

**INSTALLATION PROCEDURE FOR ABB CONTROL
DISCONNECT SWITCHES C/W FLANGE-MOUNTED OPERATORS
USE ADAPTOR AKU**

BUL10100
REV. D

| ABB CONTROLS DISCONNECT SWITCHES WITH FLANGE MOUNTED OPERATORS | | | | | | WIRE BEND SPACE ABOVE DISCONNECT | | | | |
|---|-------|----------------------|-------------------|--------------|----------------|--|------|------|-----------------|-----------------|
| FITS ENCLOSURE HIEGHT | | ABB SWITCH NUMBER | AMP RATING | FUSE CLIP | FUSE CLASS | SPACE OCCUPIED | | | WHEN A=60.13 | WHEN A=72.13 |
| 60.13 | 72.13 | | | | | L | M | N | P | P |
| * | * | OETL-NF30-F | 30A | NO FUSE | - | 4.78 | 7.75 | 0.63 | 7.80 | 13.80 |
| * | * | OETL-NF60-F | 60A | NO FUSE | - | 4.78 | 7.43 | 0.63 | 7.80 | 13.80 |
| * | * | OETL-NF100-F | 100A | NO FUSE | - | 5.22 | 8.81 | 0.63 | 7.37 | 13.37 |
| * | * | OETL-NF175-F | 175A | NO FUSE | - | 5.07 | 7.71 | 0.63 | 6.48 | 12.48 |
| * | * | OETL-NF200-F | 200A | NO FUSE | - | 5.07 | 8.50 | 0.63 | 6.48 | 12.48 |
| * | * | OESA-F30J6-F | 30A | 30A-600V | J | 4.78 | 7.75 | 0.63 | 7.80 | 13.80 |
| * | * | OESA-F60J6-F | 60A | 60A-600V | J | 4.78 | 7.43 | 0.63 | 7.80 | 13.80 |
| * | * | OESA-F100J6-F | 100A | 100A-600V | J ¹ | 5.22 | 8.81 | 0.63 | 7.37 | 13.37 |
| | | | 200A ² | | | | | | | |

NOTE¹ J TYPE FUSE CLIPS ARE STANDARD. IF 600V TYPE "T" FUSE CLIPS ARE DESIRED,
ORDER T TYPE FUSE ADAPTOR.

NOTE² 200 A AVAILABLE BY USING NON-FUSIBLE 200A SWITCH AND A TRAILING FUSE BLOCK
(CONSULT ABB)

| FITS ENCLOSURE HEIGHT | | ISOMAX CIRCUIT BREAKER# | AMP RATING | OPERATING MECHANISM | FRAME TYPE | SPACE OCCUPIED | | | WHEN A=60.13 | WHEN A=72.13 |
|-----------------------------|-------|----------------------------|---------------|------------------------|---------------|-------------------|-------|------|-----------------|-----------------|
| 60.13 | 72.13 | | | | | L | M | N | P | P |
| * | * | S1N100TL | 100A | K2FHD-M | S1 | 5.30 | 4.60 | 0.63 | 8.33 | 14.33 |
| * | * | S3N150TW | 150A | K3FHD-M | S3 | 6.67 | 5.02 | 0.63 | 7.73 | 13.73 |
| * | * | S3N225TW | 225A | K3FHD-M | S3 | 6.67 | 5.02 | 0.63 | 7.73 | 13.73 |
| * | * | S4N250BW | 250A | K4FHD-M | S4 | 8.45 | 5.02 | 0.63 | 6.20 | 12.20 |
| * | * | S5N400TW | 400A | K5FHD-M | S5 | 8.45 | 6.40 | 0.63 | 6.20 | 12.20 |
| | * | S6N600TW | 600A | K6FHD-M | S6 | 8.33 | 10.00 | 0.63 | | 11.53 |
| | * | S6N800TW | 800A | K6FHD-M | S6 | 8.33 | 10.00 | 0.63 | | 11.53 |

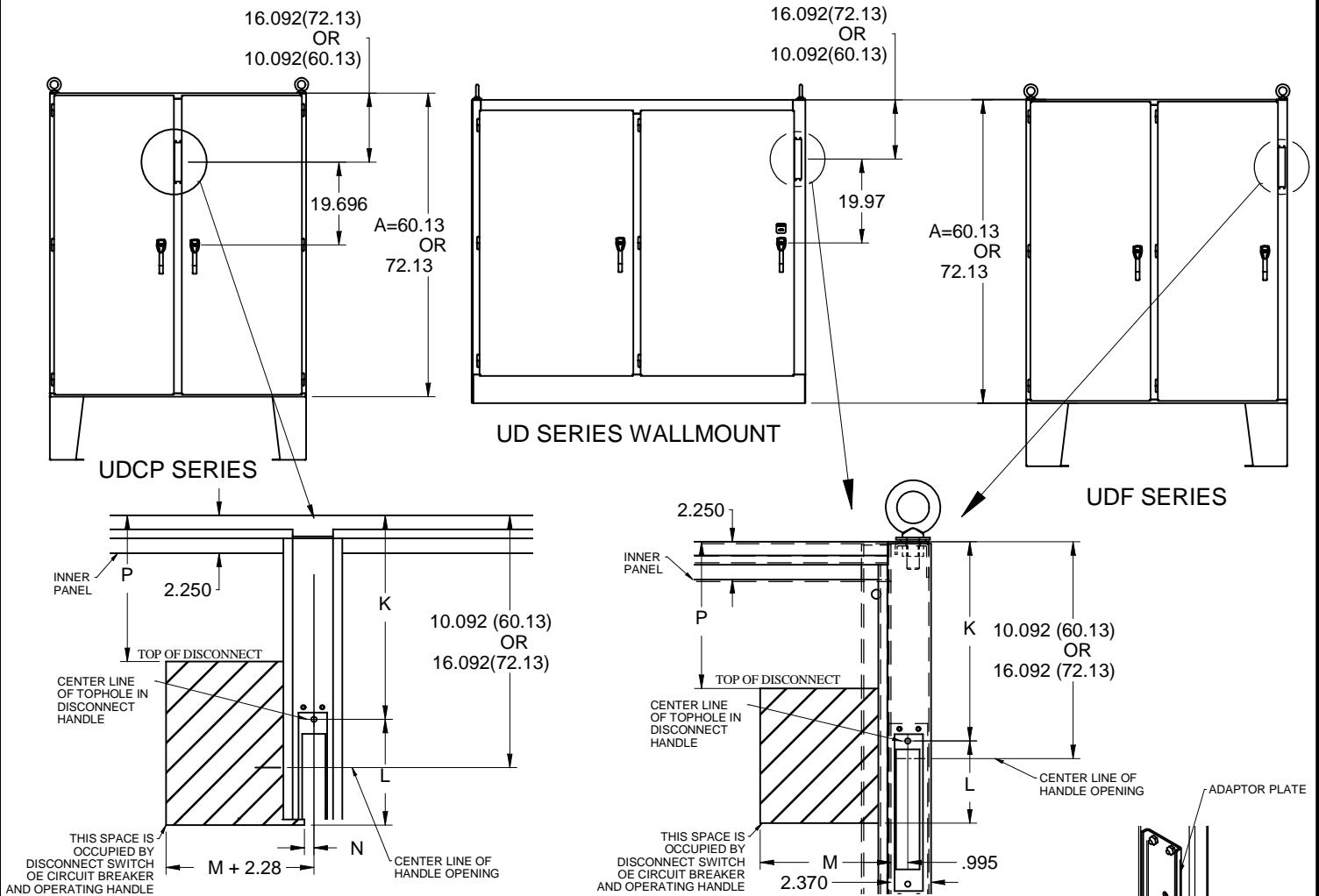
"K" = 7.88 WHEN "A" = 60.13
"K" = 13.88 WHEN "A" = 72.13



UDCP/UD/UDF SERIES

BUL10101
REV. E

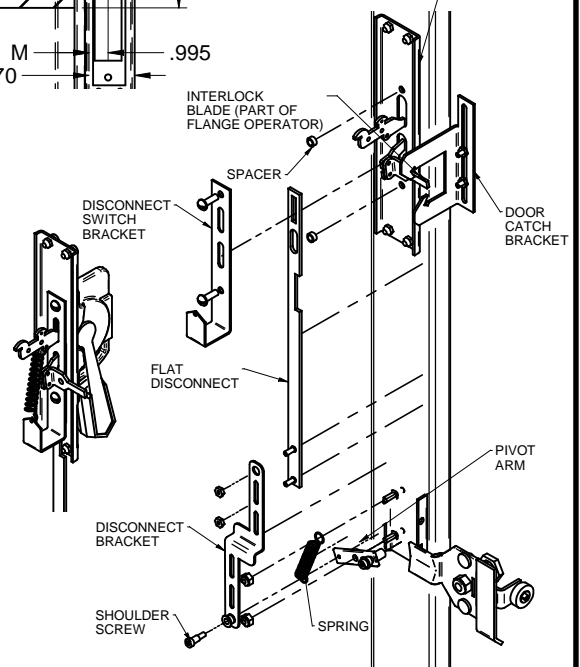
INSTALLATION PROCEDURE FOR ALLEN BRADLEY 1494V DISCONNECT AND CIRCUIT BREAKERS USE ADAPTOR AKU


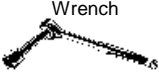




ASSEMBLY INSTRUCTIONS

- MOUNT ADAPTOR PLATE ON INSIDE OF ENCLOSURE HANDLE CUTOUT USING 1/4-20 BINDING HD SCREWS SUPPLIED. THE GASKET TO SEAL BETWEEN SURFACES.
- PRE-ASSEMBLE DISCONNECT BRACKET TO FLAT DISCONNECT. STUDS SLIP THRU SLOTS-HAND TIGHTEN NUTS SUPPLIED. WAIT TO SECURE WITH WRENCH IN STEP F.
- POSITION FLANGE OPERATOR SO THAT THE OPERATOR ARMS PROTRUDE THRU SLOTS IN ADAPTOR PLATE. HOLD OPERATOR IN POSITION AND SLIP PRE-ASSEMBLY IN STEP B OVER THE INTERLOCK AS DESCRIBED IN STEP D.
- SLIP PRE-ASSEMBLY IN STEP B (USE TOP SLOT ON FLAT DISCONNECT) AND DISCONNECT SWITCH BRACKET (USE BOTTOM SLOT ON DISCONNECT SWITCH BRACKET) OVER THE INTERLOCK BLADE AS SHOWN. SECURE PRE-ASSEMBLY AND SWITCH BRACKET USING SCREWS PROVIDED WITH OPERATOR AND SPACERS AS SHOWN. SPACERS ARE TRAPPED BETWEEN SWITCH BRACKET AND ADAPTOR PLATE AS SHOWN.
- TO INSTALL DISCONNECT BRACKET TO PIVOT ARM, REMOVE SHOULDER SCREW FROM SPRING END OF PIVOT ARM. INSERT SHOULDER SCREW THROUGH BOTTOM HOLE IN DISCONNECT BRACKET. SLIP BUSHING AND SPRING OVER SHOULDER SCREW. THREAD SHOULDER SCREW BACK INTO PIVOT ARM.
- ADJUST LENGTH OF DISCONNECT ASSEMBLY TO ALLOW THE PROPER FUNCTIONING OF INTERLOCK. FLANGE OPERATOR SHOULD NOT BE ABLE TO BE RAISED UNTIL THE DOOR HANDLE IS CLOSED COMPLETELY. TIGHTEN NUTS TO HOLD PRE-ASSEMBLY (FLAT DISCONNECT & DISCONNECT BRACKET) IN POSITION.
- ADJUST INTERLOCK DOOR CATCH BRACKET SO IT CATCHES ON THE INTERLOCK BLADE ONLY WHEN THE FLANGE OPERATOR IS IN THE "ON" POSITION. THIS IS TO PREVENT THE DOOR FROM OPENING WHEN POWER IS ON.
- INSTALL FUSE BLOCK OR DISCONNECT PER MANUFACTURER'S INSTRUCTIONS.

* ONLY ONE OF THE TWO SUPPLIED ADAPTOR PLATES IS REQUIRED. USE THE ONE THAT FITS.



| TOOL BOX | 11/32, 3/8 or 7/16 Socket Wrench | 1/8 ALLEN KEY | 1/4 Slot Head Screw Driver |
|---|---|---|---|
|  |  |  |  |

**HAMMOND
MANUFACTURING™
ENCLOSURES**

INSTALLATION PROCEDURE FOR ALLEN BRADLEY 1494V DISCONNECT SWITCHES AND CIRCUIT BREAKERS USE ADAPTOR AKU

BUL10101
REV. D

| ALLEN-BRADLEY 1494V OPERATORS FOR DISCONNECT SWITCHES | | | | | | | | | WIRE BEND SPACE ABOVE DISCONNECT | |
|---|-------|------------------------|------------|-----------|------------|----------------|------|------|----------------------------------|----------------|
| FITS ENCLOSURE HEIGHT | | ALLEN BRADLEY TYPE NO. | AMP RATING | FUSE CLIP | FUSE CLASS | SPACE OCCUPIED | | | WHEN A=60.13 P | WHEN A=72.13 P |
| 60.13 | 72.13 | | | | | L | M(2) | N | | |
| * | * | DS30 | 30A | NO-FUSE | - | 3.88 | 6.75 | 1.06 | 6.00 | 12.00 |
| * | * | DS30 | 30A | 30A-250V | H,K,R | 5.25 | 6.75 | 1.06 | 6.00 | 12.00 |
| * | * | DS30 | 30A | 30A-600V | H,K,R | 8.00 | 6.75 | 1.06 | 6.00 | 12.00 |
| * | * | DS30 | 30A | 30A-600V | J | 5.25 | 6.75 | 1.06 | 6.00 | 12.00 |
| * | * | DS30 | 30A | 60A-250V | H,K | 6.00 | 6.75 | 1.06 | 6.00 | 12.00 |
| * | * | DS30 | 30A | 60A-600V | H,K | 8.50 | 6.75 | 1.06 | 6.00 | 12.00 |
| * | * | DS30 | 30A | 60A-600V | J | 5.38 | 6.75 | 1.06 | 6.00 | 12.00 |
| * | * | DS60 | 60A | NO-FUSE | - | 3.88 | 6.75 | 1.06 | 5.81 | 11.81 |
| * | * | DS60 | 60A | 60A-250V | H,K,R | 6.00 | 6.75 | 1.06 | 5.81 | 11.81 |
| * | * | DS60 | 60A | 60A-600V | H,K,R | 8.50 | 6.75 | 1.06 | 5.81 | 11.81 |
| * | * | DS60 | 60A | 60A-600V | J | 5.38 | 6.75 | 1.06 | 5.81 | 11.81 |
| * | * | DS60 | 60A | 30A-600V | H,K,R | 8.00 | 6.75 | 1.06 | 5.81 | 11.81 |
| * | * | DS60 | 60A | 100A-250V | H,K | 8.50 | 6.75 | 1.06 | 5.81 | 11.81 |
| * | * | DS60 | 60A | 100A-600V | H,K | 10.50 | 6.75 | 1.06 | 5.81 | 11.81 |
| * | * | DS60 | 60A | 100A-600V | J | 7.25 | 6.75 | 1.06 | 5.81 | 11.81 |
| * | * | DS100(1) | 100A | NO-FUSE | - | 3.88 | 6.75 | 1.06 | 5.81 | 11.81 |
| * | * | DS100(1) | 100A | 100A-250V | H,K,R | 8.12 | 6.75 | 1.06 | 5.81 | 11.81 |
| * | * | DS100(1) | 100A | 100A-600V | H,K,R | 10.12 | 6.75 | 1.06 | 5.81 | 11.81 |
| * | * | DS100(1) | 100A | 100A-600V | J | 6.80 | 6.75 | 1.06 | 5.81 | 11.81 |
| * | * | DS100(1) | 100A | 60A-600V | H,K,R | 10.12 | 6.75 | 1.06 | 5.81 | 11.81 |
| * | * | DS100(1) | 100A | 60A-600V | J | 8.88 | 6.75 | 1.06 | 5.81 | 11.81 |
| * | * | DS200(1) | 200A | NO-FUSE | - | 4.75 | 8.00 | 1.06 | | 10.34 |
| * | * | DS200(1) | 200A | 200A-250V | H,K,R | 10.88 | 8.00 | 1.06 | | 10.34 |
| * | * | DS200(1) | 200A | 200A-600V | H,K,R | 13.88 | 8.00 | 1.06 | | 10.34 |
| * | * | DS200(1) | 200A | 200A-600V | J | 9.50 | 8.00 | 1.06 | | 10.34 |
| * | * | DS200(1) | 200A | 100A-600V | H,K,R | 12.00 | 8.00 | 1.06 | | 10.34 |
| * | * | DS200(1) | 200A | 100A-600V | J | 8.75 | 8.00 | 1.06 | | 10.34 |

1 SERIES B

2 "M" DIMENSION DOES NOT INCLUDE SPACE FOR AN OPTIONAL AUXILLIARY SWITCH

| ALLEN-BRADLEY BULLETIN 1494V OPERATORS FOR CIRCUIT BREAKERS | | | | | | | | | WIRE BEND SPACE ABOVE CIRCUIT BREAKER | |
|---|-------|------------------------|------------|---|----------------|------|------|----------------|---------------------------------------|--|
| FITS ENCLOSURE HEIGHT | | ALLEN BRADLEY TYPE NO. | AMP RATING | CIRCUIT BREAKER TYPE FRAME TYPE | SPACE OCCUPIED | | | WHEN A=60.13 P | WHEN A=72.13 P | |
| 60.13 | 72.13 | | | | L | M(1) | N | | | |
| * | * | M40 | 15A-150A | C-H WESTINGHOUSE EHD, FD,FDB,FDC,HFD,HMCP | 5.00 | 4.62 | 1.06 | 7.25 | 13.25 | |
| * | * | M50 | 70A-250A | C-H WESTINGHOUSE JD, JDB,JDC,HJD,HMCP | 9.75 | 4.88 | 1.06 | 6.81 | 12.81 | |
| | * | M60 | 100A-400A | C-H WESTINGHOUSE KD, KDB,DK,HKD,HMCP | 9.69 | 6.25 | 1.06 | - | 12.62 | |

1 THE "M" DIMENSION DOES NOT INCLUDE SPACE FOR AUXILIARY SWITCHES. SEE ALLEN BRADLEY INSTRUCTIONS IF ADDITIONAL SPACE IS REQUIRED.

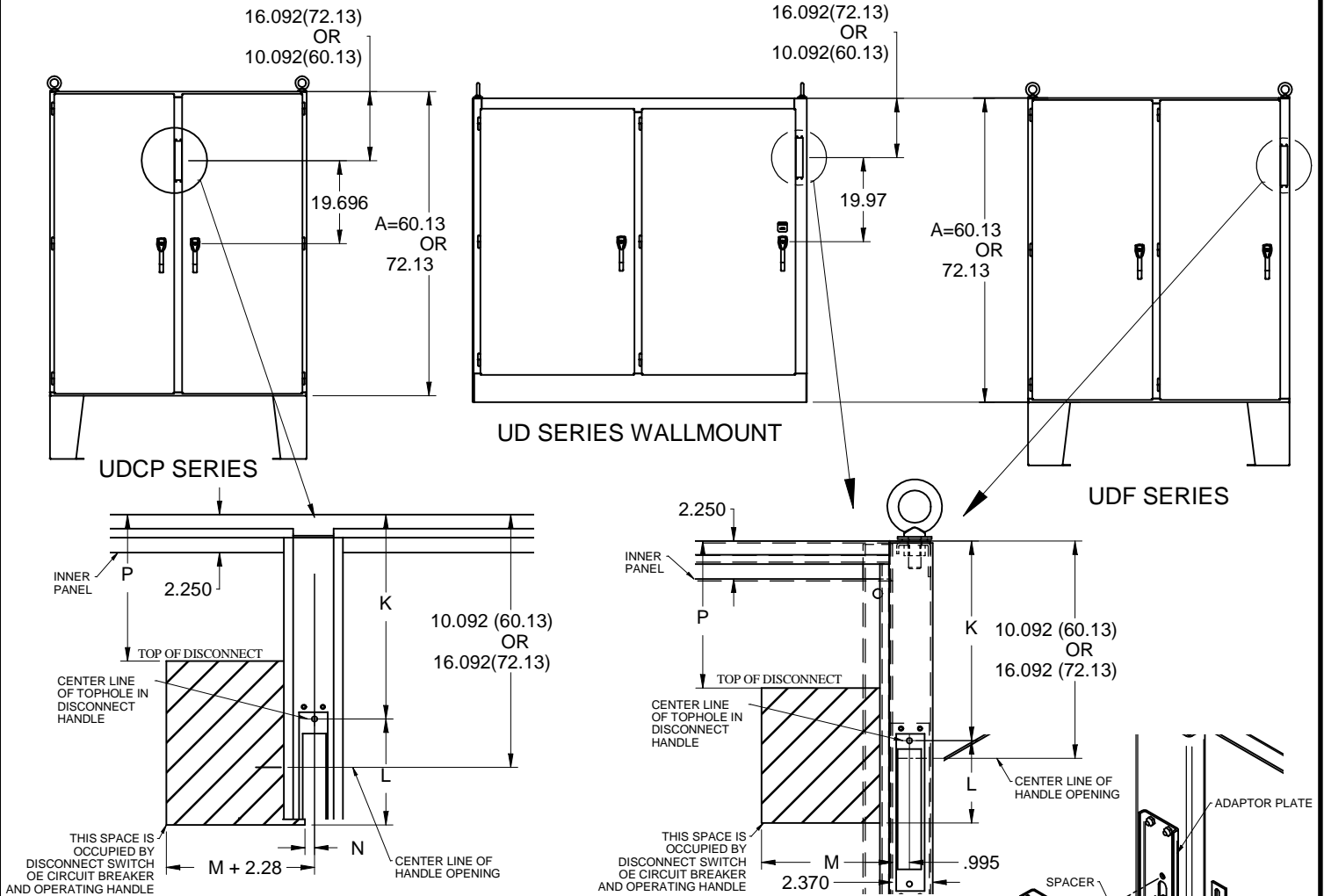
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"K" = 13.88 WHEN "A" = 72.13



UDCP/UD/UDF SERIES

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INSTALLATION PROCEDURE FOR ALLEN BRADLEY 1494V DISCONNECT AND CIRCUIT BREAKERS USE ADAPTOR AKU

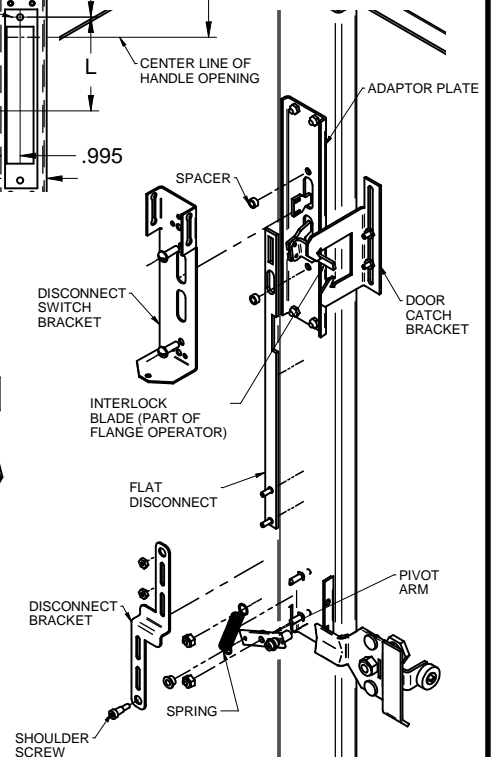


ASSEMBLY INSTRUCTIONS

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|----------|--|---------------|-------------------------------|
| | | | |



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INSTALLATION PROCEDURE FOR SQUARE "D" 9422 DISCONNECT SWITCHES AND CIRCUIT BREAKERS USE ADAPTOR AKU

BUL10102

REV. D

| SQAURE D CLASS 9422 VARIABLE DEPTH DISCONNECT SWITCHES | | | | | | | | | WIRE BEND SPACE ABOVE DISCONNECT | | |
|--|-------|---------------------|------|------------|-----------|------------|----------------|-------|----------------------------------|--------------|--------------|
| FITS ENCLOSURE HIEGHT | | SQAURE D AMP NUMBER | | AMP RATING | FUSE CLIP | FUSE CLASS | SPACE OCCUPIED | | | WHEN A=60.13 | WHEN A=72.13 |
| 60.13 | 72.13 | | | | | | L | M(2) | N | P | P |
| * | * | TCN-30 | 30A | 30A | NO-FUSE | - | 3.80 | 6.97 | 0.63 | 6.75 | 12.75 |
| * | * | TCF-30 | 30A | 30A | 30A-250V | H,K,R | 5.53 | 6.97 | 0.63 | 6.75 | 12.75 |
| * | * | TCF-33 | 30A | 30A | 30A-600V | H,K,R | 8.15 | 6.97 | 0.63 | 6.75 | 12.75 |
| * | * | TCF-33 | 30A | 30A | 30A-250V | H,K,R | 6.15 | 6.97 | 0.63 | 6.75 | 12.75 |
| * | * | TCF-33 | 30A | 30A | 30A-600V | J | 5.53 | 6.97 | 0.63 | 6.75 | 12.75 |
| * | * | TDN-60 | 60A | 60A | NO-FUSE | - | 3.80 | 6.97 | 0.63 | 6.75 | 12.75 |
| * | * | TDF-60 | 60A | 60A | 30A-600V | H,K,R | 8.15 | 6.97 | 0.63 | 6.75 | 12.75 |
| * | * | TDF-60 | 60A | 60A | 60A-250V | H,K,R | 6.15 | 6.97 | 0.63 | 6.75 | 12.75 |
| * | * | TDF-63 | 60A | 60A | 60A-600V | H,K,R | 8.65 | 6.97 | 0.63 | 6.75 | 12.75 |
| * | * | TDF-63 | 60A | 60A | 60A-600V | J | 5.53 | 6.97 | 0.63 | 6.75 | 12.75 |
| * | * | TEN-10 | 100A | 100A | NO-FUSE | - | 3.80 | 6.97 | 0.63 | 6.62 | 12.62 |
| * | * | TEF-10 | 100A | 100A | 100A-250V | H,K,R | 8.25 | 6.97 | 0.63 | 6.62 | 12.62 |
| * | * | TEF-10 | 100A | 100A | 100A-600V | H,K,R | 10.25 | 6.97 | 0.63 | 6.62 | 12.62 |
| * | * | TEF-10 | 100A | 100A | 100A-600V | J | 7.05 | 6.97 | 0.63 | 6.62 | 12.62 |
| * | * | TEF-13 | 100A | 100A | 200A-600V | J | - | - | 0.63 | 6.62 | 12.62 |
| * | * | TC-1 | 30A | 30A | NO-FUSE | - | 5.75 | 6.12 | 0.63 | 5.88 | 11.88 |
| * | * | TC-2 | 30A | 30A | 30A-250V | H,K,R | 5.75 | 6.12 | 0.63 | 5.88 | 11.88 |
| * | * | TC-3 | 30A | 30A | 30A-600V | H,K,R | 7.75 | 6.12 | 0.63 | 5.88 | 11.88 |
| * | * | TC-3 | 30A | 30A | 60A-250V | H,K,R | 5.88 | 6.12 | 0.63 | 5.88 | 11.88 |
| * | * | TC-3 | 30A | 30A | 30A-600V | J | 5.75 | 6.12 | 0.63 | 5.88 | 11.88 |
| * | * | TD-1 | 60A | 60A | NO-FUSE | - | 6.38 | 6.75 | 0.63 | 6.75 | 12.75 |
| * | * | TD-2 | 60A | 60A | 30A-600V | H,K,R | 8.50 | 6.75 | 0.63 | 6.75 | 12.75 |
| * | * | TD-2 | 60A | 60A | 60A-250V | H,K,R | 6.50 | 6.75 | 0.63 | 6.75 | 12.75 |
| * | * | TD-3 | 60A | 60A | 60A-600V | H,K,R | 9.00 | 6.75 | 0.63 | 6.75 | 12.75 |
| * | * | TD-3 | 60A | 60A | 60A-600V | J | 6.38 | 6.75 | 0.63 | 6.75 | 12.75 |
| * | * | TE-1 | 100A | 100A | NO-FUSE | - | 4.75 | 8.50 | 0.63 | 6.50 | 12.50 |
| * | * | TE-2 | 100A | 100A | 100A-250V | H,K,R | 7.50 | 8.50 | 0.63 | 6.50 | 12.50 |
| * | * | TE-2 | 100A | 100A | 100A-600V | H,K,R | 9.50 | 8.50 | 0.63 | 6.50 | 12.50 |
| * | * | TE-2 | 100A | 100A | 100A-600V | J | 6.25 | 8.50 | 0.63 | 6.50 | 12.50 |
| * | * | TE-3 | 100A | 100A | 200A-600V | J | 13.75 | 8.50 | 0.63 | 6.50 | 12.50 |
| * | * | TF-1 | 200A | 200A | NO-FUSE | - | 5.50 | 11.75 | 0.63 | 5.12 | 11.12 |
| * | * | TF-2 | 200A | 200A | 200A-250V | H,K,R | 11.50 | 11.75 | 0.63 | 5.12 | 11.12 |
| * | * | TF-2 | 200A | 200A | 200A-600V | H,K,R | 14.00 | 11.75 | 0.63 | 5.12 | 11.12 |
| * | * | TF-2 | 200A | 200A | 200A-600V | J | 10.12 | 11.75 | 0.63 | 5.12 | 11.12 |
| * | * | TF-3 | 200A | 200A | 400A-600V | J | 14.50 | 11.75 | 0.63 | 5.12 | 11.12 |

| SQAURE D CLASS 9422 VARIABLE DEPTH OPERATORS-CIRCUIT BREAKERS | | | | | | | | WIRE BEND SPACE ABOVE CIRCUIT BREAKER | | |
|---|-------|----------------------|------|------------|-------------|----------------|------|---------------------------------------|--------------|--------------|
| FITS ENCLOSURE HIEGHT | | SQAURE D TYPE NUMBER | | AMP RATING | FRAME SIZE | SPACE OCCUPIED | | | WHEN A=60.13 | WHEN A=72.13 |
| 60.13 | 72.13 | | | | | L | M | N | P | P |
| * | * | RG-1 | 75A | 75A | GJL | 3.53 | 3.87 | 0.63 | 6.69 | 12.69 |
| * | * | RG-1 | 100A | 100A | GJL | 3.53 | 3.87 | 0.63 | 6.69 | 12.69 |
| * | * | RN-1 | 100A | 100A | FAL,FHL | 5.12 | 5.38 | 0.63 | 6.88 | 12.88 |
| * | * | RP-1 | 250A | 250A | KAL,KHL | 7.12 | 5.75 | 0.63 | 7.56 | 13.56 |
| * | * | RR-1 | 400A | 400A | LAL,LHL,Q4L | 7.62 | 8.88 | 0.63 | - | 9.25 |

"K" = 7.88 WHEN "A" = 60.13
 "K" = 13.88 WHEN "A" = 72.13



INSTALLATION PROCEDURE FOR SQUARE "D" 9422 DISCONNECT SWITCHES AND CIRCUIT BREAKERS USED WITH CABLE MECHANISM USE ADAPTOR AKU

BUL10102
REV. D

| SQUARE D CLASS 9422 DISCONNECT SWITCHES (CABLE MECHANISM 9422-CFT30 AND 9422A-1 HANDLE MECHANISM) | | | | | | | |
|--|----------------------|---------------------------|---------------|--------------|---------------|---------------------------|--------------------------|
| WHEN A=60.13 P | WHEN A=72.13 P | SQUARE D AMP NUMBER | AMP RATING | FUSE CLIP | FUSE CLASS | DISCONNECT HEIGHT X | DISCONNECT WIDTH Y |
| * | * | TCN-30 | 30A | NO-FUSE | - | 5.90 | 6.20 |
| * | * | TCF-30 | 30A | 30A-250V | H,K,R | 7.50 | 6.20 |
| * | * | TCF-33 | 30A | 30A-600V | H,K,R | 10.15 | 6.20 |
| * | * | TCF-33 | 30A | 60A-250V | H,K,R | 8.15 | 6.20 |
| * | * | TCF-33 | 30A | 30A-600V | J | 7.50 | 6.20 |
| * | * | TDN-60 | 60A | NO-FUSE | - | 5.90 | 6.20 |
| * | * | TDF-60 | 60A | 30A-600V | H,K,R | 10.15 | 6.20 |
| * | * | TDF-60 | 60A | 60A-250V | H,K,R | 8.15 | 6.20 |
| * | * | TDF-63 | 60A | 60A-600V | H,K,R | 10.65 | 6.20 |
| * | * | TDF-63 | 60A | 60A-600V | J | 7.50 | 6.20 |
| * | * | TEN-10 | 100A | NO-FUSE | - | 5.90 | 6.20 |
| * | * | TEF-10 | 100A | 100A-250V | H,K,R | 10.35 | 6.20 |
| * | * | TEF-10 | 100A | 100A-600V | H,K,R | 10.35 | 6.20 |
| * | * | TEF-10 | 100A | 100A-600V | J | 10.35 | 6.20 |

| SQUARE D CLASS 9422 CABLE MECHANISM (CIRCUIT BREAKERS) | | | | | | |
|--|----------------------|-------------------------|---------------|---------------|---------------------------|--------------------------|
| WHEN A=60.13 P | WHEN A=72.13 P | CABLE TYPE SWITCH | AMP RATING | FRAME TYPE | DISCONNECT HEIGHT X | DISCONNECT WIDTH Y |
| * | * | 9422 CGJ30 | 75A | GJL | 4.75 | 3.50 |
| * | * | 9422 CEJ30 | 100A | GJL | 4.75 | 3.50 |
| * | * | 9422 CFA30 | 100A | FAL,FHL | 6.00 | 4.50 |
| * | * | 9422 CKA30 | 250A | KAL,KHL | 8.00 | 4.50 |
| * | * | 9422 CLA30 | 400A | LAL,LHL,Q4L | 11.00 | 6.00 |

USE CABLE MECHANISM WITH CIRCUIT BREAKER AND 9422-A1 HANDLE MECHANISM
CABLE OPERATORS ARE OFFERED IN 3', 5', AND 10' LENGTHS.
LAST 2 DIGITS OF PART NUMBERS ARE ABOVE (30) ARE FOR 3-FOOT CABLES

SPACE OCCUPIED BY DISCONNECT SWITCH OR CIRCUIT BREAKER

- SQUARE D CABLE SYSTEM PERMITS CIRCUIT BREAKER LOCATIONS SEPARATE FROM THE FLANGE MOUNTED HANDLE MECHANISM.
- SEE NATIONAL ELECTRICAL CODE 1996 ARTICLE 430-10(B) FOR WIRING SPACE (REF "P") NEEDED FOR LINE SIDE CONDUCTORS.
- SELECT CABLE MECHANISM LENGTH BASED ON DISCONNECT LOCATION IN ENCLOSURE. SEE SQUARE D INSTRUCTION BULLETIN FOR MINIMUM CABLE BEND RADIUS.

4. SPACE OCCUPIED BY CIRCUIT BREAKER IS CALCULATED BY:

- * OVERALL (HEIGHT "X" AND WIDTH "Y")
- * MINIMUM WIRE BEND SPACE (MANUFACTURER SPECIFIED)

"K" = 7.88 WHEN "A" = 60.13

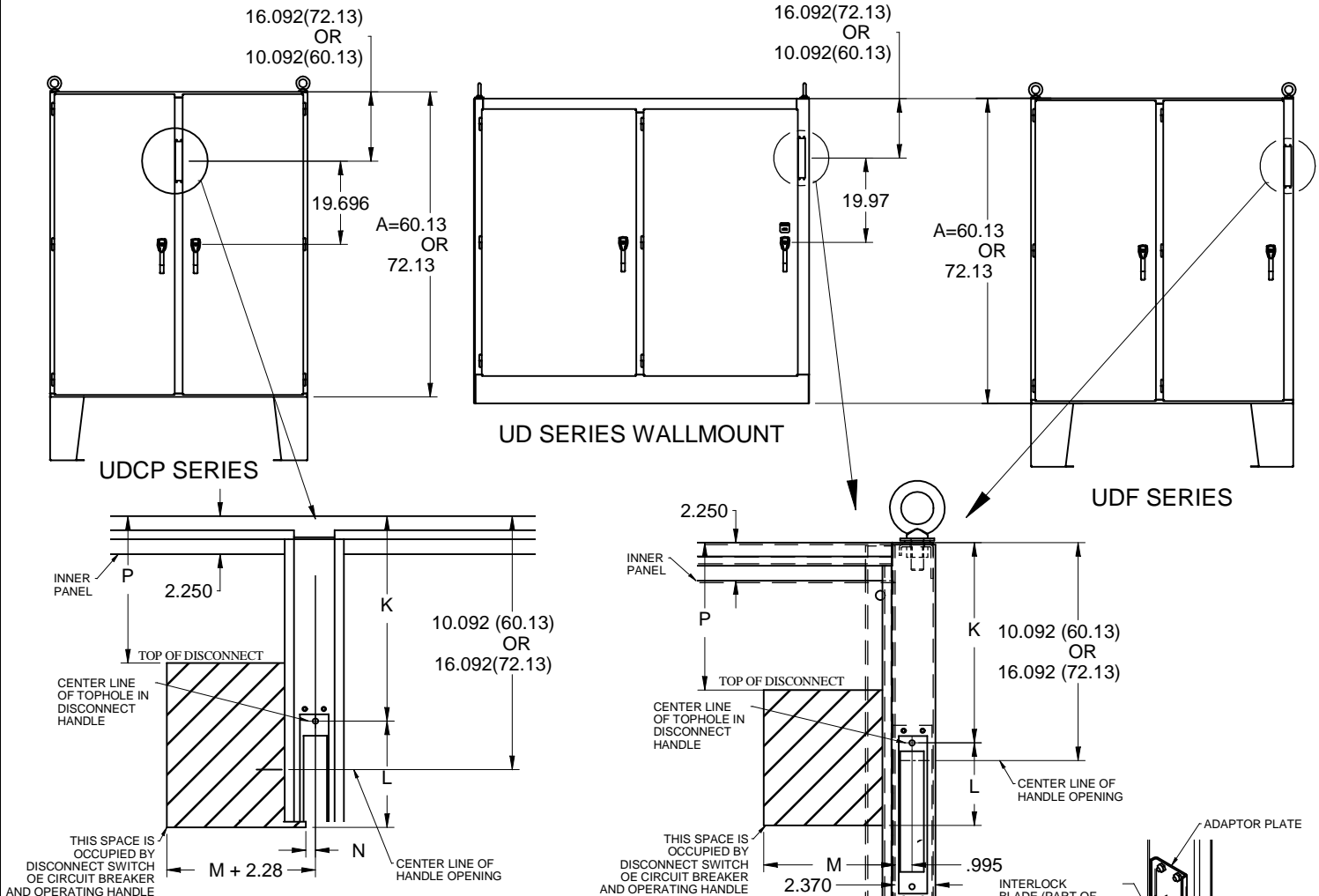
"K" = 13.88 WHEN "A" = 72.13

UDCP/UD/UDF SERIES

BUL10103

REV. E

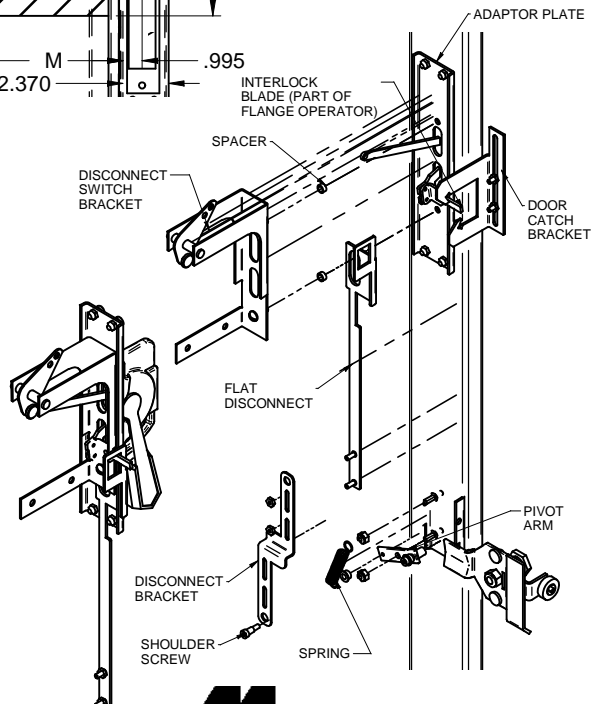
INSTALLATION PROCEDURE FOR ITE MAXFLEX DISCONNECT SWITCHES AND CIRCUIT BREAKERS USING FHO OPERATOR.







ASSEMBLY INSTRUCTIONS

- MOUNT ADAPTOR PLATE ON INSIDE OF ENCLOSURE HANDLE CUTOUT USING 1/4-20 BINDING HD SCREWS SUPPLIED. THE GASKET TO SEAL BETWEEN SURFACES.
- PRE-ASSEMBLE DISCONNECT BRACKET TO FLAT DISCONNECT. STUDS SLIP THRU SLOTS-HAND TIGHTEN NUTS SUPPLIED. WAIT TO SECURE WITH WRENCH IN STEP F.
- POSITION FLANGE OPERATOR SO THAT THE OPERATOR ARMS PROTRUDE THRU SLOTS IN ADAPTOR PLATE. HOLD OPERATOR IN POSITION AND SLIP PRE-ASSEMBLY IN STEP B OVER THE INTERLOCK AS DESCRIBED IN STEP D.
- SLIP PRE-ASSEMBLY IN STEP B (USE TOP SLOT ON FLAT DISCONNECT) AND DISCONNECT SWITCH BRACKET (USE BOTTOM SLOT ON DISCONNECT SWITCH BRACKET) OVER THE INTERLOCK BLADE AS SHOWN. SECURE PRE-ASSEMBLY AND SWITCH BRACKET USING SCREWS PROVIDED WITH OPERATOR AND SPACERS AS SHOWN. SPACERS ARE TRAPPED BETWEEN SWITCH BRACKET AND ADAPTOR PLATE AS SHOWN.
- TO INSTALL DISCONNECT BRACKET TO PIVOT ARM, REMOVE SHOULDER SCREW FROM SPRING END OF PIVOT ARM. INSERT SHOULDER SCREW THROUGH BOTTOM HOLE IN DISCONNECT BRACKET. SLIP BUSHING AND SPRING OVER SHOULDER SCREW. THREAD SHOULDER SCREW BACK INTO PIVOT ARM.
- ADJUST LENGTH OF DISCONNECT ASSEMBLY TO ALLOW THE PROPER FUNCTIONING OF INTERLOCK. FLANGE OPERATOR SHOULD NOT BE ABLE TO BE RAISED UNTIL THE DOOR HANDLE IS CLOSED COMPLETELY. TIGHTEN NUTS TO HOLD PRE-ASSEMBLY (FLAT DISCONNECT & DISCONNECT BRACKET) IN POSITION.
- ADJUST INTERLOCK DOOR CATCH BRACKET SO IT CATCHES ON THE INTERLOCK BLADE ONLY WHEN THE FLANGE OPERATOR IS IN THE "ON" POSITION.. THIS IS TO PREVENT THE DOOR FROM OPENING WHEN POWER IS ON.
- INSTALL FUSE BLOCK OR DISCONNECT PER MANUFACTURER'S INSTRUCTIONS.

* ONLY ONE OF THE TWO SUPPLIED ADAPTOR PLATES IS REQUIRED. USE THE ONE THAT FITS.



| | | | |
|--|---|--|---|
| <p>TOOL BOX</p>  | <p>11/32, 3/8 or 7/16 Socket Wrench</p>  | <p>1/8 ALLEN KEY</p>  | <p>1/4 Slot Head Screw Driver</p>  |
|--|---|--|---|

**HAMMOND
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INSTALLATION PROCEDURE UNIVERSAL ADAPTOR KIT WITH ITE MAX-FLEX DISCONNECT SWITCHES AND BREAKER USING FHO OPERATORS

BUL10103
REV. D

| I-T-E DISCONNECT SWITCHES (MAX-FLEX OPERATORS) | | | | | | DISCONNECT | DISCONNECT |
|--|-------|---------|------------|-----------|------------|------------|------------|
| FITS ENCLOSURE HIEGHT | | SWITCH | AMP RATING | FUSE CLIP | FUSE CLASS | HEIGHT | WIDTH |
| 60.13 | 72.13 | | | | | "X" | "Y" |
| * | * | MCS603R | 30A | NO-FUSE | - | 5.52 | 6.13 |
| * | * | MCS603R | 30A | 30A-250V | H,K,R | 8.11 | 6.13 |
| * | * | MCS603R | 30A | 30A-600V | H,K,R | 10.11 | 6.13 |
| * | * | MCS603R | 30A | 30A-600V | J | 8.48 | 6.13 |
| * | * | MCS606R | 60A | NO-FUSE | - | 5.52 | 6.13 |
| * | * | MCS606R | 60A | 60A-250V | H,K,R | 7.86 | 6.13 |
| * | * | MCS606R | 60A | 60A-600V | H,K,R | 10.38 | 6.13 |
| * | * | MCS606R | 60A | 60A-600V | J | 8.36 | 6.13 |
| * | * | MCS610R | 100A | NO-FUSE | - | 7.59 | 7.38 |
| * | * | MCS610R | 100A | 100A-250V | H,K,R | 11.85 | 7.38 |
| * | * | MCS610R | 100A | 100A-600V | H,K,R | 13.85 | 7.38 |
| * | * | MCS610R | 100A | 100A-600V | J | 10.60 | 7.38 |
| * | * | MCS620R | 200A | NO-FUSE | - | 9.00 | 9.17 |
| * | * | MCS620R | 200A | 200A-250V | H,K,R | 14.70 | 9.17 |
| * | * | MCS620R | 200A | 200A-600V | H,K,R | 17.20 | 9.17 |
| * | * | MCS620R | 200A | 200A-600V | J | 13.32 | 9.17 |

NOTE: ENCLOSURES THAT ARE 24.13 INCHES DEEP REQUIRE A 48" MAX-FLEX CABLE (MINIMUM CABLE LENGTH)

I-T-E MAX-FLEX OPERATORS (CIRCUIT BREAKERS)

| COMPLETE OPERATOR MECHANISM | AMP RATING | BREAKER FRAME SIZE | CIRCUIT BREAKER HEIGHT(X) | CIRCUIT BREAKER WIDTH(Y) | CIRCUIT BREAKER TYPE |
|-----------------------------|-------------|--------------------|---------------------------|--------------------------|---|
| FHOE036 | 125A | ED | 6.34 | 3.00 | ED2,ED4,ED6,HED4,HED6 |
| FHOE036 | 125A | CED | 9.58 | 3.00 | CED6 |
| FHOF036 | 250A | FD | 9.50 | 4.50 | FXD6-A,FD6-A,HFD6,FXD6-ETJ,HHFD6,HHFXD6 |
| FHOF036 | 250A | CFD | 14.25 | 4.50 | CFD6,CFD6-ETI |
| FHOJ036 | 400A, 600A | JD,LD | 11.00 | 7.50 | JXD2,LXD6,JD6,LD6,HJD6,HLD6,HHJD6,HHLD6,HHJXD6,HHLDX6,JXD6-ETI,LXD6-ETI |
| FHOJ036 | 400A, 600A | CJD,CLD | 17.86 | 7.50 | CJD6,CLD6,CJD6-ETI,CLD6-ETI |
| FHOLMO36 | 800A | LMD | 16.00 | 9.00 | LMD6,LMXD6,HLMD6,HLMXD6,LMXD6-ETI |
| FHON048 | 800A,1200A | MD,ND | 24.00 | 9.00 | MD6,ND6,MXD6,NXD6,HMD6,HND6,HMXD6,HNXD6,CMD6,CND6,MXD6-ETI,CMD6-ETI |
| FHONO48 | 1600A,2000A | PD,RD | 24.50(2) | 13.63(2) | PD6,RD6,PXD6,RXD6,HPD6,HRD6,HPXD6,HRXD6,CPD6 |

CIRCUIT BREAKER SIZE INCLUDES REQUIRED BASE MOUNTING BLOCK.

THE LAST 3 DIGITS OF OPERATOR MECHANISM PART NUMBER DENOTE CABLE LENGTH IN INCHES. 24" DEEP ENCLOSURES REQUIRE LONGER OPERATING CABLES. (SOLD SEPARATELY)

"K" = 7.88 WHEN "A" = 60.12

"K" = 13.88 WHEN "A" = 72.12

(DEDUCT 1.45 INCHES FROM "K" FOR FHON048 OPERATOR MECHANISM FOR MD, ND, PD, RD CIRCUIT BREAKERS.

SPACE OCCUPIED BY DISCONNECT:

1. I-T-E MAX-FLEX SYSTEM PERMITS CIRCUIT BREAKER LOCATIONS SEPARATE FROM THE FLANGE MOUNTED HANDLE MECHANISM.
2. SEE NATIONAL ELECTRICAL CODE 1996 ARTICLE 430-10(B) FOR WIRING SPACE (REF "P") NEEDED FOR LINE SIDE CONDUCTORS.
3. SEE SIEMENS I-T-E INSTRUCTIONS FOR DISCONNECT LOCATION LIMITATIONS WHEN USING 36" OR 48" MAX FLEX CABLES.
4. SPACE OCCUPIED BY CIRCUIT BREAKER IS CALCULATED BY:

* OVERALL (HEIGHT "X" AND WIDTH "Y")

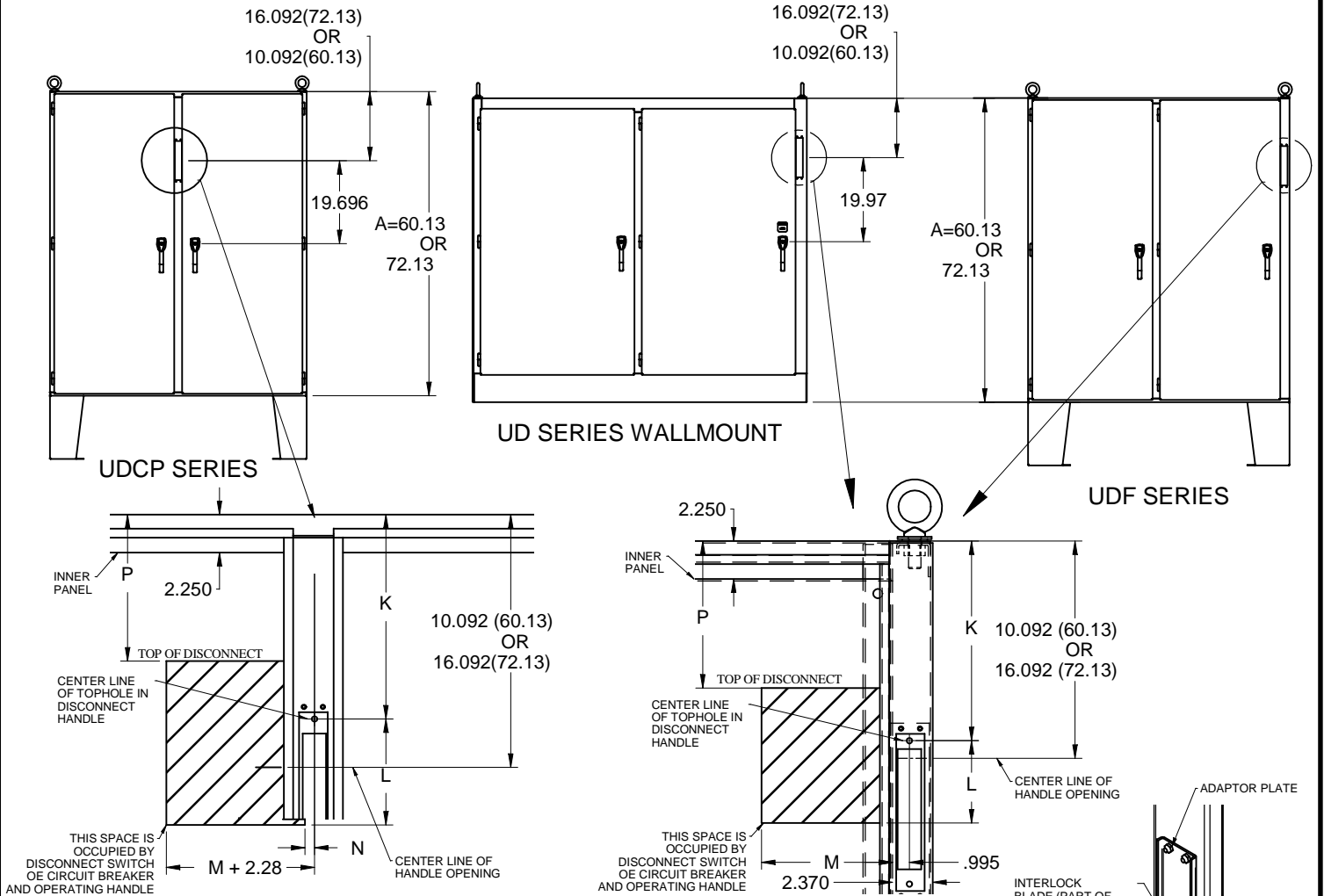
* MINIMUM WIRE BEND SPACE (MANUFACTURER SPECIFIED)

* LOCATION "M" FROM RIGHT TO LEFT

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BUL10104
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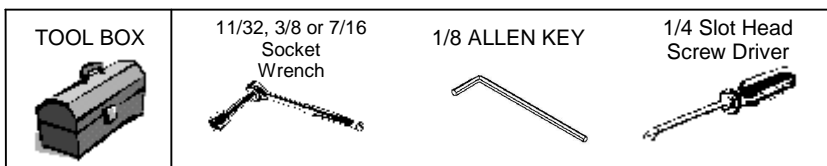
INSTALLATION PROCEDURE FOR CUTLER HAMMER C361 AND C371 DISCONNECTS USE ADAPTOR AKU



ASSEMBLY INSTRUCTIONS

- MOUNT ADAPTOR PLATE ON INSIDE OF ENCLOSURE HANDLE CUTOUT USING 1/4-20 BINDING HD SCREWS SUPPLIED. THE GASKET TO SEAL BETWEEN SURFACES.
- PRE-ASSEMBLE DISCONNECT BRACKET TO FLAT DISCONNECT. STUDS SLIP THRU SLOTS-HAND TIGHTEN NUTS SUPPLIED. WAIT TO SECURE WITH WRENCH IN STEP F.
- POSITION FLANGE OPERATOR SO THAT THE OPERATOR ARMS PROTRUDE THRU SLOTS IN ADAPTOR PLATE. HOLD OPERATOR IN POSITION AND SLIP PRE-ASSEMBLY IN STEP B OVER THE INTERLOCK AS DESCRIBED IN STEP D.
- SLIP PRE-ASSEMBLY IN STEP B (USE TOP SLOT ON FLAT DISCONNECT) AND DISCONNECT SWITCH BRACKET (USE BOTTOM SLOT ON DISCONNECT SWITCH BRACKET) OVER THE INTERLOCK BLADE AS SHOWN. SECURE PRE-ASSEMBLY AND SWITCH BRACKET USING SCREWS PROVIDED WITH OPERATOR AND SPACERS AS SHOWN. SPACERS ARE TRAPPED BETWEEN SWITCH BRACKET AND ADAPTOR PLATE AS SHOWN.
- TO INSTALL DISCONNECT BRACKET TO PIVOT ARM, REMOVE SHOULDER SCREW FROM SPRING END OF PIVOT ARM. INSERT SHOULDER SCREW THROUGH BOTTOM HOLE IN DISCONNECT BRACKET. SLIP BUSHING AND SPRING OVER SHOULDER SCREW. THREAD SHOULDER SCREW BACK INTO PIVOT ARM.
- ADJUST LENGTH OF DISCONNECT ASSEMBLY TO ALLOW THE PROPER FUNCTIONING OF INTERLOCK. FLANGE OPERATOR SHOULD NOT BE ABLE TO BE RAISED UNTIL THE DOOR HANDLE IS CLOSED COMPLETELY. TIGHTEN NUTS TO HOLD PRE-ASSEMBLY (FLAT DISCONNECT & DISCONNECT BRACKET) IN POSITION.
- ADJUST INTERLOCK DOOR CATCH BRACKET SO IT CATCHES ON THE INTERLOCK BLADE ONLY WHEN THE FLANGE OPERATOR IS IN THE "ON" POSITION. THIS IS TO PREVENT THE DOOR FROM OPENING WHEN POWER IS ON.
- INSTALL FUSE BLOCK OR DISCONNECT PER MANUFACTURER'S INSTRUCTIONS.

* ONLY ONE OF THE TWO SUPPLIED ADAPTOR PLATES IS REQUIRED. USE THE ONE THAT FITS.



**HAMMOND
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**INSTALLATION PROCEDURE FOR CUTLER HAMMER C361 AND C371
DISCONNECTS USE ADAPTOR AKU**

BUL10104
REV. D

| CUTLER-HAMMER C361 DISCONNECT SWITCHES | | | | | | | | | WIRE BEND SPACE ABOVE DISCONNECT | |
|--|-------|---------------------|------------|-----------|------------|----------------|-------|------|----------------------------------|--------------|
| FITS ENCLOSURE HEIGHT | | SQUARE D AMP NUMBER | AMP RATING | FUSE CLIP | FUSE CLASS | SPACE OCCUPIED | | | WHEN A=60.13 | WHEN A=72.13 |
| 60.13 | 72.13 | | | | | L | M | N | P | P |
| * | * | C361NC | 30A | NO-FUSE | - | 5.75 | 7.55 | 0.63 | 6.50 | 12.50 |
| * | * | C361SC21 | 30A | 30A-250V | H,K,R | 8.38 | 7.55 | 0.63 | 6.50 | 12.50 |
| * | * | C361SC61 | 30A | 60A-250V | H,K,R | 8.38 | 7.55 | 0.63 | 6.50 | 12.50 |
| * | * | C361SC61 | 30A | 30A-600V | H,J,K,R | 8.38 | 7.55 | 0.63 | 6.50 | 12.50 |
| * | * | C361ND | 60A | NO-FUSE | - | 5.75 | 7.55 | 0.63 | 6.50 | 12.50 |
| * | * | C361SD22 | 60A | 60A-250V | H,K,R | 8.38 | 7.55 | 0.63 | 6.50 | 12.50 |
| * | * | C361SD22 | 60A | 30A-600V | J | 8.38 | 7.55 | 0.63 | 6.50 | 12.50 |
| * | * | C361SD62 | 60A | 60A-600V | H,K,R | 8.38 | 7.55 | 0.63 | 6.50 | 12.50 |
| * | * | C361SD62 | 60A | 60A-600V | J | 8.38 | 7.55 | 0.63 | 6.50 | 12.50 |
| * | * | C361NE | 100A | NO-FUSE | - | 5.56 | 9.07 | 0.63 | 6.06 | 12.06 |
| * | * | C361SE263 | 100A | 100A-250V | H,K,R | 10.31 | 9.07 | 0.63 | 6.06 | 12.06 |
| * | * | C361SE263 | 100A | 100A-600V | H,K,R | 10.31 | 9.07 | 0.63 | 6.06 | 12.06 |
| * | * | C361SE263 | 100A | 100A-600V | J | 10.31 | 9.07 | 0.63 | 6.06 | 12.06 |
| * | * | C361NF | 200A | NO-FUSE | - | 13.06 | 10.12 | 0.63 | 4.06 | 10.12 |
| * | * | C361SF264 | 200A | 200A-250V | H,K,R | 13.06 | 10.12 | 0.63 | 4.06 | 10.12 |
| * | * | C361SF264 | 200A | 200A-250V | H,J,K,R | 13.06 | 10.12 | 0.63 | 4.06 | 10.12 |

| CUTLER-HAMMER C371 CIRCUIT BREAKER OPERATORS FOR C-H/WESTINGHOUSE CIRCUIT BREAKERS | | | | | | | WIRE BEND SPACE ABOVE CIRCUIT BREAKER | | | |
|--|-------|--------------------------|------------|-----------------------------|----------------|-------|---------------------------------------|--------------|--------------|--|
| FITS ENCLOSURE HEIGHT | | CUTLER HAMMER MECHANISMS | AMP RATING | FRAME TYPE | SPACE OCCUPIED | | | WHEN A=60.13 | WHEN A=72.13 | |
| 60.13 | 72.13 | | | | L | M | N | P | P | |
| * | * | C371E | 150A | F FRAME EHD, FDB,FD,HFD,FDC | 6.00 | 5.62 | 0.63 | 7.62 | 13.62 | |
| * | * | C371E | 150A | F FRAME HMCP | 6.00 | 5.62 | 0.63 | 7.62 | 13.62 | |
| 1 | * | C371F | 250A | J FRAME JDB, JD, HJD, JDC | 8.94 | 8.12 | 0.63 | 7.50 (1) | 13.50 | |
| 1 | * | C371F | 250A | J FRAME HMCP | 10.94 | 8.12 | 0.63 | 7.50 (1) | 13.50 | |
| 1 | * | C371F | 400A | K FRAME DK, KDB, KD, HKD | 9.75 | 8.12 | 0.63 | 7.00 (1) | 13.00 | |
| 1 | * | C371F | 400A | K FRAME HMCP | 9.75 | 8.12 | 0.63 | 7.00 (1) | 13.00 | |
| - | 2 | C371G | 600A | L FRAME LD, HLD,LDC | 8.44 | 12.00 | 0.63 | - | 11.38 (2) | |

1. WIRE BEND SPACE "P" DOES NOT ALLOW CABLE SIZE LARGER THEN 4/0 AWG IN A 60.13" TALL ENCLOSURE
 2. WIRE BEND SPACE "P" DOES NOT ALLOW CABLE SIZE LARGER THAN 300 MCM.

 "K" = 7.88 WHEN "A" = 60.13
 "K" = 13.88 WHEN "A" = 70.13

**INSTALLATION PROCEDURE FOR CUTLER HAMMER FLEX SHAFT
OPERATOR MECHANISM FOR C-H/WESTINGHOUSE CIRCUIT BREAKERS
USE ADAPTOR AKU**

BUL10104
REV. D

| CUTLER HAMMER FLEX SHAFT OPERATOR MECHANISMS FOR C-H/WESTINGHOUSE CIRCUIT BREAKERS | | | | |
|---|---------------|------------------------------|-------------------------------------|-------------------------------------|
| COMPLETE OPERATOR MECHANISMS | AMP RATING | FRAME TYPE | BREAKER HEIGHT(X) (IN INCHES) | BREAKER WIDTH(Y) (IN INCHES) |
| F1S03 | 150A | F FRAME EHD, FDB,FD ,HFD | 6.00 | 4.12 |
| F1S03 | 150A | F FRAME HCMP | 6.00 | 4.12 |
| F2S03 | 250A | J FRAME JDB, JD, HJD, JDC | 10.00 | 4.12 |
| F2S03 | 250A | J FRAME HCMP | 10.00 | 4.12 |
| F3S03 | 400A | K FRAME DK, KDB, KD , HKD | 10.12 | 5.50 |
| F3S03 | 400A | K FRAME HCMP | 12.45 | 5.50 |
| F4S04 | 600A | L FRAME LD, HLD, LDC | 10.75 | 8.25 |
| F7S04 | 800A | M FRAME MD, MDS | 16.00 | 8.25 |
| F5S04 | 1200A | N FRAME ND, HND,NDC | 16.00 | 8.25 |
| F6S04 | 2500A | R FRAME RD, CRD, RDC | 16.00 | 15.50 |

PART NUMBERS FOR COMPLETE OPERATOR MECHANISMS INCLUDE FLANGE MOUNTED HANDLE, FLEXIBLE SHAFT AND CIRCUIT BREAKER MECHANISM.

THE LAST DIGIT OF THE PART NUMBER DENOTES THE LENGTH OF SHAFT (F1S03 = 3' LENGTH).

* THE F,J,K FRAME FLEX SHAFTS ARE AVAILABLE IN 3' TO 10' LENGTHS.

* THE L,N,R FRAME FLEX SHAFTS ARE AVAILABLE IN 4' TO 6' LENGTHS.

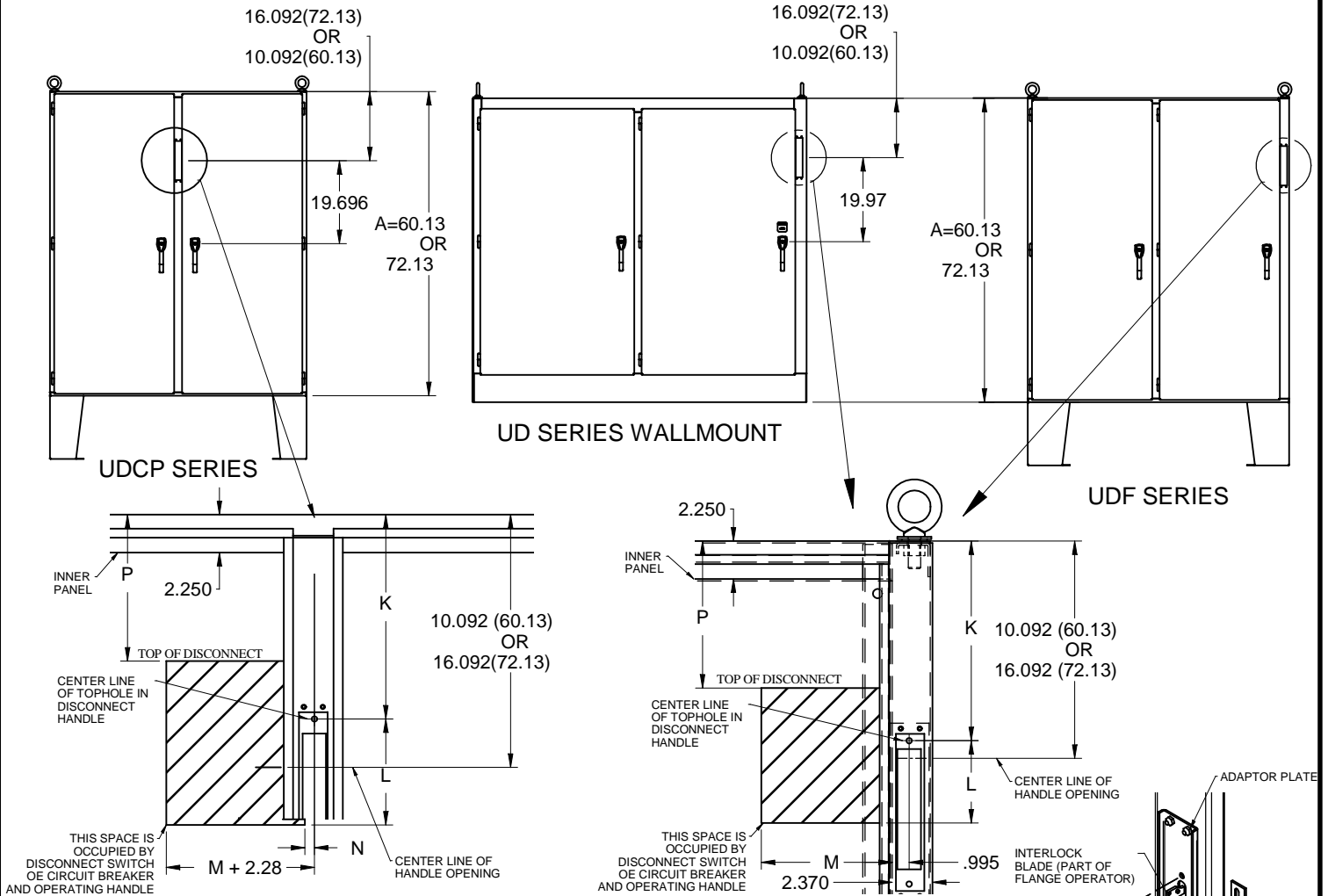
SPACE OCCUPIED BY CIRCUIT BREAKER:

1. THE FLEX SHAFT SYSTEM PERMITS CIRCUIT BREAKER LOCATIONS SEPARATE FROM THE FLANGE MOUNTED HANDLE MECHANISM.
2. SEE NATIONAL ELECTRICAL CODE 1996 ARTICLE 430-10(B) FOR WIRING SPACE (REF "P") NEEDED FOR LINE SIDE CONDUCTORS.
3. SELECT SHAFT LENGTH BASED ON LOCATION OF THE CIRCUIT BREAKER IN THE ENCLOSURE ENSURING A 4" MINIMUM BENDING RADIUS FOR THE FLEX.
4. SPACE OCCUPIED BY CIRCUIT BREAKER IS CALCULATED BY:
 - * OVERALL (HEIGHT "X" AND WIDTH "Y")
 - * MINIMUM WIRE BEND SPACE (MANUFACTURER SPECIFIED)
 - * LOCATION "M" FROM RIGHT TO LEFT

UDCP/UD/UDF SERIES

BUL10105
REV. E

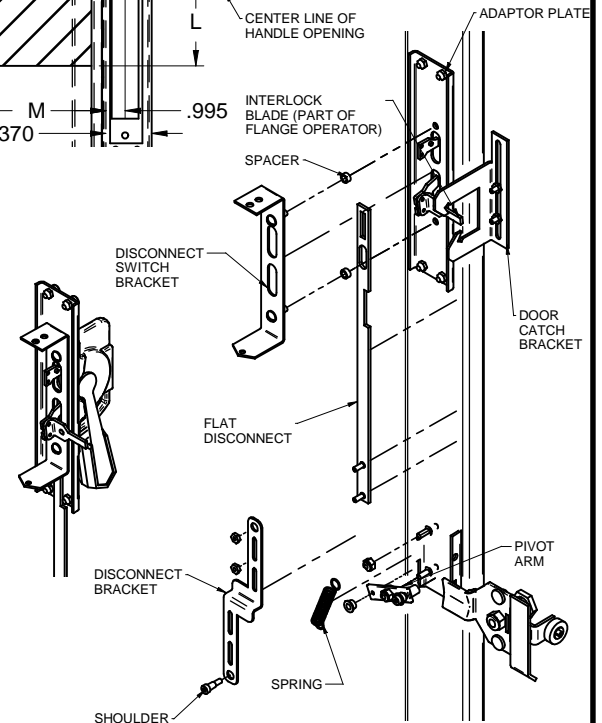
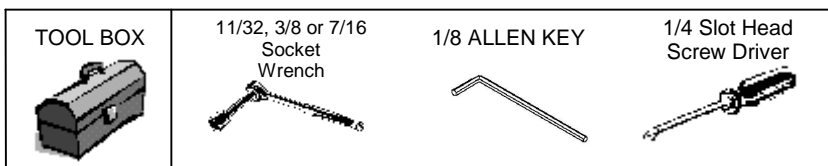
INSTALLATION PROCEDURE FOR GENERAL ELECTRIC FLANGE OPERATOR STDA SERIES USE ADAPTOR AKU



ASSEMBLY INSTRUCTIONS

- MOUNT ADAPTOR PLATE ON INSIDE OF ENCLOSURE HANDLE CUTOUT USING 1/4-20 BINDING HD SCREWS SUPPLIED. THE GASKET TO SEAL BETWEEN SURFACES.
- PRE-ASSEMBLE DISCONNECT BRACKET TO FLAT DISCONNECT. STUDS SLIP THRU SLOTS-HAND TIGHTEN NUTS SUPPLIED. WAIT TO SECURE WITH WRENCH IN STEP F.
- POSITION FLANGE OPERATOR SO THAT THE OPERATOR ARMS PROTRUDE THRU SLOTS IN ADAPTOR PLATE. HOLD OPERATOR IN POSITION AND SLIP PRE-ASSEMBLY IN STEP B OVER THE INTERLOCK AS DESCRIBED IN STEP D.
- SLIP PRE-ASSEMBLY IN STEP B (USE TOP SLOT ON FLAT DISCONNECT) AND DISCONNECT SWITCH BRACKET (USE BOTTOM SLOT ON DISCONNECT SWITCH BRACKET) OVER THE INTERLOCK BLADE AS SHOWN. SECURE PRE-ASSEMBLY AND SWITCH BRACKET USING SCREWS PROVIDED WITH OPERATOR AND SPACERS AS SHOWN. SPACERS ARE TRAPPED BETWEEN SWITCH BRACKET AND ADAPTOR PLATE AS SHOWN.
- TO INSTALL DISCONNECT BRACKET TO PIVOT ARM, REMOVE SHOULDER SCREW FROM SPRING END OF PIVOT ARM. INSERT SHOULDER SCREW THROUGH BOTTOM HOLE IN DISCONNECT BRACKET. SLIP BUSHING AND SPRING OVER SHOULDER SCREW. THREAD SHOULDER SCREW BACK INTO PIVOT ARM.
- ADJUST LENGTH OF DISCONNECT ASSEMBLY TO ALLOW THE PROPER FUNCTIONING OF INTERLOCK. FLANGE OPERATOR SHOULD NOT BE ABLE TO BE RAISED UNTIL THE DOOR HANDLE IS CLOSED COMPLETELY. TIGHTEN NUTS TO HOLD PRE-ASSEMBLY (FLAT DISCONNECT & DISCONNECT BRACKET) IN POSITION.
- ADJUST INTERLOCK DOOR CATCH BRACKET SO IT CATCHES ON THE INTERLOCK BLADE ONLY WHEN THE FLANGE OPERATOR IS IN THE "ON" POSITION. THIS IS TO PREVENT THE DOOR FROM OPENING WHEN POWER IS ON.
- INSTALL FUSE BLOCK OR DISCONNECT PER MANUFACTURER'S INSTRUCTIONS.

* ONLY ONE OF THE TWO SUPPLIED ADAPTOR PLATES IS REQUIRED. USE THE ONE THAT FITS.



HAMMOND MANUFACTURING™
ENCLOSURES

INSTALLATION PROCEDURE FOR GENERAL ELECTRIC FLANGE OPERATOR STDA SERIES USE ADAPTOR AKU

BUL10105
REV. D

GENERAL ELECTRIC TYPE STDA DISCONNECT SWITCH OPERATORS

WIRE BEND SPACE ABOVE DISCONNECT

| FITS ENCLOSURE HIEGHT | | SQUARE D AMP NUMBER | AMP RATING | FUSE CLIP | FUSE CLASS | SPACE OCCUPIED | | | WHEN A=60.13 | WHEN A=72.13 |
|-----------------------|-------|---------------------|------------|-----------|------------|----------------|------|------|--------------|--------------|
| 60.13 | 72.13 | | | | | L | M | N | P | P |
| * | * | TDOM1A | 30A | NO-FUSE | - | 6.88 | 5.38 | 0.63 | 8.38 | 14.38 |
| * | * | TDOM1A | 30A | 30A-250V | H,R | 6.88 | 5.38 | 0.63 | 8.38 | 14.38 |
| * | * | TDOM1B | 30A | 30A-600V | H,R | 11.50 | 5.38 | 0.63 | 8.38 | 14.38 |
| * | * | TDOM1B | 30A | 60A-250V | H,R | 11.50 | 5.38 | 0.63 | 8.38 | 14.38 |
| * | * | TDOM1B | 30A | 60A-600V | H,R | 11.50 | 5.38 | 0.63 | 8.38 | 14.38 |
| * | * | TDOM1A | 60A | NO-FUSE | - | 6.88 | 5.38 | 0.63 | 8.38 | 14.38 |
| * | * | TDOM1B | 60A | 60A-250V | H,R | 11.50 | 5.38 | 0.63 | 8.38 | 14.38 |
| * | * | TDOM1B | 60A | 60A-600V | H,R | 11.50 | 5.38 | 0.63 | 8.38 | 14.38 |
| * | * | TDOM1B | 60A | 100A-250V | H,R | 11.50 | 5.38 | 0.63 | 8.38 | 14.38 |
| * | * | TDOM1B | 60A | 100A-600V | H,R | 11.50 | 5.38 | 0.63 | 8.38 | 14.38 |
| * | * | TDOM1A | 100A | NO-FUSE | - | 6.88 | 5.38 | 0.63 | 8.38 | 14.38 |
| * | * | TDOM1B | 100A | 100A-250V | H,R | 11.50 | 5.38 | 0.63 | 8.38 | 14.38 |
| * | * | TDOM1B | 100A | 100A-600V | H,R | 11.50 | 5.38 | 0.63 | 8.38 | 14.38 |
| * | * | TDOM1B | 100A | 200A-250V | H,R | 11.50 | 5.38 | 0.63 | 8.38 | 14.38 |
| * | * | TDOM1B | 100A | 200A-600V | H,R | 11.50 | 5.38 | 0.63 | 8.38 | 14.38 |
| * | * | TDOM2 | 200A | NO-FUSE | - | 7.00 | 9.25 | 0.63 | 5.69 | 11.69 |
| * | * | TDOM2 | 200A | 200A-250V | H,R | 15.38 | 9.25 | 0.63 | 5.69 | 11.69 |
| * | * | TDOM2 | 200A | 200A-600V | H,R | 15.38 | 9.25 | 0.63 | 5.69 | 11.69 |

GENERAL ELECTRIC TYPE STDA CIRCUIT BREAKER OPERATORS

WIRE BEND SPACE ABOVE CIRCUIT BREAKER

| FITS ENCLOSURE HIEGHT | | CUTLER HAMMER MECHANISM S | AMP RATING | FRAME TYPE | SPACE OCCUPIED | | | WHEN A=60.13 | WHEN A=72.13 |
|-----------------------|-------|---------------------------|------------|--------------------------|----------------|------|------|--------------|--------------|
| 60.13 | 72.13 | | | | L | M | N | P | P |
| * | * | TDOM1A | 150A | TEB, TED, THED | 6.88 | 5.38 | 0.63 | 7.24 | 13.24 |
| * | * | TDOM1A | 150A | TEC | 6.88 | 5.38 | 0.63 | 7.24 | 13.24 |
| * | * | TDOM1B | 150A | TB1 | 11.50 | 5.38 | 0.63 | 7.24 | 13.24 |
| * | * | TDOM1B | 150A | TEC, TECL | 11.50 | 5.38 | 0.63 | 7.24 | 13.24 |
| * | * | TDOM1C | 150A | TEL | 6.88 | 5.38 | 0.63 | 7.24 | 13.24 |
| * | * | TDOM1D | 150A | THLC1 | 6.88 | 5.38 | 0.63 | 5.87 | 11.87 |
| * | * | TDOM3 | 225A | TFJ | 10.38 | 5.88 | 0.63 | 6.81 | 12.81 |
| * | * | TDOM3 | 225A | TFK, THFK, TFL | 10.38 | 5.88 | 0.63 | 6.81 | 12.81 |
| | * | TDOM4 | 400A | TJJ, TJK4, THJK4, TJL4V | 8.25 | 9.50 | 0.63 | - | 11.91 |
| | * | TDOM4 | 600A | TJK6, THJK6, TJ4V, TJL4V | 8.25 | 9.50 | 0.63 | - | 11.91 |
| | * | TDOM5 | 400A | TB4, TJH6S | 14.25 | 9.50 | 0.63 | - | 11.91 |
| | * | TDOM5 | 225A | TLB2, THLC2 | 11.75 | 9.50 | 0.63 | - | 11.35 |
| | * | TDOM6 | 400A | TLB4, THLC4 | 11.75 | 9.50 | 0.63 | - | 9.97 |
| * | * | SDOM1A | 150A | SPECTRA SE150 | 6.88 | 5.38 | 0.63 | 7.24 | 13.24 |
| * | * | SDOM3 | 250A | SPECTRA SF250 | 10.38 | 5.88 | 0.63 | 6.81 | 11.88 |
| | * | SDOM4 | 600A | SPECTRA SG600 | 10.00 | 7.12 | 0.63 | - | 9.18 |

"K" = 7.88 WHEN "A" = 60.13
"K" = 13.88 WHEN "A" = 70.13

**INSTALLATION PROCEDURE FOR GENERAL ELECTRIC CIRCUIT
BREAKERS WITH SPECTRA FLEX CABLE OPERATORS
USE ADAPTOR AKU**

BUL10105
REV. D

**GENERAL ELECTRIC CIRCUIT BREAKERS
(SPECTRA FLEX CABLE OPERATORS)**

| FITS ENCLOSURE HEIGHT | | FRAME TYPE | MAX AMP RATING | CIRCUIT BREAKER HEIGHT(X) | CIRCUIT BREAKER WIDTH(Y) |
|--------------------------|-------|---------------|----------------------|---------------------------------|--------------------------------|
| 60.13 | 72.13 | E150 | 150A | 6.31 | 4.12 |
| * | * | SE150 | 150A | 6.31 | 4.12 |
| * | * | SF250 | 250A | 10.12 | 4.12 |
| * | * | SG600 | 600A | 10.09 | 5.50 |
| * | * | SK1200 | 1200A | 15.50 | 8.25 |

NOTE: ALL 2UD,2UDF,2UDCP SERIES ENCLOSURES THAT ARE 24.00" DEEP REQUIRE A 48" OR LONGER OPERATING CABLE.

| FRAME SIZE | BREAKER MECHANISM | FLANGE MOUNTING HANDLE | OPERATING CABLE |
|---------------|----------------------|------------------------------|--------------------|
| E150 | SCOM1A | SCH1 | SC3L1 |
| SE150/SF250 | SCOM1EF | SCH1 | SC3L1 |
| SG600 | SCOM1G | SCH1 | SC3L1 |
| SK1200 | SCOM1K | SCH2K | SC3L1 |

**1 OPERATING CABLES ARE AVAILABLE 3' TO 10' LENGTHS.
IN THE TABLE ABOVE, THE NUMBER 3 IN THE PART NUMBER
INDICATES A 3' CABLE.**

SPACE OCCUPIED BY CIRCUIT DISCONNECT:

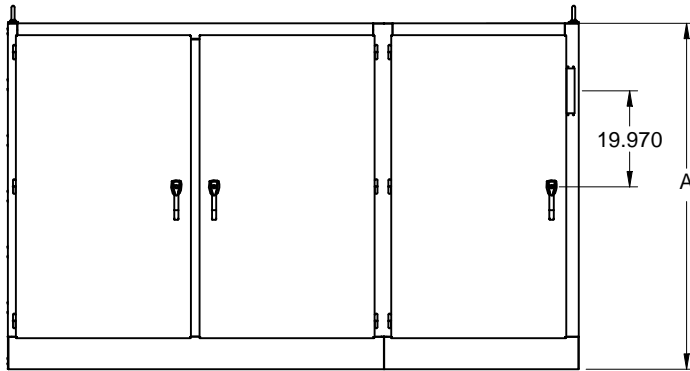
1. GE SPECTRA-FLEX OPERATING CABLES PERMITS CIRCUIT BREAKER LOCATIONS SEPARATE FROM THE FLANGE MOUNTED HANDLE MECHANISM.
2. SEE NATIONAL ELECTRICAL CODE 1996 ARTICLE 430-10(B) FOR WIRING SPACE (REF "P") NEEDED FOR LINE SIDE CONDUCTORS.
3. SELECT SHAFT LENGTH BASED ON LOCATION OF THE CIRCUIT BREAKER IN THE ENCLOSURE. MAINTAIN A 3" MINIMUM BENDING RADIUS FOR THE FLEX SHAFT.
4. SPACE OCCUPIED BY CIRCUIT BREAKER IS CALCULATED BY:
 - * OVERALL (HEIGHT "X" AND WIDTH "Y")
 - * MINIMUM WIRE BEND SPACE (MANUFACTURER SPECIFIED)
 - * LOCATION "M" FROM RIGHT TO LEFT

"K" = 7.88 WHEN "A" = 60.13
"K" = 13.88 WHEN "A" = 72.13

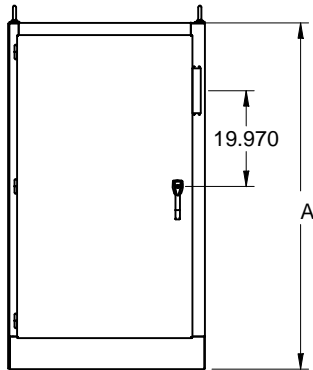
UHD AND UHDM SERIES

BUL10107
REV. D

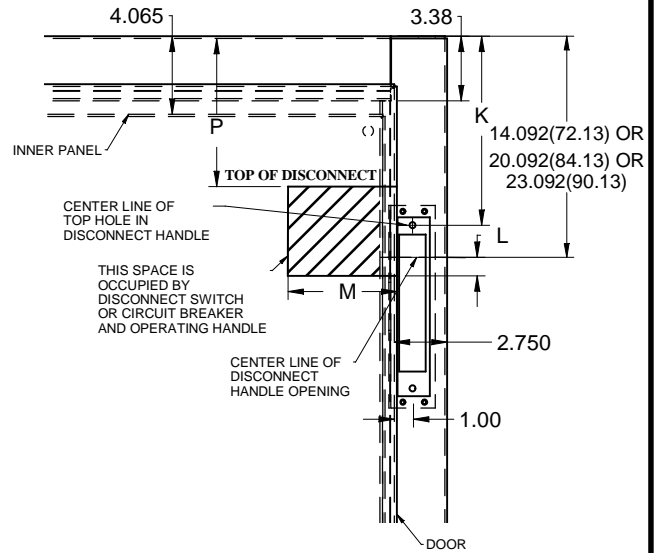
INSTALLATION PROCEDURE ALLEN BRADLEY 1494F DISCONNECTS AND 1494D OPERATORS FOR CIRCUIT BREAKERS USE ADAPTOR AK1494FD



UHD SERIES - 3 OR 4 OR 5 DOOR ENCLOSURES

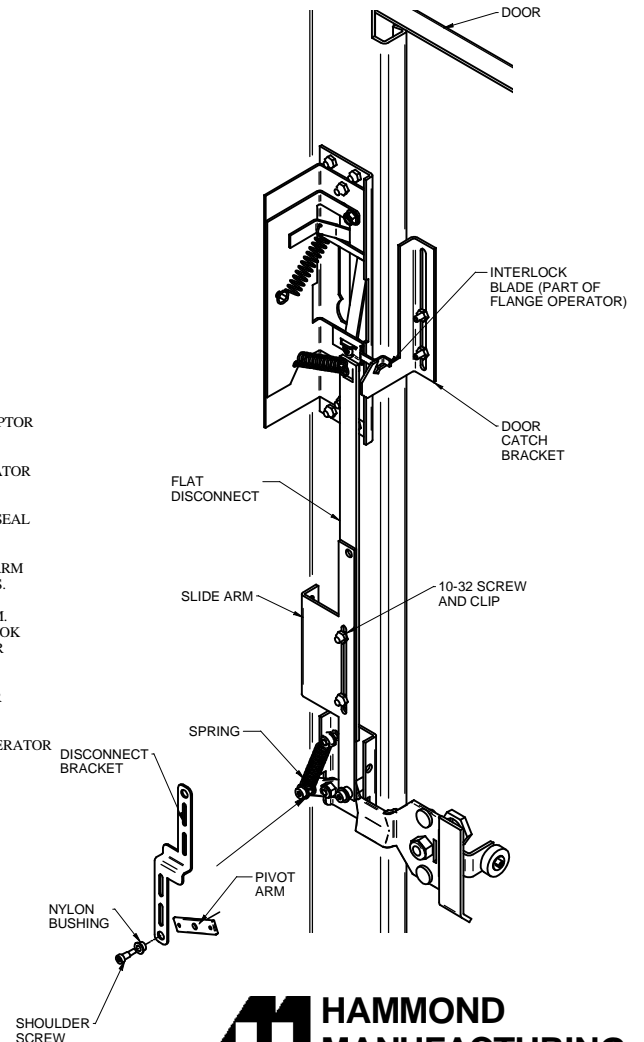






UHD AND UHDM SERIES 1 OR 2 DOOR ENCLOSURES



ASSEMBLY INSTRUCTIONS

- (A) BOLT FLANGE OPERATOR TO APPROPRIATE GREY ADAPTOR PLATE (FOLLOW A1 OR A2)
 - A1. 30 THRU 100 AMP OPERATORS: MOUNT FLANGE PLATE SUPPLIED WITH OPERATOR ONTO OPERATOR WITH ADAPTOR PLATE IN BETWEEN.
 - A2. 200 AMP OPERATORS: DISCARD FLANGE PLATE SUPPLIED WITH OPERATOR. ATTACH ADAPTOR PLATE TO OPERATOR USING NUTS AND WASHERS SUPPLIED WITH OPERATOR.
- (B) INSTALL ABOVE ASSEMBLY IN FLANGE OF ENCLOSURE USE THE 1/4-20 BINDING HEAD SCREWS AND THE GASKET TO SEAL BETWEEN SURFACES.
- (C) PREASSEMBLE SLIDE ARM TO SLIDE ARM ADAPTOR INSTALL CLIP NUTS IN THE TWO OBOUND HOLES IN THE SLIDE ARM ADAPTOR SO IT CAN BE FASTENED AGAINST THE INSIDE EDGE OF THE FLANGE ON THE SLIDE ARM WITH 10-32 SCREWS.
- (D) INSTALL SLIDE ARM ASSEMBLY INTO THE ENCLOSURE- REMOVE SHOULDER SCREW FROM SPRING END OF PIVOT ARM. INSERT SHOULDER SCREW THROUGH BUSHING AND SPRING AND BACK THROUGH THE SLIDE ARM. TEMPORARILY HOOK SLIDE ARM ASSEMBLY INTO POSITION ON INTERLOCK BLADE TO SUPPORT IT'S WEIGHT WHILE THREADING SHOULDER SCREW BACK INTO PIVOT ARM.
- (E) ADJUST LENGTH OF SLIDE ARM ASSEMBLY TO ALLOW THE PROPER FUNCTIONING OF INTERLOCK. FLANGE OPERATOR SHOULD NOT BE ABLE TO BE RAISED UNTIL THE DOOR HANDLE IS CLOSED COMPLETELY.
- (F) ADJUST INTERLOCK DOOR CATCH BRACKET SO IT CATCHES ON THE INTERLOCK BLADE ONLY WHEN THE FLANGE OPERATOR IS IN THE "ON" POSITION. THIS IS TO PREVENT THE DOOR FROM OPENING WHEN POWER IS ON.
- (G) INSTALL FUSE BLOCK OR DISCONNECT PER MANUFACTURER'S INSTRUCTIONS.



| | | | |
|---|---|--|---|
| <p>TOOL BOX</p>  | <p>11/32, 3/8 or 7/16 Socket Wrench</p>  | <p>1/8 ALLEN KEY</p>  | <p>1/4 Slot Head Screw Driver</p>  |
|---|---|--|---|



**INSTALLATION PROCEDURE FOR ALLEN BRADLEY 1494F
DISCONNECTS AND 1494D OPERATORS FOR CIRCUIT BREAKERS USE
ADAPTOR AK1494FD**

BUL10107
REV. D

| ALLEN-BRADLEY BULLETIN 1494F DISCONNECT SWITCHES | | | | | | | | | | WIRE BEND SPACE ABOVE DISCONNECT | | |
|--|-------|-------|------------------------|------------|-----------|------------|----------------|-------|--------------|----------------------------------|--------------|--|
| FITS ENCLOSURE HIEGHT | | | ALLEN-BRADLEY TYPE NO. | AMP RATING | FUSE CLIP | FUSE CLASS | SPACE OCCUPIED | | WHEN A=72.13 | WHEN A=84.13 | WHEN A=90.13 | |
| 72.13 | 84.13 | 90.13 | | | | | L | M(1) | P | P | P | |
| * | * | * | N30 | 30A | NO-FUSE | - | 4.62 | 6.50 | 9.31 | 15.31 | 18.31 | |
| * | * | * | NF30 | 30A | 30A-250V | H,K,R | 6.50 | 6.50 | 9.31 | 15.31 | 18.31 | |
| * | * | * | NF30 | 30A | 60A-250V | H,K,R | 7.25 | 6.50 | 9.31 | 15.31 | 18.31 | |
| * | * | * | NF30 | 30A | 30A-600V | H,K,R | 9.25 | 6.50 | 9.31 | 15.31 | 18.31 | |
| * | * | * | NF30 | 30A | 60A-600V | H,K,R | 9.75 | 6.50 | 9.31 | 15.31 | 18.31 | |
| * | * | * | NF30 | 30A | 30A-600V | J | 6.50 | 6.50 | 9.31 | 15.31 | 18.31 | |
| * | * | * | NF30 | 30A | 60A-600V | J | 6.62 | 6.50 | 9.31 | 15.31 | 18.31 | |
| * | * | * | N60 | 60A | NO-FUSE | - | 4.62 | 6.50 | 8.62 | 14.62 | 17.62 | |
| * | * | * | NF60 | 60A | 30A-600V | H,K,R | 10.38 | 6.50 | 8.62 | 14.62 | 17.62 | |
| * | * | * | NF60 | 60A | 60A-250V | H,K,R | 8.38 | 6.50 | 8.62 | 14.62 | 17.62 | |
| * | * | * | NF60 | 60A | 100A-250V | H,K,R | 10.88 | 6.50 | 8.62 | 14.62 | 17.62 | |
| * | * | * | NF60 | 60A | 60A-600V | H,K,R | 10.88 | 6.50 | 8.62 | 14.62 | 17.62 | |
| * | * | * | NF60 | 60A | 100A-600V | H,K,R | 12.88 | 6.62 | 8.62 | 14.62 | 17.62 | |
| * | * | * | NF60 | 60A | 60A-600V | J | 7.75 | 6.50 | 8.62 | 14.62 | 17.62 | |
| * | * | * | NF60 | 60A | 100A-600V | J | 9.75 | 6.50 | 8.62 | 14.62 | 17.62 | |
| * | * | * | N100 | 100A | NO-FUSE | - | 4.62 | 7.25 | 6.75 | 12.75 | 15.75 | |
| * | * | * | NF100 | 100A | 100A-250V | H,K,R | 11.38 | 7.38 | 6.75 | 12.75 | 15.75 | |
| * | * | * | NF100 | 100A | 200A-250V | H,K,R | 12.25 | 7.62 | 6.75 | 12.72 | 15.75 | |
| * | * | * | NF100 | 100A | 100A-600V | H,K,R | 13.38 | 7.50 | 6.75 | 12.75 | 15.75 | |
| * | * | * | NF100 | 100A | 200A-600V | H,K,R | 14.75 | 7.75 | 6.75 | 12.75 | 15.75 | |
| * | * | * | NF100 | 100A | 100A-600V | J | 10.12 | 7.38 | 6.75 | 12.75 | 15.75 | |
| * | * | * | NF100 | 100A | 200A-600V | J | 10.88 | 7.50 | 6.75 | 12.75 | 15.75 | |
| * | * | * | N200 | 200A | NO-FUSE | - | 7.12 | 10.38 | 5.12 | 11.12 | 14.12 | |
| * | * | * | NF200 | 200A | 200A-250V | H,K,R | 15.00 | 10.38 | 5.12 | 11.12 | 14.12 | |
| * | * | * | NF200 | 200A | 400A-250V | H,K,R | 16.56 | 10.75 | 5.12 | 11.12 | 14.12 | |
| * | * | * | NF200 | 200A | 200A-600V | H,K,R | 17.56 | 10.38 | 5.12 | 11.12 | 14.12 | |
| * | * | * | NF200 | 200A | 400A-600V | H,K,R | 19.56 | 11.00 | 5.12 | 11.12 | 14.12 | |
| * | * | * | NF200 | 200A | 200A-600V | J | 13.69 | 10.38 | 5.12 | 11.12 | 14.12 | |
| * | * | * | NF200 | 200A | 400A-600V | J | 15.00 | 10.62 | 5.12 | 11.12 | 14.12 | |

1. THE "M" DIMENSIONS DO NOT INCLUDE SPACE FOR AUXILIARY SWITCHES. SEE ALLEN-BRADLEY INSTRUCTIONS FOR ADDITIONAL SPACE REQUIRED.

| ALLEN-BRADLEY BULLETIN 1494D OPERATORS FOR CIRCUIT BREAKERS | | | | | | | | WIRE BEND SPACE ABOVE CIRCUIT BREAKER | | |
|---|-------|-------|-----------------------|------------|--|----------------|------|---------------------------------------|--------------|--------------|
| FITS ENCLOSURE HIEGHT | | | ALLEN-BRADLEY TYP NO. | AMP RATING | CIRCUIT BREAKER TYPE FRAME SIZE | SPACE OCCUPIED | | WHEN A=72.13 | WHEN A=84.13 | WHEN A=90.13 |
| 72.13 | 84.13 | 90.13 | | | | L | M(1) | P | P | P |
| * | * | * | N4/N40 | 150A | C-H WESTINGHOUSE EHD, FD,FDB,FDC,HFD,HMCP | 5.81 | 4.56 | 9.25 | 15.25 | 18.25 |
| * | * | * | N5/N50 | 250A | C-H WESTINGHOUSE JD, JDB,JDC,HJD,HMCP | 8.81 | 4.75 | 8.44 | 14.44 | 17.44 |
| * | * | * | N5/N60 | 400A | C-H WESTINGHOUSE KD, KDB,DK,HKD,HMCP | 8.81 | 5.88 | 8.50 | 14.50 | 17.50 |

1. THE "M" DIMENSIONS DO NOT ALLOW FOR AUXILIARY SWITCHES. REFER TO ALLEN-BRADLEY INSTRUCTIONS FOR ADDITIONAL SPACE REQUIRED.

"K" = 9.88 WHEN "A" = 72.13 (EXCEPT 200A SWITCH)

"K" = 15.88 WHEN "A" = 84.13 (EXCEPT 200A SWITCH)

"K" = 18.88 WHEN "A" = 90.13 (EXCEPT 200A SWITCH)

"K" = 8.56 WHEN "A" = 72.13 (200A SWITCH)

"K" = 14.56 WHEN "A" = 84.13 (200A SWITCH)

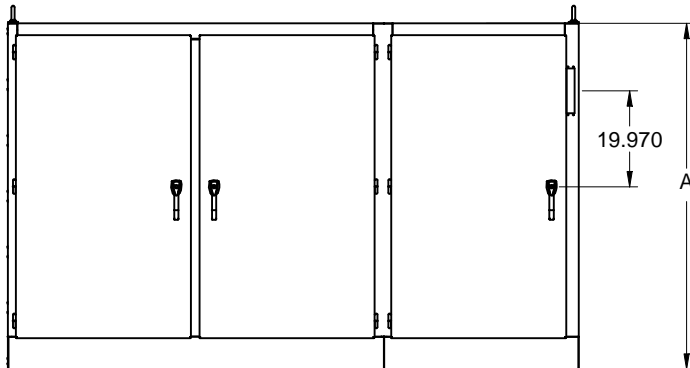
"K" = 17.56 WHEN "A" = 90.13 (200A SWITCH)



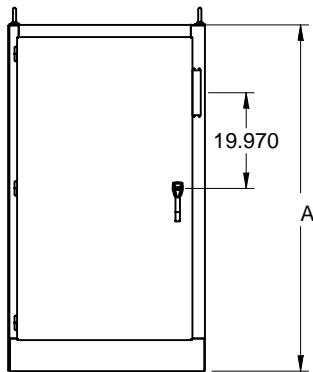
UHD AND UHDM SERIES

BUL10108
REV. E

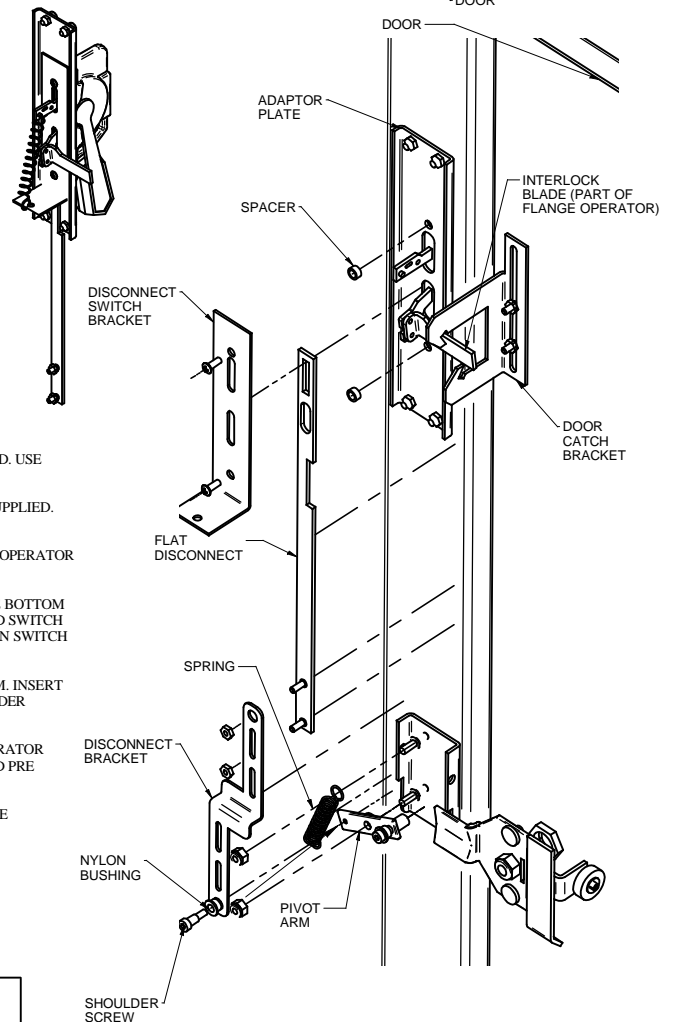
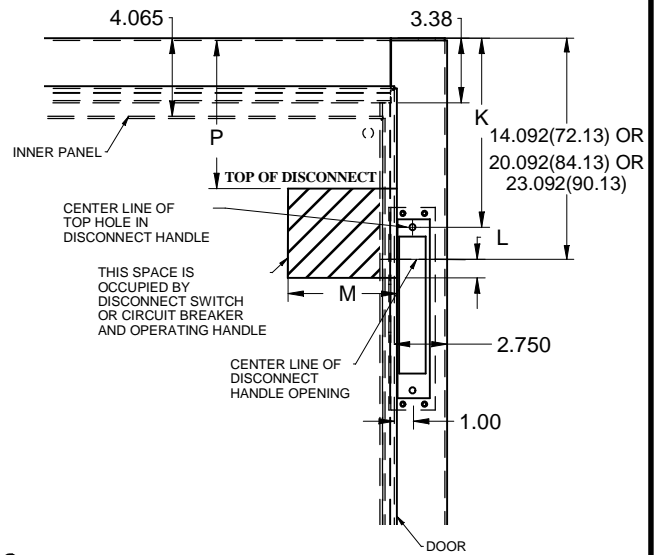
INSTALLATION PROCEDURE FOR ABB CONTROL DISCONNECT SWITCHES C/W FLANGE-MOUNTED OPERATORS USE ADAPTOR AKU.



UHD SERIES - 3 OR 4 OR 5 DOOR ENCLOSURES



UHD AND UHDM SERIES 1 OR 2 DOOR ENCLOSURES



ASSEMBLY INSTRUCTIONS

- MOUNT ADAPTOR PLATE ON INSIDE OF ENCLOSURE HANDLE CUTOUT USING 1/4-20 BINDING HD SCREWS SUPPLIED. USE GASKET TO SEAL BETWEEN SURFACES.
- PRE-ASSEMBLE DISCONNECT BRACKET TO FLAT DISCONNECT. STUDS SLIP THRU SLOTS - HAND TIGHTEN NUTS SUPPLIED. WAIT TO SECURE WITH WRENCH IN STEP F.
- POSITION FLANGE OPERATOR SO THAT THE OPERATOR ARMS PROTRUDE THRU SLOTS IN ADAPTOR PLATE. HOLD OPERATOR IN POSITION AND SLIP PRE-ASSEMBLY IN STEP B OVER INTERLOCK BLADE AS DESCRIBED IN STEP D.
- SLIP PRE-ASSEMBLY IN STEP B (USE TOP SLOT ON FLAT DISCONNECT) AND DISCONNECT SWITCH BRACKET (USE BOTTOM SLOT ON DISCONNECT SWITCH BRACKET) OVER THE INTERLOCK BLADE AS SHOWN. SECURE PRE-ASSEMBLY AND SWITCH BRACKET USING SCREWS PROVIDED WITH OPERATOR AND SPACERS AS SHOWN. SPACERS ARE TRAPPED BETWEEN SWITCH BRACKET AND ADAPTOR PLATE AS SHOWN.
- TO INSTALL DISCONNECT BRACKET TO PIVOT ARM, REMOVE SHOULDER SCREW FROM SPRING END OF PIVOT ARM. INSERT SHOULDER SCREW THROUGH BOTTOM HOLE IN DISCONNECT BRACKET. SLIP BUSHING AND SPRING OVER SHOULDER SCREW. THREAD SHOULDER SCREW BACK INTO PIVOT ARM.
- ADJUST LENGTH OF DISCONNECT ASSEMBLY TO ALLOW THE PROPER FUNCTIONING OF INTERLOCK. FLANGE OPERATOR SHOULD NOT BE ABLE TO BE RAISED UNTIL THE DOOR HANDLE IS CLOSED COMPLETELY. TIGHTEN NUTS TO HOLD PRE ASSEMBLY (FLAT DISCONNECT & DISCONNECT BRACKET) IN POSITION.
- ADJUST INTERLOCK DOOR CATCH BRACKET SO IT CATCHES ON THE INTERLOCK BLADE ONLY WHEN THE FLANGE OPERATOR IS IN THE "ON" POSITION. THIS IS TO PREVENT THE DOOR FROM OPENING WHEN THE POWER IS ON.
- INSTALL FUSE BLOCK OR DISCONNECT PER MANUFACTURER'S INSTRUCTIONS.

* ONLY ONE OF THE TWO SUPPLIED ADAPTOR PLATES IS REQUIRED. USE THE ONE THAT FITS.

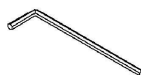
TOOL BOX



11/32, 3/8 or 7/16
Socket Wrench



1/8 ALLEN KEY



1/4 Slot Head
Screw Driver



INSTALLATION PROCEDURE FOR ABB CONTROL DISCONNECT SWITCHES C/W FLANGE-MOUNTED OPERATORS USE ADAPTOR AKU.

BUL10108
REV. D

| ABB CONTROLS DISCONNECT SWITCHES WITH FLANGE-MOUNTED OPERATORS | | | | | | | | | | WIRE BEND SPACE ABOVE DISCONNECT | | |
|--|-------|-------|-------------------|------------|-----------|----------------|----------------|------|--------------|----------------------------------|--------------|--|
| FITS ENCLOSURE HIEGHT | | | ABB SWITCH NUMBER | AMP RATING | FUSE CLIP | FUSE CLASS | SPACE OCCUPIED | | WHEN | | | |
| 72.13 | 84.13 | 90.13 | | | | | L | M | A=72.13 P | A=84.13 P | A=90.13 P | |
| * | * | * | OETL-NF30-F | 30A | NO FUSE | - | 4.78 | 7.72 | 11.80 | 17.80 | 20.80 | |
| * | * | * | OETL-NF60-F | 60A | NO FUSE | - | 4.78 | 7.40 | 11.80 | 17.80 | 20.80 | |
| * | * | * | OETL-NF100-F | 100A | NO FUSE | - | 5.22 | 8.78 | 11.37 | 17.37 | 20.37 | |
| * | * | * | OETL-NF175-F | 175A | NO FUSE | - | 5.07 | 7.68 | 10.48 | 16.48 | 19.48 | |
| * | * | * | OETL-NF200-F | 200A | NO FUSE | - | 5.07 | 8.47 | 10.48 | 16.48 | 19.48 | |
| * | * | * | OESA-F30J6-F | 30A | 30A-600V | J | 4.78 | 7.72 | 11.80 | 17.80 | 20.80 | |
| * | * | * | OESA-F60J6-F | 60A | 60A-600V | J | 4.78 | 7.40 | 11.80 | 17.80 | 20.80 | |
| * | * | * | OESA-F100J6-F | 100A | 100A-600V | J ¹ | 5.22 | 8.78 | 11.37 | 17.37 | 20.37 | |

NOTE 1: J TYPE FUSE CLIPS ARE STANDARD. IF 600V TYPE "T" FUSE CLIPS ARE DESIRED, ORDER T TYPE FUSE ADAPTOR.
NOTE 2: 200 A AVAILABLE BY USING NON-FUSIBLE 200A SWITCH AND A TRAILING FUSE BLOCK (CONSULT ABB)

| ABB CONTROLS CIRCUIT BREAKERS WITH FLANGE MOUNTED OPERATORS | | | | | | | WIRE BEND SPACE ABOVE CIRCUIT BREAKER | | | | |
|---|-------|-------|--------------------------|------------|---------------------|------------|---------------------------------------|------|--------------|--------------|--------------|
| FITS ENCLOSURE HIEGHT | | | ISOMAX CIRCUIT BREAKER # | AMP RATING | OPERATING MECHANISM | FRAME TYPE | SPACE OCCUPIED | | WHEN | | |
| 72.13 | 84.13 | 90.13 | | | | | L | M | A=72.13 P | A=84.13 P | A=90.13 P |
| * | * | * | S1N100TL | 100A | K2FHD-M | S1 | 5.30 | 4.57 | 12.33 | 18.33 | 21.33 |
| * | * | * | S3N150TW | 150A | K3FHD-M | S3 | 6.67 | 4.99 | 11.73 | 17.73 | 20.73 |
| * | * | * | S3N225TW | 225A | K3FHD-M | S3 | 6.67 | 4.99 | 11.73 | 17.73 | 20.73 |
| * | * | * | S4N250BW | 250A | K4FHD-M | S4 | 8.45 | 4.99 | 10.20 | 16.20 | 19.20 |
| * | * | * | S5N400TW | 400A | K5FHD-M | S5 | 8.45 | 6.37 | 10.20 | 16.20 | 19.20 |
| * | * | * | S6N600TW | 600A | K6FHD-M | S6 | 8.33 | 9.97 | 9.53 | 15.53 | 18.53 |
| * | * | * | S6N800TW | 800A | K6FHD-M | S6 | 8.33 | 9.97 | 9.53 | 15.53 | 18.53 |

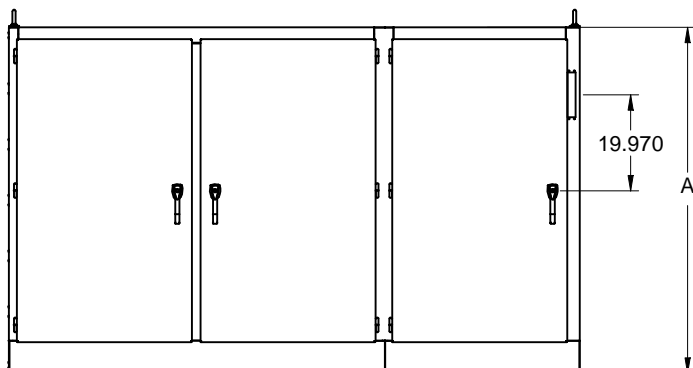
"K" = 11.88 WHEN A = 72.13
"K" = 17.88 WHEN A = 84.13
"K" = 20.88 WHEN A = 90.13

UHD AND UHDM SERIES

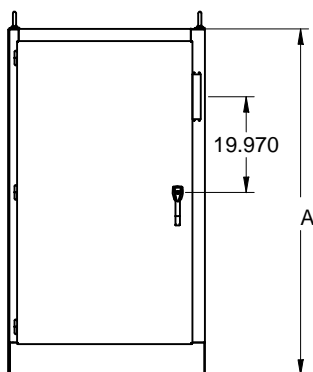
BUL10109

REV. F

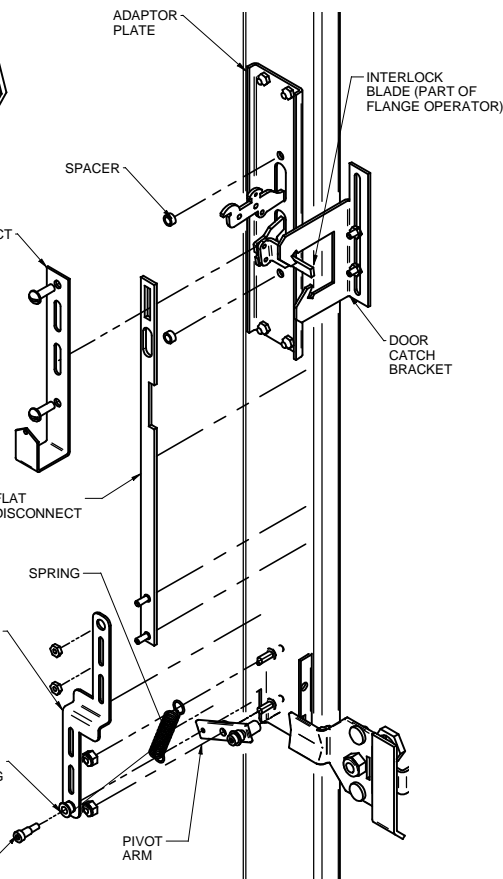
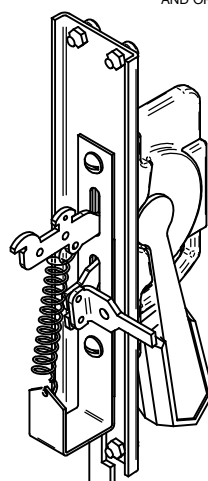
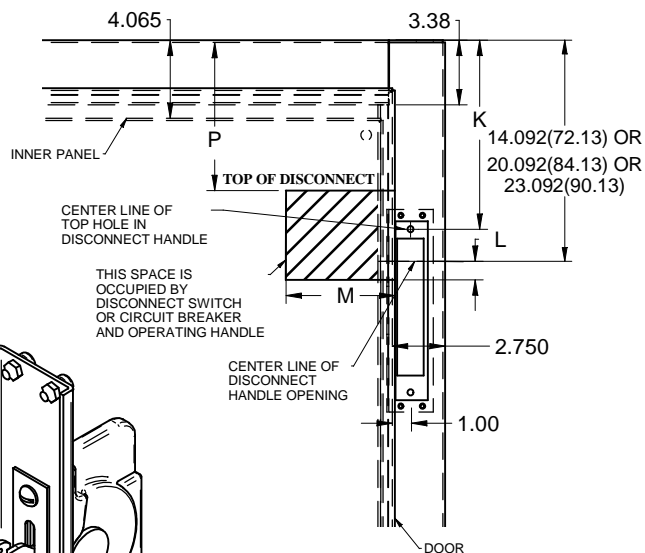
INSTALLATION PROCEDURE FOR ALLEN BRADLEY 1494V DISCONNECT AND CIRCUIT BREAKERS USE ADAPTOR AKU



UHD SERIES - 3 OR 4 OR 5 DOOR ENCLOSURES



UHD AND UHDM SERIES 1 OR 2 DOOR ENCLOSURES



ASSEMBLY INSTRUCTIONS

- MOUNT ADAPTOR PLATE ON INSIDE OF ENCLOSURE HANDLE CUTOUT USING 1/4-20 BINDING HD SCREWS SUPPLIED. USE GASKET TO SEAL BETWEEN SURFACES.
- PRE-ASSEMBLE DISCONNECT BRACKET TO FLAT DISCONNECT. STUDS SLIP THRU SLOTS - HAND TIGHTEN NUTS SUPPLIED. WAIT TO SECURE WITH WRENCH IN STEP F.
- POSITION FLANGE OPERATOR SO THAT THE OPERATOR ARMS PROTRUDE THRU SLOTS IN ADAPTOR PLATE. HOLD OPERATOR IN POSITION AND SLIP PRE-ASSEMBLY IN STEP B OVER INTERLOCK BLADE AS DESCRIBED IN STEP D.
- SLIP PRE-ASSEMBLY IN STEP B (USE TOP SLOT ON FLAT DISCONNECT) AND DISCONNECT SWITCH BRACKET (USE BOTTOM SLOT ON DISCONNECT SWITCH BRACKET) OVER THE INTERLOCK BLADE AS SHOWN. SECURE PRE-ASSEMBLY AND SWITCH BRACKET USING SCREWS PROVIDED WITH OPERATOR AND SPACERS AS SHOWN. SPACERS ARE TRAPPED BETWEEN SWITCH BRACKET AND ADAPTOR PLATE AS SHOWN.
- TO INSTALL DISCONNECT BRACKET TO PIVOT ARM, REMOVE SHOULDER SCREW FROM SPRING END OF PIVOT ARM. INSERT SHOULDER SCREW THROUGH BOTTOM HOLE IN DISCONNECT BRACKET. SLIP BUSHING AND SPRING OVER SHOULDER SCREW. THREAD SHOULDER SCREW BACK INTO PIVOT ARM.
- ADJUST LENGTH OF DISCONNECT ASSEMBLY TO ALLOW THE PROPER FUNCTIONING OF INTERLOCK. FLANGE OPERATOR SHOULD NOT BE ABLE TO BE RAISED UNTIL THE DOOR HANDLE IS CLOSED COMPLETELY. TIGHTEN NUTS TO HOLD PRE ASSEMBLY (FLAT DISCONNECT & DISCONNECT BRACKET) IN POSITION.
- ADJUST INTERLOCK DOOR CATCH BRACKET SO IT CATCHES ON THE INTERLOCK BLADE ONLY WHEN THE FLANGE OPERATOR IS IN THE "ON" POSITION. THIS IS TO PREVENT THE DOOR FROM OPENING WHEN THE POWER IS ON.
- INSTALL FUSE BLOCK OR DISCONNECT PER MANUFACTURER'S INSTRUCTIONS.

* ONLY ONE OF THE TWO SUPPLIED ADAPTOR PLATES IS REQUIRED. USE THE ONE THAT FITS.

TOOL BOX



11/32, 3/8 or 7/16
Socket Wrench



1/8 ALLEN KEY



1/4 Slot Head
Screw Driver



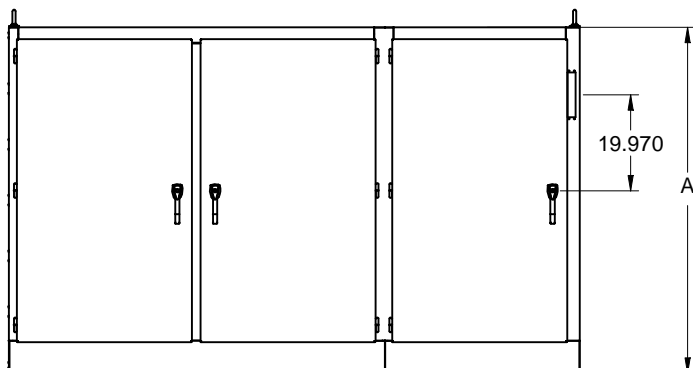
**HAMMOND
MANUFACTURING™
ENCLOSURES**

UHD AND UHDM SERIES

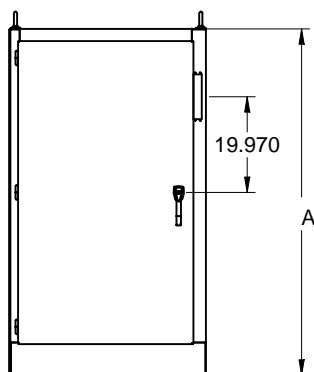
BUL10109

REV. B

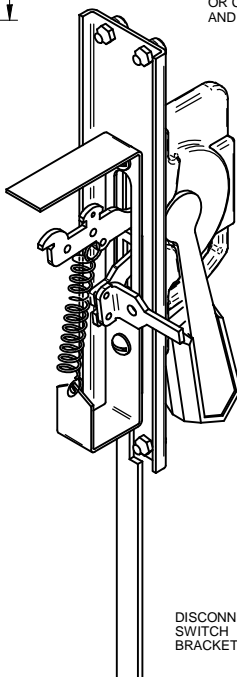
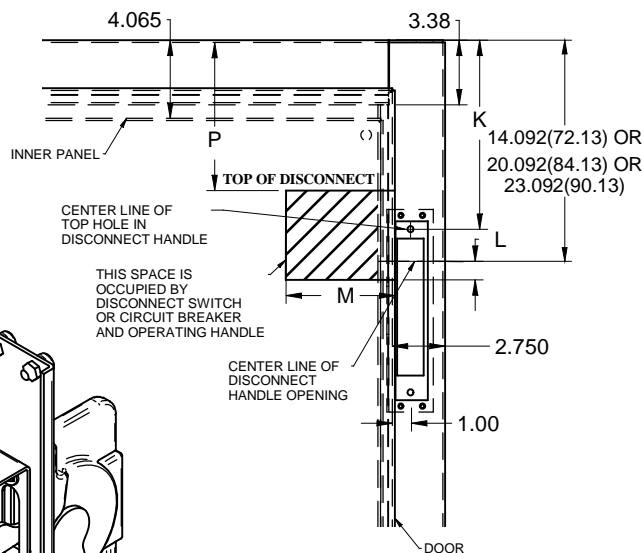
INSTALLATION PROCEDURE FOR ALLEN BRADLEY 1494V DISCONNECT AND CIRCUIT BREAKERS USE ADAPTOR AKU



UHD SERIES - 3 OR 4 OR 5 DOOR ENCLOSURES



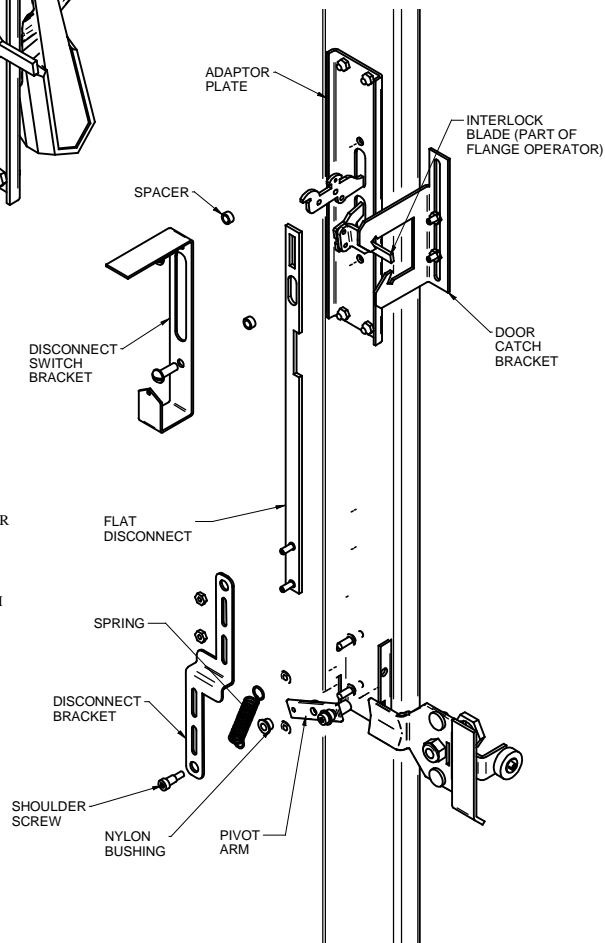
UHD AND UHDM SERIES 1 OR 2 DOOR ENCLOSURES



ASSEMBLY INSTRUCTIONS

- MOUNT ADAPTOR PLATE ON INSIDE OF ENCLOSURE HANDLE CUTOUT USING 1/4-20 BINDING HD SCREWS SUPPLIED. USE GASKET TO SEAL BETWEEN SURFACES.
- PRE-ASSEMBLE DISCONNECT BRACKET TO FLAT DISCONNECT. STUDS SLIP THRU SLOTS - HAND TIGHTEN NUTS SUPPLIED. WAIT TO SECURE WITH WRENCH IN STEP F.
- POSITION FLANGE OPERATOR SO THAT THE OPERATOR ARMS PROTRUDE THRU SLOTS IN ADAPTOR PLATE. HOLD OPERATOR IN POSITION AND SLIP PRE-ASSEMBLY IN STEP B OVER INTERLOCK BLADE AS DESCRIBED IN STEP D.
- SLIP PRE-ASSEMBLY IN STEP B (USE TOP SLOT ON FLAT DISCONNECT) AND DISCONNECT SWITCH BRACKET (USE BOTTOM SLOT ON DISCONNECT SWITCH BRACKET) OVER THE INTERLOCK BLADE AS SHOWN. SECURE PRE-ASSEMBLY AND SWITCH BRACKET USING SCREWS PROVIDED WITH OPERATOR AND SPACERS AS SHOWN. SPACERS ARE TRAPPED BETWEEN SWITCH BRACKET AND ADAPTOR PLATE AS SHOWN.
- TO INSTALL DISCONNECT BRACKET TO PIVOT ARM, REMOVE SHOULDER SCREW FROM SPRING END OF PIVOT ARM. INSERT SHOULDER SCREW THROUGH BOTTOM HOLE IN DISCONNECT BRACKET. SLIP BUSHING AND SPRING OVER SHOULDER SCREW. THREAD SHOULDER SCREW BACK INTO PIVOT ARM.
- ADJUST LENGTH OF DISCONNECT ASSEMBLY TO ALLOW THE PROPER FUNCTIONING OF INTERLOCK. FLANGE OPERATOR SHOULD NOT BE ABLE TO BE RAISED UNTIL THE DOOR HANDLE IS CLOSED COMPLETELY. TIGHTEN NUTS TO HOLD PRE ASSEMBLY (FLAT DISCONNECT & DISCONNECT BRACKET) IN POSITION.
- ADJUST INTERLOCK DOOR CATCH BRACKET SO IT CATCHES ON THE INTERLOCK BLADE ONLY WHEN THE FLANGE OPERATOR IS IN THE "ON" POSITION. THIS IS TO PREVENT THE DOOR FROM OPENING WHEN THE POWER IS ON.
- INSTALL FUSE BLOCK OR DISCONNECT PER MANUFACTURER'S INSTRUCTIONS.

* ONLY ONE OF THE TWO SUPPLIED ADAPTOR PLATES IS REQUIRED. USE THE ONE THAT FITS.



TOOL BOX



11/32, 3/8 or 7/16
Socket Wrench



1/8 ALLEN KEY



1/4 Slot Head
Screw Driver



**HAMMOND
MANUFACTURING™
ENCLOSURES**

INSTALLATION PROCEDURE FOR ALLEN BRADLEY 1494V DISCONNECT SWITCHES AND CIRCUIT BREAKERS USE ADAPTOR AKU.

BUL10109

REV. D

| ALLEN-BRADLEY BULLETIN 1494V DISCONNECT SWITCHES | | | | | | | | | WIRE BEND SPACE ABOVE DISCONNECT | | |
|--|-------|-------|------------------------|------------|-----------|------------|----------------|-------|----------------------------------|--------------|--------------|
| FITS ENCLOSURE HEIGHT | | | ALLEN-BRADLEY TYPE NO. | AMP RATING | FUSE CLIP | FUSE CLASS | SPACE OCCUPIED | | WHEN A=72.13 | WHEN A=84.13 | WHEN A=90.13 |
| 72.13 | 84.13 | 90.13 | | | | | L | M(1) | P | P | P |
| * | * | * | DS30 | 30A | NO FUSE | - | 3.88 | 6.75 | 10.00 | 16.00 | 19.00 |
| * | * | * | DS30 | 30A | 30A-250V | H,K,R | 5.25 | 6.75 | 10.00 | 16.00 | 19.00 |
| * | * | * | DS30 | 30A | 30A-600V | H,K,R | 8.00 | 6.75 | 10.00 | 16.00 | 19.00 |
| * | * | * | DS30 | 30A | 30A-600V | J | 5.25 | 6.75 | 10.00 | 16.00 | 19.00 |
| * | * | * | DS30 | 30A | 60A-250V | H,K | 6.00 | 6.75 | 10.00 | 16.00 | 19.00 |
| * | * | * | DS30 | 30A | 60A-600V | H,K | 8.50 | 6.75 | 10.00 | 16.00 | 19.00 |
| * | * | * | DS30 | 30A | 60A-600V | J | 5.38 | 6.75 | 10.00 | 16.00 | 19.00 |
| * | * | * | DS60 | 60A | NO FUSE | - | 3.88 | 6.75 | 9.81 | 15.81 | 18.81 |
| * | * | * | DS60 | 60A | 60A-250V | H,K,R | 6.00 | 6.75 | 9.81 | 15.81 | 18.81 |
| * | * | * | DS60 | 60A | 60A-600V | H,K,R | 8.50 | 6.75 | 9.81 | 15.81 | 18.81 |
| * | * | * | DS60 | 60A | 60A-600V | J | 5.38 | 6.75 | 9.81 | 15.81 | 18.81 |
| * | * | * | DS60 | 60A | 30A-600V | H,K,R | 8.00 | 6.75 | 9.81 | 15.81 | 18.81 |
| * | * | * | DS60 | 60A | 100A-250V | H,K | 8.50 | 6.75 | 9.81 | 15.81 | 18.81 |
| * | * | * | DS60 | 60A | 100A-600V | H,K | 10.50 | 6.75 | 9.81 | 15.81 | 18.81 |
| * | * | * | DS60 | 60A | 100A-600V | J | 7.25 | 6.75 | 9.81 | 15.81 | 18.81 |
| * | * | * | DS100(2) | 100A | NO FUSE | - | 3.88 | 6.75 | 9.81 | 15.81 | 18.81 |
| * | * | * | DS100(2) | 100A | 100A-250V | H,K,R | 8.12 | 6.75 | 9.81 | 15.81 | 18.81 |
| * | * | * | DS100(2) | 100A | 100A-600V | H,K,R | 10.12 | 6.75 | 9.81 | 15.81 | 18.81 |
| * | * | * | DS100(2) | 100A | 100A-600V | J | 6.80 | 6.75 | 9.81 | 15.81 | 18.81 |
| * | * | * | DS100(2) | 100A | 60A-600V | H,K,R | 10.12 | 6.75 | 9.81 | 15.81 | 18.81 |
| * | * | * | DS100(2) | 100A | 60A-600V | J | 8.88 | 6.75 | 9.81 | 15.81 | 18.81 |
| * | * | * | DS100(2) | 200A | NO FUSE | - | 4.75 | 8.00 | 8.34 | 14.34 | 17.34 |
| * | * | * | DS100(2) | 200A | 200A-250V | H,K,R | 10.88 | 8.00 | 8.34 | 14.34 | 17.34 |
| * | * | * | DS100(2) | 200A | 200A-600V | H,K,R | 13.88 | 8.00 | 8.34 | 14.34 | 17.34 |
| * | * | * | DS100(2) | 200A | 200A-600V | J | 9.50 | 8.00 | 8.34 | 14.34 | 17.34 |
| * | * | * | DS100(2) | 200A | 100A-600V | H,K,R | 12.00 | 8.00 | 8.34 | 14.34 | 17.34 |
| * | * | * | DS100(2) | 200A | 100A-600V | J | 8.75 | 8.00 | 8.34 | 14.34 | 17.34 |
| * | * | * | DS400 | 400A | NO FUSE | - | 10.75 | 11.00 | | 10.14 | 13.14 |
| * | * | * | DS400 | 400A | 400A-250V | H,K,R | 16.12 | 11.00 | | 10.14 | 13.14 |
| * | * | * | DS400 | 400A | 400A-600V | H,K,R | 19.12 | 11.00 | | 10.14 | 13.14 |
| * | * | * | DS400 | 400A | 400A-600V | J | 14.62 | 11.00 | | 10.14 | 13.14 |
| * | * | * | DS600 | 600A | NO FUSE | - | 10.75 | 11.00 | | | 13.14 |
| * | * | * | DS600(3) | 600A | 600A-250V | H,R | 10.75 | 11.00 | | | 13.14 |
| * | * | * | DS600(3) | 600A | 600A-600V | H,R | 10.75 | 11.00 | | | 13.14 |
| * | * | * | DS600 | 600A | 600A-600V | J | 17.59 | 11.00 | | | 13.14 |

1. "M" DIMENSIONS DO NOT ALLOW FOR AUXILIARY SWITCHES. REFER TO ALLEN-BRADLEY INSTRUCTIONS IF ADDITIONAL SPACE IS REQUIRED.
 2. SERIES "B".
 3. "L" AND "M" DO NOT INCLUDE SEPARATELY MOUNTED FUSE BOX.

| ALLEN-BRADLEY BULLETIN 1494V OPERATORS FOR CIRCUIT BREAKERS | | | | | | | WIRE BEND SPACE ABOVE CIRCUIT BREAKER | | | | |
|---|-------|-------|------------------------|------------|---|------------|---------------------------------------|------|--------------|--------------|--------------|
| FITS ENCLOSURE HEIGHT | | | ALLEN-BRADLEY TYPE NO. | AMP RATING | CIRCUIT BREAKER TYPE | FRAME SIZE | SPACE OCCUPIED | | WHEN A=72.13 | WHEN A=84.13 | WHEN A=90.13 |
| 72.13 | 84.13 | 90.13 | | | | | L | M(1) | P | P | P |
| * | * | * | M40 | 15A-150A | C-H WESTINGHOUSE EHD, FD,FDB,FDC,HFD,HMCP | | 5.00 | 4.62 | 11.25 | 17.25 | 20.25 |
| * | * | * | M50 | 70A-250A | C-H WESTINGHOUSE JD, JDB,JDC,HJD,HMCP | | 9.75 | 4.88 | 10.81 | 16.81 | 19.81 |
| * | * | * | M60 | 100A-400A | C-H WESTINGHOUSE KD, KDB,DK,HKD,HMCP | | 9.69 | 6.25 | 10.62 | 16.62 | 19.62 |

1. THE "M" DIMENSIONS DO NOT ALLOT FOR AUXILIARY SWITCHES. REFER TO ALLEN BRADLEY INSTRUCTIONS IF ADDITIONAL SPACE IS REQUIRED.

"K" = 11.88 WHEN A = 72.13

"K" = 17.88 WHEN A = 84.13, EXCEPT 400A OR 600A SWITCHES

"K" = 20.88 WHEN A = 90.13, EXCEPT 400A OR 600A SWITCHES

"K" = 16.43 WHEN "A" = 84.13, 400A SWITCHES ONLY

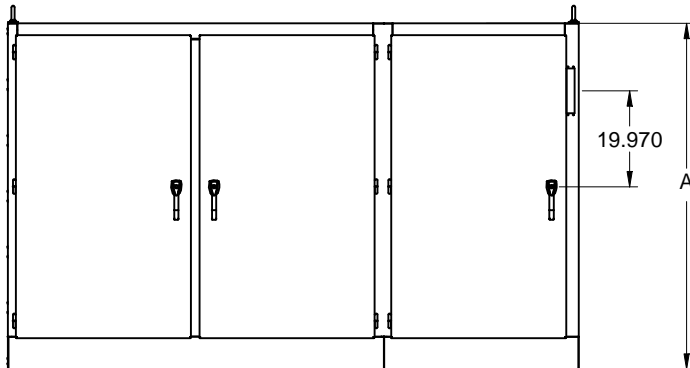
"K" = 19.43 WHEN "A" = 90.13, 400A AND 600A SWITCHES ONLY



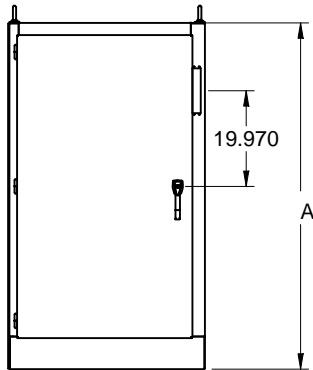
UHD AND UHDM SERIES

BUL10110
REV. E

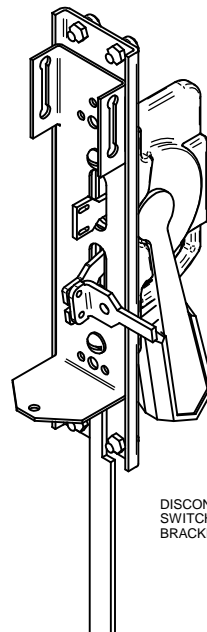
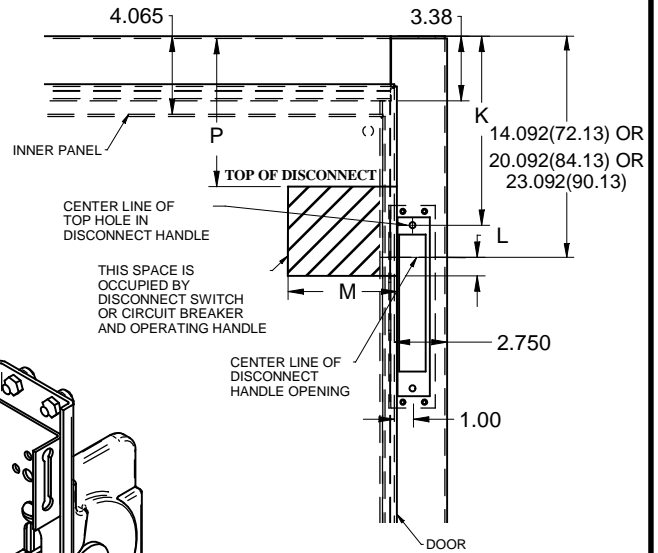
INSTALLATION PROCEDURE FOR SQUARE "D" 9422 DISCONNECT AND CIRCUIT BREAKERS USE ADAPTOR AKU



UHD SERIES - 3 OR 4 OR 5 DOOR ENCLOSURES



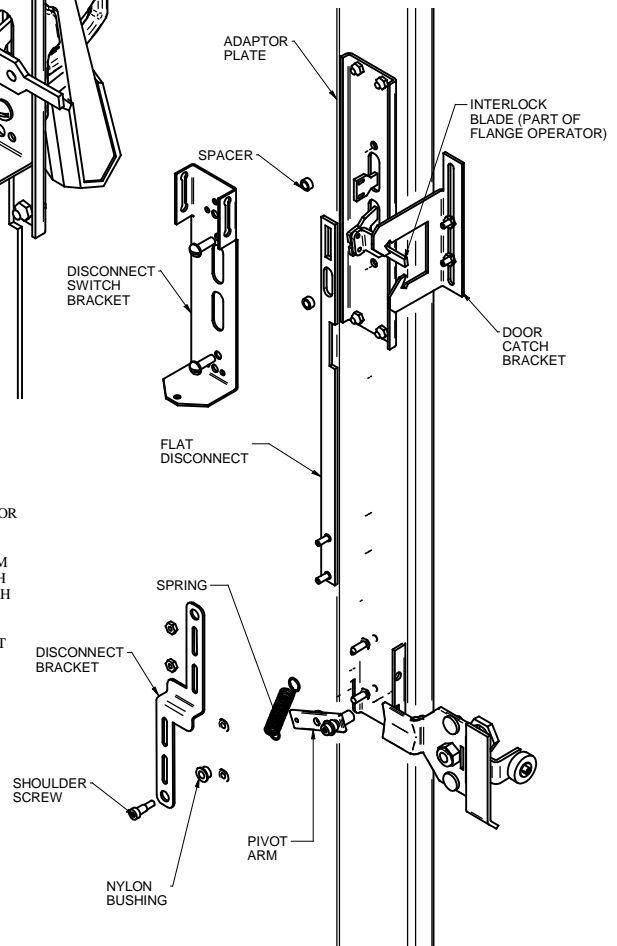
UHD AND UHDM SERIES 1 OR 2 DOOR ENCLOSURES



ASSEMBLY INSTRUCTIONS

- MOUNT ADAPTOR PLATE ON INSIDE OF ENCLOSURE HANDLE CUTOUT USING 1/4-20 BINDING HD SCREWS SUPPLIED. USE GASKET TO SEAL BETWEEN SURFACES.
- PRE-ASSEMBLE DISCONNECT BRACKET TO FLAT DISCONNECT. STUDS SLIP THRU SLOTS - HAND TIGHTEN NUTS SUPPLIED. WAIT TO SECURE WITH WRENCH IN STEP F.
- POSITION FLANGE OPERATOR SO THAT THE OPERATOR ARMS PROTRUDE THRU SLOTS IN ADAPTOR PLATE. HOLD OPERATOR IN POSITION AND SLIP PRE-ASSEMBLY IN STEP B OVER INTERLOCK BLADE AS DESCRIBED IN STEP D.
- SLIP PRE-ASSEMBLY IN STEP B (USE TOP SLOT ON FLAT DISCONNECT) AND DISCONNECT SWITCH BRACKET (USE BOTTOM SLOT ON DISCONNECT SWITCH BRACKET) OVER THE INTERLOCK BLADE AS SHOWN. SECURE PRE-ASSEMBLY AND SWITCH BRACKET USING SCREWS PROVIDED WITH OPERATOR AND SPACERS AS SHOWN. SPACERS ARE TRAPPED BETWEEN SWITCH BRACKET AND ADAPTOR PLATE AS SHOWN.
- TO INSTALL DISCONNECT BRACKET TO PIVOT ARM, REMOVE SHOULDER SCREW FROM SPRING END OF PIVOT ARM. INSERT SHOULDER SCREW THROUGH BOTTOM HOLE IN DISCONNECT BRACKET. SLIP BUSHING AND SPRING OVER SHOULDER SCREW. THREAD SHOULDER SCREW BACK INTO PIVOT ARM.
- ADJUST LENGTH OF DISCONNECT ASSEMBLY TO ALLOW THE PROPER FUNCTIONING OF INTERLOCK. FLANGE OPERATOR SHOULD NOT BE ABLE TO BE RAISED UNTIL THE DOOR HANDLE IS CLOSED COMPLETELY. TIGHTEN NUTS TO HOLD PRE ASSEMBLY (FLAT DISCONNECT & DISCONNECT BRACKET) IN POSITION.
- ADJUST INTERLOCK DOOR CATCH BRACKET SO IT CATCHES ON THE INTERLOCK BLADE ONLY WHEN THE FLANGE OPERATOR IS IN THE "ON" POSITION. THIS IS TO PREVENT THE DOOR FROM OPENING WHEN THE POWER IS ON.
- INSTALL FUSE BLOCK OR DISCONNECT PER MANUFACTURER'S INSTRUCTIONS.

* ONLY ONE OF THE TWO SUPPLIED ADAPTOR PLATES IS REQUIRED. USE THE ONE THAT FITS.



| TOOL BOX | 11/32, 3/8 or 7/16 Socket Wrench | 1/8 ALLEN KEY | 1/4 Slot Head Screw Driver |
|----------|-------------------------------------|---------------|-------------------------------|
| | | | |



INSTALLATION PROCEDURE FOR SQUARE "D" 9422 DISCONNECT SWITCHES AND CIRCUIT BREAKERS USE ADAPTOR AKU

BUL10110
REV. D

SQUARE D CLASS 9422 VARIABLE DEPTH DISCONNECT SWITCHES

WIRE BEND SPACE ABOVE DISCONNECT

| FITS ENCLOSURE HEIGHT | | SQUARE D TYPE | AMP NUMBER | FUSE RATING | FUSE CLIP | CLASS | SPACE OCCUPIED | | WHEN A=72.13 | WHEN A=84.13 | WHEN A=90.13 |
|-----------------------|-------|---------------|------------|-------------|-----------|-------|----------------|-------|--------------|--------------|--------------|
| 60.13 | 72.13 | | | | | | 90.13 | L | M | P | P |
| * | * | * | TCN-30 | 30A | NO FUSE | - | 3.80 | 6.97 | 10.75 | 16.75 | 19.75 |
| * | * | * | TCF-30 | 30A | 30A-250V | H,K,R | 5.53 | 6.97 | 10.75 | 16.75 | 19.75 |
| * | * | * | TCF-33 | 30A | 30A-600V | H,K,R | 8.15 | 6.97 | 10.75 | 16.75 | 19.75 |
| * | * | * | TCF-33 | 30A | 60A-250V | H,K,R | 6.15 | 6.97 | 10.75 | 16.75 | 19.75 |
| * | * | * | TCF-33 | 30A | 30A-600V | J | 5.53 | 6.97 | 10.75 | 16.75 | 19.75 |
| * | * | * | TDN-60 | 60A | NO FUSE | - | 3.80 | 6.97 | 10.75 | 16.75 | 19.75 |
| * | * | * | TDN-60 | 60A | 30A-600V | H,K,R | 8.15 | 6.97 | 10.75 | 16.75 | 19.75 |
| * | * | * | TDN-60 | 60A | 60A-250V | H,K,R | 6.15 | 6.97 | 10.75 | 16.75 | 19.75 |
| * | * | * | TDN-63 | 60A | 60A-600V | H,K,R | 8.65 | 6.97 | 10.75 | 16.75 | 19.75 |
| * | * | * | TDN-63 | 60A | 60A-600V | J | 5.53 | 6.97 | 10.75 | 16.75 | 19.75 |
| * | * | * | TEN-10 | 100A | NO FUSE | - | 3.80 | 6.97 | 10.62 | 16.62 | 19.62 |
| * | * | * | TEF-10 | 100A | 100A-250V | H,K,R | 8.25 | 6.97 | 10.62 | 16.62 | 19.62 |
| * | * | * | TEF-10 | 100A | 100A-600V | H,K,R | 10.25 | 6.97 | 10.62 | 16.62 | 19.62 |
| * | * | * | TEF-10 | 100A | 100A-600V | J | 7.05 | 6.97 | 10.62 | 16.62 | 19.62 |
| * | * | * | TEF-13 | 100A | 200A-600V | J | - | - | 10.62 | 16.62 | 19.62 |
| * | * | * | TC-1 | 30A | NO FUSE | - | 5.75 | 6.12 | 9.88 | 15.88 | 18.88 |
| * | * | * | TC-2 | 30A | 30A-250V | H,K,R | 5.75 | 6.12 | 9.88 | 15.88 | 18.88 |
| * | * | * | TC-3 | 30A | 30A-600V | H,K,R | 7.75 | 6.12 | 9.88 | 15.88 | 18.88 |
| * | * | * | TC-3 | 30A | 60A-250V | H,K,R | 5.88 | 6.12 | 9.88 | 15.88 | 18.88 |
| * | * | * | TC-3 | 30A | 30A-600V | J | 5.75 | 6.12 | 9.88 | 15.88 | 18.88 |
| * | * | * | TD-1 | 60A | NO FUSE | - | 6.38 | 6.75 | 10.75 | 16.75 | 19.75 |
| * | * | * | TD-2 | 60A | 30A-600V | H,K,R | 8.50 | 6.75 | 10.75 | 16.75 | 19.75 |
| * | * | * | TD-2 | 60A | 60A-250V | H,K,R | 6.50 | 6.75 | 10.75 | 16.75 | 19.75 |
| * | * | * | TD-3 | 60A | 60A-600V | H,K,R | 9.00 | 6.75 | 10.75 | 16.75 | 19.75 |
| * | * | * | TD-3 | 60A | 60A-600V | J | 6.38 | 6.75 | 10.75 | 16.75 | 19.75 |
| * | * | * | TE-1 | 100A | NO FUSE | - | 4.75 | 8.50 | 10.50 | 16.50 | 19.50 |
| * | * | * | TE-2 | 100A | 100A-250V | H,K,R | 7.50 | 8.50 | 10.50 | 16.50 | 19.50 |
| * | * | * | TE-2 | 100A | 100A-600V | H,K,R | 9.50 | 8.50 | 10.50 | 16.50 | 19.50 |
| * | * | * | TE-2 | 100A | 100A-600V | J | 6.25 | 8.50 | 10.50 | 16.50 | 19.50 |
| * | * | * | TE-3 | 100A | 200A-600V | J | 13.75 | 8.50 | 10.50 | 16.50 | 19.50 |
| * | * | * | TF-1 | 200A | NO FUSE | - | 5.50 | 11.75 | 9.12 | 15.12 | 18.12 |
| * | * | * | TF-2 | 200A | 200A-250V | H,K,R | 11.50 | 11.75 | 9.12 | 15.12 | 18.12 |
| * | * | * | TF-2 | 200A | 200A-600V | H,K,R | 14.00 | 11.75 | 9.12 | 15.12 | 18.12 |
| * | * | * | TF-2 | 200A | 200A-600V | J | 10.12 | 11.75 | 9.12 | 15.12 | 18.12 |

SQUARE D CLASS 9422 VARIABLE DEPTH OPERATORS-CIRCUIT BREAKERS

WIRE BEND SPACE ABOVE CIRCUIT BREAKER

| FITS ENCLOSURE HEIGHT | | SQUARE D TYPE | AMP RATING | FRAME TYPE | SPACE OCCUPIED | | WHEN A=72.13 | WHEN A=84.13 | WHEN A=90.13 | |
|-----------------------|-------|---------------|------------|------------|----------------|------|--------------|--------------|--------------|-------|
| 72.13 | 84.13 | | | | 90.13 | L | M | P | P | P |
| * | * | * | RG-1 | 75A | GJL | 3.53 | 3.87 | 10.69 | 16.69 | 19.69 |
| * | * | * | RG-1 | 100A | GJL | 3.53 | 3.87 | 10.69 | 16.69 | 19.69 |
| * | * | * | RN-1 | 100A | FAL,FHL | 5.12 | 5.38 | 10.88 | 16.88 | 19.88 |
| * | * | * | RP-1 | 250A | KAL,KHL | 7.12 | 5.75 | 11.56 | 17.56 | 20.56 |
| * | * | * | RR-1 | 400A | LAL,LHL,Q4L | 7.62 | 8.88 | - | 13.25 | 16.25 |
| * | * | * | RT-1 | 800A | MEL,MXL | 9.12 | 12.00 | - | 13.12 | 16.12 |
| * | * | * | RT-1 | 1000A | MAL,MHL | 9.12 | 12.00 | - | 13.12 | 16.12 |

"K" = 11.88 WHEN A = 72.13

"K" = 17.88 WHEN A = 84.13

"K" = 20.88 WHEN A = 90.13

INSTALLATION PROCEDURE FOR SQUARE "D" 9422 DISCONNECT SWITCHES USED WITH CABLE MECHANISM 9422-CFT30 AND 9422A-1 HANDLE MECHANISM AND CIRCUIT BREAKERS USE ADAPTOR AKU

BUL10110
REV. D

| SQUARE D CLASS 9422 DISCONNECT SWITCHES (CABLE MECHANISM 9422-CFT30 AND 9422A-1 HANDLE MECHANISM) | | | | | | | | |
|---|-------|-------|----------------------|------------|-----------|------------|-----------------------|----------------------|
| FITS ENCLOSURE HIEGHT | | | SQUARE D TYPE NUMBER | AMP RATING | FUSE CLIP | FUSE CLASS | DISCONNECT HEIGHT "X" | DISCONNECT WIDTH "Y" |
| 72.13 | 84.13 | 90.13 | | | | | | |
| * | * | * | TCN-30 | 30A | NO FUSE | - | 5.90 | 6.20 |
| * | * | * | TCF-30 | 30A | 30A-250V | H,K,R | 7.50 | 6.20 |
| * | * | * | TCF-33 | 30A | 30A-600V | H,K,R | 10.15 | 6.20 |
| * | * | * | TCF-33 | 30A | 60A-250V | H,K,R | 8.15 | 6.20 |
| * | * | * | TCF-33 | 30A | 30A-600V | J | 7.50 | 6.20 |
| * | * | * | TDN-60 | 60A | NO FUSE | - | 5.90 | 6.20 |
| * | * | * | TDF-60 | 60A | 30A-600V | H,K,R | 10.15 | 6.20 |
| * | * | * | TDF-60 | 60A | 60A-250V | H,K,R | 8.15 | 6.20 |
| * | * | * | TDF-63 | 60A | 60A-600V | H,K,R | 10.65 | 6.20 |
| * | * | * | TDF-63 | 60A | 60A-600V | J | 7.50 | 6.20 |
| * | * | * | TEN-10 | 100A | NO FUSE | - | 5.90 | 6.20 |
| * | * | * | TEF-10 | 100A | 100A-250V | H,K,R | 10.35 | 6.20 |
| * | * | * | TEF-10 | 100A | 100A-600V | H,K,R | 10.35 | 6.20 |
| * | * | * | TEF-10 | 100A | 100A-600V | J | 10.35 | 6.20 |

USE SWITCH WITH APPROPRIATE CABLE MECHANISM AND 9422A-1 HANDLE MECHANISM

| SQUARE D CLASS 9422 CABLE MECHANISM (CIRCUIT BREAKERS) | | | | | | | |
|--|-------|-------|-------------------|------------|-------------|--------------------------|-------------------------|
| FITS ENCLOSURE HIEGHT | | | CABLE TYPE SWITCH | AMP RATING | FRAME TYPE | CIRCUIT BREAKER HEIGHT X | CIRCUIT BREAKER WIDTH Y |
| 72.13 | 84.13 | 90.13 | | | | | |
| * | * | * | 9422 CGJ30 | 75A | GJL | 4.75 | 3.50 |
| * | * | * | 9422 CEJ30 | 100A | GJL | 4.75 | 3.50 |
| * | * | * | 9422 CFA30 | 100A | FAL,FHL | 6.00 | 4.50 |
| * | * | * | 9422 CKA30 | 250A | KAL,KHL | 8.00 | 4.50 |
| * | * | * | 9422 CLA30 | 400A | LAL,LHL,Q4L | 11.00 | 6.00 |

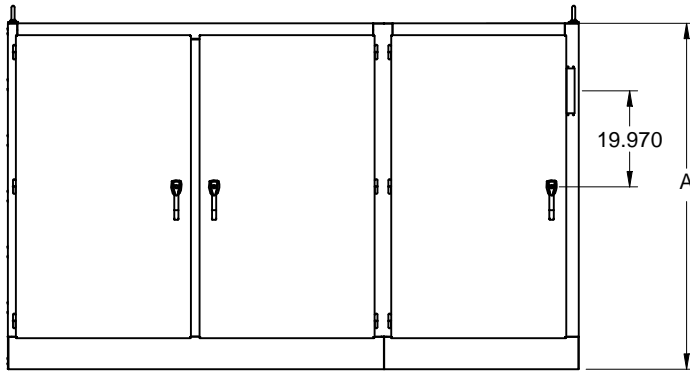
USE CABLE MECHANISM WITH CIRCUIT BREAKER AND 9422-A1 HANDLE MECHANISM.
CABLE OPERATORS ARE OFFERED IN 3',5' AND 10' LENGTHS.
LAST 2 DIGITS OF PART NUMBERS ABOVE (30) ARE FOR 3' CABLE.

- SPACE OCCUPIED BY DISCONNECT SWITCH FOR CIRCUIT BREAKERS**
- SQUARE D CABLE SYSTEM PERMITS CIRCUIT BREAKER LOCATIONS SEPARATE FROM THE FLANGE MOUNTED HANDLE MECHANISM.
 - SEE NATIONAL ELECTRICAL CODE 1996 ARTICLE 430-10(B) FOR WIRING SPACE (REF "P") NEEDED FOR LINE SIDE CONDUCTORS.
 - SELECT CABLE MECHANISM LENGTH BASED ON DISCONNECT LOCATION IN ENCLOSURE. SEE SQUARE D INSTRUCTION BULLETIN FOR MINIMUM CABLE BEND RADIUS.
 - SPACE OCCUPIED BY CIRCUIT BREAKER IS CALCULATED BY:
 - * OVERALL (HEIGHT "X" AND WIDTH "Y")
 - * MINIMUM WIRE BEND SPACE (MANUFACTURER SPECIFIED)
- "K" = 11.88 WHEN "A" = 72.13
"K" = 17.88 WHEN "A" = 84.13
"K" = 20.88 WHEN "A" = 90.13

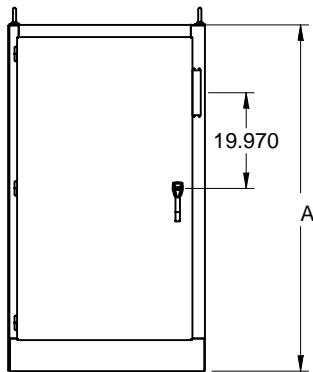
UHD AND UHDM SERIES

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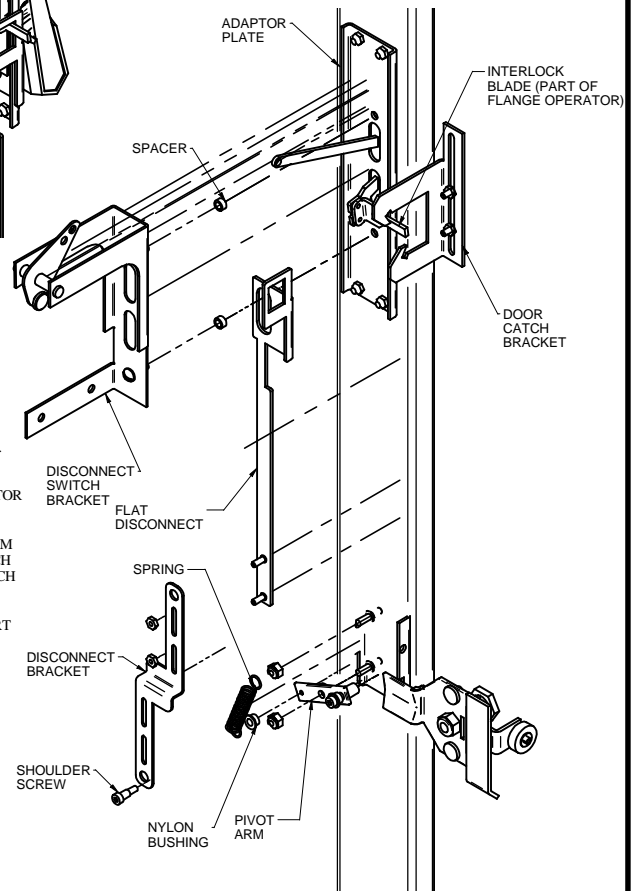
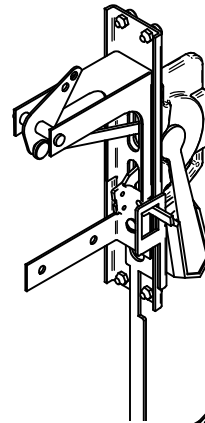
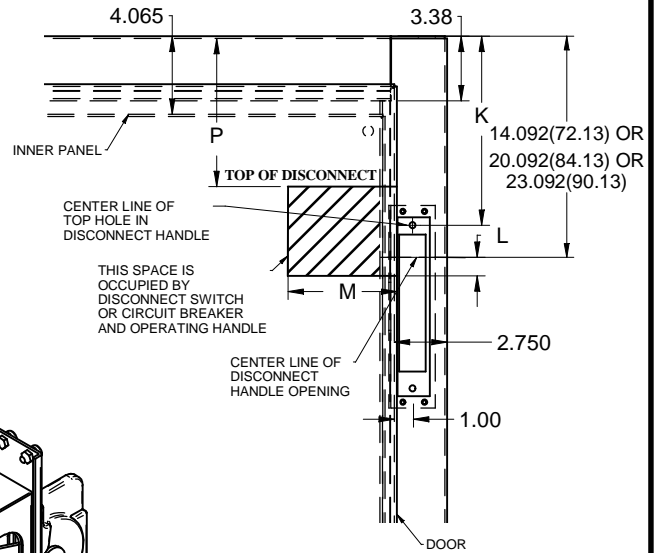
INSTALLATION PROCEDURE FOR ITE MAX - FLEX DISCONNECT SWITCHES AND CIRCUIT BREAKERS USING FHO OPERATORS USE ADAPTOR AKU.



UHD SERIES - 3 OR 4 OR 5 DOOR ENCLOSURES







UHD AND UHDM SERIES 1 OR 2 DOOR ENCLOSURES



ASSEMBLY INSTRUCTIONS

- MOUNT ADAPTOR PLATE ON INSIDE OF ENCLOSURE HANDLE CUTOUT USING 1/4-20 BINDING HD SCREWS SUPPLIED. USE GASKET TO SEAL BETWEEN SURFACES.
- PRE-ASSEMBLE DISCONNECT BRACKET TO FLAT DISCONNECT. STUDS SLIP THRU SLOTS - HAND TIGHTEN NUTS SUPPLIED. WAIT TO SECURE WITH WRENCH IN STEP F.
- POSITION FLANGE OPERATOR SO THAT THE OPERATOR ARMS PROTRUDE THRU SLOTS IN ADAPTOR PLATE. HOLD OPERATOR IN POSITION AND SLIP PRE-ASSEMBLY IN STEP B OVER INTERLOCK BLADE AS DESCRIBED IN STEP D.
- SLIP PRE-ASSEMBLY IN STEP B (USE TOP SLOT ON FLAT DISCONNECT) AND DISCONNECT SWITCH BRACKET (USE BOTTOM SLOT ON DISCONNECT SWITCH BRACKET) OVER THE INTERLOCK BLADE AS SHOWN. SECURE PRE-ASSEMBLY AND SWITCH BRACKET USING SCREWS PROVIDED WITH OPERATOR AND SPACERS AS SHOWN. SPACERS ARE TRAPPED BETWEEN SWITCH BRACKET AND ADAPTOR PLATE AS SHOWN.
- TO INSTALL DISCONNECT BRACKET TO PIVOT ARM, REMOVE SHOULDER SCREW FROM SPRING END OF PIVOT ARM. INSERT SHOULDER SCREW THROUGH BOTTOM HOLE IN DISCONNECT BRACKET. SLIP BUSHING AND SPRING OVER SHOULDER SCREW. THREAD SHOULDER SCREW BACK INTO PIVOT ARM.
- ADJUST LENGTH OF DISCONNECT ASSEMBLY TO ALLOW THE PROPER FUNCTIONING OF INTERLOCK. FLANGE OPERATOR SHOULD NOT BE ABLE TO BE RAISED UNTIL THE DOOR HANDLE IS CLOSED COMPLETELY. TIGHTEN NUTS TO HOLD PRE ASSEMBLY (FLAT DISCONNECT & DISCONNECT BRACKET) IN POSITION.
- ADJUST INTERLOCK DOOR CATCH BRACKET SO IT CATCHES ON THE INTERLOCK BLADE ONLY WHEN THE FLANGE OPERATOR IS IN THE "ON" POSITION. THIS IS TO PREVENT THE DOOR FROM OPENING WHEN THE POWER IS ON.
- INSTALL FUSE BLOCK OR DISCONNECT PER MANUFACTURER'S INSTRUCTIONS.

* ONLY ONE OF THE TWO SUPPLIED ADAPTOR PLATES IS REQUIRED. USE THE ONE THAT FITS.

| | | | |
|---|---|--|---|
| <p>TOOL BOX</p>  | <p>11/32, 3/8 or 7/16 Socket Wrench</p>  | <p>1/8 ALLEN KEY</p>  | <p>1/4 Slot Head Screw Driver</p>  |
|---|---|--|---|



INSTALLATION PROCEDURE FOR ITE MAX - FLEX DISCONNECTS AND BREAKER USING FHO OPERATORS USE ADAPTOR AKU.

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| I-T-E DISCONNECT SWITCHES (MAX FLEX OPERATORS) | | | | | | | | |
|--|-------|-------|-----------------|------------|-----------|------------|-----------------------|----------------------|
| FITS ENCLOSURE HIEGHT | | | ITE TYPE SWITCH | AMP RATING | FUSE CLIP | FUSE CLASS | DISCONNECT HEIGHT "X" | DISCONNECT WIDTH "Y" |
| 72.13 | 84.13 | 90.13 | | | | | | |
| * | * | * | MCS603R | 30A | NO FUSE | - | 5.52 | 6.13 |
| * | * | * | MCS603R | 30A | 30A-250V | H,K,R | 8.11 | 6.13 |
| * | * | * | MCS603R | 30A | 30A-600V | H,K,R | 10.11 | 6.13 |
| * | * | * | MCS603R | 30A | 30A-600V | J | 8.48 | 6.13 |
| * | * | * | MCS606R | 60A | NO FUSE | - | 5.52 | 6.13 |
| * | * | * | MCS606R | 60A | 60A-250V | H,K,R | 7.86 | 6.13 |
| * | * | * | MCS606R | 60A | 60A-600V | H,K,R | 10.38 | 6.13 |
| * | * | * | MCS606R | 60A | 60A-600V | J | 8.36 | 6.13 |
| * | * | * | MCS610R | 100A | NO FUSE | - | 7.59 | 7.38 |
| * | * | * | MCS610R | 100A | 100A-250V | H,K,R | 11.85 | 7.38 |
| * | * | * | MCS610R | 100A | 100A-600V | H,K,R | 13.85 | 7.38 |
| * | * | * | MCS610R | 100A | 100A-600V | J | 10.60 | 7.38 |
| * | * | * | MCS620R | 200A | NO FUSE | - | 9.00 | 9.17 |
| * | * | * | MCS620R | 200A | 200-250V | H,K,R | 14.70 | 9.17 |
| * | * | * | MCS620R | 200A | 200A-600V | H,K,R | 17.20 | 9.17 |
| * | * | * | MCS620R | 200A | 200A-600V | J | 13.32 | 9.17 |

NOTE: ENCLOSURES THAT ARE 24.13 INCHES DEEP REQUIRE A 48" MAX FLEX CABLE (MINIMUM CABLE LENGTH)

| I-T-E MAX-FLEX OPERATORS (CIRCUIT BREAKERS) | | | | | |
|---|-------------|--------------------|---------------------------|--------------------------|---|
| COMPLETE OPERATOR MECHANISM | AMP RATING | BREAKER FRAME SIZE | CIRCUIT BREAKER HEIGHT(X) | CIRCUIT BREAKER WIDTH(Y) | CIRCUIT BREAKER TYPE |
| FHOE036 | 125A | ED | 6.34 | 3.00 | ED2,ED4,ED6,HED4,HED6 |
| FHOE036 | 125A | CED | 9.58 | 3.00 | CED6 |
| FHOF036 | 250A | FD | 9.50 | 4.50 | FXD6-A,FD6-A,HFD6,FXD6-ETJ,HHFD6,HHFXD6 |
| FHOF036 | 250A | CFD | 14.25 | 4.50 | CFD6,CFD6-ETI |
| FHOJ036 | 400A,600A | JD,LD | 11.00 | 7.50 | JXD2,LXD6,JD6,LD6,HJD6,HLD6,HHJD6,HHLD6,HHJXD6,HHLDX6,JXD6-ETI,LXD6-ETI |
| FHOJ036 | 400A,600A | CJD,CLD | 17.86 | 7.50 | CJD6,CLD6,CJD6-ETI,CLD6-ETI |
| FHOLM036 | 800A | LMD | 16.00 | 9.00 | LMD6,LMXD6,HLMD6,HLMXD6,LMXD6-ETI |
| FHON048 | 800A,1200A | MD,ND | 24.00 | 9.00 | MD6,ND6,MXD6,NXD6,HMD6,HND6,HMXD6,HNXD6,CMD6,CND6,MXD6-ETI,CMD6-ETI |
| FHON048 | 1600A,2000A | PD,RD | 24.50(2) | 13.63(2) | PD6,RD6,PXD6,RXD6,HPD6,HRD6,HPXD6,HRXD6,CPD6 |

CIRCUIT BREAKER SIZE INCLUDES REQUIRED BASE MOUNTING BLOCK.

THE LAST 3 DIGITS OF THE OPERATOR MECHANISM PART NUMBER DENOTE CABLE LENGTH IN INCHES.

24" DEEP ENCLOSURES REQUIRE LONGER OPERATING CABLE. (SOLD SEPARATELY)

"K" = 11.88 WHEN "A" = 72.13

"K" = 17.88 WHEN "A" = 84.13

"K" = 20.88 WHEN "A" = 90.13
(DEDUCT 1.45 INCHES FROM "K" FOR FHON048 OPERATOR MECHANISM FOR MD,ND,PD,RD CIRCUIT BREAKERS)

SPACE OCCUPIED BY DISCONNECT

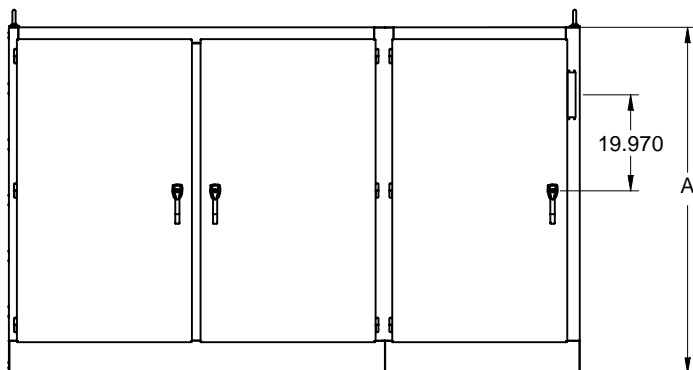
1. I-T-E MAX-FLEX SYSTEM PERMITS CIRCUIT BREAKER LOCATIONS SEPARATE FROM THE FLANGE MOUNTED HANDLE MECHANISM.
2. SEE NATIONAL ELECTRICAL CODE 1996 ARTICLE 430-10(B) FOR WIRING SPACE (REF "P") NEED FOR LINE SIDE CONDUCTORS.
3. SEE SIEMENS I-T-E INSTRUCTIONS FOR DISCONNECT LOCATION LIMITATIONS WHEN USING 36" OR 48" MAX-FLEX CABLES.
4. SPACE OCCUPIED BY CIRCUIT BREAKER IS CALCULATED BY:
 - * OVERALL (HEIGHT "X" AND WIDTH "Y")
 - * MINIMUM WIRE BEND SPACE (MANUFACTURER SPECIFIED)
 - * LOCATION "M" FROM RIGHT TO LEFT.

UHD AND UHDM SERIES

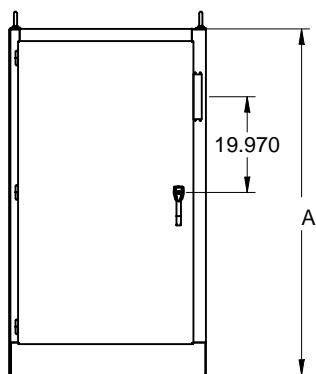
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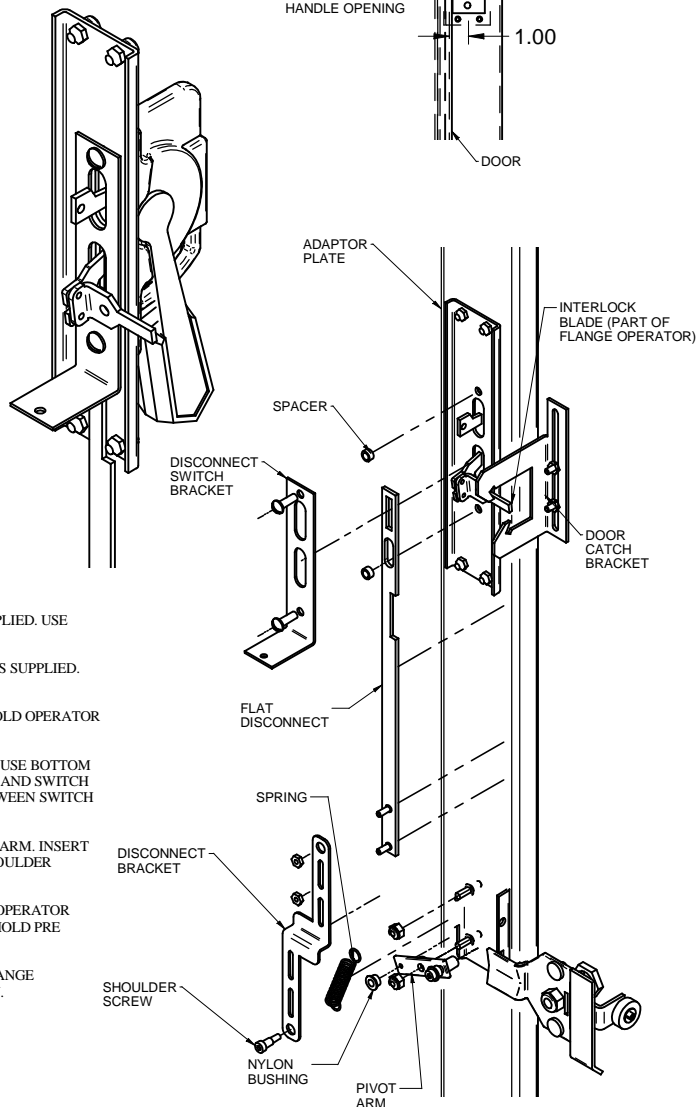
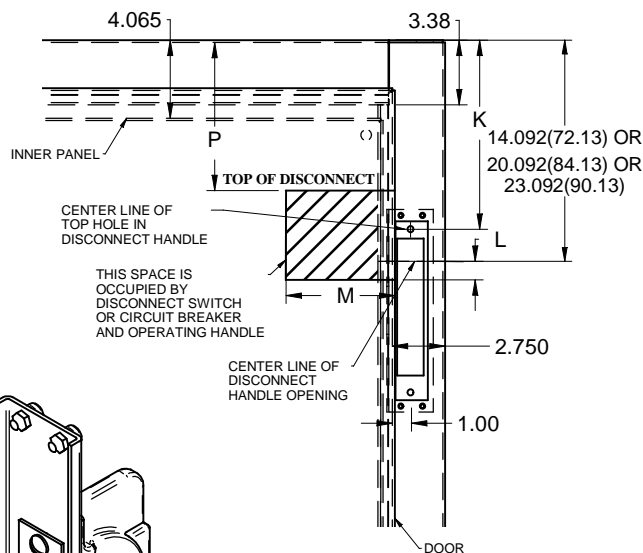
INSTALLATION PROCEDURE CUTLER HAMMER C361 AND C371 DISCONNECTS USE ADAPTOR AKU



UHD SERIES - 3 OR 4 OR 5 DOOR ENCLOSURES



UHD AND UHDM SERIES 1 OR 2 DOOR ENCLOSURES



ASSEMBLY INSTRUCTIONS

- MOUNT ADAPTOR PLATE ON INSIDE OF ENCLOSURE HANDLE CUTOUT USING 1/4-20 BINDING HD SCREWS SUPPLIED. USE GASKET TO SEAL BETWEEN SURFACES.
- PRE-ASSEMBLE DISCONNECT BRACKET TO FLAT DISCONNECT. STUDS SLIP THRU SLOTS - HAND TIGHTEN NUTS SUPPLIED. WAIT TO SECURE WITH WRENCH IN STEP F.
- POSITION FLANGE OPERATOR SO THAT THE OPERATOR ARMS PROTRUDE THRU SLOTS IN ADAPTOR PLATE. HOLD OPERATOR IN POSITION AND SLIP PRE-ASSEMBLY IN STEP B OVER INTERLOCK BLADE AS DESCRIBED IN STEP D.
- SLIP PRE-ASSEMBLY IN STEP B (USE TOP SLOT ON FLAT DISCONNECT) AND DISCONNECT SWITCH BRACKET (USE BOTTOM SLOT ON DISCONNECT SWITCH BRACKET) OVER THE INTERLOCK BLADE AS SHOWN. SECURE PRE-ASSEMBLY AND SWITCH BRACKET USING SCREWS PROVIDED WITH OPERATOR AND SPACERS AS SHOWN. SPACERS ARE TRAPPED BETWEEN SWITCH BRACKET AND ADAPTOR PLATE AS SHOWN.
- TO INSTALL DISCONNECT BRACKET TO PIVOT ARM, REMOVE SHOULDER SCREW FROM SPRING END OF PIVOT ARM. INSERT SHOULDER SCREW THROUGH BOTTOM HOLE IN DISCONNECT BRACKET. SLIP BUSHING AND SPRING OVER SHOULDER SCREW. THREAD SHOULDER SCREW BACK INTO PIVOT ARM.
- ADJUST LENGTH OF DISCONNECT ASSEMBLY TO ALLOW THE PROPER FUNCTIONING OF INTERLOCK. FLANGE OPERATOR SHOULD NOT BE ABLE TO BE RAISED UNTIL THE DOOR HANDLE IS CLOSED COMPLETELY. TIGHTEN NUTS TO HOLD PRE ASSEMBLY (FLAT DISCONNECT & DISCONNECT BRACKET) IN POSITION.
- ADJUST INTERLOCK DOOR CATCH BRACKET SO IT CATCHES ON THE INTERLOCK BLADE ONLY WHEN THE FLANGE OPERATOR IS IN THE "ON" POSITION. THIS IS TO PREVENT THE DOOR FROM OPENING WHEN THE POWER IS ON.
- INSTALL FUSE BLOCK OR DISCONNECT PER MANUFACTURER'S INSTRUCTIONS.

* ONLY ONE OF THE TWO SUPPLIED ADAPTOR PLATES IS REQUIRED. USE THE ONE THAT FITS.

TOOL BOX



11/32, 3/8 or 7/16
Socket Wrench



1/8 ALLEN KEY



1/4 Slot Head
Screw Driver



**HAMMOND
MANUFACTURING™
ENCLOSURES**

INSTALLATION PROCEDURE FOR CUTLER HAMMER C361 AND C371 DISCONNECTS USE ADAPTOR AKU

BUL10112
REV. D

| CUTLER-HAMMER C361 DISCONNECT SWITCHES | | | | | | | | | ABOVE DISCONNECT | | |
|--|-------|-------|------------------------------|---------------|--------------|---------------|----------------|-------|------------------|-----------------|-----------------|
| FITS ENCLOSURE HIEGHT | | | CUTLER HAMMER TYPE NO. | AMP RATING | FUSE CLIP | FUSE CLASS | SPACE OCCUPIED | | WHEN A=72.13 | WHEN A=84.13 | WHEN A=90.13 |
| 72.13 | 84.13 | 90.13 | | | | | L | M(1) | P | P | P |
| * | * | * | C361NC | 30A | NO FUSE | - | 5.75 | 7.55 | 10.50 | 16.50 | 19.50 |
| * | * | * | C361SC21 | 30A | 30A-250V | H,K,R | 8.38 | 7.55 | 10.50 | 16.50 | 19.50 |
| * | * | * | C361SC61 | 30A | 60A-250V | H,K,R | 8.38 | 7.55 | 10.50 | 16.50 | 19.50 |
| * | * | * | C361SC61 | 30A | 30A-600V | H,J,K,R | 8.38 | 7.55 | 10.50 | 16.50 | 19.50 |
| * | * | * | C361ND | 60A | NO FUSE | - | 5.75 | 7.55 | 10.50 | 16.50 | 19.50 |
| * | * | * | C361SD22 | 60A | 60A-250V | H,K,R | 8.38 | 7.55 | 10.50 | 16.50 | 19.50 |
| * | * | * | C361SD22 | 60A | 30A-600V | J | 8.38 | 7.55 | 10.50 | 16.50 | 19.50 |
| * | * | * | C361SD62 | 60A | 60A-600V | H,K,R | 8.38 | 7.55 | 10.50 | 16.50 | 19.50 |
| * | * | * | C361SD62 | 60A | 60A-600V | J | 8.38 | 7.55 | 10.50 | 16.50 | 19.50 |
| * | * | * | C361NE | 100A | NO FUSE | - | 5.56 | 9.07 | 10.06 | 16.06 | 19.06 |
| * | * | * | C361SE263 | 100A | 100A-250V | H,K,R | 10.31 | 9.07 | 10.06 | 16.06 | 19.06 |
| * | * | * | C361SE263 | 100A | 100A-600V | H,K,R | 10.31 | 9.07 | 10.06 | 16.06 | 19.06 |
| * | * | * | C361SE263 | 100A | 100A-600V | J | 10.31 | 9.07 | 10.06 | 16.06 | 19.06 |
| * | * | * | C361NF | 200A | NO FUSE | - | 13.06 | 10.12 | 8.06 | 14.12 | 17.12 |
| * | * | * | C361SF264 | 200A | 200A-250V | H,K,R | 13.06 | 10.12 | 8.06 | 14.12 | 17.12 |
| * | * | * | C361SF264 | 200A | 200A-600V | H,K,R | 13.06 | 10.12 | 8.06 | 14.12 | 17.12 |

1. "M" DIMENSION DOES NOT ALLOW FOR AUXILLARY SWITCHES. REFER TO CUTLER HAMMER INSTRUCTIONS IF ADDITIONAL SPACE REQUIRED.

"K" = 11.88 WHEN "A" = 72.13

"K" = 17.88 WHEN "A" = 84.13

"K" = 20.88 WHEN "A" = 90.13

CUTLER-HAMMER C371 CIRCUIT BREAKER OPERATORS FOR C-H/WESTINGHOUSE CIRCUIT BREAKERS

WIRE BEND SPACE ABOVE CIRCUIT BREAKER

| FITS ENCLOSURE HIEGHT | | | CUTLER HAMMER MECHANISMS | AMP RATING | FRAME TYPE | SPACE OCCUPIED | | WHEN A=72.13 | WHEN A=84.13 | WHEN A=90.13 |
|--------------------------|-------|-------|--------------------------------|---------------|----------------------------|----------------|-------|-----------------|-----------------|-----------------|
| 72.13 | 84.13 | 90.13 | | | | L | M | P | P | P |
| * | * | * | C371E | 150A | F FRAME EHD,FDB,FD,HFD,FDC | 6.00 | 5.62 | 11.62 | 17.62 | 20.62 |
| * | * | * | C371E | 150A | F FRAME HMCP | 6.00 | 5.62 | 11.62 | 17.62 | 20.62 |
| * | * | * | C371F | 250A | J FRAME JDB,JD,HJD,JDC | 8.94 | 8.12 | 11.44 | 17.44 | 20.50 |
| * | * | * | C371F | 250A | J FRAME HMCP | 10.94 | 8.12 | 11.44 | 17.44 | 20.50 |
| * | * | * | C371F | 400A | K FRAME DK,KDB,KD,HKD | 9.75 | 8.12 | 11.00 | 17.00 | 20.00 |
| * | * | * | C371F | 400A | K FRAME HMCP | 9.75 | 8.12 | 11.00 | 17.00 | 20.00 |
| * | * | * | C371G | 600A | L FRAME LD,HLD,LDC | 8.44 | 12.00 | 9.38 | 15.38 | 18.38 |
| | * | * | C371K | 800A | M FRAME MD,MDS | 10.25 | 12.00 | - | 11.81 | 14.81 |
| | 1 | * | C371K | 1200A | N FRAME ND,HND,NDC | 10.25 | 12.00 | - | 11.81 | 14.81 |

1. WIRE BEND SPACE "P" DOES NOT ALLOW CABLE SIZES LARGER THAN 350 MCM IN AN 84.13" TALL ENCLOSURE WHEN 4 CABLE PER TERMINAL USED.

REFER TO NATIONAL ELECTRIC CODE 1996 TABLE 373-6(B) FOR MORE INFORMATION.

WIRE BEND SPACE "P" COMPATABLE WITH C-H/WESTINGHOUSE BREAKERS WITH TA1201 NB1 TERMINALS.

"K" = 11.88 WHEN A = 72.13

"K" = 17.88 WHEN A = 84.13

"K" = 20.88 WHEN A = 90.13

**INSTALLATION PROCEDURE FOR CUTLER-HAMMER FLEX SHAFT
OPERATOR MECHANISMS FOR C-H / WESTINGHOUSE CIRCUIT
BREAKERS USE ADAPTOR.**

BUL10112
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| CUTLER-HAMMER FLEX SHAFT OPERATOR MECHANISMS FOR C-H/WESTINGHOUSE CIRCUIT BREAKERS | | | | |
|---|---------------|------------------------|-------------------------------------|------------------------------------|
| COMPLETE OPERATOR MECHANISMS | AMP RATING | FRAME TYPE | BREAKER HEIGHT(X) (IN INCHES) | BREAKER WIDTH(Y) (IN INCHES) |
| F1S03 | 150A | F FRAME EHD,FDB,FD,HFD | 6.00 | 4.12 |
| F1S03 | 150A | F FRAME HCMP | 6.00 | 4.12 |
| F2S03 | 250A | J FRAME JDB,JD,HJD,JDC | 10.00 | 4.12 |
| F2S03 | 250A | J FRAME HCMP | 10.00 | 4.12 |
| F3S03 | 400A | K FRAME DK,KDB,KD,HKD | 10.12 | 5.50 |
| F3S03 | 400A | K FRAME HCMP | 12.45 | 5.50 |
| F4S04 | 600A | L FRAME LD,HLD,LDC | 10.75 | 8.25 |
| F7S04 | 800A | M FRAME MD,MDS | 16.00 | 8.25 |
| F5S04 | 1200A | N FRAME ND,HND,NDC | 16.00 | 8.25 |
| F6S04 | 2500A | R FRAME RD,CRD,RDC | 16.00 | 15.50 |

PART NUMBERS FOR COMPLETE OPERATOR MECHANISMS INCLUDE FLANGE MOUNTED HANDLE, FLEXIBLE SHAFT AND CIRCUIT BREAKER MECHANISM.

THE LAST DIGIT OF THE PART NUMBER DENOTES THE SHAFT LENGTH (F1S03 = 3' LENGTH)

* THE F,J,K FRAME FLEX SHAFTS ARE AVAILABLE IN 3' TO 10' LENGTHS.

* THE L,N,R FRAME FLEX SHAFTS ARE AVAILABLE IN 4' TO 6' LENGTHS.

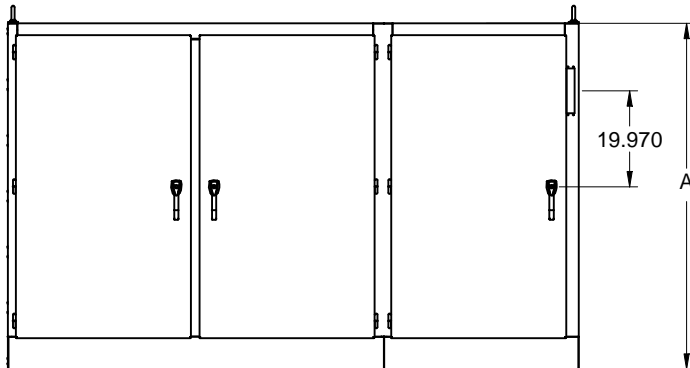
SPACE OCCUPIED BY CIRCUIT BREAKER.

1. THE FLEX SHAFT SYSTEM PERMITS CIRCUIT BREAKER LOCATIONS SEPARATE FROM FLANGE MOUNTED HANDLE MECHANISM.
2. SEE THE NATIONAL ELECTRICAL CODE 1996 ARTICLE 430-10(B) FOR WIRING SPACE (REF "P") NEEDED FOR LINE SIDE CONDUCTORS.
3. SELECT SHAFT LENGTH BASED ON LOCATION OF THE CIRCUIT BREAKER IN THE ENCLOSURE ENSURING A 4" MINIMUM BENDING RADIUS FOR THE FLEX SHAFT.
4. SPACE OCCUPIED BY CIRCUIT BREAKER IS CALCULATED BY:
 - * OVERALL (HEIGHT "X" AND WIDTH "Y")
 - * MINIMUM WIRE BEND SPACE (MANUFACTURER SPECIFIED)
 - * LOCATION "M" FROM RIGHT TO LEFT.

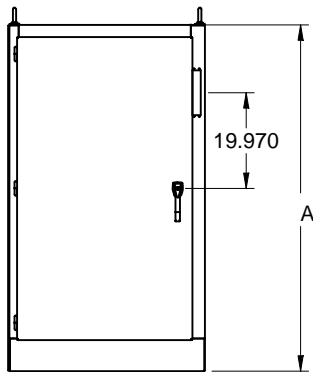
UHD AND UHDM SERIES

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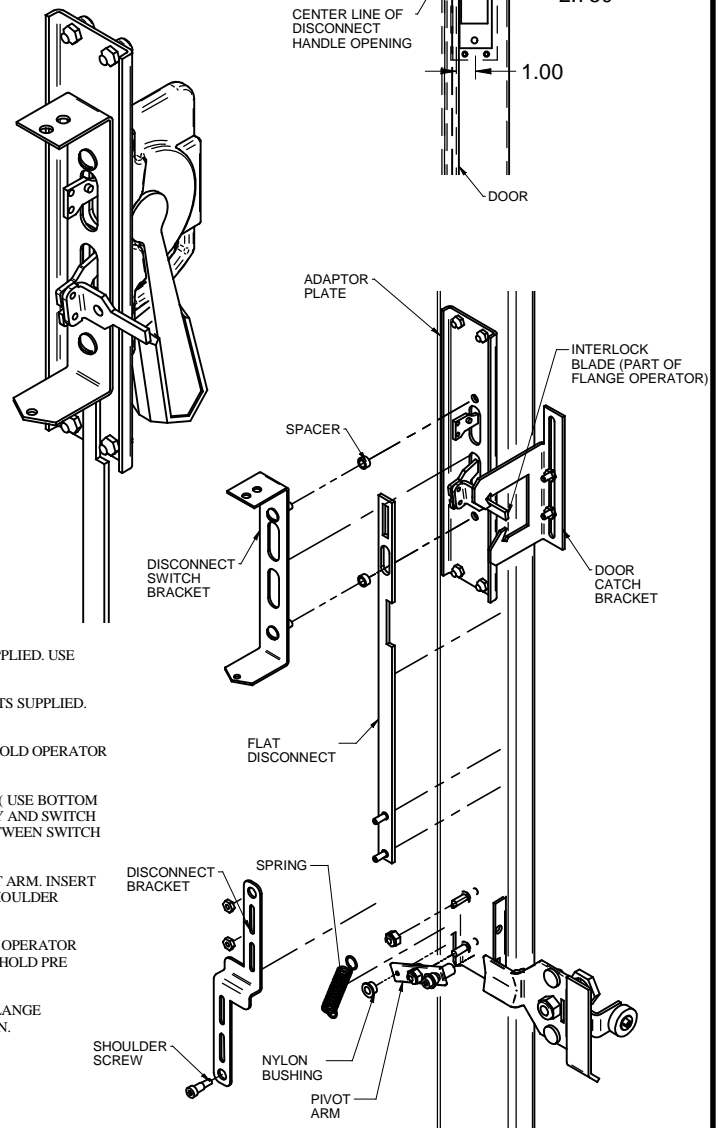
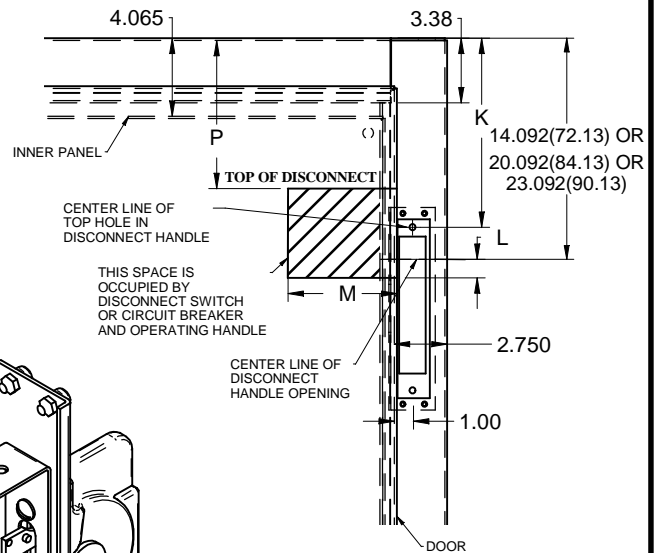
INSTALLATION PROCEDURE FOR GENERAL ELECTRIC FLANGE OPERATOR STDA1 OR STDA2 USE ADAPTOR AKU



UHD SERIES - 3 OR 4 OR 5 DOOR ENCLOSURES



UHD AND UHDM SERIES 1 OR 2 DOOR ENCLOSURES



ASSEMBLY INSTRUCTIONS

- MOUNT ADAPTOR PLATE ON INSIDE OF ENCLOSURE HANDLE CUTOUT USING 1/4-20 BINDING HD SCREWS SUPPLIED. USE GASKET TO SEAL BETWEEN SURFACES.
- PRE-ASSEMBLE DISCONNECT BRACKET TO FLAT DISCONNECT. STUDS SLIP THRU SLOTS - HAND TIGHTEN NUTS SUPPLIED. WAIT TO SECURE WITH WRENCH IN STEP F.
- POSITION FLANGE OPERATOR SO THAT THE OPERATOR ARMS PROTRUDE THRU SLOTS IN ADAPTOR PLATE. HOLD OPERATOR IN POSITION AND SLIP PRE-ASSEMBLY IN STEP B OVER INTERLOCK BLADE AS DESCRIBED IN STEP D.
- SLIP PRE-ASSEMBLY IN STEP B (USE TOP SLOT ON FLAT DISCONNECT) AND DISCONNECT SWITCH BRACKET (USE BOTTOM SLOT ON DISCONNECT SWITCH BRACKET) OVER THE INTERLOCK BLADE AS SHOWN. SECURE PRE-ASSEMBLY AND SWITCH BRACKET USING SCREWS PROVIDED WITH OPERATOR AND SPACERS AS SHOWN. SPACERS ARE TRAPPED BETWEEN SWITCH BRACKET AND ADAPTOR PLATE AS SHOWN.
- TO INSTALL DISCONNECT BRACKET TO PIVOT ARM, REMOVE SHOULDER SCREW FROM SPRING END OF PIVOT ARM. INSERT SHOULDER SCREW THROUGH BOTTOM HOLE IN DISCONNECT BRACKET. SLIP BUSHING AND SPRING OVER SHOULDER SCREW. THREAD SHOULDER SCREW BACK INTO PIVOT ARM.
- ADJUST LENGTH OF DISCONNECT ASSEMBLY TO ALLOW THE PROPER FUNCTIONING OF INTERLOCK. FLANGE OPERATOR SHOULD NOT BE ABLE TO BE RAISED UNTIL THE DOOR HANDLE IS CLOSED COMPLETELY. TIGHTEN NUTS TO HOLD PRE ASSEMBLY (FLAT DISCONNECT & DISCONNECT BRACKET) IN POSITION.
- ADJUST INTERLOCK DOOR CATCH BRACKET SO IT CATCHES ON THE INTERLOCK BLADE ONLY WHEN THE FLANGE OPERATOR IS IN THE "ON" POSITION. THIS IS TO PREVENT THE DOOR FROM OPENING WHEN THE POWER IS ON.
- INSTALL FUSE BLOCK OR DISCONNECT PER MANUFACTURER'S INSTRUCTIONS.

* ONLY ONE OF THE TWO SUPPLIED ADAPTOR PLATES IS REQUIRED. USE THE ONE THAT FITS.

TOOL BOX



11/32, 3/8 or 7/16
Socket Wrench



1/8 ALLEN KEY



1/4 Slot Head
Screw Driver



**HAMMOND
MANUFACTURING™
ENCLOSURES**

INSTALLATION PROCEDURE FOR GENERAL ELECTRIC FLANGE OPERATORS STDA1 OR STDA2 USE ADAPTOR AKU

BUL10113
REV. D

| GENERAL ELECTRIC TYPE STDA DISCONNECT SWITCH OPERATORS | | | | | | | | | | WIRE BEND SPACE ABOVE DISCONNECT | |
|--|-------|-------|--|-------------------------|--------------|---------------|-------------------|------|--------------|-------------------------------------|--------------|
| FITS ENCLOSURE HIEGHT | | | GENERAL ELECTRIC MECHANISMS FOR SWITCHES | SWITCH AMP RATING | FUSE CLIP | FUSE CLASS | SPACE OCCUPIED | | WHEN | | |
| 72.13 | 84.13 | 90.13 | | | | | L | M | A=72.13 P | A=84.13 P | A=90.13 P |
| * | * | * | TDOM1A | 30A | NO FUSE | - | 6.88 | 5.38 | 12.38 | 18.38 | 21.38 |
| * | * | * | TDOM1A | 30A | 30A-250V | H,R | 6.88 | 5.38 | 12.38 | 18.38 | 21.38 |
| * | * | * | TDOM1B | 30A | 30A-600V | H,R | 11.50 | 5.38 | 12.38 | 18.38 | 21.38 |
| * | * | * | TDOM1B | 30A | 60A-250V | H,R | 11.50 | 5.38 | 12.38 | 18.38 | 21.38 |
| * | * | * | TDOM1B | 30A | 60A-600V | H,R | 11.50 | 5.38 | 12.38 | 18.38 | 21.38 |
| * | * | * | TDOM1A | 60A | NO FUSE | - | 6.88 | 5.38 | 12.38 | 18.38 | 21.38 |
| * | * | * | TDOM1B | 60A | 60A-250V | H,R | 11.50 | 5.38 | 12.38 | 18.38 | 21.38 |
| * | * | * | TDOM1B | 60A | 60A-600V | H,R | 11.50 | 5.38 | 12.38 | 18.38 | 21.38 |
| * | * | * | TDOM1B | 60A | 100A-250V | H,R | 11.50 | 5.38 | 12.38 | 18.38 | 21.38 |
| * | * | * | TDOM1B | 60A | 100A-600V | H,R | 11.50 | 5.38 | 12.38 | 18.38 | 21.38 |
| * | * | * | TDOM1A | 100A | NO FUSE | - | 6.88 | 5.38 | 12.38 | 18.38 | 21.38 |
| * | * | * | TDOM1B | 100A | 100A-250V | H,R | 11.50 | 5.38 | 12.38 | 18.38 | 21.38 |
| * | * | * | TDOM1B | 100A | 100A-600V | H,R | 11.50 | 5.38 | 12.38 | 18.38 | 21.38 |
| * | * | * | TDOM1B | 100A | 200A-250V | H,R | 11.50 | 5.38 | 12.38 | 18.38 | 21.38 |
| * | * | * | TDOM1B | 100A | 200A-600V | H,R | 11.50 | 5.38 | 12.38 | 18.38 | 21.38 |
| * | * | * | TDOM2 | 200A | NO FUSE | - | 7.00 | 9.25 | 9.69 | 15.69 | 18.69 |
| * | * | * | TDOM2 | 200A | 200A-250V | H,R | 15.38 | 9.25 | 9.69 | 15.69 | 18.69 |
| * | * | * | TDOM2 | 200A | 200A-600V | H,R | 15.38 | 9.25 | 9.69 | 15.69 | 18.69 |

| 72.13 | 84.13 | 90.13 | CIRCUIT BREAKERS | RATING | FRAME TYPE | L | M | P | P | P |
|-------|-------|-------|------------------|-----------|-----------------------|-------|------|-------|-------|-------|
| * | * | * | SDOM1A | 150A | TEB,TED,THED | 6.88 | 5.38 | 11.24 | 17.24 | 20.24 |
| * | * | * | SDOM1A | 150A | TEC | 6.88 | 5.38 | 11.24 | 17.24 | 20.24 |
| * | * | * | TDOM1B | 150A | TB1 | 11.50 | 5.38 | 11.24 | 17.24 | 20.24 |
| * | * | * | TDOM1B | 150A | TEC,TECL | 11.50 | 5.38 | 11.24 | 17.24 | 20.24 |
| * | * | * | TDOM1C | 150A | TEL | 6.88 | 5.38 | 11.24 | 17.24 | 20.24 |
| * | * | * | TDOM1D | 150A | THLC1 | 6.88 | 5.38 | 9.87 | 15.87 | 18.87 |
| * | * | * | TDOM3 | 225A | TFJ | 10.38 | 5.88 | 10.81 | 16.81 | 19.81 |
| * | * | * | TDOM3 | 225A | TFK,THFK,TFL | 10.38 | 5.88 | 10.81 | 16.81 | 19.81 |
| * | * | * | TDOM4 | 400A | TJJ,TJK4,THJK4,TJL4V | 8.25 | 9.50 | 9.91 | 15.91 | 18.91 |
| * | * | * | TDOM4 | 600A | TJK6,THJK6,TJ4V,TJL4V | 8.25 | 9.50 | 9.91 | 15.91 | 18.91 |
| * | * | * | TDOM5 | 400A | TB4,TJH6S | 14.25 | 9.50 | 9.91 | 15.91 | 18.91 |
| * | * | * | TDOM6 | 225A | TLB2,THLC2 | 11.75 | 9.50 | - | 15.35 | 18.35 |
| * | * | * | TDOM6 | 400A | TLB4,THLC4 | 11.75 | 9.50 | - | 13.97 | 16.97 |
| * | * | * | TDOM6 | 800/1200A | TKMA,THKMA,TK4V | 11.75 | 9.50 | - | - | 18.38 |
| * | * | * | TDOM6 | 1200A | TK4V,THK4V | 11.75 | 9.50 | - | - | 18.38 |
| * | * | * | TDOM7 | 600A | TB6 | 18.12 | 9.50 | - | 12.25 | 15.25 |
| * | * | * | TDOM7 | 800A | TB8 | 18.12 | 9.50 | - | 12.25 | 15.25 |
| * | * | * | TDOM7 | 1200A | TKL12S | 18.12 | 9.50 | - | - | 15.25 |
| * | * | * | SDOM1A | 150A | SE150 | 6.88 | 5.38 | 11.24 | 17.24 | 20.24 |
| * | * | * | SDOM3 | 250A | SPECTRA SF250 | 10.38 | 5.88 | 10.81 | 16.81 | 19.81 |
| * | * | * | SDOM4 | 600A | SPECTRA SG600 | 10.00 | 7.12 | - | 13.18 | 16.18 |

"K" = 11.88 WHEN A = 72.13
 "K" = 17.88 WHEN A = 84.13
 "K" = 20.88 WHEN A = 90.13

**INSTALLATION PROCEDURE FOR GENERAL ELECTRIC CIRCUIT
BREAKERS WITH SPECTRA FLEX CABLE OPERATORS USE ADAPTOR
AKU**

BUL10113
REV. D

| GENERAL ELECTRIC CIRCUIT BREAKERS WITH SPECTRA FLEX CABLE OPERATORS | | | | | | |
|---|-------|-------|------------|----------------|---------------------------|--------------------------|
| FITS ENCLOSURE HIEGHT | | | FRAME SIZE | MAX AMP RATING | CIRCUIT BREAKER HEIGHT(X) | CIRCUIT BREAKER WIDTH(Y) |
| 72.13 | 84.13 | 90.13 | | | | |
| * | * | * | E150 | 150A | 6.31 | 4.12 |
| * | * | * | SE150 | 150A | 6.31 | 4.12 |
| * | * | * | SF250 | 250A | 10.12 | 4.12 |
| * | * | * | SG600 | 600A | 10.09 | 5.50 |
| * | * | * | SK1200 | 1200A | 15.50 | 8.25 |

NOTE: ALL UHD AND UHDM SERIES ENCLOSURES THAT ARE 24.13" DEEP REQUIRE A 48" OR LONGER OPERATING CABLE.

| FRAME SIZE | BREAKER MECHANISM | FLANGE MOUNTING HANDLE | OPERATING CABLE |
|-------------|-------------------|------------------------|-----------------|
| E150 | SCOM1A | SCH1 | SC3L |
| SE150/SF250 | SCOM1EF | SCH1 | SC3L |
| SG600 | SCOM1G | SCH1 | SC3L |
| SK1200 | SCOM1K | SCH2K | SC3H |

OPERATING CABLES ARE AVAILABLE IN 3' TO 10' LENGTHS. IN THE TABLE ABOVE THE NUMBER "3" IN THE PART NUMBER INDICATES A 3 FOOT CABLE.

- SPACE OCCUPIED BY DISCONNECT**
- GE SPECTRA-FLEX OPERATING CABLES PERMIT CIRCUIT BREAKER LOCATIONS SEPARATE FROM THE FLANGE MOUNTED HANDLE MECHANISM.
 - SEE NATIONAL ELECTRICAL CODE 1996 ARTICLE 430-10(B) FOR WIRING SPACE (REF "P") NEEDED FOR LINE SIDE CONDUCTORS.
 - SELECT SHAFT LENGTH BASED ON LOCATION OF THE CIRCUIT BREAKER IN THE ENCLOSURE. MAINTAIN A 3" MINIMUM BENDING RADIUS FOR THE FLEX SHAFT.
 - SPACE OCCUPIED BY CIRCUIT BREAKER IS CALCULATED BY :
 - * OVERALL (HEIGHT "X" AND WIDTH "Y")
 - * MINIMUM WIRE BEND SPACE (MANUFACTURER SPECIFIED)
 - * LOCATION "M" FROM RIGHT TO LEFT
- "K" = 11.88 WHEN "A" = 72.13
 "K" = 17.88 WHEN "A" = 84.13
 "K" = 20.88 WHEN "A" = 90.13