

# **UHDM Modular Disconnect Enclosures - NEMA 12**

ABB Controls, Allen Bradley, Cutler Hammer, General Electric, Siemens I-T-E Max-Flex™, Square D

Freestanding Enclosures



# Application

Designed to bolt together in any number of units for maximum flexibility and ease of transportation. The UHDM system consists of a Master enclosure to house the flange mounted disconnect switch and interlocking Slave enclosures which may be added or removed as required. Master enclosure units will accept the following disconnect switches and circuit breakers:

- ABB Controls flange mounted variable depth operating mechanism for disconnect switches and circuit breakers.
- Allen Bradley 1494F flange mounted disconnect switches and 1494D flange mounted operators for circuit breakers. Allen Bradley 1494V variable depth flange operated disconnect switches and circuit breaker mechanisms.
- C-H Westinghouse Type C361 disconnect switches and operator mechanism. Cutler Hammer Type C371 circuit breaker operating mechanisms. Flex Shaft<sup>™</sup> handle operators for circuit breakers.
- General Electric Type STDA flange handles and variable depth operating mechanisms for disconnect switches and circuit breakers. Also Spectra-Flex™ cable operators for circuit breakers.
- I-T-E Max-Flex<sup>™</sup> flange mounted variable depth operating handles for disconnect switches and circuit breakers.
- Square D disconnect switches and circuit breakers used with Class 9422 flange mounted variable depth operating mechanisms or cable mechanisms. These enclosures will not receive Class 9422 bracket mounted disconnect devices or Class 9422TG1 or TG2 devices.

# **Standards**

- UL 508 Type 12
- CSA Type 12
  - **Complies with**
  - NEMA Type 12
  - JIC EGP-1-1967 and EMP-1-1967
  - IEC 60529, IP54
- Appropriate components are required to maintain these standards.

# Construction

- Formed from 10 gauge steel with smooth continuously welded seams.
- Body stiffeners are provided in the larger enclosures for extra rigidity.
- Heavy duty lifting eyes are anchored into reinforced top corners.
- Removable doors are secured with heavy duty lift off hinges.
- Flange trough collar (FTC) around door excludes liquids and contaminants.
- Formed 10 gauge steel inner panels are provided on collar studs.
- Panel supports are provided.
- Center post is removable, providing easy panel installation.
- Heavy duty three point latching door mechanism.
- Side openings are reinforced to provide structural strength, smooth edges and preset gasket compression.
- Oil resistant gaskets on doors and side openings are permanently secured. No gasket kit is provided.
- Master door handle complete with



screw defeater and padlock hasp.

- Slave door handle complete with padlock hasp.
- A mechanical interlock activated by the master door prevents the auxiliary door from being opened first.
- The universal flange cutout provides mounting for disconnect operators by use of the appropriate operator adaptor kit.
- A bonding stud is provided in the door and a grounding stud is provided in the enclosure for each door.
- A literature pocket is provided.

#### Note:

• Disconnect switches, circuit breakers and operators are not provided with the enclosure, and must be ordered separately from the manufacturer.

## Finish

- Door and enclosure are phosphatized and finished in ANSI 61 gray recoatable powder coating on the outside.
- Interior white powder coating.
- Inner panel is finished in white powder coating.

### **Accessories**

- Additional inner panels...contact factory
- Air conditioners...see page 349-367
- Blank adaptor plates...see page 182
- Operator adaptor kits...see page 182
- Blowers...see page 392
- Breather kits...see page 400-401
- Doorstop kits...see page 453
- Enclosure stabilizers...see page 456
- Filter fans...see page 371-384
- Floor stand kits...see page 453
- Heaters...see page 393-396
- Light kits...see page 452
- Thermostats...see page 397
- Window kits...see page 449

Technical references and CAD downloads available at www.hammondmfg.com

All dimensions in inches unless specified otherwise

# www.hammondmfg.com

INNER PANEL

PANEI SUPPOR

**Rear View (Cross Section)** 

.88 TYP

3.75

4.06

8.06



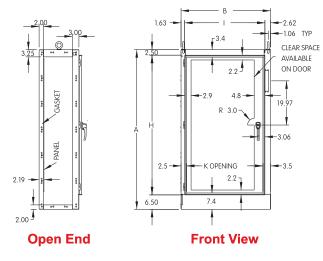
UHDM Modular Disconnect Enclosures - NEMA 12

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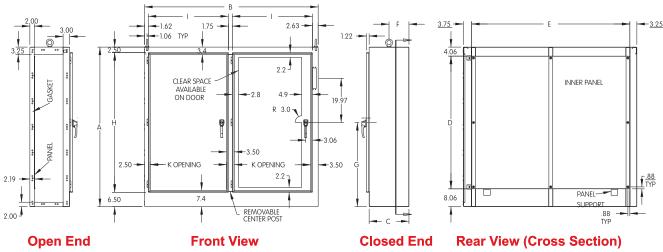
**Closed End** 

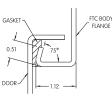
ABB Controls, Allen Bradley, Cutler Hammer, General Electric, Siemens I-T-E Max-Flex™, Square D

### Single Door Master Enclosure (Left side open)



### Two Door Master Enclosure (Left side open)





#### **Master Enclosures**

Part No.	Overall Dimensions										Ship Wt.	Description
Fart NO.	A	В	С	D	Е	F	G	Н	I.	K	lbs.	Description
UHDM724118MFTC	72.13	40.75	18.13	60	33.75	9.06	38.06	63.13	36.5	34.75	506	Single Door Disconnect
UHDM844118MFTC	84.13	40.75	18.13	72	33.75	9.06	44.06	75.13	36.5	34.75	573	Left side open
UHDM844124MFTC	84.13	40.75	24.13	72	33.75	12.06	44.06	75.13	36.5	34.75	658	
UHDM727918MFTC	72.13	79.00	18.13	60	72.00	9.06	38.06	63.13	36.5	34.75	918	Two Door Disconnect
UHDM847918MFTC	84.13	79.00	18.13	72	72.00	9.06	44.06	75.13	36.5	34.75	1050	Left side open
UHDM847924MFTC	84.13	79.00	24.13	72	72.00	12.06	44.06	75.13	36.5	34.75	1150	

Technical references and CAD downloads available at www.hammondmfg.com

All dimensions in inches unless specified otherwise

3.25

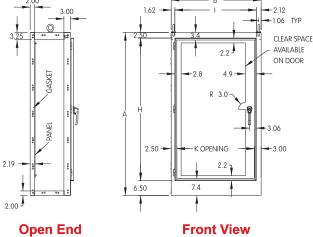


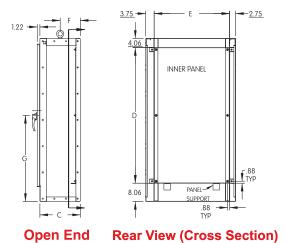
# **UHDM Modular Disconnect Enclosures - NEMA 12**

ABB Controls, Allen Bradley, Cutler Hammer, General Electric, Siemens I-T-E Max-Flex™, Square D

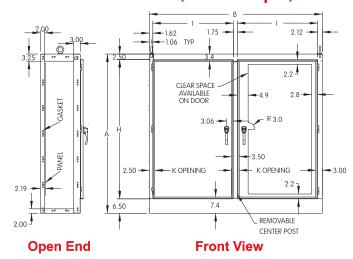


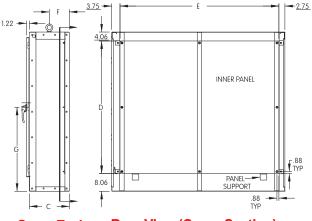
## Single Door Slave Enclosure (Both sides open)





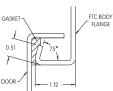
### Two Door Slave Enclosure (Both sides open)





Open End

**Rear View (Cross Section)** 



#### Slave Enclosures

Olave Lifelosules											11.	
Part No.	Overall Dimensions									Ship Wt.	Description	
Fart NO.	A	В	С	D	Е	F	G	Н	l I	K	lbs.	Description
UHDM724118SFTC	72.13	40.25	18.13	60	33.75	9.06	38.06	63.13	36.5	34.75	473	Single Door Slave
UHDM844118SFTC	84.13	40.25	18.13	72	33.75	9.06	44.06	75.13	36.5	34.75	550	Both sides open
UHDM844124SFTC	84.13	40.25	24.13	72	33.75	12.06	44.06	75.13	36.5	34.75	570	
UHDM727818SFTC	72.13	78.50	18.13	60	72.00	9.06	38.06	63.13	36.5	34.75	888	Two Door Slave
UHDM847818SFTC	84.13	78.50	18.13	72	72.00	9.06	44.06	75.13	36.5	34.75	1010	Both sides open
UHDM847824SFTC	84.13	78.50	24.13	72	72.00	12.06	44.06	75.13	36.5	34.75	1060	

Technical references and CAD downloads available at www.hammondmfg.com

All dimensions in inches unless specified otherwise





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## **Disconnect Ordering Information**

#### **ABB Controls**

#### Disconnect switch:

- Flange operated switch (fusible or nonfusible)
- Shaft:
- 18.13" deep enclosures use DSFHS-17
- 24.13" deep enclosures, platform
- must be used with shaft (not included) • Handle: DSFHN-HS12

#### Circuit breaker:

- Circuit breaker: ABB
- Operating mechanism
- Shaft:
- 18.13" deep enclosures use K7FHD-S17
- 24.13" deep enclosures, platform must be used with shaft (not included)
- Handle mechanism: K7FHD-HS12

### **Allen Bradley**

# Bulletin 1494F flange mounted disconnect switch:

- Disconnect switch
- Fuse block adaptor (if required)
- · Line and load connectors (if required)

# 1494D flange mounted circuit breaker operating mechanism:

- Circuit breaker: C-H Westinghouse
- Flange mounted operating mechanism
- Slide mechanism

# Bulletin 1494V flange mounted disconnect switch:

- Disconnect switch
- Operating handle
- Connecting rod/rods (long)
- Trailer fuse block kit (if required)
- Fuse clip kit (if required)
- Line and load connectors (if required)

# Bulletin 1494V flange mounted circuit breaker operating mechanism:

- Circuit breaker: C-H Westinghouse
- Operating mechanism
- Operating handle
- Connecting rod (long)

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### C-H Westinghouse

- Type C361 disconnect switch: • Disconnect switch with an operating mechanism
- Operating handle: C361H1 or C361H3
  In 24.13" deep enclosures, platform
- must be used with shaft (not included)

# Type C371 circuit breaker operating mechanism with a C-H Westinghouse circuit breaker:

- · Circuit breaker
- Operating mechanism
- Long operating rod (if required)
- Operating handle:
- 150 amp C371H1 or C371H3
   250 through 1200 amp C371H5 or C371H7

#### Flex-Shaft<sup>™</sup> handle mechanism:

- Circuit breaker
- Complete Flex-Shaft<sup>™</sup> handle mechanism

### **General Electric**

#### Disconnect switch:

- Disconnect switch: Type QMR or QMW
- Fuse clip kit or no-fuse kit
- Flange handle: STDA1 or STDA2
- Variable depth operating mechanism
- Extended length drive rod (if required)

#### Circuit breaker:

- Circuit breaker
- Flange handle: STDA1 or STDA2
- Variable depth operating mechanism
- Extended length drive rod (if required)

# Circuit breaker with a Spectra-Flex™ cable operator:

- Circuit breaker
- Flange mounted handle mechanism:

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- 150 to 600 amps STDA1
- SK1200 STDA3
- Breaker mounted mechanism
- Operating cable

Technical references and CAD downloads available at www.hammondmfg.com

### I-T-E Siemens

#### Disconnect switch:

- Basic switch (right-hand)Fuse or no-fuse kit
- Flange mounted handle: FHOHS

Disconneci

Freestanding Enclosures

180

- Switch operator
- Operating cable: FHOEC048

#### Circuit breaker:

- Circuit breaker
- Pressure wire connectors
- Flange mounted handle:
  - 100 to 600 FHOH800 to 2000 FHOHN
- Circuit breaker operator mechanism
- Operating cable:
- 18.13" deep enclosures accept 36" or 48" cables;
- 24.13" deep enclosures require a 48" cable
- These items are available from Siemens I-T-E as a complete mechanism with a 36" operating cable only Order items separately when using a 48" cable

### Square D

#### Disconnect switch:

- Disconnect switch with operating mechanism
- Universal handle mechanism: Type A-1
- Long operating rod (if required)

#### Circuit breaker:

A-1

A-1

Circuit breaker

3. 5. or 10 foot

3, 5, or 10 foot

· Circuit breaker: Square D

- Operating mechanism
- Universal handle mechanism: Type A-1
- Long operating rod (if required)

# Class 9422 Type T disconnect switch with a cable mechanism:

Handle mechanism: Class 9422, Type

Cable mechanism: Class 9422 CFT\_O,

Circuit breaker with a cable mechanism:

· Handle mechanism: Class 9422, type

· Cable mechanism: Class 9422 CFT\_O,

All dimensions in inches unless specified otherwise

Data Subject to change without notice

 Disconnect switch with operating mechanism: Class 9422, Type T



-1.00

0.50

DIA HOLE

0.13±0.010

+1 00 -

Section A-A

GASKET

**UHDM Modular Disconnect Enclosures - NEMA 12** 

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## Formed End Plates and Flat End Plates

- · Formed from 12 gauge steel.
- Used to enclose the open end(s) of one or more modular enclosures.

/4-20 x 1.00 MOUNTING STUDS

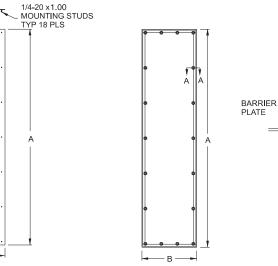
Two types are available. No separate gasket kit is required.



### Flat Barrier Plate

- Formed from 14 gauge steel.
- May be used to provide a barrier ٠ between modular enclosures. They are supplied complete with gasket.





Hardware

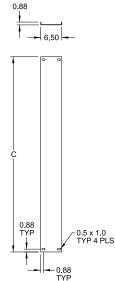
Included



Α

# Panel Bridge Kit

- Formed from 10 gauge steel.
- · May be used to join back panels together between modular enclosures to provide a continuous panel surface.



**Panel Bridge Kit** 

Technical references and CAD downloads available at www.hammondmfg.com

All dimensions in inches unless specified otherwise

**Formed End Plate** 



**Flat End Plate** 

### Accessories for Heavy Duty Modular NEMA 12 Enclosures for **Flange Mounted Disconnects**

Part No.	А	В	С	Description
UHDM7218ECA	71.86	17.87	—	Formed End Plate with
UHDM8418ECA	83.87	17.87	—	Mounting Hardware
UHDM8424ECA	83.87	23.87	—	
UHDM7218EPA	71.87	17.87	—	Flat End Plate with
UHDM8418EPA	83.87	17.87	—	Mounting Hardware
UHDM8424EPA	83.87	23.87	—	
UHDM7218BPA	71.87	17.87	—	Flat Barrier Plate with
UHDM8418BPA	83.87	17.87	—	Mounting Hardware
UHDM8424BPA	83.87	23.87	—	
UHDMFTC72BK	_	_	60	Inner Panel Bridge Kit
UHDMFTC84BK	_	_	72	



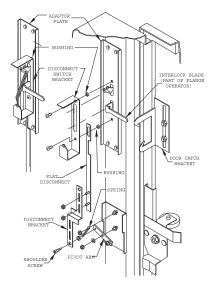
**Universal Disconnect Enclosure - Operator Adaptor Kits** 

ABB Controls, Allen Bradley, Cutler Hammer, General Electric, Siemens I-T-E Max-Flex™, Square D

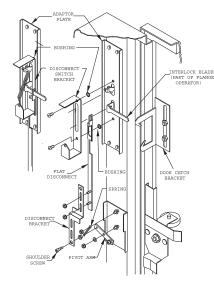
### **Operator Adaptor Kits**

- All Universal series enclosures require one adaptor kit (ordered separately) to adapt the type of disconnect and mechanism to be used.
- Each brand and type requires a different adaptor kit.
- Each kit contains an adaptor plate and master door interlocking mechanism.
- Fully detailed, illustrated instructions included.

#### Version Shown Allen Bradley - 1494V H1

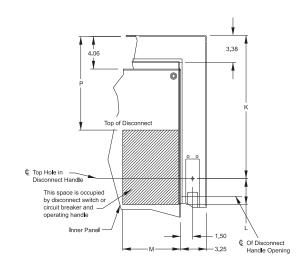


Version Shown Allen Bradley - 1494V H2



Part No.	Operator Make	Туре
AKU	ABB Controls operating handle Disconnect Switch Circuit Breaker	DSFHN-HS12 K7FHD-HS12
	Allen Bradley variable depth operating handle Disconnect Switch 30-200 400-600 Circuit breaker	1494V H1 1494V H2 1494V H11
	Cutler Hammer operating handle Disconnect Switch Circuit Breaker • 150A • 50 to 1200A Circuit Breaker C371 Flex-Shaft <sup>™</sup> handle mechanism.	C361H1 or H3 C371H1 or H3 C371H5 or H7
	General Electric operating handle Disconnect Switch Circuit Breaker Circuit Breaker Spectra-Flex™ cable operators • 150 to 600A • K1200	STDA1or STDA2 STDA1or STDA2 STDA1 STDA3
	Siemens I-T-E Max-Flex <sup>™</sup> operating handle Disconnect Switch variable depth Circuit Breaker • 125 to 600 • 800 to 2000	FHOHS FHOH FHOHN
	<b>Square D</b> class 9422 operating mechanism Disconnect Switch variable depth Circuit Breaker variable depth Disconnect Switch with cable mechanism Circuit Breaker with cable mechanism	9422 type A1 9422 type A1 9422 type A1 9422 type A1 9422 type A1
AK1494FD	Allen Bradley	1494F and D

BPAK Blank Adapter Plate



## **Space Occupied by Disconnects**

Note: Disconnects will occupy space on panel shown by dimensions "K", "L", and "M". Wiring space "P" is available when disconnect is installed in the enclosure.\*The disconnect information and space occupied tables based on data supplied by disconnect manufacturer's bulletins. Hammond Manufacturing not responsible for dimensional accuracy.

Technical references and CAD downloads available at www.hammondmfg.com

All dimensions in inches unless specified otherwise