

INSTALLATION INSTRUCTIONS

INSULATED ALUMINUM INLINE SPLICER

REDUCER CONNECTORS - CLEAR & BLACK

WARNING: FAILURE TO FOLLOW THE INSTALLATION INSTRUCTIONS SHOWN BELOW CAN CAUSE A CONDITION OF SEVERE CONNECTOR OVERHEATING AND RELATED HAZARDS.

"IISR" & "IISRB" TYPE SPLICE CONNECTORS ACCOMMODATE TWO CONDUCTORS IN THE FOLLOWING COMBINATIONS:
ALUMINUM TO ALUMINUM
ALUMINUM TO COPPER
COPPER TO COPPER

INSTALLATION PROCEDURE

1. SELECT PROPER IISR OR IISRB CONNECTOR SIZE FOR THE CONDUCTOR RANGE TO BE USED.
2. STRIP THE INSULATION TO LENGTH SPECIFIED IN TABLE FOR FULL INSERTION INTO THE CONNECTOR AND TO OBTAIN PROPER SCREW CONTACT. WHEN STRIPPING INSULATION, BE CAREFUL TO NOT NICK THE CONDUCTOR STRANDS. A PROPER INSULATION STRIPPING TOOL OR USE OF A PENCIL SHAVING METHOD IS RECOMMENDED.

WARNING: NICKING OF STRANDS WILL CAUSE A REDUCTION IN CURRENT CARRYING CAPACITY OF THE CONDUCTORS.

WARNING: CONDUCTOR MUST BE STRIPPED IMMEDIATELY PRIOR TO INSTALLATION.

3. CONDUCTOR SURFACE SHOULD BE THOROUGHLY CLEANED BY USE OF A STIFF WIRE BRUSH OR ABRASIVE CLOTH TO ABRASE SURFACE.
4. AFTER CONDUCTORS ARE PROPERLY PREPARED FOR INSTALLATION, INSERT CONDUCTORS INTO CONNECTOR BODY UNTIL THE CONDUCTOR CONTACTS THE SOLID CENTER BARRIER. THIS WILL ENSURE FULL CONTACT OF THE SET SCREW ONTO THE CONDUCTOR.
5. SET SCREWS SHALL BE TIGHTENED TO FINAL TORQUE VALUE SHOWN IN TIGHTENING TORQUE TABLE BELOW.

WARNING: FAILURE TO ACHIEVE PROPER TORQUE WILL RESULT IN CONNECTOR AND CONDUCTOR OVERHEATING.

TIGHTENING TORQUE VALUES FOR PENN-UNION INSULATED POWER BAR CONNECTORS			
CATALOG FAMILY	INTERNAL SOCKET SIZE ACROSS FLATS (IN)	TIGHTENING TORQUE (IN•LB)	CONDUCTOR INSULATION STRIP LENGTH (IN)
IISR-2 IISRB-2	5/32	90	3/4 (±1/16)
IISR-1/0 * IISRB-1/0 *	7/32	120	1 (±1/16)
IISR-250 * IISRB-250 *	5/16	275	1-3/16 (±1/16)
IISR-350 * IISRB-350 *	5/16	275	1-7/16 (±1/8)
IISR-500 * IISRB-500 *	3/8	500	1-3/4 (±1/8)
IISR-750 * IISRB-750 *	3/8	550	3-1/4 (±1/8)
IISR-1000 * IISRB-1000 *	1/2	800**	4-11/16 (±1/8)

*SUITABLE FOR USE ON LINE SIDE OF SERVICE EQUIPMENT, "SVC"

**SET SCREWS TO BE TORQUED FROM OUTER ENDS OF CONNECTOR TOWARDS THE CENTER

CONDUCTOR SIZE & STRANDING					
CATALOG FAMILY	CLASS B & C	CLASS G	CLASS H	CLASS I	CLASS K
IISR-2 IISRB-2	2 STR. - 14 SOL.	#4 (49/.0292) - #14 (49/.0092)	4# (133/.0177) - #9 (133/.0099)	#4 (105/.0201) - #6 (63/.0201)	#4 (420/.0100) - #9 (133/.0100)
IISR-1/0 IISRB-1/0	1/0 STR. - 14 SOL.	#1 (133/.0251) - #14 (49/.0092)	#1 (259/.0180) - #9 (133/.0099)	#1 (210/.0201) - #6 (63/.0201)	#1 (836/.0100) - #9 (133/.0100)
IISR-250 IISRB-250	250 MCM - 10 SOL.	3/0 (133/.0355) - #10 (49/.0146)	3/0 (259/.0255) - #9 (133/.0099)	3/0 (418/.0201) - #6 (63/.0201)	3/0 (1666/.0100) - #9 (133/.0100)
IISR-350 IISRB-350	350 MCM - 10 SOL.	250 MCM (259/.0311) - #10 (49/.0146)	250 MCM (427/.0242) - #9 (133/.0099)	250 MCM (637/.0201) - #6 (63/.0201)	250 MCM (2499/.0100) - #9 (133/.0100)
IISR-500 IISRB-500	500 MCM - 6 STR.	350 MCM (259/.0368) - #6 (49/.0231)	350 MCM (427/.0286) - #6 (133/.0140)	350 MCM (882/.0201) - #6 (63/.0201)	350 MCM (3458/.0100) - #6 (266/.0100)
IISR-750 IISRB-750	750 MCM - 250 MCM	500 MCM (259/.0439) - 250 MCM (259/.0311)	500 MCM (427/.0342) - 250 MCM (427/.0242)	500 MCM (1225/.0201) - 250 MCM (637/.0201)	500 MCM (5054/.0100) - 250 MCM (2499/.0100)
IISR-1000 IISRB-1000	1000 MCM - 500 MCM	600 MCM (427/.0375) - 500 MCM (259/.0439)	600 MCM (703/.0292) - 500 MCM (427/.0242)	600 MCM (1470/.0201) - 500 MCM (1225/.0201)	600 MCM (5985/.0100) - 500 MCM (5054/.0100)
					DIESEL LOCOMOTIVE CABLE (DLO)
					#4 (105/.0201) - #14 (19/.0142)
					#1 (225/.0201) - #14 (19/.0142)
					3/0 (450/.0201) - #10 (27/.0201)
					4/0 (550/.0201) - #10 (27/.0201)
					373 MCM (925/.0201) - #6 (61/.0201)
					535 MCM (1325/.0201) - 250 MCM (650/.0201)
					646 MCM (1600/.0201) - 535 MCM (1325/.0201)

PROPER FUNCTIONING OF PENN-UNION CO. LLC. "IISR" OR "IISRB" SERIES INSULATED INLINE SPICER REDUCERS IS CONTINGENT UPON INSTALLATION OF THIS PRODUCT IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE AND THE ABOVE INSTRUCTIONS. ANY APPLICATION THAT IS NOT IN ACCORDANCE IS CONSIDERED A MISUSE OF THE PRODUCT. READ INSTRUCTIONS CAREFULLY BEFORE MAKING ANY ASSEMBLIES.

LISTED



WIRE CONNECTOR



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9Y81-97463-01
REV. 9