

POWER CONNECTORS De-1

STRAIGHT COUPLER TYPE ETT

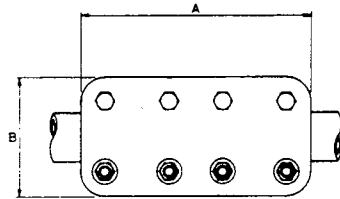


FIG 1

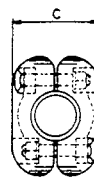


FIG 2

CAT. NO.	IPS SIZE	FIG. NO.	DIMENSIONS (INCHES)			BOLT SIZE
			A	B	C	
90328	2	1	7-1/2	5-1/8	4	1/2
90329	2-1/2	1	8-1/2	6	4-5/8	5/8
90330	3	1	8-1/2	6-5/8	4-7/8	5/8
90331	3-1/2	1	9-1/2	7-1/8	5-3/8	5/8
90332	4	1	9-1/2	7-5/8	6	5/8
90333	5	2	11-1/2	8-3/4	7-1/8	5/8
90334	6	2	12-1/2	9-3/4	8-1/2	5/8

Example for Ordering: #90332 Royal Type ETT straight coupler for 4" IPS aluminum.

De-Coupler

ROYAL SWITCHGEAR MANUFACTURING CO.

3995 Pine Lane SE • Bessemer, AL 35023 • (205) 426-4090 • FAX (205) 426-4095

De-2 POWER CONNECTORS

REDUCER COUPLER

TYPE ETRT

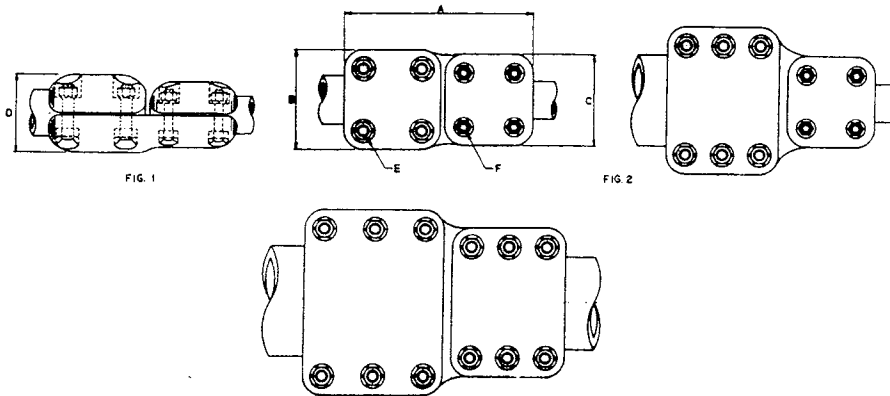


FIG. 3

CAT. NO.	IPS SIZE		FIG. NO.	DIMENSIONS (INCHES)						BOLT SIZE	
	RUN	TAP		A	B	C	D	E	F		
90342	2-1/2	2	1	8-1/4	6	5-1/8	4-5/8	5/8	1/2		
90343	3	2	1	8-1/4	6-5/8	5-1/8	4-7/8	5/8	1/2		
90344	3	2-1/2	1	8-3/4	6-5/8	6	4-7/8	5/8	5/8		
90345	3-1/2	2	1	8-3/4	7-1/8	5-1/8	5-3/8	5/8	1/2		
90346	3-1/2	2-1/2	1	9-1/4	7-1/8	6	5-3/8	5/8	5/8		
90347	3-1/2	3	1	9-1/4	7-1/8	6-5/8	5-3/8	5/8	5/8		
90348	4	2	1	8-3/4	7-5/8	5-1/8	6	5/8	1/2		
90349	4	2-1/2	1	9-1/4	7-5/8	6	6	5/8	5/8		
90350	4	3	1	9-1/4	7-5/8	6-5/8	6	5/8	5/8		
90351	4	3-1/2	1	9-3/4	7-5/8	7-1/8	6	5/8	5/8		
90352	5	2	2	9-3/4	8-3/4	5-1/8	7-1/8	5/8	1/2		
90353	5	2-1/2	2	10-1/4	8-3/4	6	7-1/8	5/8	5/8		
90354	5	3	2	10-1/4	8-3/4	6-5/8	7-1/8	5/8	5/8		
90355	5	3-1/2	2	10-3/4	8-3/4	7-1/8	7-1/8	5/8	5/8		
90356	5	4	2	10-3/4	8-3/4	7-5/8	7-1/8	5/8	5/8		
90357	6	2	2	10-1/4	9-3/4	5-1/8	8-1/2	5/8	1/2		
90358	6	2-1/2	2	10-3/4	9-3/4	6	8-1/2	5/8	5/8		
90359	6	3	2	10-3/4	9-3/4	6-5/8	8-1/2	5/8	5/8		
90360	6	3-1/2	2	11-1/4	9-3/4	7-1/8	8-1/2	5/8	5/8		
90361	6	4	2	11-1/4	9-3/4	7-5/8	8-1/2	5/8	5/8		
90362	6	5	3	12-1/4	9-3/4	8-3/4	8-1/2	5/8	5/8		

Example for Ordering: #90353 Royal Type ETRT reducer coupler for 5" IPS aluminum run to 2-1/2" IPS aluminum tap.

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POWER CONNECTORS De-3

ELBOW COUPLER

TYPES ETT-90 AND ETT-45

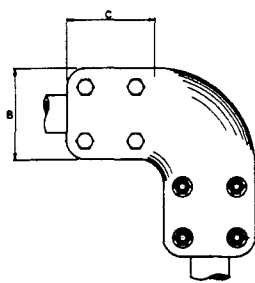


FIG. 1

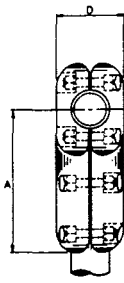


FIG. 2

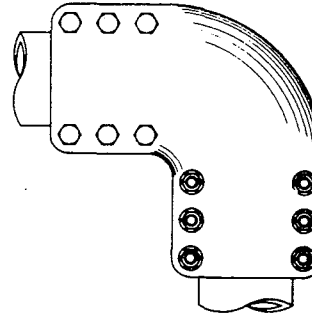


FIG. 3

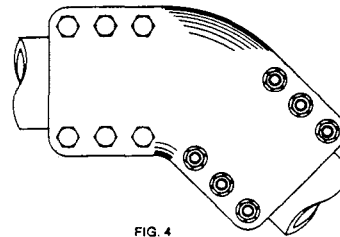


FIG. 4

De-Coupler

TYPE ETT-90

CAT. NO.	IPS SIZE	FIG. NO.	DIMENSIONS (INCHES)				BOLT SIZE
			A	B	C	D	
90363	2	1	6-7/8	5-1/8	3-3/4	4	1/2
90364	2-1/2	1	7-3/4	6	4-1/4	4-5/8	5/8
90365	3	1	8-1/8	6-5/8	4-1/4	4-7/8	5/8
90366	3-1/2	1	8-7/8	7-1/8	4-3/4	5-3/8	5/8
90367	4	1	9-1/8	7-5/8	4-3/4	6	5/8
90368	5	2	10-5/8	8-3/4	5-3/4	7-1/8	5/8
90369	6	2	11-5/8	9-3/4	6-1/4	8-1/2	5/8

TYPE ETT-45

90370	2	3	-	5-1/8	3-3/4	4	1/2
90371	2-1/2	3	-	6	4-1/4	4-5/8	5/8
90372	3	3	-	6-5/8	4-1/4	4-7/8	5/8
90373	3-1/2	3	-	7-1/8	4-3/4	5-3/8	5/8
90374	4	3	-	7-5/8	4-3/4	6	5/8
90375	5	4	-	8-3/4	5-3/4	7-1/8	5/8
90376	6	4	-	9-3/4	6-1/4	8-1/2	5/8

Example for Ordering: #90375 Royal Type ETT-45 elbow coupler for 5" IPS aluminum.

ROYAL SWITCHGEAR MANUFACTURING CO.

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De-4 POWER CONNECTORS

EXPANSION COUPLER

TYPE ETLT

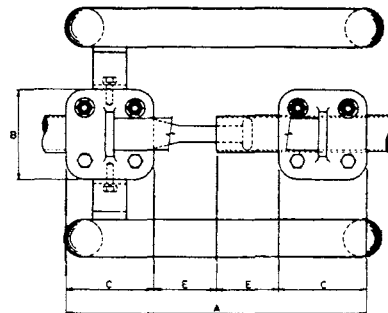


FIG 1

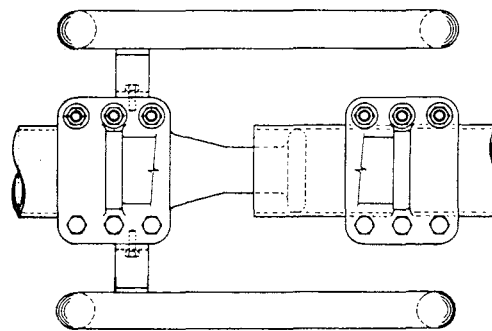
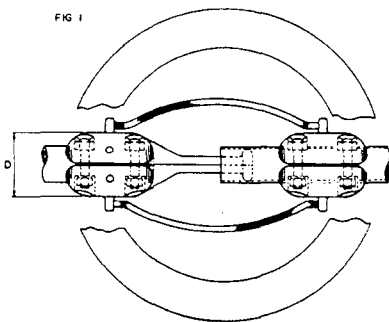


FIG 2

CAT. NO.	IPS SIZE	FIG. NO.	DIMENSIONS (INCHES)					BOLT SIZE
			A	B	C	D	E	
90335	2	1	13-1/2	5-1/8	3-3/4	4	3	1/2
90336	2-1/2	1	14-1/2	6	4-1/4	4-5/8	3	5/8
90337	3	1	15-1/2	6-5/8	4-1/4	4-7/8	3-1/2	5/8
90338	3-1/2	1	16-1/2	7-1/8	4-3/4	5-3/8	3-1/2	5/8
90339	4	1	17-1/2	7-5/8	4-3/4	6	4	5/8
90340	5	2	19-1/2	8-3/4	5-3/4	7-1/8	4	5/8
90341	6	2	20-1/2	9-3/4	6-1/4	8-1/2	4	5/8

NOTE:

1. For operation above 550 kv, special 4" IPS aluminum-tubing corona rings must be used. Add suffix -XV to catalog number.
2. Dimensions A and E are mean dimensions for installation purposes.
3. Add suffix -EH for extra heavy pipe.

Example for Ordering: #90338 Royal Type ETLT expansion coupler for 3-1/2" IPS aluminum

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POWER CONNECTORS De-5

END CONNECTOR TYPE ETRC

De-Coupler

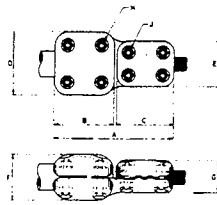


FIG 1

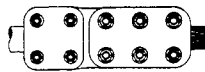


FIG 2

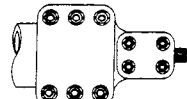


FIG 3

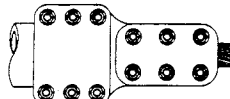


FIG 4

CAT. NO.	IPS RUN	CONDUCTOR SIZE		FIG. NO.	DIMENSIONS (INCHES)								BOLT SIZE	
		CABLE TAP (MCM)			A	B	C	D	E	F	G	H	J	
		AL	ACSR											
90377	2	715.5-1033.5	636 - 954	1	8	3-3/4	4	5-1/8	4	4	2-7/8	1/2	1/2	
90378	2	954-1431	795 -1272	1	8-1/4	3-3/4	4-1/4	5-1/8	4-1/4	4	3	1/2	1/2	
90379	2	1272-1750	1113 -1590	1	8-1/2	3-3/4	4-1/2	5-1/8	4-3/8	4	3-1/4	1/2	1/2	
90380	2	1590-2000	1,453*-1,630*	1	9	3-3/4	5	5-1/8	4-7/8	4	3-3/4	1/2	5/8	
90381	2	2000-2500	1,630*-1,823*	1	9-1/4	3-3/4	5-1/4	5-1/8	5	4	4	1/2	5/8	
90382	2	2500-3000	1,823*-1,998*	1	9-1/2	3-3/4	5-1/2	5-1/8	5-1/8	4	4-1/4	1/2	5/8	
90383	2	3000-3500	1,998*-2,158*	2	10	3-3/4	6	5-1/8	5-3/8	4	4-1/2	1/2	5/8	
90384	2-1/2	715.5-1033.5	636 - 954	1	8-1/2	4-1/4	4	6	4	4-5/8	2-7/8	5/8	1/2	
90385	2-1/2	954-1431	795 -1272	1	8-3/4	4-1/4	4-1/4	6	4-1/4	4-5/8	3	5/8	1/2	
90386	2-1/2	1272-1750	1113 -1590	1	9	4-1/4	4-1/2	6	4-3/8	4-5/8	3-1/4	5/8	1/2	
90387	2-1/2	1590-2000	1,453*-1,630*	1	9-1/2	4-1/4	5	6	4-7/8	4-5/8	3-3/4	5/8	5/8	
90388	2-1/2	2000-2500	1,630*-1,823*	1	9-3/4	4-1/4	5-1/4	6	5	4-5/8	4	5/8	5/8	
90389	2-1/2	2500-3000	1,823*-1,998*	1	10	4-1/4	5-1/2	6	5-1/8	4-5/8	4-1/4	5/8	5/8	
90390	2-1/2	3000-3500	1,998*-2,158*	2	10-1/2	4-1/4	6	6	5-3/8	4-5/8	4-1/2	5/8	5/8	
90391	3	715.5-1033.5	636 - 954	1	8-1/2	4-1/4	4	6-5/8	4	4-7/8	2-7/8	5/8	1/2	
90392	3	954-1431	795 -1272	1	8-3/4	4-1/4	4-1/4	6-5/8	4-1/4	4-7/8	3	5/8	1/2	
90393	3	1272-1750	1113 -1590	1	9	4-1/4	4-1/2	6-5/8	4-3/8	4-7/8	3-1/4	5/8	1/2	
90394	3	1590-2000	1,453*-1,630*	1	9-1/2	4-1/4	5	6-5/8	4-7/8	4-7/8	3-3/4	5/8	5/8	
90395	3	2000-2500	1,630*-1,823*	1	9-3/4	4-1/4	5-1/4	6-5/8	5	4-7/8	4	5/8	5/8	
90396	3	2500-3000	1,823*-1,998*	1	10	4-1/4	5-1/2	6-5/8	5-1/8	4-7/8	4-1/4	5/8	5/8	
90397	3	3000-3500	1,998*-2,158*	2	10-1/2	4-1/4	6	6-5/8	5-3/8	4-7/8	4-1/2	5/8	5/8	
90398	3-1/2	715.5-1033.5	636 - 954	1	5	4-3/4	4	7-1/8	4	5-3/8	2-7/8	5/8	1/2	
90399	3-1/2	954-1431	795 -1272	1	9-1/4	4-3/4	4-1/4	7-1/8	4-1/4	5-3/8	3	5/8	1/2	
90400	3-1/2	1272-1750	1113 -1590	1	9-1/2	4-3/4	4-1/2	7-1/8	4-3/8	5-3/8	3-1/4	5/8	1/2	
90401	3-1/2	1590-2000	1,453*-1,630*	1	10	4-3/4	5	7-1/8	4-7/8	5-3/8	3-3/4	5/8	5/8	
90402	3-1/2	2000-2500	1,630*-1,823*	1	10-1/4	4-3/4	5-1/4	7-1/8	5	5-3/8	4	5/8	5/8	
90403	3-1/2	2500-3000	1,823*-1,998*	1	10-1/2	4-3/4	5-1/2	7-1/8	5-1/8	5-3/8	4-1/4	5/8	5/8	
90404	3-1/2	3000-3500	1,998*-2,158*	2	11	4-3/4	6	7-1/8	5-3/8	5-3/8	4-1/2	5/8	5/8	
90405	4	715.5-1033.5	636 - 954	1	9	4-3/4	4	7-5/8	4	6	2-7/8	5/8	1/2	
90406	4	954-1431	795 -1272	1	9-1/4	4-3/4	4-1/4	7-5/8	4-1/4	6	3	5/8	1/2	
90407	4	1272-1750	1113 -1590	1	9-1/2	4-3/4	4-1/2	7-5/8	4-3/8	6	3-1/4	5/8	1/2	
90408	4	1590-2000	1,453*-1,630*	1	10	4-3/4	5	7-5/8	4-7/8	6	3-3/4	5/8	5/8	
90409	4	2000-2500	1,630*-1,823*	1	10-1/4	4-3/4	5-1/4	7-5/8	5	6	4	5/8	5/8	
90410	4	2500-3000	1,823*-1,998*	1	10-1/2	4-3/4	5-1/2	7-5/8	5-1/8	6	4-1/4	5/8	5/8	
90411	4	3000-3500	1,998*-2,158*	2	11	4-3/4	6	7-5/8	5-3/8	6	4-1/2	5/8	5/8	
90412	5	715.5-1033.5	636 - 954	3	10	5-3/4	4	8-3/4	4	7-1/8	2-7/8	5/8	1/2	
90413	5	954-1431	795 -1272	3	10-1/4	5-3/4	4-1/4	8-3/4	4-1/4	7-1/8	3	5/8	1/2	
90414	5	1272-1750	1113 -1590	3	10-1/2	5-3/4	4-1/2	8-3/4	4-3/8	7-1/8	3-1/4	5/8	1/2	
90415	5	1590-2000	1,453*-1,630*	3	11	5-3/4	5	8-3/4	4-7/8	7-1/8	3-3/4	5/8	5/8	
90416	5	2000-2500	1,630*-1,823*	3	11-1/4	5-3/4	5-1/4	8-3/4	5	7-1/8	4	5/8	5/8	
90417	5	2500-3000	1,823*-1,998*	3	11-1/2	5-3/4	5-1/2	8-3/4	5-1/8	7-1/8	4-1/4	5/8	5/8	
90418	5	3000-3500	1,998*-2,158*	4	12	5-3/4	6	8-3/4	5-3/8	7-1/8	4-1/2	5/8	5/8	
90419	6	715.5-1033.5	636 - 954	3	10-1/2	6-1/4	4	9-3/4	4	8-1/2	2-7/8	5/8	1/2	
90420	6	954-1431	795 -1272	3	10-3/4	6-1/4	4-1/4	9-3/4	4-1/4	8-1/2	3	5/8	1/2	
90421	6	1272-1750	1113 -1590	3	11	6-1/4	4-1/2	9-3/4	4-3/8	8-1/2	3-1/4	5/8	1/2	
90422	6	1590-2000	1,453*-1,630*	3	11-1/2	6-1/4	5	9-3/4	4-7/8	8-1/2	3-3/4	5/8	5/8	
90423	6	2000-2500	1,630*-1,823*	3	11-3/4	6-1/4	5-1/4	9-3/4	5	8-1/2	4	5/8	5/8	
90424	6	2500-3000	1,823*-1,998*	3	12	6-1/4	5-1/2	9-3/4	5-1/8	8-1/2	4-1/4	5/8	5/8	
90425	6	3000-3500	1,998*-2,158*	4	12-1/2	6-1/4	6	9-3/4	5-3/8	8-1/2	4-1/2	5/8	5/8	

Example for Ordering: #90398 Royal Type ETRC end connector for 3-1/2" IPS aluminum to 636-954 MCM ACSR.

CABLE DIA. EQUIVALENTS

MCM	Inches
715.5-1033.5	.974-1.196
954-1431	1.126-1.382
1272-1750	1.297-1.545

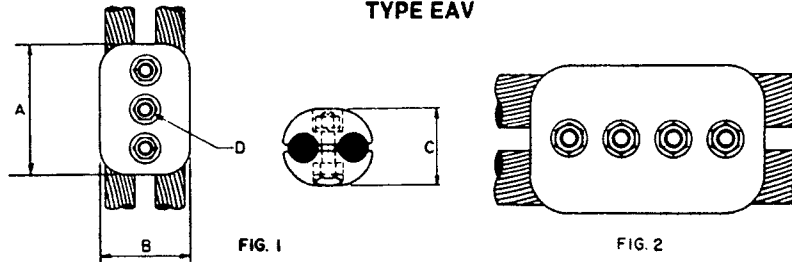
ROYAL SWITCHGEAR MANUFACTURING CO.

3995 Pine Lane SE • Bessemer, AL 35023 • (205) 426-4090 • FAX (205) 426-4095

De-6 POWER CONNECTORS

CABLE COUPLER

TYPE EAV



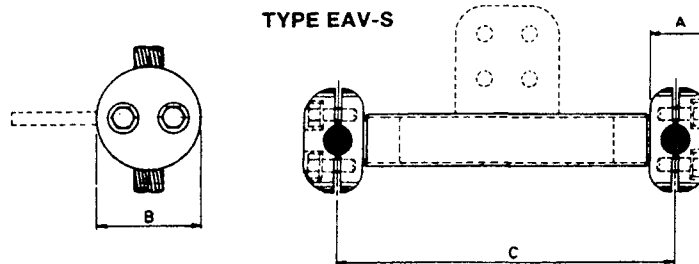
CAT. NO.	CONDUCTOR SIZE (MCM)		FIG. NO.	DIMENSIONS (INCHES)			BOLT SIZE
	AL	ACSR		A	B	C	
90426	715.5-1033.5	636 - 954	1	5	3-1/2	2-7/8	1/2
90427	954-1431	795 -1272	1	5	4	3	1/2
90428	1272-1750	1113 -1590	1	5	4-3/8	3-1/4	1/2
90429	1590-2000	1,453"-1,630"	1	6	4-5/8	3-3/4	5/8
90430	2000-2500	1,630"-1,823"	1	6	5	4	5/8
90431	2500-3000	1,823"-1,998"	1	6	5-3/8	4-1/4	5/8
90432	3000-3500	1,998"-2,158"	2	7-3/4	5-3/4	4-1/2	5/8

CABLE DIA. EQUIVALENTS

MCM	Inches
715.5-1033.5	.974-1.196
954-1431	1.126-1.382
1272-1750	1.297-1.545

Example for Ordering: #90427 Royal Type EAV cable coupler for 795-1272 MCM ACSR.

TYPE EAV-S



CAT. NO.	CONDUCTOR SIZE (MCM)		DIMENSIONS (INCHES)			BOLT SIZE
	AL	ACSR	A	B	C	
90433	715.5-1033.5	636 - 954		4	2-7/8	1/2
90434	954-1431	795 -1272	AS	4-1/4	3	1/2
90435	1272-1750	1113 -1590	REQUIRED	4-3/8	3-1/4	1/2
90436	1590-2000	1,453"-1,630"	CUSTOMER	4-7/8	3-3/4	5/8
90437	2000-2500	1,630"-1,823"	TD	5	4	5/8
90438	2500-3000	1,823"-1,998"	SPECIFY	5-1/8	4-1/4	5/8
90439	3000-3500	1,998"-2,158"		5-3/8	4-1/2	5/8

CABLE DIA. EQUIVALENTS

MCM	Inches
715.5-1033.5	.974-1.196
954-1431	1.126-1.382
1272-1750	1.297-1.545

Example for Ordering: #90435 Royal Type EAV-S cable spacer for 1113-1590 MCM ACSR, A = 12".

Add suffix -N3 to catalog number when 3" NEMA pad is required.
Add suffix -N4 to catalog number when 4" NEMA pad is required.

ROYAL SWITCHGEAR MANUFACTURING CO.

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