAC 3W	3
HBL1224	BROWN	20A 120-277VAC 4W	5
HBL1224BK	BLACK	20A 120-277VAC 4W	5
HBL1224GY	GRAY	20A 120-277VAC 4W	5
HBL1224I	IVORY	20A 120-277VAC 4W	5
HBL1224R	RED	20A 120-277VAC 4W	5
HBL1224W	WHITE	20A 120-277VAC 4W	5
HBL1224OW	OFFICE WHITE	20A 120-277VAC 4W	5
HBL1224LA	✓LT. ALMOND	20A 120-277VAC 4W	5
HBL3031	BROWN	30A 120-277VAC S.P.	2
HBL3031I	IVORY	30A 120-277VAC S.P.	2
HBL3032	BROWN	30A 120-277VAC D.P.	6
HBL3032I	IVORY	30A 120-277VAC D.P.	6
HBL3032W	WHITE	30A 120-277VAC D.P.	6
HBL3033	BROWN	30A 120-277VAC 3W	4
HBL3033I	IVORY	30A 120-277VAC 3W	4

LIST OF PARTS

DESCRIPTION	MATERIAL	FINISH
HOUSING	UREA	
COVER	UREA	
TOGGLE	NYLON	
STATIONARY TERMINAL	.031 BRASS	NOTE 1
SPRING ARM TERMINAL	.031 BRASS	NOTE 1
WIRE CLAMP	.060 STEEL	TIN PLATE
BRIDGE	.050 STEEL	NICKEL PLATE
CONTACTS	SILVER/CADMIUM OXIDE	
BINDING SCREWS	BRASS	
MOUNTING SCREWS	STEEL	ZINC PLATE

SYM	REVISIONS	APP	DATE
6	ADDED CATALOG NOS. HBL1203BK, HBL1204BK, HBL1222AL, HBL1222LA, HBL1222OW & HBL1224LA AND SPECS. TO TABLE PER DCN 20354 DD_	TFH	03/05/14 TFH 3/5/14
5	ADDED CAT. HBL1223 LA TO TABLE. PER DCN# 19766. MJZ, PJB	MJZ	4/10/13
4	ADDED CAT. HBL3032W TO TABLE. PER DCN 17810 SPN	DJP	7/6/11
3	ADDED CAT. NO.'S HBL1221OW, HBL1223OW, & HBL1224OW TO TABLE. ADDED NOTE 3 AND DUAL DIMENSIONING PER DCN #13355. JMN	DJP	12/1/06
2	CONVERTED ALL DIMS TO 3 PL DECIMAL, ADDED TOL & NOTE 2 CHGD SCREWS TO TRI-DRIVE PER DCN #7793. AMZ	DB	7/27/00
1	"X" REMOVED; LAST X-REVISION WAS X-0 PER DCN # 2123. JMN	CJC	8/25/93

THE DESIGN AND DIMENSIONS OF THE PRODUCT SHOWN ON THIS DRAWING ARE SUBJECT TO CHANGE WITHOUT NOTICE

TITLE

FLUSH A.C. TOGGLE SWITCH

TOLERANCES UNLESS OTHERWISE SPECIFIED
.XX = ±.01
.XXX = ±.005
ANGLES = ±2°

WIRING DEVICE-KELLEMS
HUBBELL INCORPORATED
SHELTON, CT

DR. EY JMN	APP. BY CJC
TR. EY	SCALE —/—
CHK. BY	DATE 8/25/93

CODE 74545

DIMENSION SHEET FOR CAT. NO. SEE TABLE

REPAIRABLE ☐ NON-REPAIRABLE ☑

B

M-7157

6

AC TOGGLE SWITCHES INSTALLATION INSTRUCTIONS

NOTICE: For installation by a qualified electrician in accordance with national and local electrical codes, and the following instructions.

CAUTION: RISK OF ELECTRIC SHOCK. Disconnect power before installing. Never wire energized electrical components.

CAUTION: USE COPPER CONDUCTORS ONLY.

Check that the device's type and rating are suitable for the application.

Select conductors having 90°C or higher rated insulation having sufficient ampacity in accordance with the 60°C column of National Electrical Code® Table 310-16 or Canadian Electrical Code Table 2.

Terminal capacity: #14 AWG to #10 AWG.

Strip conductors using strip gage on switch body. DO NOT TIN CONDUCTORS.

Loosen terminal screws. Connect conductors to proper terminals as shown in Figs 1-4.

Back Wire: insert conductor into terminal hole.

Side Wire: wrap conductor securely around terminal screw.

Tighten terminal screws to 9-12 pound•inches (1.0-1.4 N•m) of torque. TAKE CAUTION THAT THERE ARE NO STRAY WIRE STRANDS.

Mount switch in box and secure cover/wall plate.

CA INTERRUPTEURS À BASCULE INSTRUCTIONS D'INSTALLATION

AVIS: Doit être installé par des électriciens qualifiés conformément aux codes nationaux et locaux de l'électricité et selon les instructions suivantes.

ATTENTION: RISQUE DE CHOC ÉLECTRIQUE. Débrancher le circuit avant l'installation. Ne jamais câbler des composants électriques sous tension.

ATTENTION: EMPLOYER UNIQUEMENT DES CONDUCTEURS EN CUIVRE.

S'assurer que type et la capacité nominale de ce dispositif conviennent à l'application.

Choisir des conducteurs ayant une cote d'isolation de 90°C ou plus et une intensité admissible suffisante selon la colonne 60°C du National Electrical Code®, Tableau 310-16, ou du Code canadien de l'électricité, Tableau 2.

Capacité de borne: du calibre #14 AWG au calibre #10 AWG.

Dénuder les conducteurs en utilisant le gabarit de dénudage "Strip Gage" sur le corps d'interrupteur. NE PAS ÉTAMER LES CONDUCTEURS.

Desserrer les vis-bornes. Brancher les conducteurs aux bornes appropriées comme indiqué dans les figures 1-4.

Fil arrière : introduire le conducteur dans le trou de la borne.

Fil latéral : enrouler le conducteur de façon sûre autour de la vis-borne.

Serrer les vis-bornes à un couple de serrage de 9-12 livres•pouce (1.0-1.4 N•m). S'ASSURER QU'IL N'Y A PAS DE TORONS DISPERSÉS.

Monter l'interrupteur dans la boîte et attacher le couvercle/plaque murale.

CA INTERRUPTORES DE PALANCA INSTRUCCIONES DE INSTALACIÓN

AVISO: Para ser instalado por un electricista calificado, de acuerdo con los códigos eléctricos nacionales y locales, y siguiendo estas instrucciones.

CUIDADO: RIESGO DE CHOQUE ELÉCTRICO. Desconectar la corriente antes de la instalación. No conectar nunca componentes eléctricos en un circuito con corriente.

CUIDADO: USAR SOLAMENTE CONDUCTORES DE COBRE.

Verificar que el tipo y las especificaciones del dispositivo sean apropiados para la aplicación.

Elegir un conductor que tenga un aislamiento especificado de 90°C o más alto y suficiente capacidad para aceptar amperaje de acuerdo con la Columna de 60°C de la Tabla 310-16 del National Electrical Code® o la Tabla 2 del Código Eléctrico Canadiense.

Capacidad del terminal: #14 AWG a #10 AWG.

Pelar los conductores usando el pelacables 'Strip Gage" en el marco del interruptor. NO ESTAÑAR LOS CONDUCTORES.

Aflojar los tornillos de los terminales. Conectar los conductores por completo en los terminales correspondientes como se indica en las figuras 1-4.

Alambre Trasero: introducir el conductor en el hueco del terminal.

Alambre Lateral: enrollar el conductor firmemente alrededor del tornillo del terminal.

Apretar un torque de 9-12 libras-pulgada (1.0-1.4 N•m) los tornillos de los terminales. TENER CUIDADO DE QUE NO QUEDEN HILOS DE ALAMBRE SUELTOS.

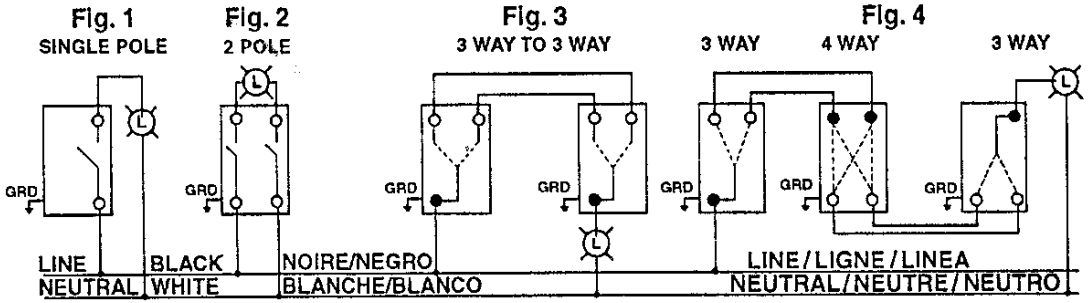
Instalar el interruptor en la caja y asegurar la cubierta/placa de pared.

WIRING DIAGRAMS/SCHÉMAS DE CÂBLAGE/DIAGRAMAS DE CABLEADO

Select the correct wiring diagram

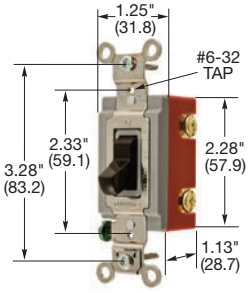
Choisir le schéma de câblage correct.

Seleccione el diagrama de cableado correcto.

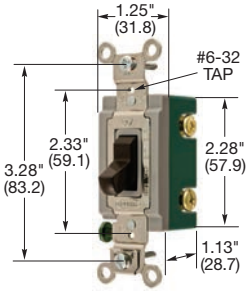


HUBBELL®

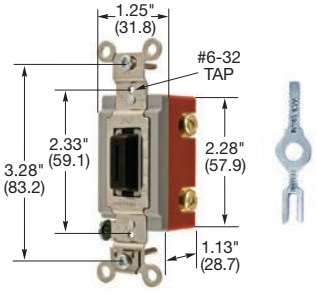
Wiring Device-Kellems



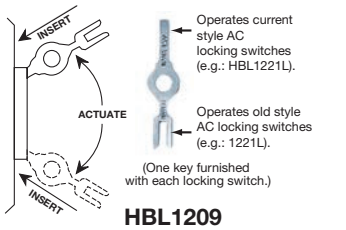
HBL1221



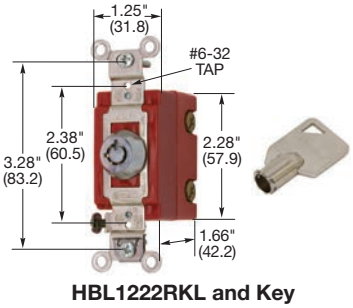
HBL3031



HBL1221L and Key



HBL1209



HBL1222RKL and Key

Dimensions in Inches (mm)

HBL Extra Heavy Duty Industrial Series, Back and Side Wired
15A, 120-277V AC

Description	Toggle Color	Single Pole	Double Pole	Three Way	Four Way
Toggle, back and side wired.	Black	**HBL1201BK**	—	**HBL1203BK**	**HBL1204BK**
	Brown	**HBL1201**	**HBL1202**	**HBL1203**	**HBL1204**
	Gray	**HBL1201GY**	—	**HBL1203GY**	**HBL1204GY**
	Ivory	**HBL1201I**	**HBL1202I**	**HBL1203I**	**HBL1204I**
	Light Almond	**HBL1201LA**	—	—	—
	Red	**HBL1201R**	—	—	—
	White	**HBL1201W**	—	**HBL1203W**	**HBL1204W**

20A, 120-277V AC

Description	Toggle Color	Single Pole	Double Pole	Three Way	Four Way
Toggle, back and side wired.	Black	**HBL1221BK**	**HBL1222BK**	**HBL1223BK**	**HBL1224BK**
	Brown	**HBL1221**	**HBL1222**	**HBL1223**	**HBL1224**
	Gray	**HBL1221GY**	**HBL1222GY**	**HBL1223GY**	**HBL1224GY**
	Ivory	**HBL1221I**	**HBL1222I**	**HBL1223I**	**HBL1224I**
	Light Almond	**HBL1221LA**	**HBL1222LA**	**HBL1223LA**	**HBL1224LA**
	Office White	**HBL1221OW**	**HBL1222OW**	**HBL1223OW**	**HBL1224OW**
	Red	**HBL1221R**	**HBL1222R**	**HBL1223R**	**HBL1224R**
	White	**HBL1221W**	**HBL1222W**	**HBL1223W**	**HBL1224W**

30A, 120-277V AC

Description	Key Guide Color	Single Pole	Double Pole	Three Way	Four Way
Nylon toggle.	Brown	**HBL3031**	**HBL3032**	**HBL3033**	—
	Ivory	**HBL3031I**	**HBL3032I**	**HBL3033I**	—
	White	—	**HBL3032W**	—	—

HBL Extra Heavy Duty Industrial Locking Series, Back and Side Wired
15A, 120-277V AC

Description	Key Guide Color	Single Pole	Double Pole	Three Way	Four Way
Key Guide, back and side wired.	Black	**HBL1201L**	**HBL1202L**	**HBL1203L**	**HBL1204L**
	Gray	**HBL1201LG**	**HBL1202LG**	**HBL1203LG**	**HBL1204LG**
	Ivory	**HBL1201LI**	**HBL1202LI**	**HBL1203LI**	**HBL1204LI**
	White	**HBL1201LW**	**HBL1202LW**	**HBL1203LW**	**HBL1204LW**
Key for Locking switch.		**HBL1209***			

20A, 120-277V AC

Description	Key Guide Color	Single Pole	Double Pole	Three Way	Four Way
Key Guide, back and side wired.	Black	**HBL1221L**	**HBL1222L**	**HBL1223L**	**HBL1224L**
	Gray	**HBL1221LG**	**HBL1222LG**	**HBL1223LG**	**HBL1224LG**
	Ivory	**HBL1221LI**	**HBL1222LI**	**HBL1223LI**	**HBL1224LI**
	White	**HBL1221LW**	**HBL1222LW**	**HBL1223LW**	**HBL1224LW**
Key for Locking switch.		**HBL1209***			

HBL Extra Heavy Duty Industrial AC Barrel Key Locking Switch†, Back and Side Wired
20A, 120-277V AC

Description	Key Guide Color	Single Pole	Double Pole	Three Way	Four Way
Chrome operator, back and side wired.	Chrome	**HBL1221RKL****	**HBL1222RKL****	**HBL1223RKL****	**HBL1224RKL****
Replacement Barrel Key.		**HBL1209RKL***			

Note: Keys are supplied with each locking switch. For extra keys order HBL1209.
**Not UL Listed, CSA Certified.*
***Not Fed. Spec.*
† See Wallplate section, page N-17 for wallplates.
See page D-13 for accessories.
See page D-15 for wallplates.
See page D-20 for technical information.

HP Conversion Chart

	120V	208V	240V	277V AC
15A	.5HP	1.5HP	2HP	2HP
20A	1HP	2HP	2HP	2HP
30A	2HP	2HP	2HP	2HP

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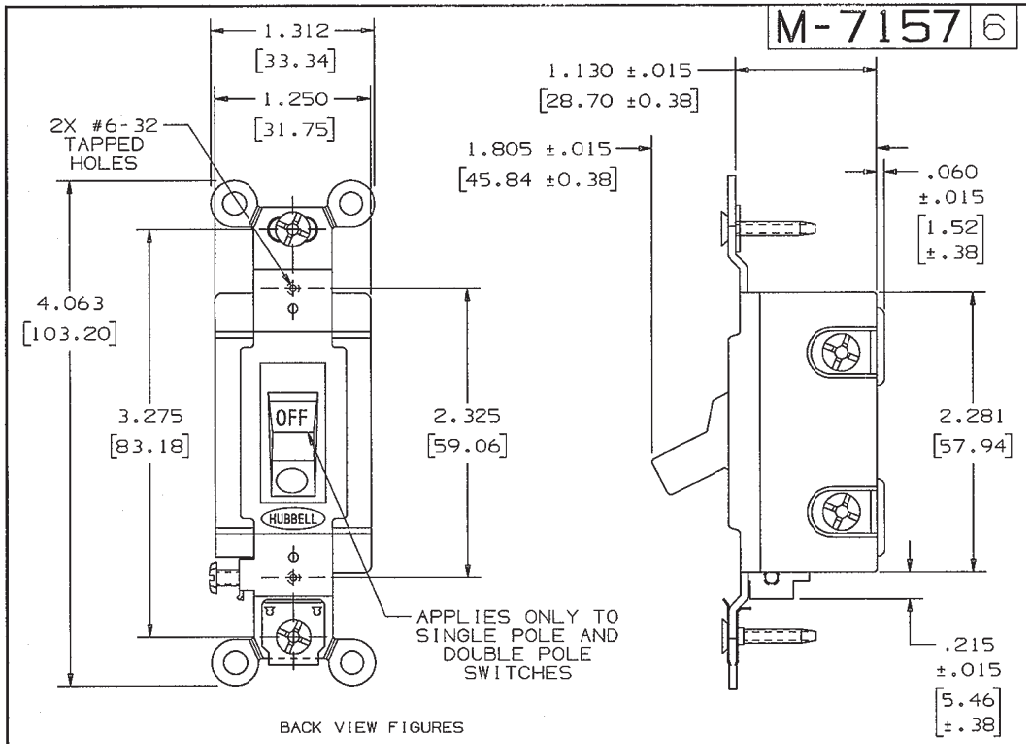
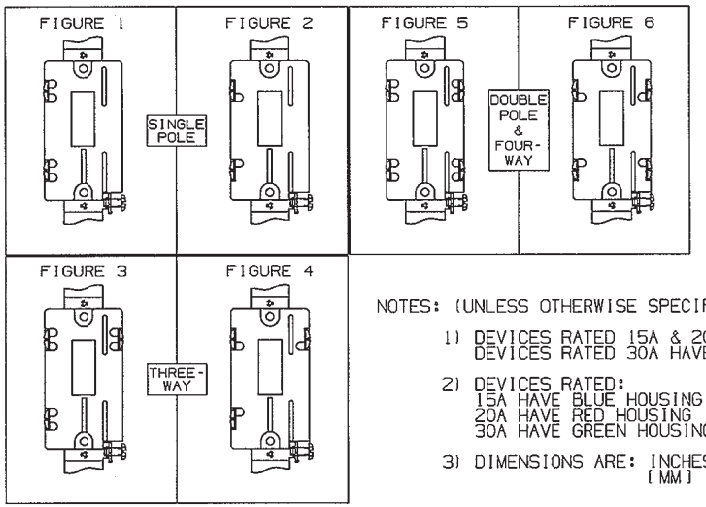


BACK VIEW FIGURES



NOTES: (UNLESS OTHERWISE SPECIFIED)

1) DEVICES RATED 15A & 20A HAVE PLAIN BRASS FINISH; DEVICES RATED 30A HAVE TIN PLATED FINISH.

2) DEVICES RATED:
15A HAVE BLUE HOUSING
20A HAVE RED HOUSING
30A HAVE GREEN HOUSING

3) DIMENSIONS ARE: INCHES
[MM]

CATALOG NO.	TOGGLE COLOR	RATING/TYPE	BACK VIEW FIGURE
HBL1201	BROWN	15A 120-277VAC S.P.	1
HBL1201GY	GRAY	15A 120-277VAC S.P.	1
HBL1201I	IVORY	15A 120-277VAC S.P.	1
HBL1201R	RED	15A 120-277VAC S.P.	1
HBL1201W	WHITE	15A 120-277VAC S.P.	1
HBL1202	BROWN	15A 120-277VAC D.P.	5
HBL1202I	IVORY	15A 120-277VAC D.P.	5
HBL1203	BROWN	15A 120-277VAC 3W	3
HBL1203BK	✓ BLACK	15A 120-277VAC 3W	3
HBL1203GY	GRAY	15A 120-277VAC 3W	3
HBL1203I	IVORY	15A 120-277VAC 3W	3
HBL1204	BROWN	15A 120-277VAC 4W	5
HBL1204BK	✓ BLACK	15A 120-277VAC 4W	5
HBL1204GY	GRAY	15A 120-277VAC 4W	5
HBL1204I	IVORY	15A 120-277VAC 4W	5
HBL1221	BROWN	20A 120-277VAC S.P.	1
HBL1221BK	BLACK	20A 120-277VAC S.P.	1
HBL1221GY	GRAY	20A 120-277VAC S.P.	1
HBL1221I	IVORY	20A 120-277VAC S.P.	1
HBL1221R	RED	20A 120-277VAC S.P.	1
HBL1221W	WHITE	20A 120-277VAC S.P.	1
HBL1221OW	OFFICE WHITE	20A 120-277VAC S.P.	1
HBL1222	BROWN	20A 120-277VAC D.P.	5
HBL1222GY	GRAY	20A 120-277VAC D.P.	5
HBL1222I	IVORY	20A 120-277VAC D.P.	5
HBL1222R	RED	20A 120-277VAC D.P.	5
HBL1222W	✓ WHITE	20A 120-277VAC D.P.	5
HBL1222OW	OFFICE WHITE	20A 120-277VAC D.P.	5
HBL1222AL	✓ ALMOND	20A 120-277VAC D.P.	5
HBL1222LA	✓LT. ALMOND	20A 120-277VAC D.P.	5
HBL1223	BROWN	20A 120-277VAC 3W	3
HBL1223BK	BLACK	20A 120-277VAC 3W	3
HBL1223GY	GRAY	20A 120-277VAC 3W	3
HBL1223I	IVORY	20A 120-277VAC 3W	3
HBL1223R	RED	20A 120-277VAC 3W	3
HBL1223W	WHITE	20A 120-277VAC 3W	3
HBL1223OW	OFFICE WHITE	20A 120-277VAC 3W	3
HBL1223LA	LT. ALMOND	20A 120-277VAC 3W	3
HBL1224	BROWN	20A 120-277VAC 4W	5
HBL1224BK	BLACK	20A 120-277VAC 4W	5
HBL1224GY	GRAY	20A 120-277VAC 4W	5
HBL1224I	IVORY	20A 120-277VAC 4W	5
HBL1224R	RED	20A 120-277VAC 4W	5
HBL1224W	WHITE	20A 120-277VAC 4W	5
HBL1224OW	OFFICE WHITE	20A 120-277VAC 4W	5
HBL1224LA	✓LT. ALMOND	20A 120-277VAC 4W	5
HBL3031	BROWN	30A 120-277VAC S.P.	2
HBL3031I	IVORY	30A 120-277VAC S.P.	2
HBL3032	BROWN	30A 120-277VAC D.P.	6
HBL3032I	IVORY	30A 120-277VAC D.P.	6
HBL3032W	WHITE	30A 120-277VAC D.P.	6
HBL3033	BROWN	30A 120-277VAC 3W	4
HBL3033I	IVORY	30A 120-277VAC 3W	4

LIST OF PARTS

DESCRIPTION	MATERIAL	FINISH
HOUSING	UREA	
COVER	UREA	
TOGGLE	NYLON	
STATIONARY TERMINAL	.031 BRASS	NOTE 1
SPRING ARM TERMINAL	.031 BRASS	NOTE 1
WIRE CLAMP	.060 STEEL	TIN PLATE
BRIDGE	.050 STEEL	NICKEL PLATE
CONTACTS	SILVER/CADMIUM OXIDE	
BINDING SCREWS	BRASS	
MOUNTING SCREWS	STEEL	ZINC PLATE

SYM	REVISIONS	APP	DATE
6	ADDED CATALOG NOS. HBL1203BK, HBL1204BK, HBL1222AL, HBL1222LA, HBL1222OW & HBL1224LA AND SPECS. TO TABLE PER DCN 20354 DD_	TFH	03/05/14 TFH 3/5/14
5	ADDED CAT. HBL1223 LA TO TABLE. PER DCN# 19766. MJZ, PJB	MJZ	4/10/13
4	ADDED CAT. HBL3032W TO TABLE. PER DCN 17810 SPN	DJP	7/6/11
3	ADDED CAT. NO.'S HBL1221OW, HBL1223OW, & HBL1224OW TO TABLE. ADDED NOTE 3 AND DUAL DIMENSIONING PER DCN #13355. JMN	DJP	12/1/06
2	CONVERTED ALL DIMS TO 3 PL DECIMAL, ADDED TOL & NOTE 2 CHGD SCREWS TO TRI-DRIVE PER DCN #7793. AMZ	DB	7/27/00
1	"X" REMOVED; LAST X-REVISION WAS X-0 PER DCN # 2123. JMN	CJC	8/25/93

THE DESIGN AND DIMENSIONS OF THE PRODUCT SHOWN ON THIS DRAWING ARE SUBJECT TO CHANGE WITHOUT NOTICE

TITLE

FLUSH A.C. TOGGLE SWITCH

TOLERANCES UNLESS OTHERWISE SPECIFIED
.XX = ±.01
.XXX = ±.005
ANGLES = ±2°

WIRING DEVICE-KELLEMS
HUBBELL INCORPORATED
SHELTON, CT

DR. EY JMN	APP. BY CJC
TR. EY	SCALE —/—
CHK. BY	DATE 8/25/93

CODE 74545

DIMENSION SHEET FOR CAT. NO. SEE TABLE

REPAIRABLE ☐ NON-REPAIRABLE ☑

B

M-7157

6

AC TOGGLE SWITCHES INSTALLATION INSTRUCTIONS

NOTICE: For installation by a qualified electrician in accordance with national and local electrical codes, and the following instructions.

CAUTION: RISK OF ELECTRIC SHOCK. Disconnect power before installing. Never wire energized electrical components.

CAUTION: USE COPPER CONDUCTORS ONLY.

Check that the device's type and rating are suitable for the application.

Select conductors having 90°C or higher rated insulation having sufficient ampacity in accordance with the 60°C column of National Electrical Code® Table 310-16 or Canadian Electrical Code Table 2.

Terminal capacity: #14 AWG to #10 AWG.

Strip conductors using strip gage on switch body. DO NOT TIN CONDUCTORS.

Loosen terminal screws. Connect conductors to proper terminals as shown in Figs 1-4.

Back Wire: insert conductor into terminal hole.

Side Wire: wrap conductor securely around terminal screw.

Tighten terminal screws to 9-12 pound•inches (1.0-1.4 N•m) of torque. TAKE CAUTION THAT THERE ARE NO STRAY WIRE STRANDS.

Mount switch in box and secure cover/wall plate.

CA INTERRUPTEURS À BASCULE INSTRUCTIONS D'INSTALLATION

AVIS: Doit être installé par des électriciens qualifiés conformément aux codes nationaux et locaux de l'électricité et selon les instructions suivantes.

ATTENTION: RISQUE DE CHOC ÉLECTRIQUE. Débrancher le circuit avant l'installation. Ne jamais câbler des composants électriques sous tension.

ATTENTION: EMPLOYER UNIQUEMENT DES CONDUCTEURS EN CUIVRE.

S'assurer que type et la capacité nominale de ce dispositif conviennent à l'application.

Choisir des conducteurs ayant une cote d'isolation de 90°C ou plus et une intensité admissible suffisante selon la colonne 60°C du National Electrical Code®, Tableau 310-16, ou du Code canadien de l'électricité, Tableau 2.

Capacité de borne: du calibre #14 AWG au calibre #10 AWG.

Dénuder les conducteurs en utilisant le gabarit de dénudage "Strip Gage" sur le corps d'interrupteur. NE PAS ÉTAMER LES CONDUCTEURS.

Desserrer les vis-bornes. Brancher les conducteurs aux bornes appropriées comme indiqué dans les figures 1-4.

Fil arrière : introduire le conducteur dans le trou de la borne.

Fil latéral : enrouler le conducteur de façon sûre autour de la vis-borne.

Serrer les vis-bornes à un couple de serrage de 9-12 livres•pouce (1.0-1.4 N•m). S'ASSURER QU'IL N'Y A PAS DE TORONS DISPERSÉS.

Monter l'interrupteur dans la boîte et attacher le couvercle/plaque murale.

CA INTERRUPTORES DE PALANCA INSTRUCCIONES DE INSTALACIÓN

AVISO: Para ser instalado por un electricista calificado, de acuerdo con los códigos eléctricos nacionales y locales, y siguiendo estas instrucciones.

CUIDADO: RIESGO DE CHOQUE ELÉCTRICO. Desconectar la corriente antes de la instalación. No conectar nunca componentes eléctricos en un circuito con corriente.

CUIDADO: USAR SOLAMENTE CONDUCTORES DE COBRE.

Verificar que el tipo y las especificaciones del dispositivo sean apropiados para la aplicación.

Elegir un conductor que tenga un aislamiento especificado de 90°C o más alto y suficiente capacidad para aceptar amperaje de acuerdo con la Columna de 60°C de la Tabla 310-16 del National Electrical Code® o la Tabla 2 del Código Eléctrico Canadiense.

Capacidad del terminal: #14 AWG a #10 AWG.

Pelar los conductores usando el pelacables 'Strip Gage" en el marco del interruptor. NO ESTAÑAR LOS CONDUCTORES.

Aflojar los tornillos de los terminales. Conectar los conductores por completo en los terminales correspondientes como se indica en las figuras 1-4.

Alambre Trasero: introducir el conductor en el hueco del terminal.

Alambre Lateral: enrollar el conductor firmemente alrededor del tornillo del terminal.

Apretar un torque de 9-12 libras-pulgada (1.0-1.4 N•m) los tornillos de los terminales. TENER CUIDADO DE QUE NO QUEDEN HILOS DE ALAMBRE SUELTOS.

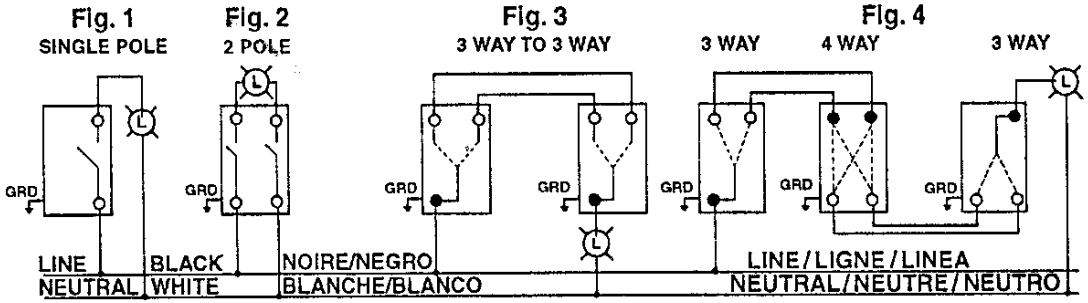
Instalar el interruptor en la caja y asegurar la cubierta/placa de pared.

WIRING DIAGRAMS/SCHÉMAS DE CÂBLAGE/DIAGRAMAS DE CABLEADO

Select the correct wiring diagram

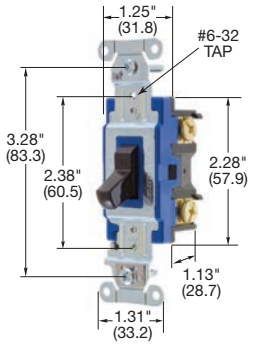
Choisir le schéma de câblage correct.

Seleccione el diagrama de cableado correcto.

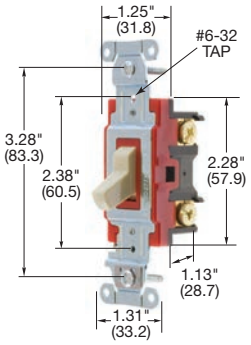


HUBBELL®

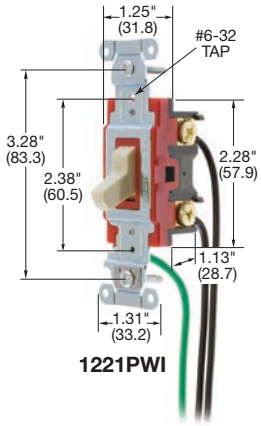
Wiring Device-Kellems



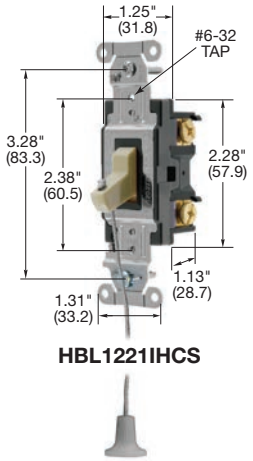
1201BK



1221I



1221PWI



HBL1221IHCS

Dimensions in Inches (mm)

Hubbell-PRO Heavy Duty Industrial Series, 15A, 120-277V AC

Description	Toggle Color	Single Pole	Double Pole	Three Way	Four Way
Toggle, back and side wired.	Almond	**1201AL**	—	**1203AL**	—
	Black	**1201BK**	—	**1203BK**	—
	Brown	**1201B**	—	**1203B**	—
	Gray	**1201GY**	—	**1203GY**	—
	Ivory	**1201I**	—	**1203I**	—
	Light Almond	**1201LA**	—	**1203LA**	—
	White	**1201W**	—	**1203W**	—

Hubbell-PRO Heavy Duty Industrial Series, 20A, 120-277V AC

Description	Toggle Color	Single Pole	Double Pole	Three Way	Four Way
Toggle, back and side wired.	Almond	**1221AL**	**1222AL**	**1223AL**	**1224AL**
	Black	**1221BK**	**1222BK**	**1223BK**	**1224BK**
	Brown	**1221B**	**1222B**	**1223B**	**1224B**
	Gray	**1221GY**	**1222GY**	**1223GY**	**1224GY**
	Ivory	**1221I**	**1222I**	**1223I**	**1224I**
	Light Almond	**1221LA**	**1222LA**	**1223LA**	**1224LA**
	Red	**1221R**	**1222R**	**1223R**	**1224R**
	White	**1221W**	**1222W**	**1223W**	**1224W**

Hubbell-PRO Pre-Wired/Leaded Heavy Duty Industrial Series 20A, 120-277V AC - 8" #12 AWG THHN

Description	Toggle Color	Single Pole	Double Pole	Three Way	Four Way
Toggle, Pre-wired leads.	Almond	**1221PWAL**	**1222PWAL**	**1223PWAL**	**1224PWAL**
	Black	**1221PWBK**	**1222PWBK**	**1223PWBK**	**1224PWBK**
	Brown	**1221PWB**	**1222PWB**	**1223PWB**	**1224PWB**
	Gray	**1221PWGY**	**1222PWGY**	**1223PWGY**	**1224PWGY**
	Ivory	**1221PWI**	**1222PWI**	**1223PWI**	**1224PWI**
	Light Almond	**1221PWLA**	**1222PWLA**	**1223PWLA**	**1224PWLA**
	Red	**1221PWR**	**1222PWR**	**1223PWR**	**1224PWR**
	White	**1221PWW**	**1222PWW**	**1223PWW**	**1224PWW**

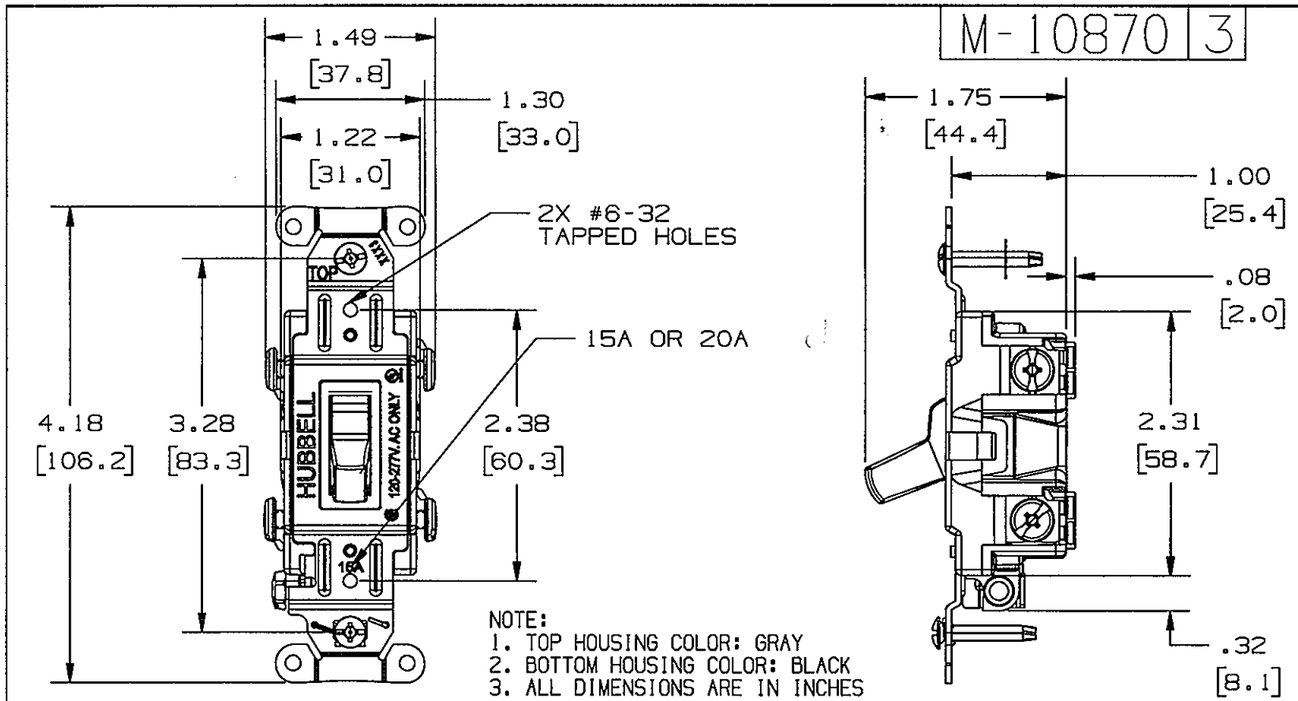
Hubbell-PRO Hospital Call Switch, with Lanyard 20A, 120-277V AC

Description	Toggle Color	Single Pole	Double Pole	Three Way	Four Way
Toggle, back and side wired.	Gray	**HBL1221GHCS**	—	—	—
	Ivory	**HBL1221IHCS**	—	—	—
	White	**HBL1221WHCS**	—	—	—

Note: See page D-13 for accessories.
See page D-15 for wallplates.
See page D-20 for technical information.

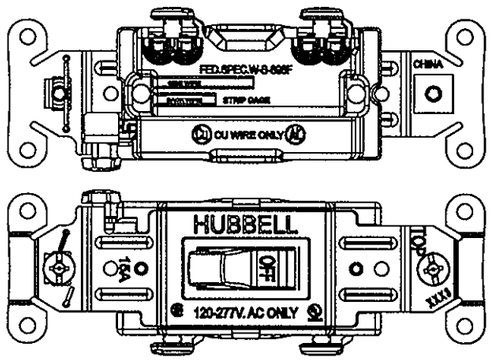
HP Conversion Chart

	120V	208V	240V	277V AC
15A	.5HP	1.5HP	2HP	2HP
20A	1HP	2HP	2HP	2HP

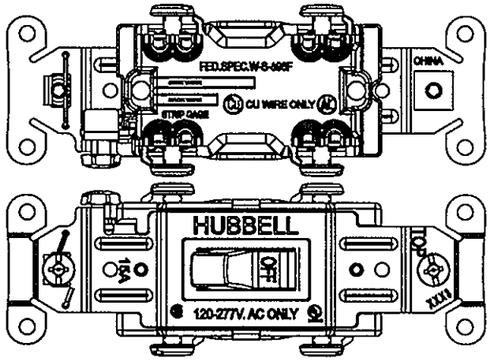


NOTE:
1. TOP HOUSING COLOR: GRAY
2. BOTTOM HOUSING COLOR: BLACK
3. ALL DIMENSIONS ARE IN INCHES AND (MILLIMETERS)

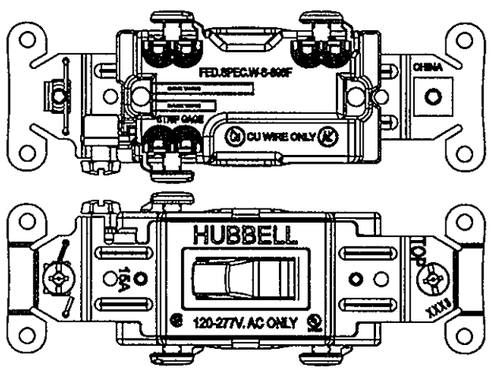
SINGLE POLE/BACK WIRE & SIDE WIRE



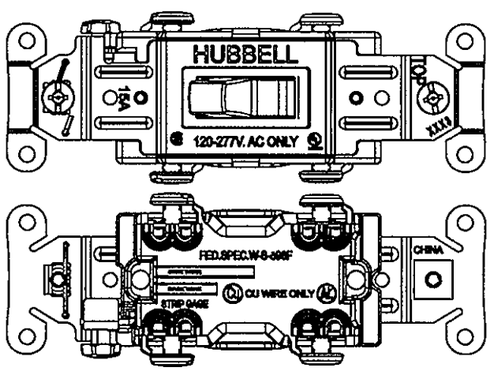
DOUBLE POLE/BACK WIRE & SIDE WIRE



3W/BACK WIRE & SIDE WIRE



4W/BACK WIRE & SIDE WIRE



CODE 74545

CATALOG NO.	RATING/TYPE	TOGGLE COLOR
CSB115	15A 120-277VAC S.P.	BROWN
CSB115I	15A 120-277VAC S.P.	IVORY
CSB115GY	15A 120-277VAC S.P.	GRAY
CSB115W	15A 120-277VAC S.P.	WHITE
CSB115BK	15A 120-277VAC S.P.	BLACK
CSB115OW	15A 120-277VAC S.P.	OFFICE WHITE
CSB115AL	15A 120-277VAC S.P.	ALMOND
CSB115LA	15A 120-277VAC S.P.	LIGHT ALMOND
CSB215	15A 120-277VAC D.P.	BROWN
CSB215I	15A 120-277VAC D.P.	IVORY
CSB215GY	15A 120-277VAC D.P.	GRAY
CSB215W	15A 120-277VAC D.P.	WHITE
CSB215BK	15A 120-277VAC D.P.	BLACK
CSB215OW	15A 120-277VAC D.P.	OFFICE WHITE
CSB215AL	15A 120-277VAC D.P.	ALMOND
CSB215LA	15A 120-277VAC D.P.	LIGHT ALMOND
CSB315	15A 120-277VAC 3W	BROWN
CSB315I	15A 120-277VAC 3W	IVORY
CSB315GY	15A 120-277VAC 3W	GRAY
CSB315W	15A 120-277VAC 3W	WHITE
CSB315BK	15A 120-277VAC 3W	BLACK
CSB315OW	15A 120-277VAC 3W	OFFICE WHITE
CSB315AL	15A 120-277VAC 3W	ALMOND
CSB315LA	15A 120-277VAC 3W	LIGHT ALMOND
CSB415	15A 120-277VAC 4W	BROWN
CSB415I	15A 120-277VAC 4W	IVORY
CSB415GY	15A 120-277VAC 4W	GRAY
CSB415W	15A 120-277VAC 4W	WHITE
CSB415BK	15A 120-277VAC 4W	BLACK
CSB415OW	15A 120-277VAC 4W	OFFICE WHITE
CSB415AL	15A 120-277VAC 4W	ALMOND
CSB415LA	15A 120-277VAC 4W	LIGHT ALMOND
CSB120	20A 120-277VAC S.P.	BROWN
CSB120I	20A 120-277VAC S.P.	IVORY
CSB120GY	20A 120-277VAC S.P.	GRAY
CSB120W	20A 120-277VAC S.P.	WHITE
CSB120R	20A 120-277VAC S.P.	RED
CSB120BK	20A 120-277VAC S.P.	BLACK
CSB120OW	20A 120-277VAC S.P.	OFFICE WHITE
CSB120AL	20A 120-277VAC S.P.	ALMOND
CSB120LA	20A 120-277VAC S.P.	LIGHT ALMOND
CSB220	20A 120-277VAC D.P.	BROWN
CSB220I	20A 120-277VAC D.P.	IVORY
CSB220GY	20A 120-277VAC D.P.	GRAY
CSB220W	20A 120-277VAC D.P.	WHITE
CSB220R	20A 120-277VAC D.P.	RED
CSB220BK	20A 120-277VAC D.P.	BLACK
CSB220OW	20A 120-277VAC D.P.	OFFICE WHITE
CSB220AL	20A 120-277VAC D.P.	ALMOND
CSB220LA	20A 120-277VAC D.P.	LIGHT ALMOND
CSB320	20A 120-277VAC 3W	BROWN
CSB320I	20A 120-277VAC 3W	IVORY
CSB320GY	20A 120-277VAC 3W	GRAY
CSB320W	20A 120-277VAC 3W	WHITE
CSB320R	20A 120-277VAC 3W	RED
CSB320BK	20A 120-277VAC 3W	BLACK
CSB320OW	20A 120-277VAC 3W	OFFICE WHITE
CSB320AL	20A 120-277VAC 3W	ALMOND
CSB320LA	20A 120-277VAC 3W	LIGHT ALMOND
CSB420	20A 120-277VAC 4W	BROWN
CSB420I	20A 120-277VAC 4W	IVORY
CSB420GY	20A 120-277VAC 4W	GRAY
CSB420W	20A 120-277VAC 4W	WHITE
CSB420R	20A 120-277VAC 4W	RED
CSB420BK	20A 120-277VAC 4W	BLACK
CSB420OW	20A 120-277VAC 4W	OFFICE WHITE
CSB420AL	20A 120-277VAC 4W	ALMOND
CSB420LA	20A 120-277VAC 4W	LIGHT ALMOND

LIST OF PARTS

DESCRIPTION	MATERIAL	FINISH
TOGGLE	THERMOPLASTIC	NONE
TOP HOUSING	THERMOPLASTIC	NONE
BOTTOM HOUSING	THERMOPLASTIC	NONE
RUBBER BUMPER	ELASTOMER	NONE
RIVET	STEEL	ZINC PLATED
GROUND SPRING	STAINLESS STEEL	NONE
MOUNTING SCREW	STEEL	ZINC PLATED
WASHER	THERMOPLASTIC	NONE
BRIDGE	STEEL	ZINC PLATED
GROUND SCREW	STEEL	DYE GREEN
GROUND CLAMP	STEEL	NI PLATED
WIRE CLAMP	STEEL	NI PLATED
ACTUATOR SPRING	SPRING WIRE	NONE
SPRING HOLDER	BRASS ALLOY	NONE
STATIONARY TERMINAL	BRASS ALLOY	BRIGHT DIP
BRUSH TERMINAL-L	BRASS ALLOY	BRIGHT DIP
BRUSH TERMINAL-R	BRASS ALLOY	BRIGHT DIP
CROSSOVER TERMINAL	BRASS ALLOY	BRIGHT DIP
TERMINAL SCREW	STEEL	PLATED
SILVER CONTACT	CADMIUM FREE SILVER ALLOY	NONE

SYM	REVISIONS	APP	DATE
3	NO CHANGES TO THIS SHEET. PER DCN 18914 DDL	EJM	06/14/12
2	10-19-11 ADDED C120BK AND CS320BK TO CHART PER DCN18422 DMP	DMP	10/19/11
1	6/17/09 RELEASE FOR PRODUCTION PER DCN#15750 C.Z	C.Z	6/17/09

THE DESIGN AND DIMENSIONS OF THE PRODUCT SHOWN ON THIS DRAWING ARE SUBJECT TO CHANGE WITHOUT NOTICE

TITLE
SPECIFICATION GRADE
COMMERCIAL SERIES
15A & 20A BACK & SIDE WIRE
AC TOGGLE SWITCH, HUBBELL

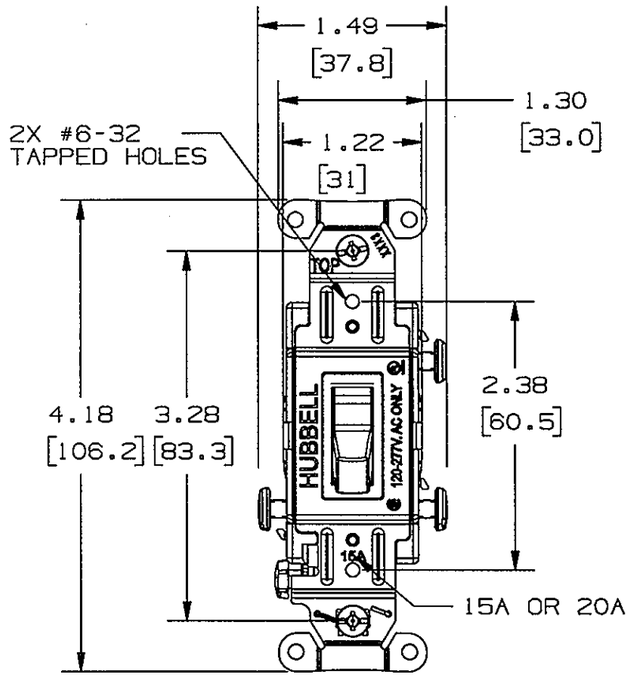
TOLERANCES UNLESS OTHERWISE SPECIFIED
FRACTIONS ± 1/64
DECIMALS ± .005
ANGLES ± 2°

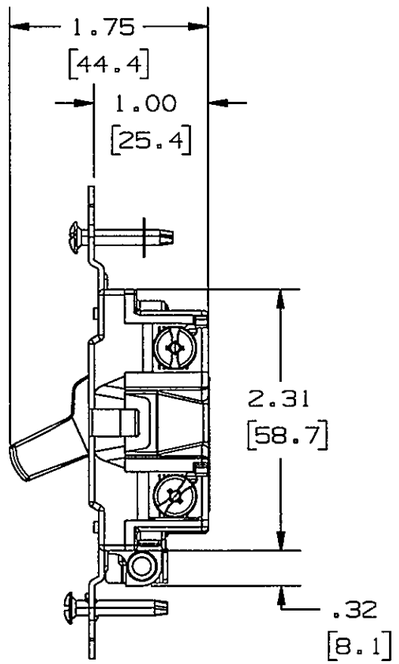
WIRING DEVICE-KELLEMS
HUBBELL INCORPORATED
BRIDGEPORT, CT

DR. BY J.X	APP. BY C.Z		
TR. BY J.X	SCALE		
CHK'D BY J.X	DATE 6/17/09		

DIMENSION SHEET FOR CAT. NO. SEE TABLE
REPAIRABLE ☐ NON-REPAIRABLE ☑
B
M-10870
3

M-10870 3





CATALOG NO.	RATING/TYPE	TOGGLE COLOR
CS115	15A 120-277VAC S.P.	BROWN
CS115I	15A 120-277VAC S.P.	IVORY
CS115GY	15A 120-277VAC S.P.	GRAY
CS115W	15A 120-277VAC S.P.	WHITE
CS115BK	15A 120-277VAC S.P.	BLACK
CS1150W	15A 120-277VAC S.P.	OFFICE WHITE
CS115AL	15A 120-277VAC S.P.	ALMOND
CS115LA	15A 120-277VAC S.P.	LIGHT ALMOND
CS315	15A 120-277VAC 3W	BROWN
CS315I	15A 120-277VAC 3W	IVORY
CS315GY	15A 120-277VAC 3W	GRAY
CS315W	15A 120-277VAC 3W	WHITE
CS3150W	15A 120-277VAC 3W	OFFICE WHITE
CS315AL	15A 120-277VAC 3W	ALMOND
CS315LA	15A 120-277VAC 3W	LIHT ALMOND
CS120	20A 120-277VAC S.P.	BROWN
CS120BK	20A 120-277VAC S.P.	BLACK
CS120I	20A 120-277VAC S.P.	IVORY
CS120GY	20A 120-277VAC S.P.	GRAY
CS120W	20A 120-277VAC S.P.	WHITE
CS1200W	20A 120-277VAC S.P.	OFFICE WHITE
CS120AL	20A 120-277VAC S.P.	ALMOND
CS120LA	20A 120-277VAC S.P.	LIGHT ALMOND
CS320	20A 120-277VAC 3W	BROWN
CS320BK	20A 120-277VAC 3W	BLACK
CS320I	20A 120-277VAC 3W	IVORY
CS320GY	20A 120-277VAC 3W	GRAY
CS320W	20A 120-277VAC 3W	WHITE
CS3200W	20A 120-277VAC 3W	OFFICE WHITE
CS320AL	20A 120-277VAC 3W	ALMOND
CS320LA	20A 120-277VAC 3W	LIGHT ALMOND

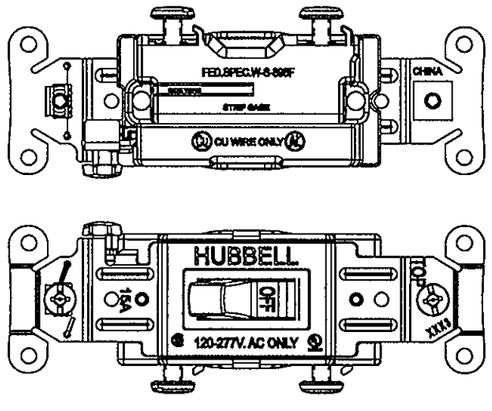
LIST OF PARTS

DESCRIPTION	MATERIAL	FINISH
TOGGLE	THERMOPLASTIC	NONE
TOP HOUSING	THERMOPLASTIC	NONE
BOTTOM HOUSING	THERMOPLASTIC	NONE
RUBBER BUMPER	ELASTOMER	NONE
RIVET	STEEL	ZINC PLATED
GROUND SPRING	STAINLESS STEEL	NONE
MOUNTING SCREW	STEEL	ZINC PLATED
WASHER	THERMOPLASTIC	NONE
BRIDGE	STEEL	ZINC PLATED
GROUND SCREW	STEEL	DYE GREEN
GROUND CLAMP	STEEL	NI PLATED
ACTUATOR SPRING	SPRING WIRE	NONE
SPRING HOLDER	BRASS ALLOY	NONE
STATIONARY TERMINAL	BRASS ALLOY	BRIGHT DIP
BRUSH TERMINAL-L	BRASS ALLOY	BRIGHT DIP
BRUSH TERMINAL-R	BRASS ALLOY	BRIGHT DIP
CROSSOVER TERMINAL	BRASS ALLOY	BRIGHT DIP
TERMINAL SCREW	STEEL	PLATED
SILVER CONTACT	CADMIUM FREE SILVER ALLOY	NONE

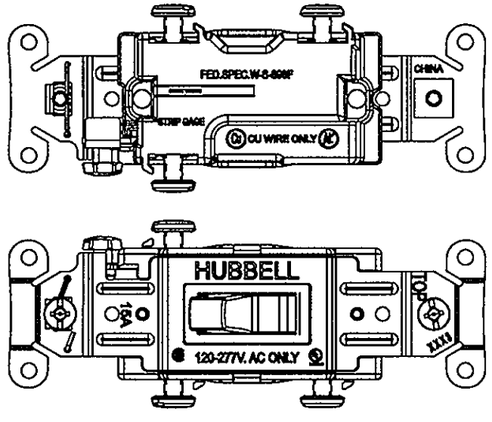
DIMENSION SHEET FOR CAT. NO. SEE TABLE

REPAIRABLE ☐ NON-REPAIRABLE ☑

SINGLE POLE/SIDE WIRE



3W/SIDE WIRE



NOTE:
1. TOP HOUSING COLOR: GRAY
2. BOTTOM HOUSING COLOR: BLACK
3. ALL DIMENSIONS ARE IN INCHES AND (MILLIMETERS)

SYM	REVISIONS	APP	DATE
3	ADDED CAT. NO. CS115BK AND SPECS TO TABLE. PER DCN 18914 DDL	EJM ESM	06/14/12
2	10-19-11 ADDED C120BK AND CS320BK TO CHART PER DCN18422 DMP	DMP	10/19/11
1	6/17/09 RELEASE FOR PRODCUTION PER DCN#15750 C.Z	C.Z	6/17/09

THE DESIGN AND DIMENSIONS OF THE PRODUCT SHOWN ON THIS DRAWING ARE SUBJECT TO CHANGE WITHOUT NOTICE

TITLE SPECIFICATION GRADE
COMMERCIAL SERIES
15A & 20A SIDE WIRE
AC TOOGGLE SWITCH,HUBBELL

TOLERANCES UNLESS OTHERWISE SPECIFIED
FRACTIONS ±1/64
DECIMALS ±.005
ANGLES ±2°

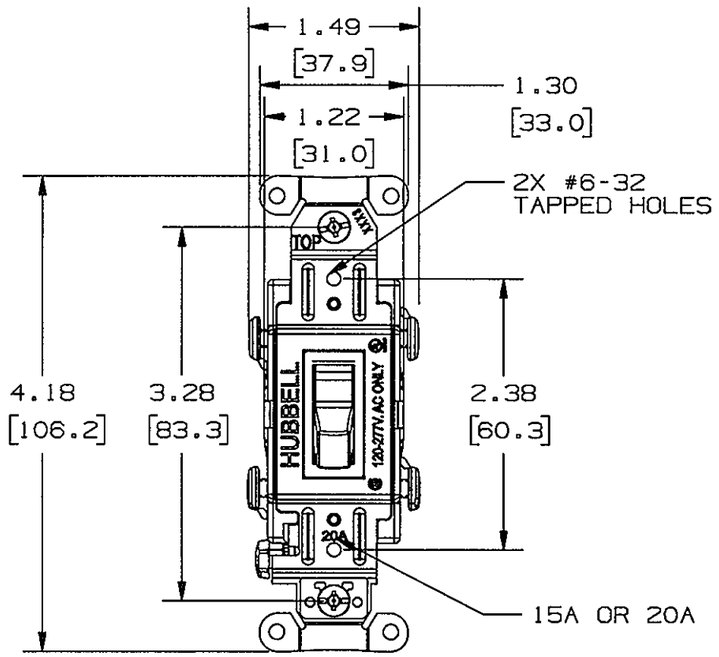
WIRING DEVICE-KELLEMS
HUBBELL INCORPORATED
BRIDGEPORT, CT

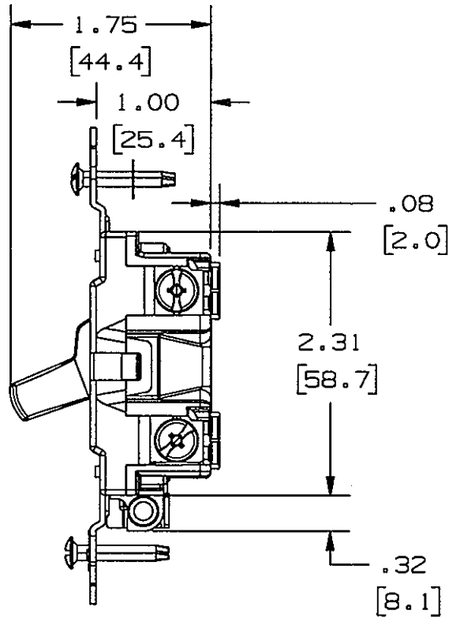
DR. BY J.X	APP. BY C.Z
TR. BY J.X	SCALE
CHK'D BY J.X	DATE 6/17/09

CODE 74545

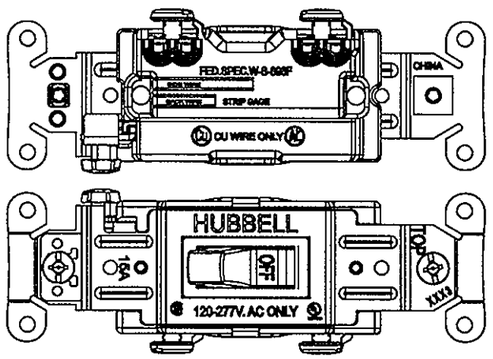
M-10870 B 3

M-10870 3

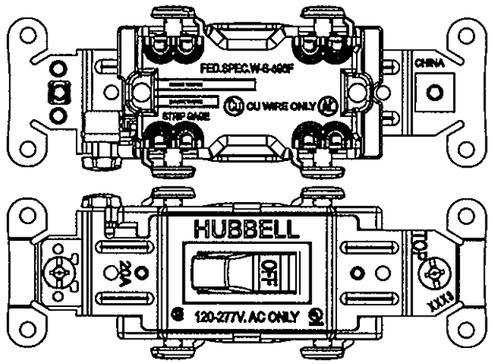




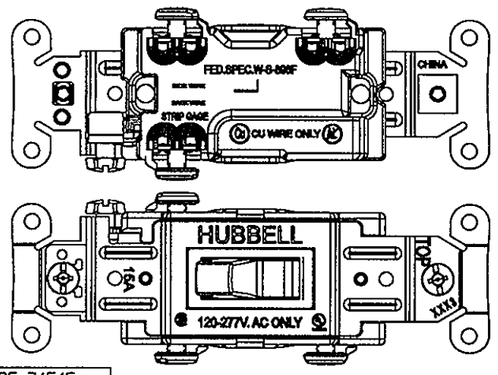
SINGLE POLE/BACK WIRE & SIDE WIRE



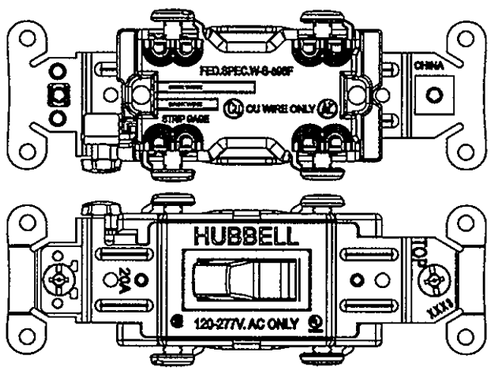
DOUBLE POLE/BACK WIRE & SIDE WIRE



3W/BACK WIRE & SIDE WIRE



4W/BACK WIRE & SIDE WIRE



CODE 74545

CATALOG NO.	RATING/TYPE	TOGGLE COLOR
1201B	15A 120-277VAC S.P.	BROWN
1201GY	15A 120-277VAC S.P.	GRAY
1201I	15A 120-277VAC S.P.	IVORY
1201W	15A 120-277VAC S.P.	WHITE
1201BK	15A 120-277VAC S.P.	BLACK
1201AL	15A 120-277VAC S.P.	ALMOND
1201LA	15A 120-277VAC S.P.	LIGHT ALMOND
1203B	15A 120-277VAC 3W	BROWN
1203GY	15A 120-277VAC 3W	GRAY
1203I	15A 120-277VAC 3W	IVORY
1203W	15A 120-277VAC 3W	WHITE
1203BK	15A 120-277VAC 3W	BLACK
1203AL	15A 120-277VAC 3W	ALMOND
1203LA	15A 120-277VAC 3W	LIGHT ALMOND
1221B	20A 120-277VAC S.P.	BROWN
1221GY	20A 120-277VAC S.P.	GRAY
1221I	20A 120-277VAC S.P.	IVORY
1221R	20A 120-277VAC S.P.	RED
1221W	20A 120-277VAC S.P.	WHITE
1221AL	20A 120-277VAC S.P.	ALMOND
1221BK	20A 120-277VAC S.P.	BLACK
1221LA	20A 120-277VAC S.P.	LIGHT ALMOND
1222B	20A 120-277VAC D.P.	BROWN
1222GY	20A 120-277VAC D.P.	GRAY
1222I	20A 120-277VAC D.P.	IVORY
1222R	20A 120-277VAC D.P.	RED
1222W	20A 120-277VAC D.P.	WHITE
1222AL	20A 120-277VAC D.P.	ALMOND
1222BK	20A 120-277VAC D.P.	BLACK
1222LA	20A 120-277VAC D.P.	LIGHT ALMOND
1223B	20A 120-277VAC 3W	BROWN
1223GY	20A 120-277VAC 3W	GRAY
1223I	20A 120-277VAC 3W	IVORY
1223R	20A 120-277VAC 3W	RED
1223W	20A 120-277VAC 3W	WHITE
1223AL	20A 120-277VAC 3W	ALMOND
1223BK	20A 120-277VAC 3W	BLACK
1223LA	20A 120-277VAC 3W	LIGHT ALMOND
1224B	20A 120-277VAC 4W	BROWN
1224GY	20A 120-277VAC 4W	GRAY
1224I	20A 120-277VAC 4W	IVORY
1224R	20A 120-277VAC 4W	RED
1224W	20A 120-277VAC 4W	WHITE
1224AL	20A 120-277VAC 4W	ALMOND
1224BK	20A 120-277VAC 4W	BLACK
1224LA	20A 120-277VAC 4W	LIGHT ALMOND

NOTE:
1. "15A" USED TO BLUE TOP HOUSING
   "20A" USED TO RED TOP HOUSING
2. BOTTOM HOUSING COLOR: BLACK
3. ALL DIMENSIONS ARE IN INCHES AND (MILLIMETERS)

3 OF 3

LIST OF PARTS

DESCRIPTION	MATERIAL	FINISH
TOGGLE	THERMOPLASTIC	NONE
TOP HOUSING	THERMOPLASTIC	NONE
BOTTOM HOUSING	THERMOPLASTIC	NONE
RUBBER BUMPER	ELASTOMER	NONE
RIVET	STEEL	ZINC PLATED
GROUND CLIP	301 S.S	NONE
MOUNTING SCREW	STEEL	ZINC PLATED
WASHER	THERMOPLASTIC	NONE
STRAP HUBBELL	STEEL	ZINC PLATED
GROUND SCREW	STEEL	DYE GREEN
GROUND CLAMP	STEEL	NI PLATED
WIRE CLAMP	STEEL	NI PLATED
ACTUATOR SPRING	SPRING WIRE	NONE
SPRING HOLDER	BRASS ALLOY	NONE
STATIONARY TERMINAL	BRASS ALLOY	BRIGHT DIP
BRUSH TERMINAL-L	BRASS ALLOY	BRIGHT DIP
BRUSH TERMINAL-R	BRASS ALLOY	BRIGHT DIP
CROSSOVER TERMINAL	BRASS ALLOY	BRIGHT DIP
TERMINAL SCREW	BRASS ALLOY	PLATED
SILVET CONTACT	CADMIUM FREE SILVER ALLOY	NONE

SYM	REVISIONS	APP	DATE
3	NO CHANGES TO THIS SHEET PER DCN 18914 DDL	EJM	06/14/12
2	10-19-11 ADDED C120BK AND CS320BK TO CHART PER DCN18422 DMP	DMP	10/19/11
1	6/17/09 RELEASE FOR PRODUCTION PER DCN#15750 C.Z	C.Z	6/17/09

THE DESIGN AND DIMENSIONS OF THE PRODUCT SHOWN ON THIS DRAWING ARE SUBJECT TO CHANGE WITHOUT NOTICE

TITLE HUBBELL-PRO
HEAVY DUTY INDUSTRIAL SERIES
15A & 20A BACK & SIDE WIRE
AC TOGGLE SWITCH, HUBBELL

TOLERANCES UNLESS OTHERWISE SPECIFIED
FRACTIONS ±1/64
DECIMALS ±.005
ANGLES ±2°

WIRING DEVICE-KELLEMS
HUBBELL INCORPORATED
BRIDGEPORT, CT

DR. BY	J.X	APP. BY	C.Z
TR. BY	J.X	SCALE	
CHK'D BY	J.X	DATE	6/17/09

DIMENSION SHEET FOR CAT. NO. SEE TABLE

REPAIRABLE ☐ NON-REPAIRABLE ☒

B

M-10870 3

AC TOGGLE SWITCHES INSTALLATION INSTRUCTIONS

NOTICE: For installation by a qualified electrician in accordance with national and local electrical codes, and the following instructions.

CAUTION: RISK OF ELECTRIC SHOCK. Disconnect power before installing. Never wire energized electrical components.

CAUTION: USE COPPER CONDUCTORS ONLY.

Check that the device's type and rating are suitable for the application.

Select conductors having 90°C or higher rated insulation having sufficient ampacity in accordance with the 60°C column of National Electrical Code® Table 310-16 or Canadian Electrical Code Table 2.

Terminal capacity: #14 AWG to #10 AWG.

Strip conductors using strip gage on switch body. DO NOT TIN CONDUCTORS.

Loosen terminal screws. Connect conductors to proper terminals as shown in Figs 1-4.

Back Wire: insert conductor into terminal hole.

Side Wire: wrap conductor securely around terminal screw.

Tighten terminal screws to 9-12 pound•inches (1.0-1.4 N•m) of torque. TAKE CAUTION THAT THERE ARE NO STRAY WIRE STRANDS.

Mount switch in box and secure cover/wall plate.

CA INTERRUPTEURS À BASCULE INSTRUCTIONS D'INSTALLATION

AVIS: Doit être installé par des électriciens qualifiés conformément aux codes nationaux et locaux de l'électricité et selon les instructions suivantes.

ATTENTION: RISQUE DE CHOC ÉLECTRIQUE. Débrancher le circuit avant l'installation. Ne jamais câbler des composants électriques sous tension.

ATTENTION: EMPLOYER UNIQUEMENT DES CONDUCTEURS EN CUIVRE.

S'assurer que type et la capacité nominale de ce dispositif conviennent à l'application.

Choisir des conducteurs ayant une cote d'isolation de 90°C ou plus et une intensité admissible suffisante selon la colonne 60°C du National Electrical Code®, Tableau 310-16, ou du Code canadien de l'électricité, Tableau 2.

Capacité de borne: du calibre #14 AWG au calibre #10 AWG.

Dénuder les conducteurs en utilisant le gabarit de dénudage "Strip Gage" sur le corps d'interrupteur. NE PAS ÉTAMER LES CONDUCTEURS.

Desserrer les vis-bornes. Brancher les conducteurs aux bornes appropriées comme indiqué dans les figures 1-4.

Fil arrière : introduire le conducteur dans le trou de la borne.

Fil latéral : enrouler le conducteur de façon sûre autour de la vis-borne.

Serrer les vis-bornes à un couple de serrage de 9-12 livres•pouce (1.0-1.4 N•m). S'ASSURER QU'IL N'Y A PAS DE TORONS DISPERSÉS.

Monter l'interrupteur dans la boîte et attacher le couvercle/plaque murale.

CA INTERRUPTORES DE PALANCA INSTRUCCIONES DE INSTALACIÓN

AVISO: Para ser instalado por un electricista calificado, de acuerdo con los códigos eléctricos nacionales y locales, y siguiendo estas instrucciones.

CUIDADO: RIESGO DE CHOQUE ELÉCTRICO. Desconectar la corriente antes de la instalación. No conectar nunca componentes eléctricos en un circuito con corriente.

CUIDADO: USAR SOLAMENTE CONDUCTORES DE COBRE.

Verificar que el tipo y las especificaciones del dispositivo sean apropiados para la aplicación.

Elegir un conductor que tenga un aislamiento especificado de 90°C o más alto y suficiente capacidad para aceptar amperaje de acuerdo con la Columna de 60°C de la Tabla 310-16 del National Electrical Code® o la Tabla 2 del Código Eléctrico Canadiense.

Capacidad del terminal: #14 AWG a #10 AWG.

Pelar los conductores usando el pelacables 'Strip Gage" en el marco del interruptor. NO ESTAÑAR LOS CONDUCTORES.

Aflojar los tornillos de los terminales. Conectar los conductores por completo en los terminales correspondientes como se indica en las figuras 1-4.

Alambre Trasero: introducir el conductor en el hueco del terminal.

Alambre Lateral: enrollar el conductor firmemente alrededor del tornillo del terminal.

Apretar un torque de 9-12 libras-pulgada (1.0-1.4 N•m) los tornillos de los terminales. TENER CUIDADO DE QUE NO QUEDEN HILOS DE ALAMBRE SUELTOS.

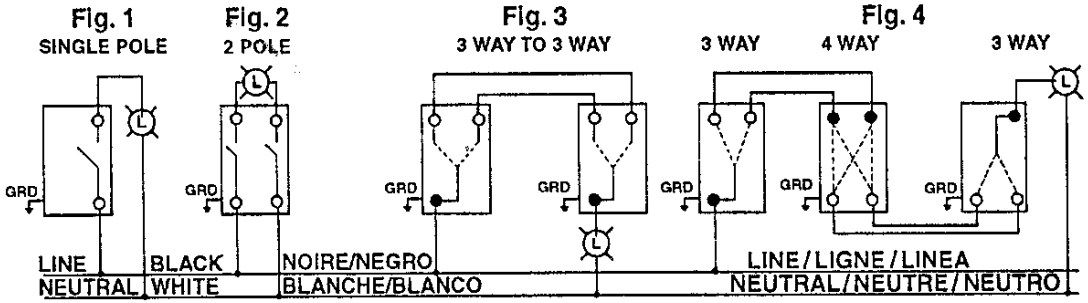
Instalar el interruptor en la caja y asegurar la cubierta/placa de pared.

WIRING DIAGRAMS/SCHÉMAS DE CÂBLAGE/DIAGRAMAS DE CABLEADO

Select the correct wiring diagram

Choisir le schéma de câblage correct.

Seleccione el diagrama de cableado correcto.



HUBBELL®

Wiring Device-Kellems