Transmission & Distribution
Material & Installation Specification

Hot Line Clamps and Riser Assembly

I. Quantity

The base bid shall include the indicated number of Hot Line Clamps and Risers of these types furnished and installed as hereinafter specified.

II. Material

A. The material shall be equal in quality, design, performance to that scheduled on drawing.

B. Hot line clamps shall be by manufactures listed on drawing or engineer approved equal.

C. Riser conductors shall be soft drawn stranded copper type XHHW-2 sized as shown on drawing for the application described.

III. Installation

A. The installation shall be as shown on drawing TDMIS-28.

B. Hot line clamps shall be installed using the manufacturer recommended tools and dies and with the number of crimps or foot-pounds of torque recommended.

C. Conductors shall be cleaned with a wire brush to a bright shine before applying clamps or stirrups.

D. Riser conductor shall be installed with adequate slack to allow easy removal and reinstallation of hot line claps with clamps stick but not so much slack that it sags onto other components or will be deflected by wind.

IV. Method of measurement

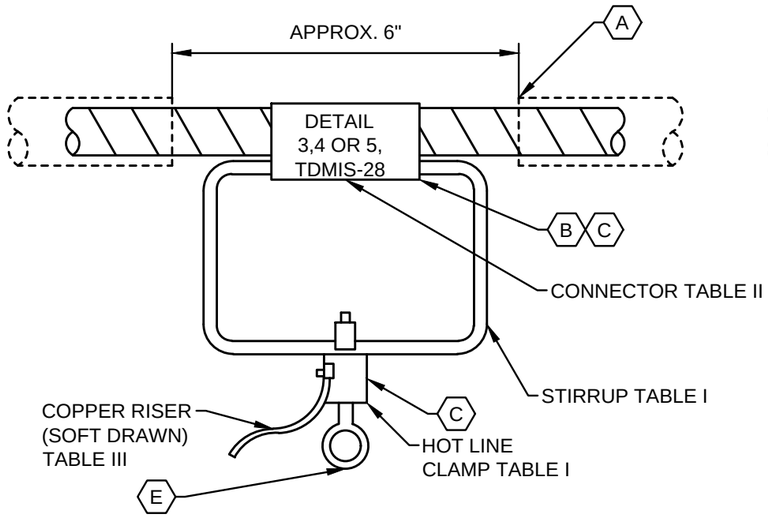
Shall be included with various modules as required for a complete and operational module, and shall include all hardware, risers, jumpers, connectors, hot line clamps, labor, equipment and miscellaneous required for a complete and operational device.

V. Basis of payment

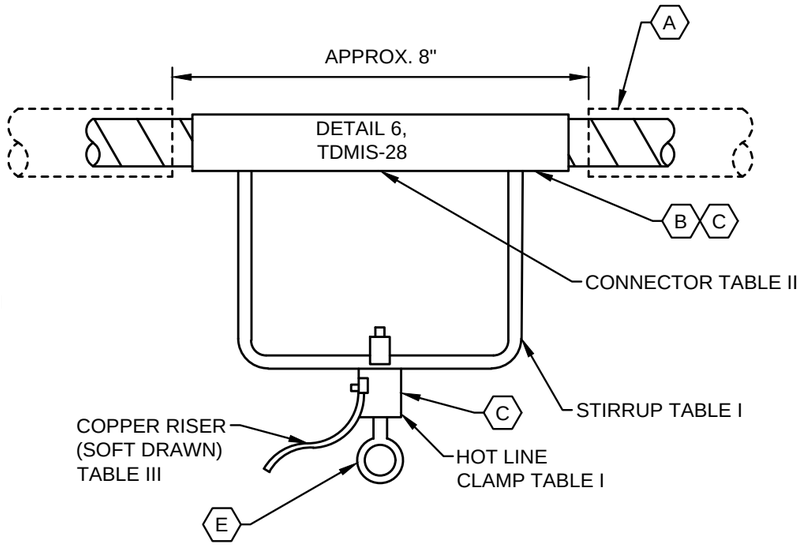
Items	Unit	Description
TDMIS-28	Two	Per single phase circuit
TDMIS-28	Three	Per three phase circuit

The pay items may also be required and included with other various modules.

CITY OF COLUMBUS DEPT. OF PUBLIC UTILITIES – DIVISION OF POWER		
HOT LINE CLAMPS AND RISER ASSEMBLY		
DRAWN BY: AEC	DATE: 01/01/2018	TDMIS-28
APPROVED: R. SPRITE		
	SHEET 1 of 3	



DETAIL 1
HOT LINE CLAMP



DETAIL 2
HOT LINE CLAMP

TABLE I

DETAIL	PRIMARY LINE TAP AMPACITY	STIRRUP F/COMPRESSION SONNECTORS		HOT LINE CALMP	
		CONDUCTOR	PART #	CLAMP AMPACITY	PART #
1	50 AMP	#4 S.D. COPPER STRANDED		150 AMP	
2	150 AMP	#2 S.D. COPPER STRANDED			
	300 AMP	1/0 S.D. COPPER STRANDED		300 AMP	

CODED NOTES:

(A) REMOVE WEATHERPROOF COVERING (WHEN PRESENT) AT POINTS SHOWN.

(B) CLEAN ALL CONDUCTOR THOROUGHLY WITH A STIFF WIRE BRUSH. BE SURE CONNECTOR AND HOT LINE CLAMP CONTACT SURFACES ARE CLEAN. CONSIDER CONNECTORS FACTORY PACKED WITH GREASE TO HAVE CLEAN CONTACT SURFACES WHEN RECEIVED. BEFORE INSTALLING HOT LINE CLAMP. COAT CONTACT SURFACES WITH GREASE.

(C) TO HELP PREVENT THE COPPER STIRRUP FROM LOOSENING IN SERVICE WHEN ALUMINUM CONNECTORS ARE USED, SLIGHTLY ROUGHEN ENDS WITH HAND PLIERS OR OTHER MEANS BEFORE COMPRESSING. AVOID NICKS OUTSIDE OF CONNECTOR ON STIRRUP SIDE.

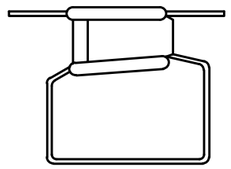
(D) TABLE III PROVIDES A LISTING OF COPPER RISERS AND THEIR RESPECTIVE AMPACITY CLASSES. EACH RISER CONDUCTOR IS CAPABLE OF PROVIDING THE AMPACITY LISTED FOR FULL RANGE AMBIENT AND LOAD FACTOR CONDITIONS.ENGINEERING SHOULD SELECT RISER CONDUCTORS BASED ON STANDARD PRACTICES IN CONJUNCTION WITH SOUND ENGINEERING JUDGMENT.

(E) JUMPERS, RISERS AND HOT LINE CLAMPS WITH STIRRUPS ARE TO BE INCLUDED WITH EACH ASSEMBLY TDMIS 26&27

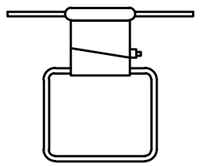
CITY OF COLUMBUS, OHIO
DEPT. OF PUBLIC UTILITIES - DIVISION OF POWER

HOT LINE CLAMP AND RISER ASSEMBLY

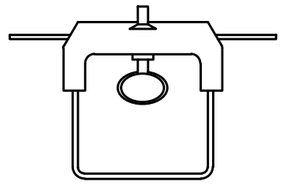
DRAWN BY: AEC	DATE: 01/01/2018	TDMIS-28
APPROVED: R. SPRITE		
SCALE: NTS	SHEET: 2 OF 3	



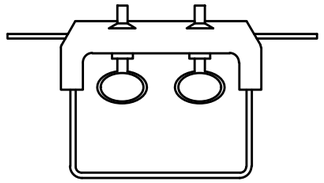
DETAIL 3
AMPACT



DETAIL 4
BOLTED



DETAIL 5
BOLTED 1 EYE



DETAIL 6
BOLTED 2 EYE

TABLE II

DETAIL	PRIMARY LINE TAP AMPACITY	STIRRUP (BAIL) SIZE	CONDUCTOR RANGE			PART #
			ALL ALUM	ACSR	COPPER	
3	50 AMPS	#2		#4-#2		
	150 AMPS			1/0-2/0		
				3/0-4/0		
	300 AMPS	1/0		336		
				477		
		2/0		795		
4	300 AMPS	2/0		336		
				556		
		2/0		795		
5	50 AMPS	#4 CU	#6-2/0	#8-2/0		
					#6-2/0	
6	300 AMPS	1/0	1/0-477	1/0-336		
		2/0	336-1033	336-795		

TABLE III

AMPACITY CLASS (MAX)	CONDUCTOR SIZE& STRANDING	PART #	INSULATION TYPE
100	4-7		XHHW-2
150	2-7		
200	1/0-7		
250	2/0-19		
300	4/0-19		
450	350-37		XHHW-2
600	500-37		
750	750-61		
900	1000-61		
100	4-SOL		XHHW-2
150	2-SOL		
200	1/0-10		
300	4/0-8		

CITY OF COLUMBUS, OHIO
DEPT. OF PUBLIC UTILITIES - DIVISION OF POWER

HOT LINE CLAMP AND RISER ASSEMBLY

DRAWN BY: AEC	DATE: 01/01/2018	TDMIS-28
APPROVED: R. SPRITE		
SCALE: NTS	SHEET: 3 OF 3	