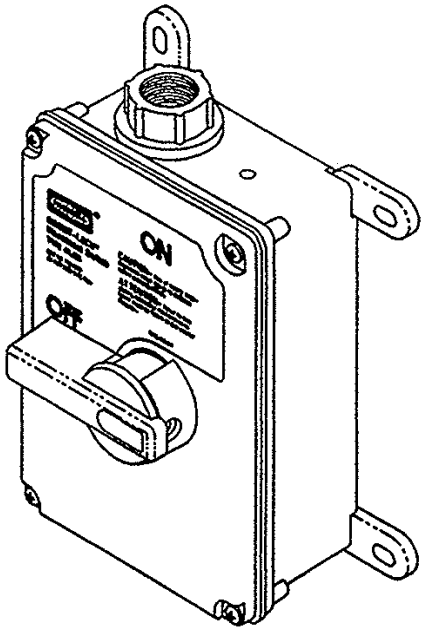
30 AMP CIRCUIT- LOCK™ DISCONNECT SWITCH

Installation Instructions

This enclosure provides ON-OFF Switched control of a directly Connected load and meets the Requirements of Outdoor/Indoor (Type 4X, Watertight, Corrosion Resistant) and Indoor (Type 12K Dust Tight) installations.



GENERAL INFORMATION

1. **NOTICE:** For installation only by a qualified electrician in Accordance with the National Elecrical Code® or the Canadian Electrical Code, local codes, and the instructions on the following Pages.

2. **CAUTION:** RISK OF ELECTRIC SHOCK. MORE THAN ONE SUPPLY DISCONNECT MAY BE REQUIRED TO DE-ENERGIZE THIS EQUIPMENT BEFORE SERVICING. DISCONNECT ALL POWER SUPPLIES TO ENCLOSURE BEFORE EXPOSING INTERIOR.

   ATTENTION: RISQUE DE CHOC ÉLECTRIQUE. IL PEUT-ÊTRE NÉCESSAIRE DE DÉBRANCHER PLUS D'UN DISJONCTEUR D'ALIMENTATION AFIN DE METTRE HORS-TENSION L'ÉQUIPMENT AVANT D'EN FAIRE L'ENTRETIEN. DÉBRANCHER TOUS LES GROUPES D'ALIMENTATION AU BOÎTIER AVANT DE L'OUVRIR ET D'EN EXPOSER L'INTÉRIEUR.

3. **NOTICE:** Separate overcurrent protection must be provided in accordance with National Electrical code® Article 220 or Canadian Electrical Code, Section B, as appropriate.

4. Suitable for use on a circuit capable of delivering not more than 10,000 rms symmetrical amperes, 600 VAC maximum. For all catalogs, except HBLDS33ACNK, suitable for use on a circuit capable of delivering not more than 65,000 rms symmetrical amperes, 600 VAC maximum when protected by Class J fuses rated 30 amperes maximum.

5. This enclosure includes a lockout provision: ON-OFF control knob (in the OFF position) accepts up to a 5/16 inch (8mm) diameter shackle of a suitable padlock Lockout device to isolate energy from the connected equipment as a method of compliance to OSHA Lockout/Tagout Regulation 29 CFR Part 1910.147. This feature, however, does NOT isolate the power supplied to the enclosure during internal servicing of the enclosure.

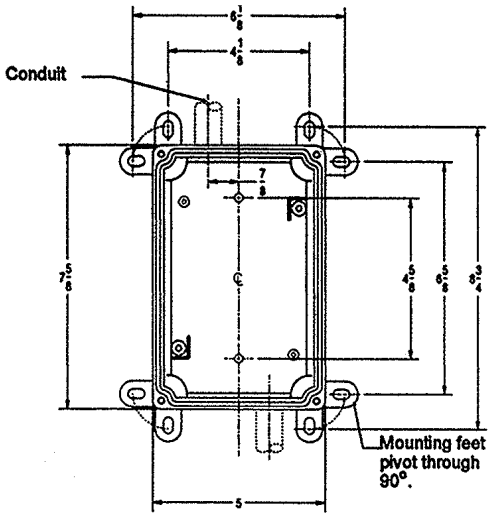
Wiring Device-Kellems
Hubbell Incorporated (Delaware)
1-800-288-6000
Shelton, CT 06484
www.hubbell-wiring.com

30 AMP CIRCUIT- LOCK™ DISCONNECT SWITCH

This enclosure may be mounted for top, bottom, back, or dual conduit entrances. It is supplied ready for top conduit entrance.

A. MOUNTING INSTRUCTIONS

1. For Type 4X and Type 12K applications, enclosure must be mounted by means of mounting feet. DO NOT drill, punch, or nail mounting holes through the enclosure.
2. Mount the feet to the enclosure using the screws provided. Tighten to 18 lb.-in. (2.0 N · m). See Fig. M-2.
3. Mounting feet will accept up to ¼ inch (6mm) screws (not provided). Mounting pattern is shown in Fig. M-1.
4. Remove the four (4) cover mounting screws.
5. For bottom feed, remove frame retention screws, remove frame from box, turn box 180°, replace frame and replace frame retention screws. Bottom feed is shown in Figs. M-3 and M-5.
6. For back feed or for dual conduit entry, see Section B and Figs. M-4 and M-5 for instructions.
7. Install the conduit fitting. Be sure that the "O" ring is properly seated in its groove. Tighten the conduit fitting.



Dimensions in inches; for millimeters, multiply by 25.4.

Fig. M-1

Fig. M-1

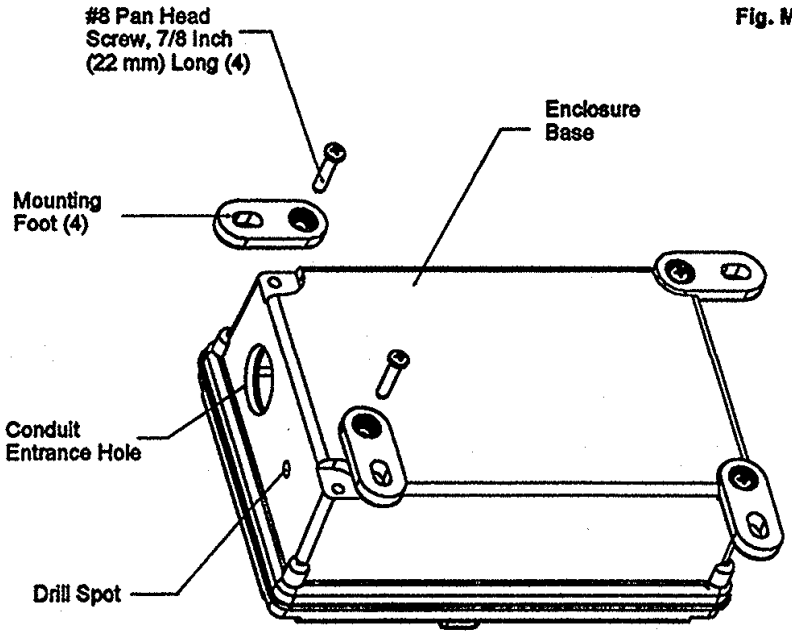
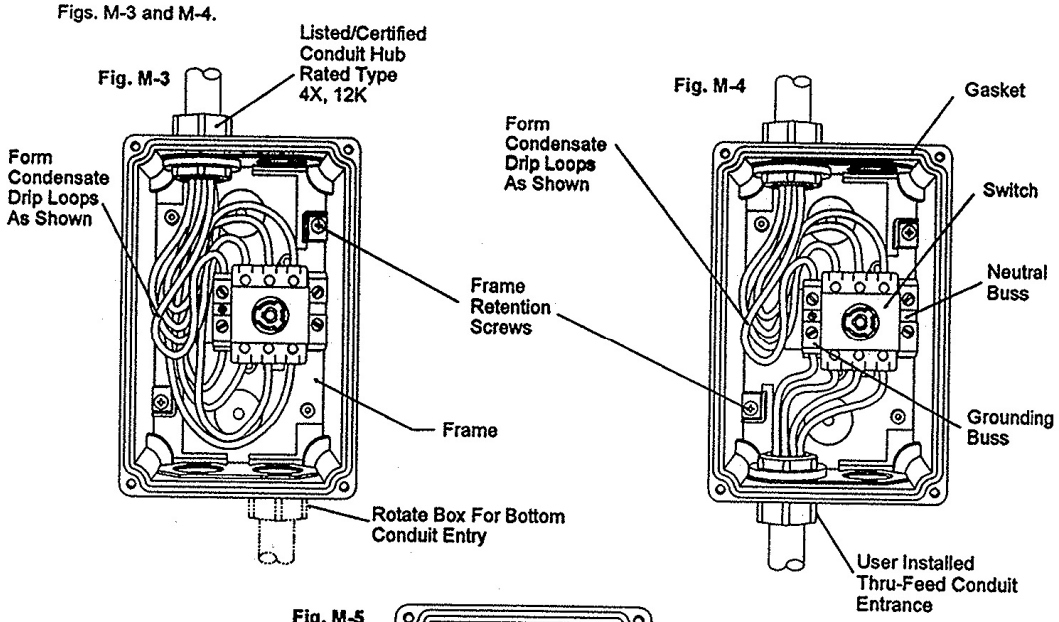


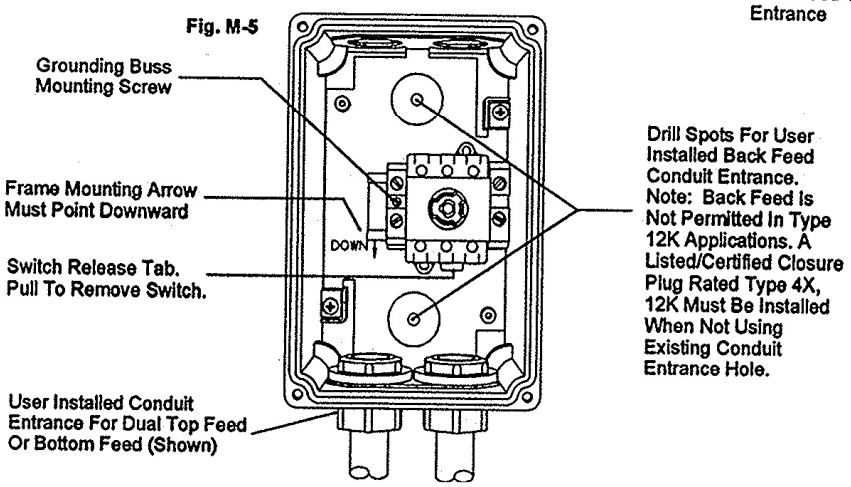
Fig. M-2

B. DUAL CONDUIT ENTRY AND BACK FEED: See Figs. M-1 and M-2.

1. NOTE: Back feed is NOT permitted in Type 12K applications. Back feed is permitted in Type 4X applications.
2. Remove frame retention screws and remove frame.
3. Drill or punch a 1.109 inch diameter (3/4" trade size) hole at the desired conduit entrance location. Use drill spots to accurately locate hole.
4. Use ONLY Listed/Certified conduit hub rated for Type 4X and Type 12K applications.
5. Any unused conduit entrance holes must be sealed with Listed/Certified closure plugs rated Type 4X and Type 12K.
6. Use of user-installed conduit entrances above the switch are not recommended in applications where condensation may be present in conduit. When using the top feed conduit entrance, drip loops must always be formed as indicated in Figs. M-3 and M-4.

Figs. M-3 and M-4.





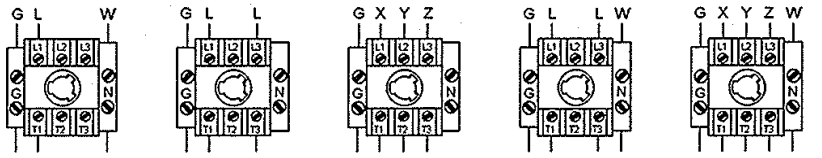
30 AMP CIRCUIT- LOCK™ DISCONNECT SWITCH

C. WIRING INSTRUCTIONS

1. Use conductors with ins Insulation rated 90°C or higher, having sufficient ampacity in accordance with the 60°C column of Table 310-16 of the National Electrical Code® or Table 2 of the Canadian Electrical Code.
2. **CAUTION:** Use copper conductors only.

   ATTENTION: Employer Uniquement avec fil de cuiver.
3. **DO NOT** tin conductors.
4. Make sure that the connected device rating does not exceed the rating of this device. See General information # 4 regarding overcurrent protection.
5. For all catalogs, except HBLDS33ACNK, switch terminals will accept wire size range from # 8-14 AWG; ground terminals from # 6-16 AWG; and neutral terminals from # 8-22 AWG.
6. For catalog HBLDS33ACNK only, switch terminals will accept wire size range from #8-14 AWG; ground terminals from #6-16 AWG.
7. For all catalog's except HBLDS33ACNK; Strip length of all conductors is ½ inch (13 mm). For catalog HBLDS33ACNK, strip length of all conductors is .35 inch (9mm).
8. Select the correct wiring diagram and wire the switch as shown.
9. For all catalog's, except HBLDS33ACNK: Tighten the switch terminalscrews to 12-15lb.-in. (1.4-1.7 N·m); For catalog HBLDS33ACNK tighten the switch terminal screws to 11lb.-in.(1.25 N·m). For all catalogs: Tighten ground terminal screws 14.2lb.-in.(1.6N·m); and neutral terminal screws 14.2lb. – in.(1.6N·m).
10. Tighten the grounding buss mounting screw to 4.4-8.9lb. – in.(0.5-1.0 N·m).
11. Take extra caution that there are no loose wire strands.
12. Reinstall the cover. The handle must be in the off position. Make sure the rope gasket is properly seated in the groove. Tighten the four cover screws to 18 lb. – in. (2.0 N·m).
13. Consult factory for auxiliary contact availability.

Wiring diagrams for all Catalogs, except HBLDS33ACNK

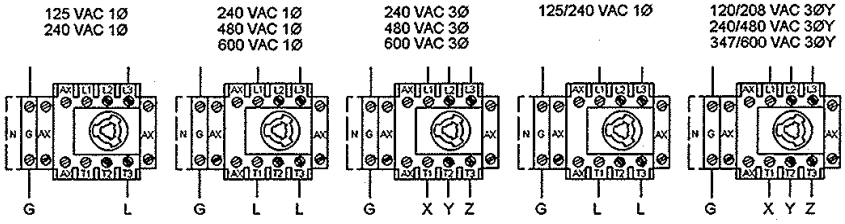


Note: "G" designates ground wire and yellow and green grounding buss.

NOTICE: This manual motor controller carries a maximun rating of:

30 Amp	600 VAC
1 HP	120 VAC 1Ø
3 HP	200-240 VAC 1Ø
5 HP	480 VAC 1Ø
7.5 HP	200-240 VAC 3Ø
15 HP	480 VAC 3Ø
15 HP	600 VAC 3Ø

Wiring diagrams for catalog HBLDS33ACNK only.



Note: "G" designates ground wire and yellow and green grounding buss.
Note: "N" represents optional neutral buss.

NOTICE: This manual motor controller carries a maximun rating of:

30 Amp	600 VAC
1 HP	120 VAC 1Ø
2.5 HP	220-277 VAC 1Ø
5 HP	480 VAC 1Ø
5 HP	208-240 VAC 3Ø
10 HP	480 VAC 3Ø
10 HP	600 VAC 3Ø

HUBBELL AUXILIARY CONTACTS

English

NOTICE:

Auxiliary contacts for use ONLY with the following Hubbell devices: Circuit-Lock® Disconnect Switches, Switched Twist-Locks®, Switched Hubellocks® and Circuit-Lock® Mechanical Interlocks with Hubbell switch types HBLD3RS, HBL30MIRS and HBLD60100RS.

This contact provides pilot duty switching on two sets of contacts. One set of contacts is Normally Open (N.O.) and the other set is Normally closed (N.C.). (See "TIMING", page 2.)

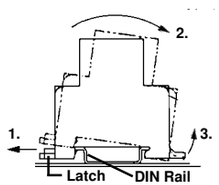
GENERAL INFORMATION

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. Check that the device's type and rating are suitable for the application.
4. **NOTICE**: Separate overcurrent protection must be provided in accordance with National Electrical Code® Article 220 or Canadian Electrical Code, Section B, as appropriate.
5. Auxiliary contacts are suitable for use on a circuit capable of delivering not more than 3,000 rms symetrical amperes, 600 VAC maximum.
6. This auxiliary contact is rated A600 Pilot Duty, Q600, 600 VAC, 10A.

INSTALLATION INSTRUCTIONS

LABELS — IMPORTANT:

1. If the existing marking does not state "More than one disconnect switch may be required to de-energize...", apply the **CAUTION/ATTENTION/CUIDADO** label. On Circuit-Lock™ Pin & Sleeve Mechanical Interlocks, place this label on top of the existing CAUTION/ATTENTION/ CUIDADO marking. On Switched Twist-Lock® Enclosures, place this label on the receptacle door.
2. Apply the **NOTICE** label (auxiliary contact rating) to the inside of the enclosure cover. This lablel must not overlap any other label inside the enclosure.



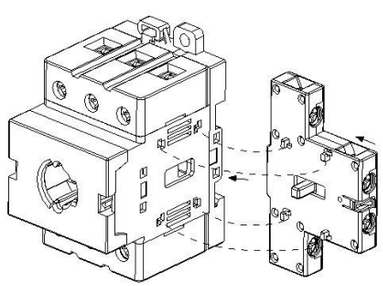
MOUNTING

A. Removing the main switch from the DIN Rail

1. Pull latch outward.
2. Rock switch away from DIN rail.
3. Unhook the switch from the DIN rail.

B. Attaching the Auxiliary Contact

1. Insert locking tabs into switch. Auxiliary contact can mount to either side of the switch.
2. Slide auxiliary contact downward until it snaps in place.
3. Test operation of switch and auxiliary contact.



CONTACTS AUXILIAIRES HUBBELL

Français

AVIS :

Contacts auxiliaires pour usage SEULEMENT avec les dispositifs Hubbell suivants : sectionneurs Circuit-Lock[MD], Twist-Locks[MD] avec commutateur, Hubellocks[MD] avec commutateur et dispositifs de blocage mécanique Circuit-Lock[MD] avec commutateurs Hubbell de types HBLD3RS, HBL30MIRS et HBLD60100RS

Ce dispositif effectue la commutation d'un circuit de commande avec deux jeux de contacts. Les contacts du premier jeux sont ouverts au repos, les contacts de l'autre sont fermés au repos. (Voir CHRONOGRAMME, page 2).

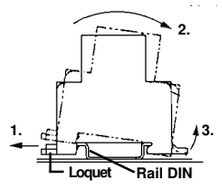
RENSEIGNEMENTS GÉNÉRAUX

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.**
3. S'assurer que le type et les caractéristiques nominales de ce dispositif conviennent à l'application.
4. **AVIS** : Un dispositif séparé de protection contre les surintensités doit être fourni conformément à la section B du Code canadien de l'électricité.
5. Ce contact auxiliaire convient à l'emploi dans un circuit dont la capacité en court-circuit est inférieure à 3 000 ampères efficaces symétriques à un maximum de 600 V C.A.
6. Ce contact auxiliaire est classé circuit de commande A600, Q600, 600 V CA, 10 A.

DIRECTIVES DE MONTAGE

ÉTIQUETTES — IMPORTANT

1. Si les indications existantes ne portent pas la mention «Il est possible qu'il soit nécessaire d'ouvrir plus d'un sectionneur...», apposer l'étiquette **«CAUTION/ATTENTION/CUICADO»**. Pour les dispositifs plot et douille à verrouillage mécanique Circuit-Lock[MC], apposer l'étiquette par-dessus l'étiquette CAUTION/ATTENTION/ CUICADO existante. Dans le cas des boîtiers d'interrupteurs Twist-Lock[MD], apposer l'étiquette sur la porte de la prise.
2. Apposer l'étiquette «**AVIS**» (caractéristiques nominales des contacts auxiliaires) sur la face intérieure de la porte du boîtier. Cette étiquette ne doit chevaucher aucune autre étiquette présente à l'intérieur du boîtier.



MONTAGE

A. Enlèvement de l'interrupteur principal du rail DIN

1. Tirer le loquet vers l'extérieur.
2. Faire pivoter l'interrupteur sur le rail DIN.
3. Décrocher l'interrupteur du rail DIN.

B. Pose du contact auxiliaire

1. Insérer les griffes de verrouillage de l'interrupteur. Le contact auxiliaire peut se placer d'un côté ou de l'autre de l'interrupteur.
2. Glisser le contact auxiliaire vers le bas jusqu'à ce qu'il s'enclenche.
3. Vérifier le bon fonctionnement du contact auxiliaire et de l'interrupteur.

CONTACTOS AUXILIARES DE HUBBELL

Español

AVISO:

Contactos auxiliares para usar ÚNICAMENTE con los siguientes dispositivos de Hubbell: Desconectadores Circuit-Lock[MR], Trabas conmutadas Twist-Lock[MR], Trabas conmutadas Hubellock[MR] y Cerrojos mecánicos Circuit-Lock[MR] con conmutadores Hubbell de tipos HBLD3RS, HBL30MIRS y HBLD60100RS

Este dispositivo permite efectuar la conmutación de un circuito de mando con dos juegos de contactos. Los contactos de uno juego están abiertos en reposo y los contactos del otro juego están cerrados en reposo. (Ver "SECUENCIA" en la pag. 2)

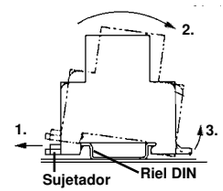
INFORMACIÓN GENERAL

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. Asegurarse de que el tipo y las características nominales del dispositivo sean apropiados para la aplicación.
4. **AVISO**: Debe proporcionarse un dispositivo protector contra sobrecorriente por separado, conforme al artículo 220 de la Norma oficial mexicana NOM-001-SEMP.
5. Este contacto auxiliar puede utilizarse en un circuito capaz de suministrar no más de 3 000 amperes efectivos simétricos a 600 V C.A. como máximo.
6. Este contacto auxiliar está clasificado para usarse como circuito de mando A600, Q600, 600 V CA., 10 A.

INSTRUCCIONES DE INSTALACIÓN

ETIQUETAS — IMPORTANTE

1. Si la indicacón existente no establece que : "Puede ser necesario abrir más de un seccionador...", aplicar la etiqueta de «**CAUTION/ATTENTION/CUICADO**». En los desconectadores de perno y manga con traba mecánica Circuit-Lock[MC], colocar esta etiqueta sobre la indicación CAUTION/ATTENTION/CUICADO existente. En las cajas de interruptores Twist-Lock[MR], colocar esta etiquetaa en la tapa del tomacorriente.
2. Aplicar la etiqueta de «**AVISO**» (características del contacto auxiliar) en el interior de la puerta de la caja. Esta etiqueta no debe superponerse a ninguna otra etiqueta sobre la caja.



MONTAJE

A. Retirar el interruptor principal del riel DIN

1. Jalar de la traba hacia afuera.
2. Hacer bascular el interruptor sobre el riel DIN.
3. Desacoplar el interruptor del riel DIN.

B. Acoplar el contacto auxiliar

1. Insertar las lengüetas trabantes en las ranuras del interruptor. El contacto auxiliar puede instalarse en cualquiera de ambos lados del interruptor.
2. Deslizar el contacto auxiliar hacia abajo hasta que quede retenido.
3. Verificar el funcionamiento del interruptor y el contacto auxiliar.

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

 PRINTED IN U.S.A. 1/06

English

C. Re-installing the Switch on the DIN Rail

1. Hook the switch on the DIN rail. Make sure switch is positioned by the locating tab.
2. Rock the switch until it snaps onto the DIN rail.

D. Removing the Auxiliary Contact

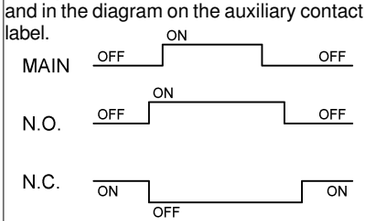
1. Slide contact fully upward and pull away from switch.

WIRING THE AUXILIARY CONTACT

1. **CAUTION**: USE COPPER CONDUCTORS ONLY.
2. DO NOT TIN CONDUCTORS.
3. Make sure the connected device does not exceed the rating of this device.
4. Terminal capacity: #14-18 AWG.
5. Strip conductors .38 inch (10 mm).
6. Wire the switch as required.
7. Tighten the terminal screws to 10-12 lb•in (1.1-1.4 N•m)
8. **TAKE CAUTION THERE ARE NO STRAY WIRE STRANDS.**

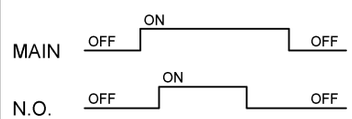
TIMING HBLAC1

Normally Open and Normally Closed contacts both switch prior to switching of the main contacts. The Normally Open contacts close before the Normally Closed contacts open resulting in an overlap when both contacts are closed or ON. Timing is illustrated in the diagram below and in the diagram on the auxiliary contact label.



TIMING HBLAC2

Normally Open Contacts switch after switching of the Main Contacts. Normally open contacts close prior to the main contacts. Do not use any other Auxillary contact with this HBLAC2.



Français

C. Remontage de l'interrupteur sur le rail DIN

1. Accrocher l'interrupteur sur le rail DIN. S'assurer que l'interrupteur est placé selon l'ergot de positionnement.
2. Faire pivoter l'interrupteur jusqu'à ce qu'il s'enclenche sur le rail DIN.

D. Enlèvement du contact auxiliaire

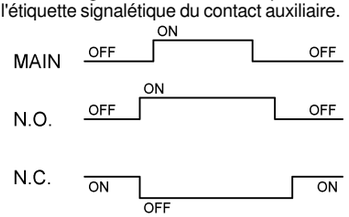
1. Glisser le contact auxiliaire complètement vers le haut et le dégager de l'interrupteur.

MÉTHODE DE CÂBLAGE DU CONTACT AUXILIAIRE

1. **ATTENTION** - EMPLOYER UNIQUEMENT DES CONDUCTEURS EN CUIVRE.
2. NE PAS ÉTAMER LES CONDUCTEURS.
3. S'assurer que le dispositif raccordé n'excède pas la capacité nominale du contact auxiliaire.
4. Calibres de conducteurs admissibles - Nº 14 à 18 AWG.
5. Dénuder les conducteurs sur une longueur de 10 mm.
6. Connecter l'interrupteur selon les besoins.
7. Serrer les vis de bornes à un couple de 1,1-1,4 N•m
8. **S'ASSURER QUE TOUS LES BRINS SONT BIEN INSÉRÉS.**

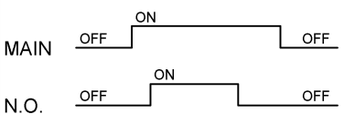
CHRONOGRAMME HBLAC1

La commutation des contacts ouverts et fermés au repos précède celle des contacts de l'interrupteur principal. La commutation des contacts ouverts au repos précède celle des contacts fermés au repos ce qui résulte en un chevauchement pendant lequel les deux types de contacts sont fermés ou «ON». La chronologie de commutation est illustrée dans le diagramme suivant ainsi que sur l'étiquette signalétique du contact auxiliaire.



CHRONOGRAMME HBLAC2

La commutation des contacts normalement ouverts se produit après celle des contacts principaux. Les contacts normalement ouverts se ferment avant les contacts principaux. Ne pas utiliser aucun autre contact auxiliaire avec le HBLCA2.



Español

C. Reinstalar el interruptor sobre el riel DIN

1. Colocar el interruptor en riel DIN. Asegurarse de colocar el interruptor en la posición correcta del riel.
2. Mediante un movimiento basculante, acoplar el interruptor al riel DIN hasta que quede retenido.

D. Para retirar el contacto auxiliar

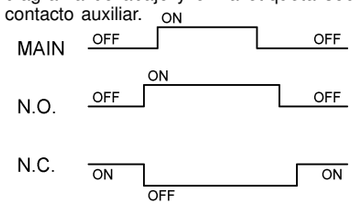
1. Deslizar el contacto auxiliar completamente hacia arriba y retirarlo del interruptor.

CÓMO CABLEAR EL CONTACTO AUXILIAR

1. **CUIDADO** - UTILIZAR ÚNICAMANTE CABLE DE COBRE.
2. NO ESTAÑAR LOS CONDUCTORES.
3. Asegurarse de que el equipo conectado no exceda la capacidad nominal del contacto auxiliar.
4. Calibres de conductores admisibles - Nº 14 a 18 AWG.
5. Pelar 10 mm de los conductores.
6. Conectar el interruptor como se requiera.
7. Ajustar los tornillos de los bornes con un par de 1,1-1,4 N•m
8. **ASGURARSE DE QUE NO QUEDEN HILOS SUELTOS.**

SECUENCIA HBLAC1

La conmutación de los contactos abiertos y cerrados en reposo precede a la de los contactos del interruptor principal. La conmutación de los contactos abiertos en reposo precede a la de los contactos cerrados en reposo, produciéndose una superposición cuando ambos contactos están cerrados u «ON». La secuencia de conmutación se muestra en el diagrama de abajo y en la etiqueta sobre el contacto auxiliar.



SECUENCIA HBLAC2

La conmutación de los contactos normalmente abiertos se produce después de conmutar los contactos principales. Los contactos normalmente abiertos se cierran antes de los contactos principales. No utilizar ningún otro contacto auxiliar con el HBLCA2.