# Rittal - The System.

Faster - better - worldwide.

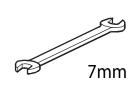




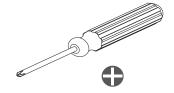
Table of contents	Page
Required Tools	2
Loose Components supplied with enclosure / Hardware	2
Enclosure Component Overview	3
Installation of the disconnect handle to the enclosure.	4
Installation of defeater lever to the disconnect handle.	4
Disconnect handle configuration chart	5
Installing the connecting rod and upper collet	6
Installing the lower collet	7
Installing the door catch	8
Testing and troubleshooting	9

# Loose Component supplied with enclosure / Hardware

## Required Tools (not provided)







PHILLIPS SCREWDRIVER



TORX DRIVER

### Hardware (provided)



M4 x 12 Bolt



M4 Lock Nut



Screw 5.5 x 13 Pan Torx

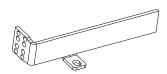


M5 Collet

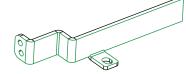


1.5mm ALLEN WRENCH

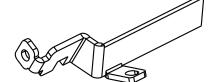
### Loose Components (provided)



Universal defeater Lever



Eaton Flex Shaft defeater Lever



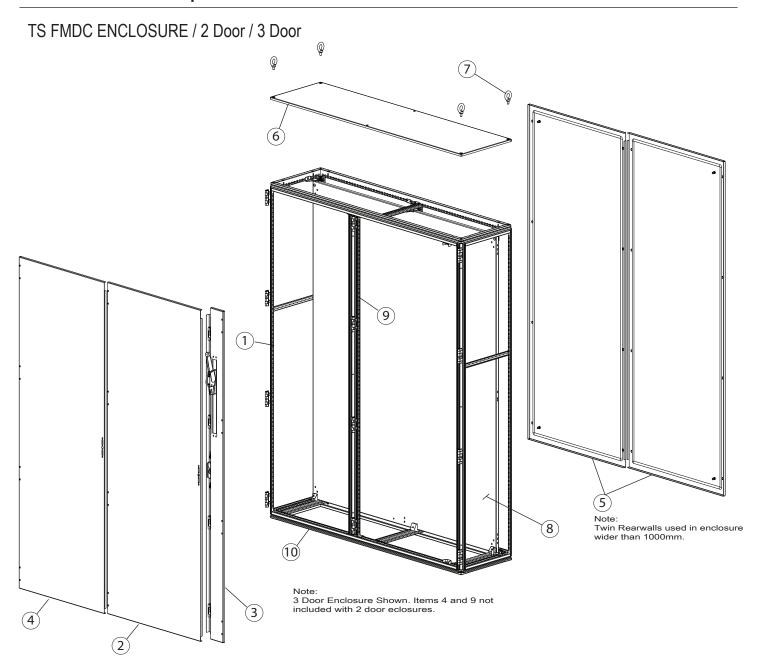
LSIS defeater Lever



Adapter Bracket Siemens

Connecting Rod

# **Enclosure Component Overview**

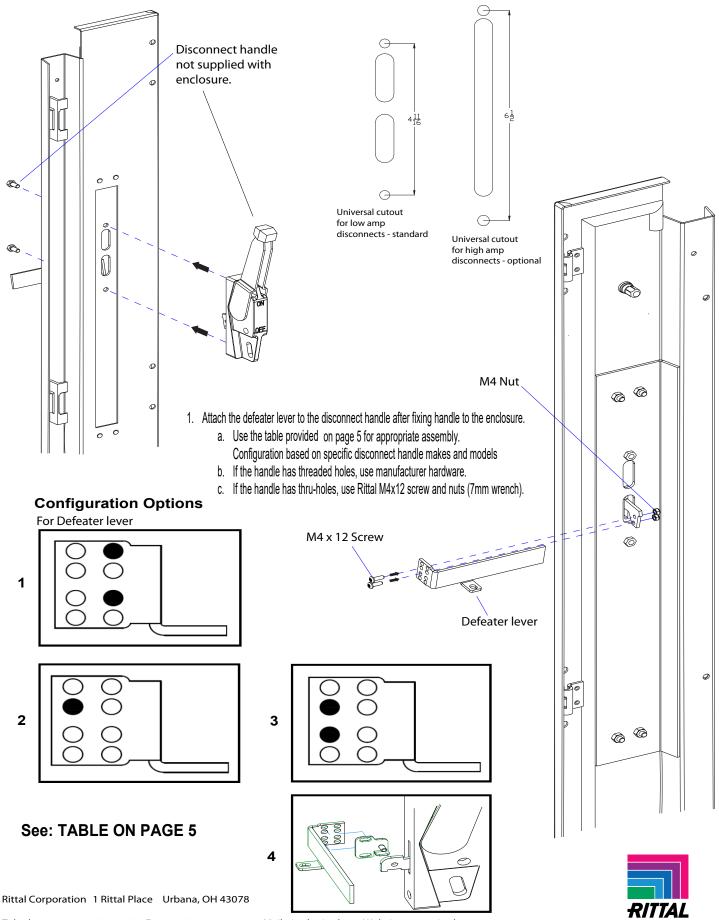


- 1 TS Frame
- (2) Master Door
- 3 FMDC Door
- (4) Slave Door
- (5) Twin Rearwalls

- 6 Roof
- 7 Eye bolt
- 8 Mounting Panel
- 9 Front Mullion
- 10) Baseframe With Cable Plates



## Installation of disconnect handle / defeater lever



Telephone: +1 937-399-0500 Fax: +1 937-390-5599 eMail: rittal@rittal.us Website: www.rittal.us

# Disconnect handle configuration chart

### 4-11/16" Cutout

	Handle/Operator	Configuration
Rockwell / Allen Bradley	140G M1/S1/P1/P2	1*
	1494C (≤200A)	1*
	1494F M1/S1/P1	1*
	1494V (≤200A)	1*
	194R	1*
ADD	DSFHN-HS	3*
ABB	OHF1C	2
	C361	3*
Eaton	C371	3*
	Flex Shaft CH	Special defeater lever
	SCH1 / SCH2	3
	SCOM	3
GE	SDOM	3
	STDA	3
	TDOM	3
	FDH10 / FDH20	2
	FHOH	2
Siemens	MFHM3RS / MFHM4X	4
Square D	9422 Type A1/A3/A9	3
Square D	9422 Type A2/A4/A10	3

Note, for configuration #2 an extra bolt/nut should be used beneath the single hole to prevent accidental rotation.

### 6-1/2" Cutout

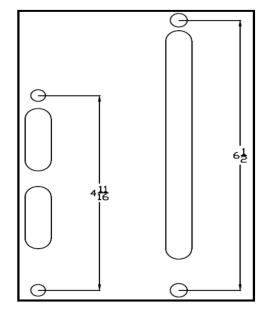
	Handle/Operator	Configuration
Rockwell / Allen Bradley	1494C (400 - 600A)	1
	1494F M2/S2	1
	1494V (400 - 600A)	1
ABB	K7FCH	2
	FHOHN	2
Siemens	MFHP3R / MFHP4X	4
	VBH2	2

\* Use hardware supplied by disconnect handle manufacturer.

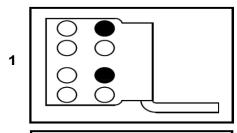
#### NOTE:

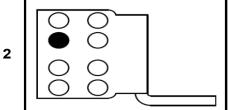
DOOR COMPONENTS SHOWN ON PAGE 4.

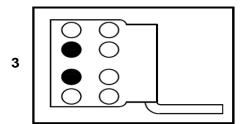
Rittal Corporation 1 Rittal Place Urbana, OH 43078

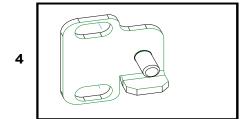


### **Configuration Options**



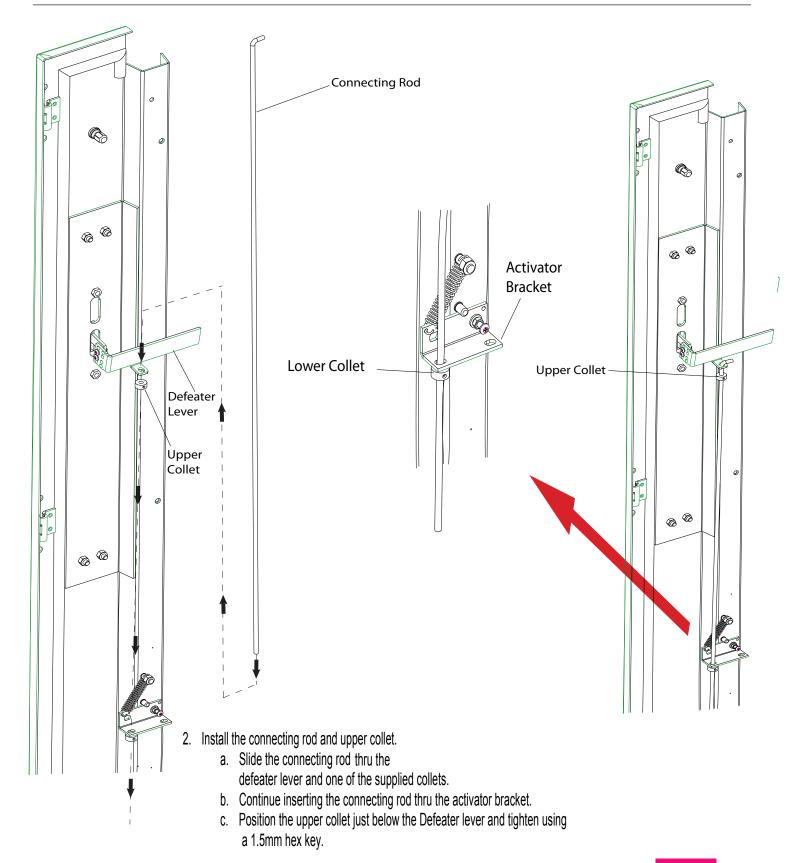






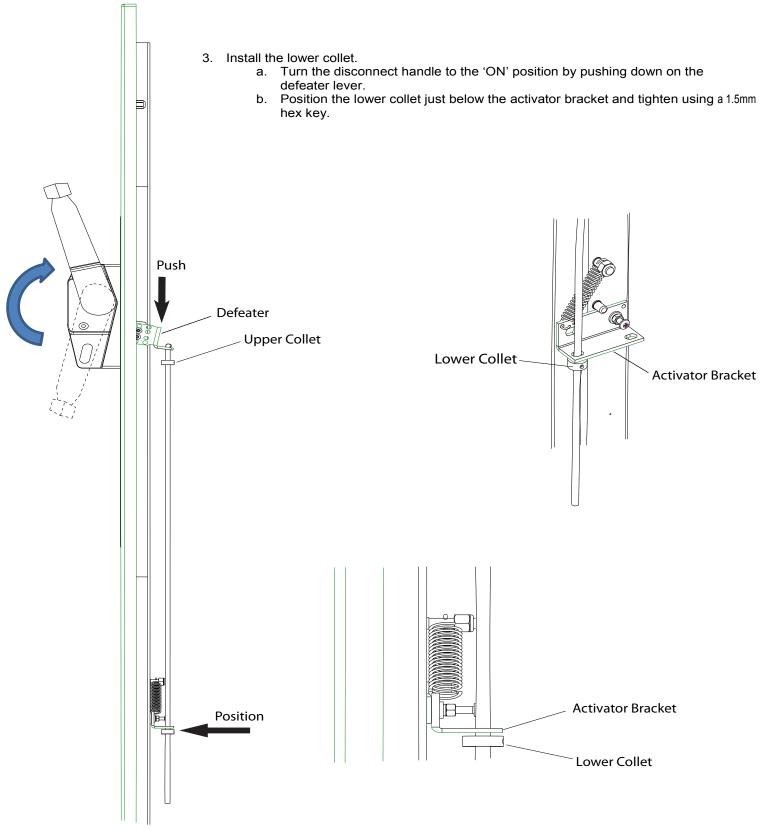


# Installing the connecting rod and upper collet



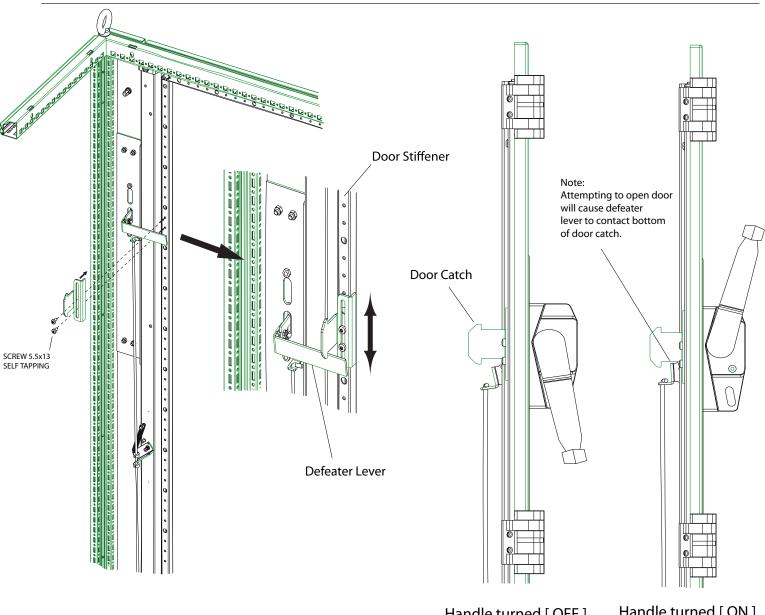


# Installing the lower collet





## Adjusting the door catch



Handle turned [ON] Handle turned [OFF]

- 4. Adjust the door catch.
  - a. The FMDC door should be closed and fully latched.
  - Assuming that there is access from the side of the enclosure for installation, the master door should be closed but NOT latched.
  - With the disconnect handle turned 'ON', position and tighten the door catch on the master door stiffener above the defeater lever such that it is effectively locking the main door and preventing it from opening.
  - Turning the handle 'OFF' should lower the defeater lever and allow the door to open.

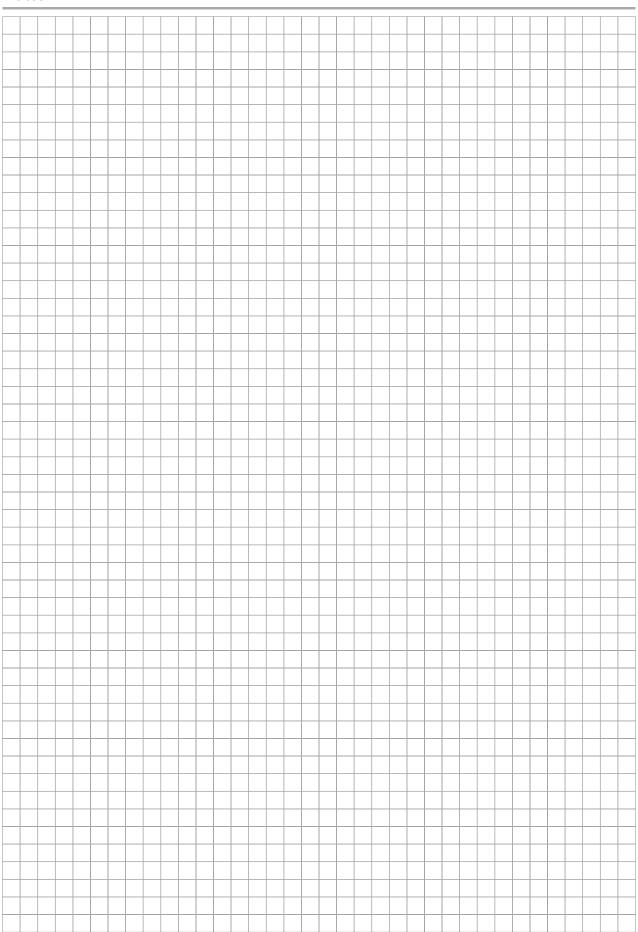


## **Testing and troubleshooting:**

- 1. Test the handle-lockrod engagement (Door open).
  - a. The FMDC Door should be closed and fully lactched.
  - b. The disconnect handle should be 'OFF'.
  - c. The Master Door should be open.
  - d. Attempt to turn the disconnect handle to the 'ON' position.
    - i. It should not allow this to happen.
  - e. If the handle is capable of turning on, the lower collet is positioned too high.
    - i. Position the lower collet slightly lower on the connecting rod and retest.
- Test the handle-lockrod engagement (Door closed).
  - a. The FMDC Door should be closed and fully latched.
  - b. The disconnect handle should be 'OFF'.
  - c. The Master Door should be closed and fully latched.
  - d. Attempt to turn the disconnect handle to the 'ON' position.
    - i. It should allow this to happen.
  - e. If the handle is incapable of turning on, the lower collet is positioned too low.
    - i. Position the lower collet slightly higher on the connecting rod and retest. After retest please go back to step 1.
- 3. Test the door lockout engagement. (After passing tests #1 and #2)
  - a. The FMDC Door should be closed and fully latched.
  - b. The disconnect handle should be 'OFF'.
  - c. The Master Door should be closed and fully latched.
  - d. Turn the disconnect handle to the 'ON' position.
  - e. Attempt to open the Master Door.
    - i. The defeater lever should engage the main door catch and lock the door.
  - f. If the main door opens the main door catch is positioned too high.
    - i. Position the main door catch lower on the main door stiffener and retest.



### Notes



# Rittal – The System.

### Faster – better – worldwide.

- Enclosures
- Power Distribution
- Climate Control
- IT Infrastructure
- Software & Services

The Rittal Corporation is the U.S. subsidiary of Rittal GmbH & Co. KG and manufactures the world's leading industrial and IT enclosures, racks and accessories, including climate control and power management systems for industrial, data center, outdoor and hybrid applications. For more information about Rittal and its products, please visit www.rittal-corp.com or call 1-800-477-4000.

**Rittal Corporation** 

1 Rittal Place • Urbana Ohio 43078 • USA

Phone: 937-399-0500 • Fax: 800-477-4003 • Toll-free: 800-477-4000

Email: rittal@rittal.us • Online: www.rittal.us

Rittal Systems Ltd.

6485 Ordan Drive • Mississauga Ontario L5T 1X2 • Canada

Phone: 905-795-0777 • Fax: 905-795-9548 • Toll-free: 800-399-0748

Email: marketing@rittal.ca • Online: www.rittal.ca

**ENCLOSURES** 

POWER DISTRIBUTION

**CLIMATE CONTROL** 

IT INFRASTRUCTURE

SOFTWARE & SERVICES