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# Distribution Design Catalogue

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## **High Voltage Hendrix**

### **Section 01B (HX)**

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ABN 18540492861

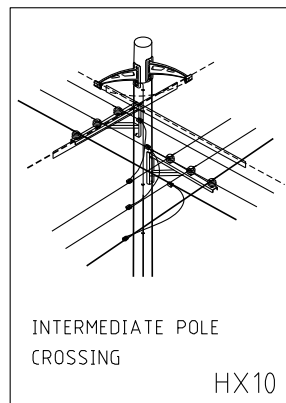
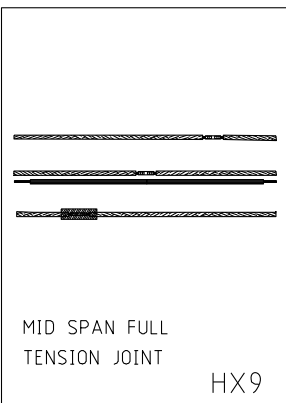
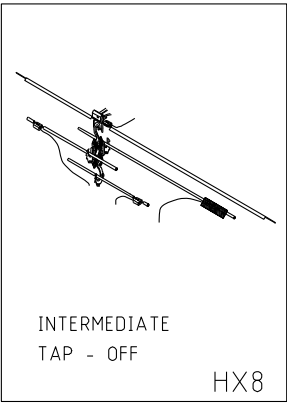
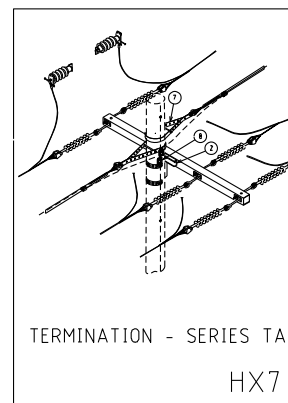
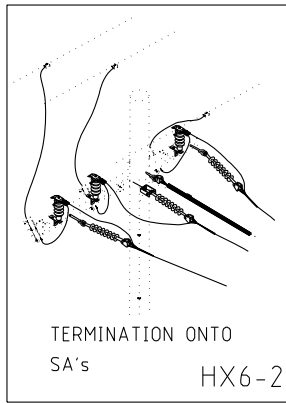
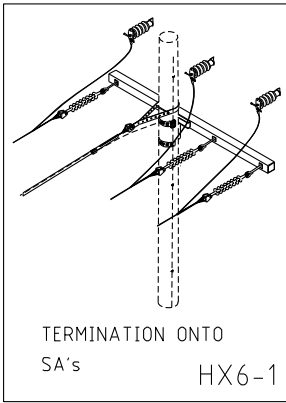
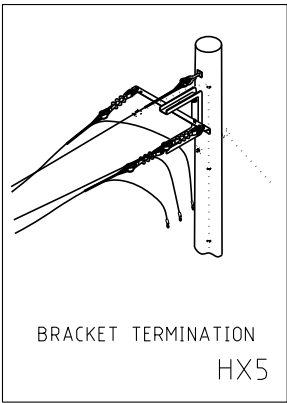
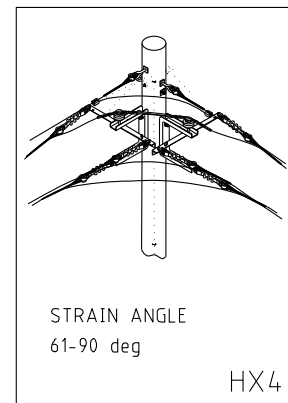
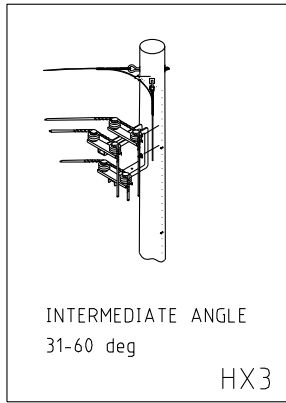
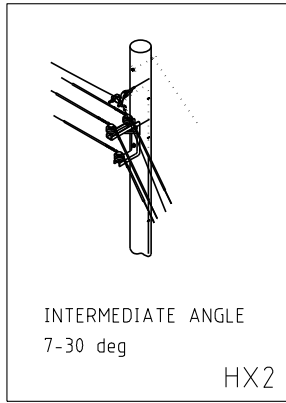
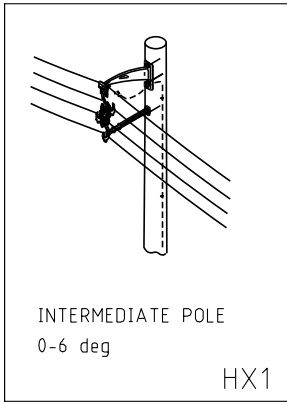
## HX Drawings Revision List

CU	Date	Revision	Description of Revision
	Feb 2009		Original issue
	Dec 2009		Revised Format
	Jul 2014		Refer to Amendment L1st
	Jan 2015		Refer to Amendment L1st
	Mar 2015		Refer to Amendment L1st
	Aug 2015		Refer to Amendment L1st
	Sept 2015		Refer to Amendment L1st
	June 2016		Refer to Amendment L1st
	Dec 2019		Refer to Amendment L1st

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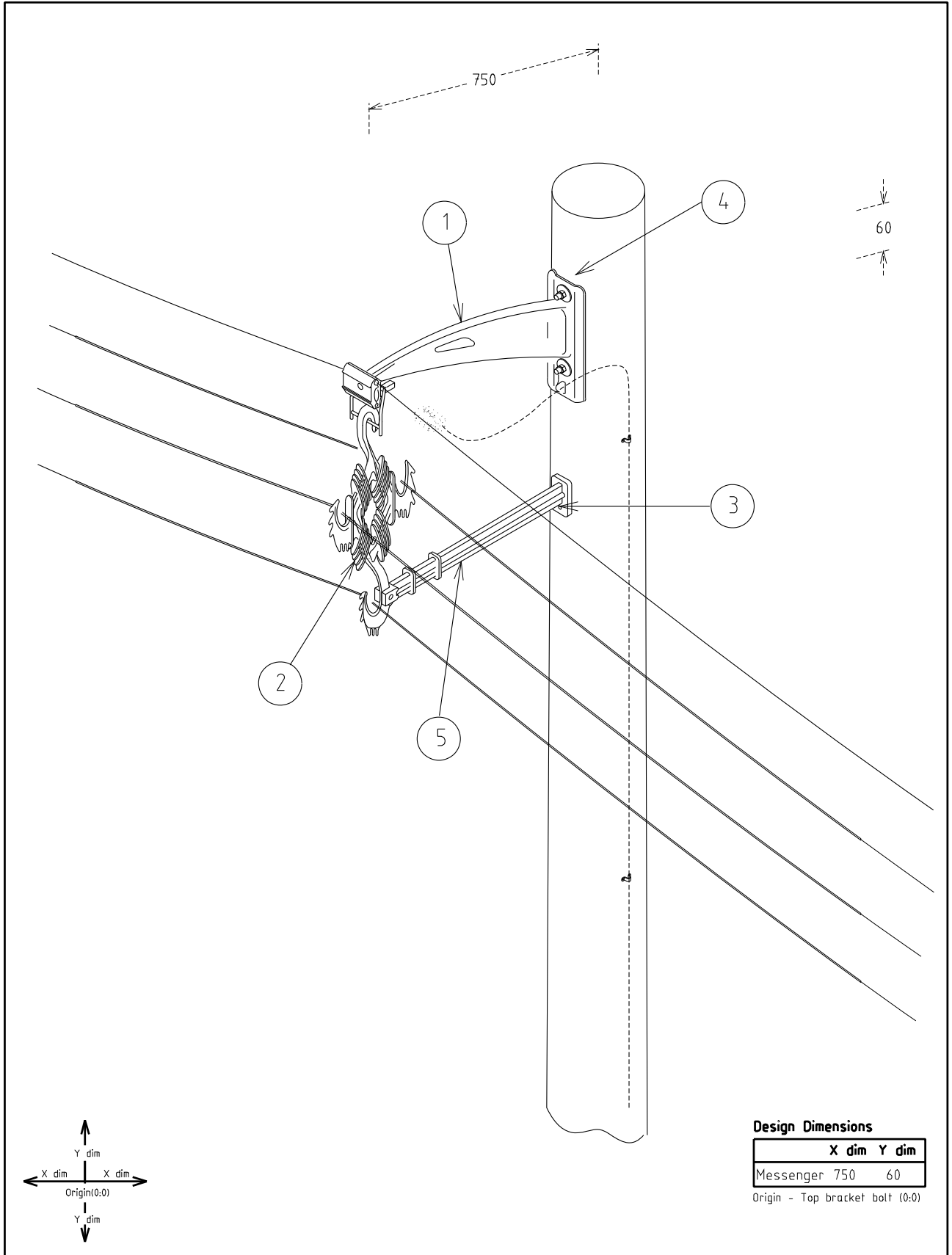


				COMPATIBLE UNIT		DISTRIBUTION DESIGN CATALOGUE		westernpower	
				TITLE		DRAWN: JRR		DATE: 11-04-2014	
				HX COMPATIBLE UNITS		ORIGINATED: SCALE: NTS		ORG. No.	
						CHECKED: REE		HX-INDEX	
						APPROVED: GRANT STACY		REV. B	
REV	DATE	DESCRIPTION	DRG.	CHKD.	APRD.			SHT.	
B	01.07.16	FORMAT CHANGED	JC	REE	GS				
A	03.02.09	ORIGINAL ISSUE							



## High Voltage Hendrix Conductor, CU List

CU	Description
HX1_I	HENDRIX Intermediate 0°-2°
HX2_IA	HENDRIX Intermediate Angle 3°-30°
HX3_IA	HENDRIX Intermediate Angle 31° -60°
HX4_SA_150	HENDRIX Strain Angle 61°-90°
HX5_T_150	HENDRIX Termination
HX6_1_TSA150	HENDRIX Termination on Surge Arresters
HX6_2_TSA150	HENDRIX Termination on Surge Arresters w/o X-arm
HX7_TST150	HENDRIX Termination Series Tap Terminated Messenger Wire
HX8_ITO	HENDRIX Intermediate Tap-off
HX9_150	HENDRIX Mid span full tension joint
HX10_IX	HENDRIX Intermediate pole crossing



**Design Dimensions**

	X dim	Y dim
Messenger	750	60

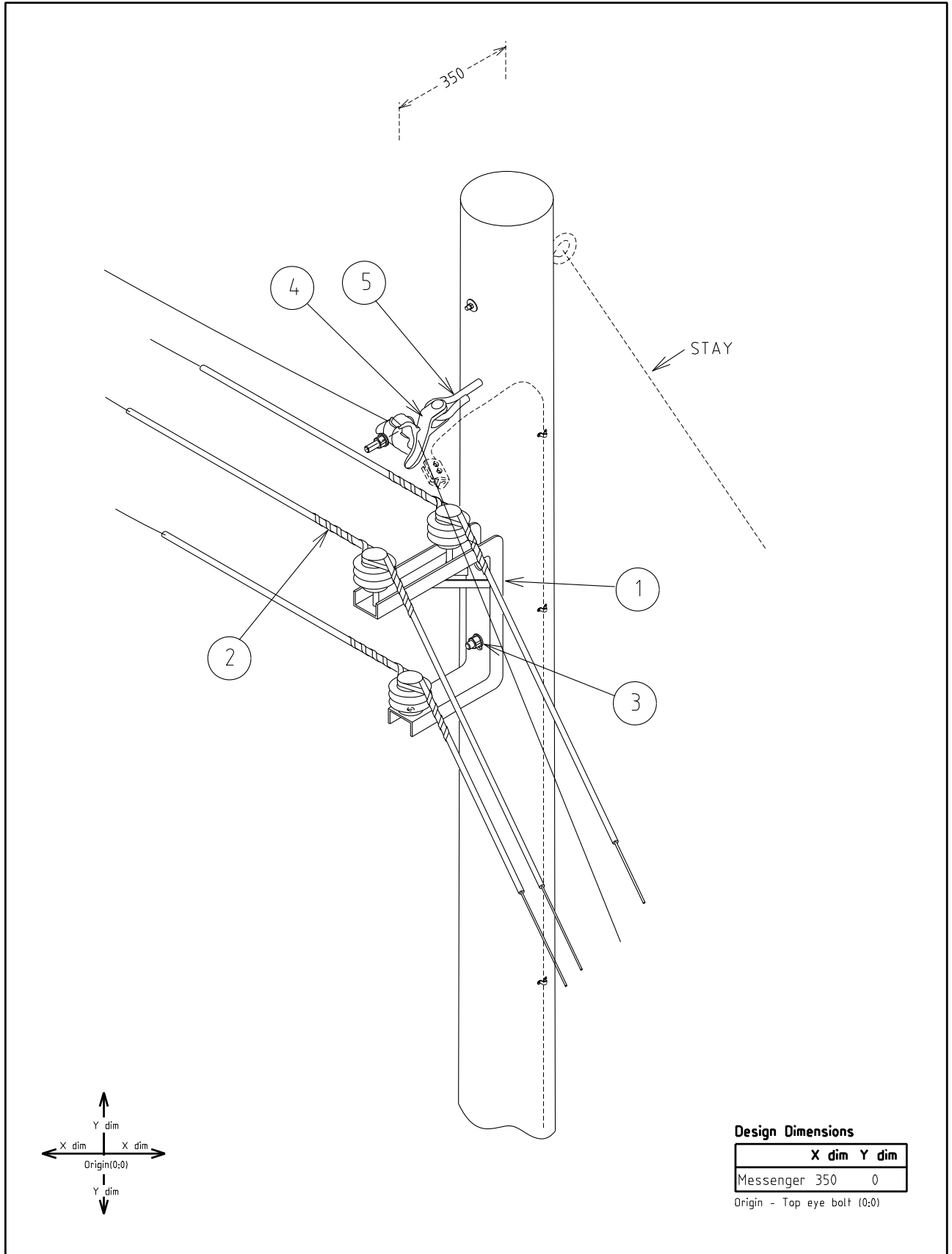
Origin - Top bracket bolt (0:0)

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						CHECKED: REE		DRG. No. HX01	
						APPROVED: GRANT STACY		REV. A	
A	11.04.14	ORIGINAL ISSUE	DESCRIPTION	ORGO.	CHKD.	APRD.			SHT.
REV	DATE							A	



CU	CU Description
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HX1_I		HENDRIX Intermediate 0°-2°			
ITEM NUMBER	STOCK CODE	DESCRIPTION	QTY ROD	UNIT OF MEASURE	REMARKS
1	IC0094	Hendrix Intermediate Bracket	1	ea	
2	IC0091	Hendrix Spacer 46kV	1	ea	
3	AS1443	Coach Screw, Steel, Galv, M12 100mm	1	ea	
4	AB6733	Pole bolt M16 x 400mm with washers	2	ea	
5	IC0093	Anti-Sway Bar	1	ea	



**Design Dimensions**

X dim	Y dim
Messenger 350	0

Origin - Top eye bolt (0:0)

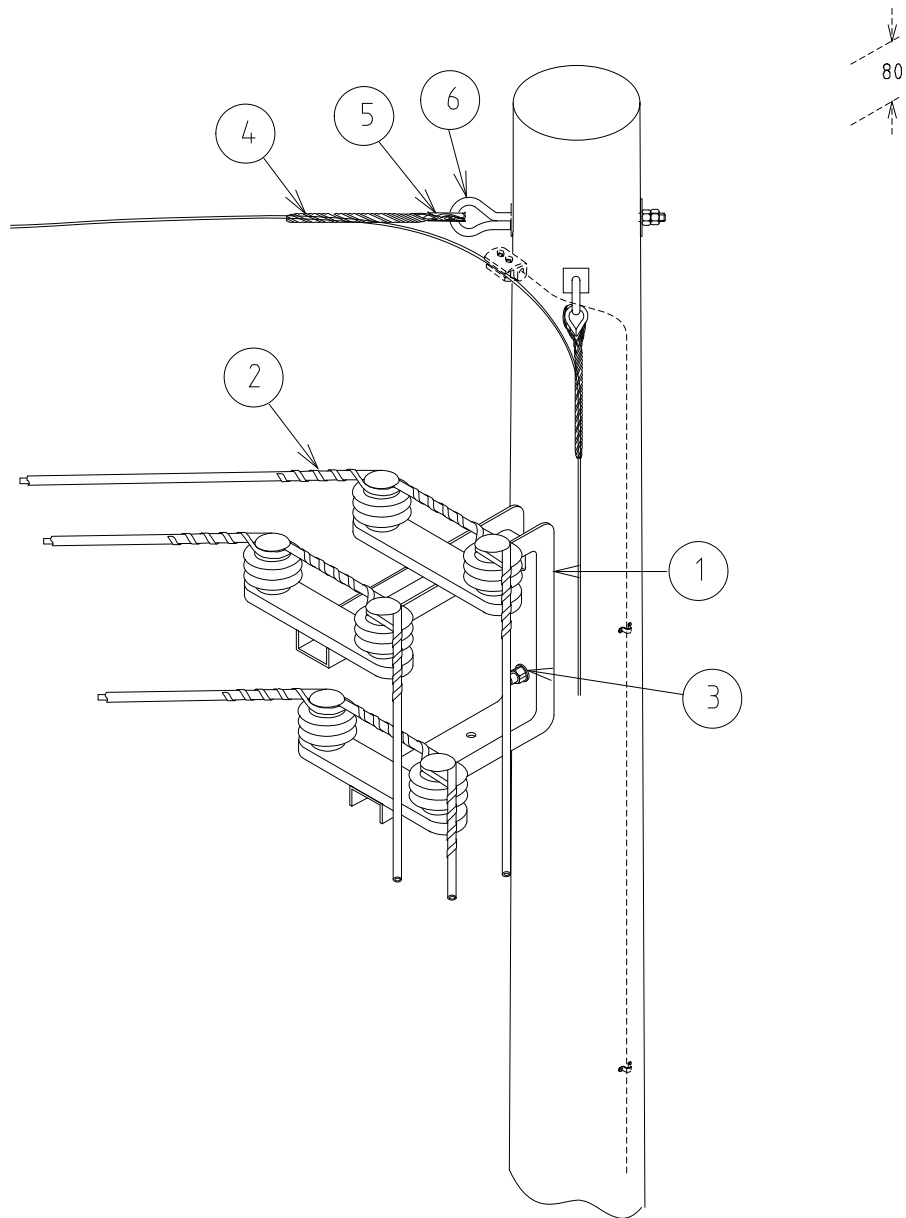
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				TITLE			DRAWN: JRR		DATE: 11-04-2014	
				INTERMEDIATE ANGLE FOR 3° - 30°			ORIGINATED: SCALE: NTS		DRG. No. HX02	
							CHECKED: REE		APPROVED: GRANT STACY	
							APPROVED: GRANT STACY		REV. A	
									SHT.	
A	11.04.14	ORIGINAL ISSUE								
REV	DATE	DESCRIPTION	ORGD.	CHKD.	APRD.					



CU	CU Description
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HX2_IA		HENDRIX Intermediate Angle 3°-30°			
ITEM NUMBER	STOCK CODE	DESCRIPTION	QTY RQD	UNIT OF MEASURE	REMARKS
1	IC0095	Angle Bracket 3 x Line Post Insulators (Hendrix) 3 x Studs	1	ea	
2	IC0098	Covered Tie Wire	3	ea	
3	AB6733	Pole bolt M16 x 400mm with washers	2	ea	
4	CC0167	Messenger wire Angle Clamp	1	ea	
5	AB6025	Eye Bolt, M16 x 400mm with washers	1	ea	

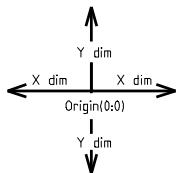




**Design Dimensions**

Messenger	X dim	Y dim
LHS	0	0
Front	0	80

Origin - Top eye bolt (0:0)

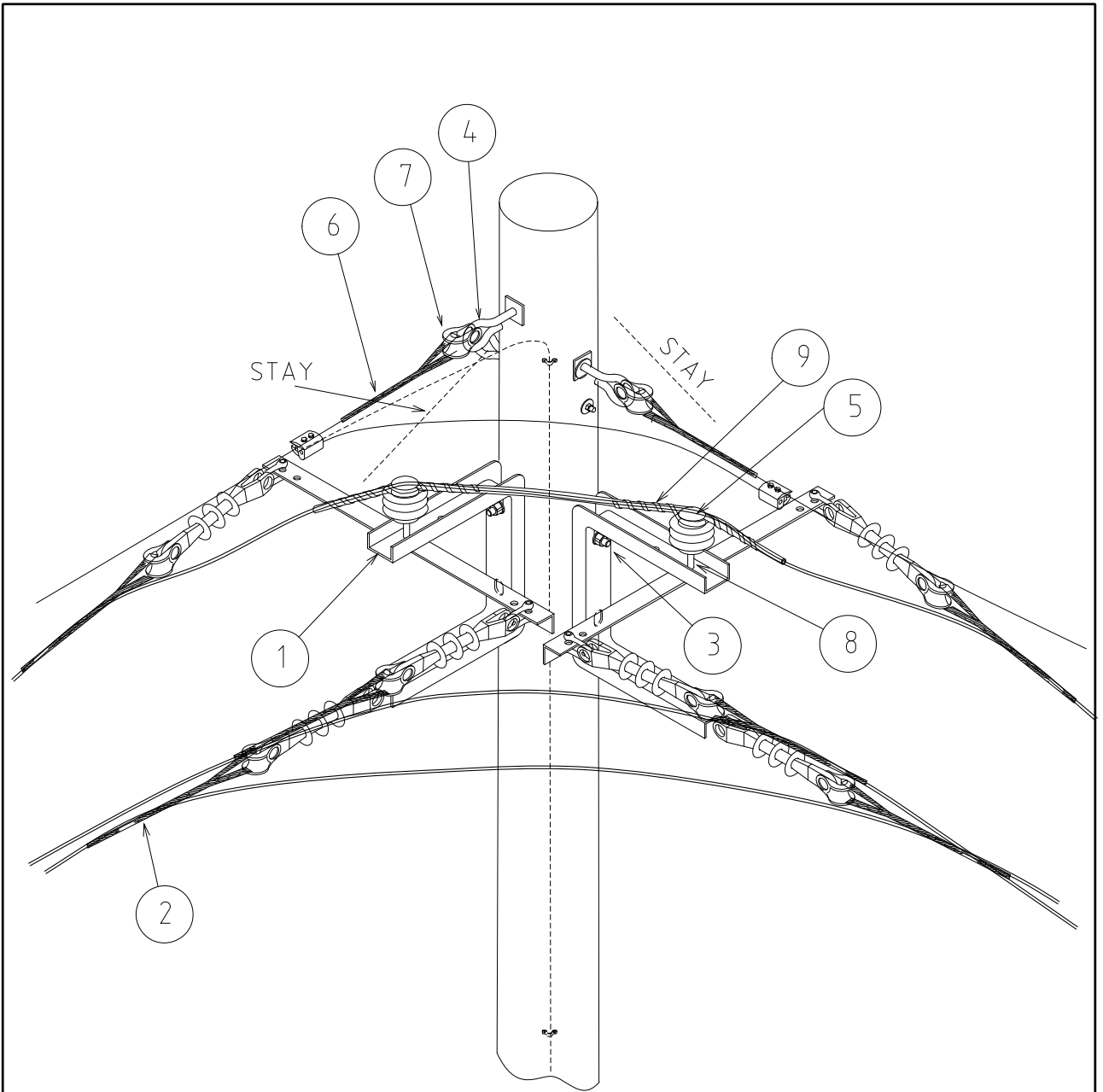


				COMPATIBLE UNIT		DISTRIBUTION DESIGN CATALOGUE		westernpower	
				TITLE		DRAWN: JRR		DATE: 11-04-2014	
				INTERMEDIATE ANGLE 31° - 60°		ORIGINATED: REE		SCALE: NTS	
						CHECKED: REE		DRG. No. HX03	
						APPROVED: GRANT STACY		REV. A	
								SHT.	
A	11.04.14	ORIGINAL ISSUE		ORGO.	CHKD.	APRD.			
REV	DATE	DESCRIPTION							



CU	CU Description
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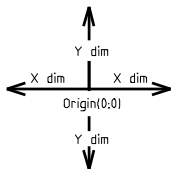
HX3_IA		HENDRIX Intermediate Angle 31°-60°			
ITEM NUMBER	STOCK CODE	DESCRIPTION	QTY ROD	UNIT OF MEASURE	REMARKS
1	IC0096	Angle Bracket 6 x Line Post Insulators (Hendrix) 6 x Studs 3 x Double Insulator Plate	1	ea	
2	IC0098	Covered Tie Wire	6	ea	
3	AB6733	Pole bolt M16 x 400mm with washers	2	ea	
4	IC0105	Dead-end Grip, Messenger wire	2	ea	
5	CT0011	Clevis Thimble, Cond. 7/2.50 - 19/3.25	2	ea	
6	AB6025	Eye Bolt, M16 x 400mm with washers	2	ea	



**Design Dimensions**

Messenger	X dim	Y dim
LHS	0	0
RHS	0	80

Origin - Top eye bolt (0:0)

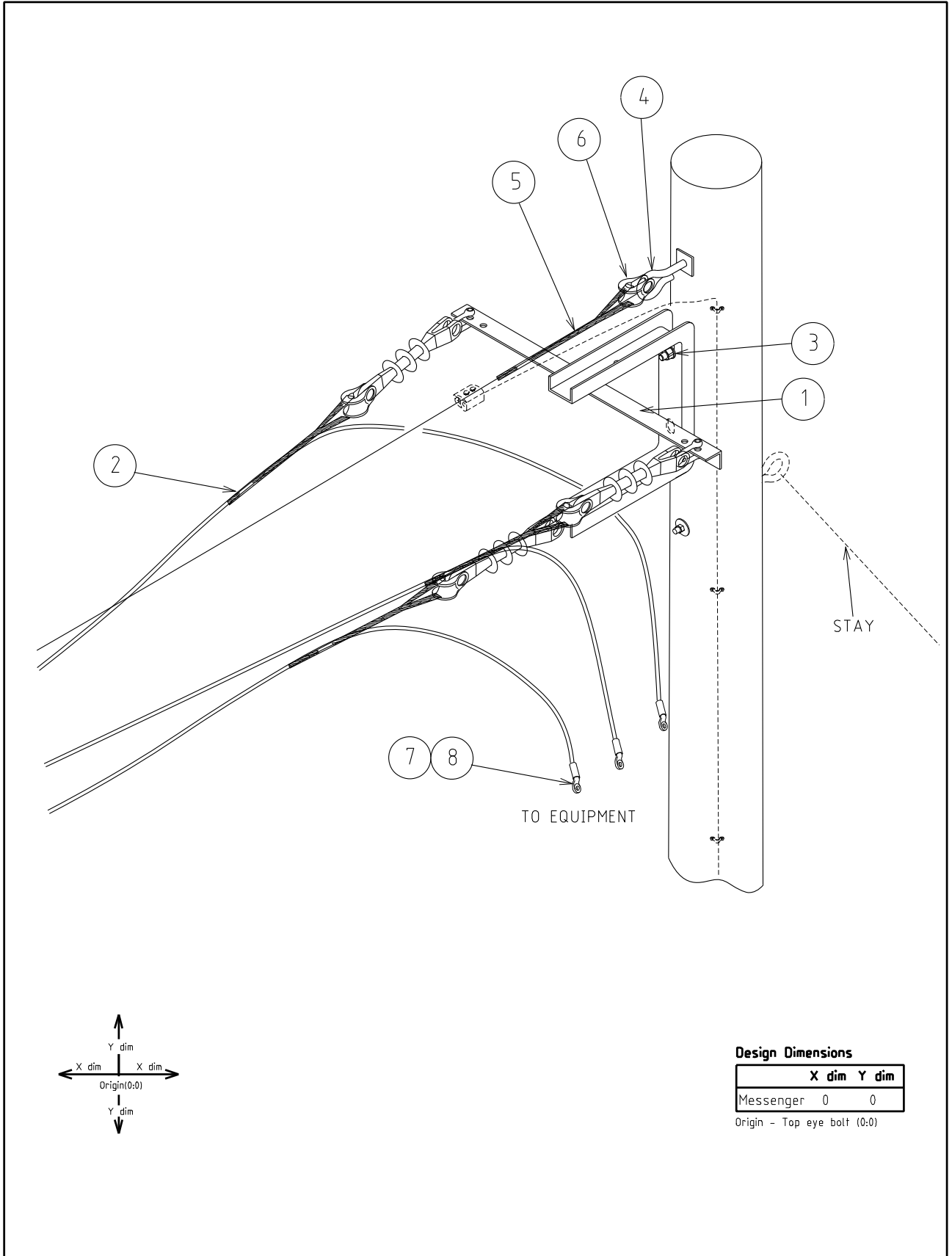


				COMPATIBLE UNIT		DISTRIBUTION DESIGN CATALOGUE			
				TITLE		DRAWN: JRR		DATE: 14-04-2014	
				STRAIN ANGLE 61°-90°		ORIGINATED: SCALE: NTS		DRG. No. HX04	
						CHECKED: REE			
						APPROVED: GRANT STACY		REV. A SHT.	
A	11.04.14	ORIGINAL ISSUE		ORGO.	CHKD.	APRD.			



CU	CU Description
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HX4_SA_150		HENDRIX Strain Angle 61-90 Deg			
ITEM NUMBER	STOCK CODE	DESCRIPTION	QTY ROD	UNIT OF MEASURE	REMARKS
1	IC0097	Termination Bracket 3 x Thimble clevis 3 x D-shackle 3 x Strain Insulators	2	ea	
2	IC0108	Dead-end Grip 150mm <sup>2</sup> Neoprene Coated	6	ea	
3	AB6733	Pole bolt M16 x 400mm with washers	4	ea	
4	AB6025	Eye Bolt, M16 x 400mm with washers	2	ea	
5	IC0100	Line Post Insulator (Hendrix)	2	ea	
6	IC0105	Dead-end Grip, Messenger wire	2	ea	
7	CT0011	Clevis Thimble, Cond. 7/2.50 - 19/3.25	2	ea	
8	CP0099	Insulator Stud	2	ea	
9	IC0098	Covered Tie Wire	2	ea	



**Design Dimensions**

	X dim	Y dim
Messenger	0	0

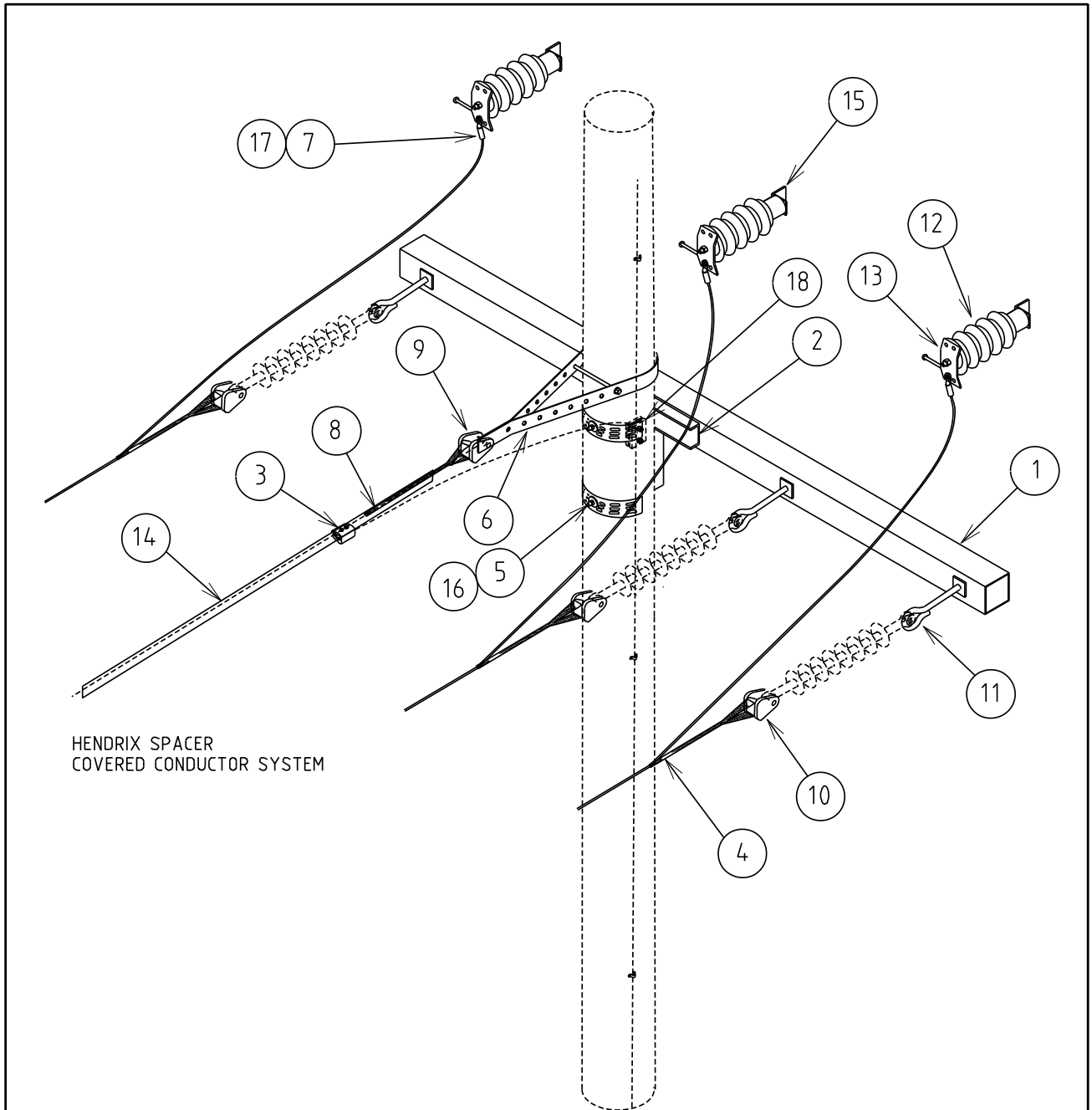
Origin - Top eye bolt (0:0)

				COMPATIBLE UNIT		DISTRIBUTION DESIGN CATALOGUE		westernpower	
				TITLE		DRAWN: JRR		DATE: 14-04-2014	
				BRACKET TERMINATION		ORIGINATED:		SCALE: NTS	
						CHECKED: REE		DRG. No. HX05	
						APPROVED: GRANT STACY		REV. B	
								SHT.	
B	06.01.14	ORIGINAL ISSUE		ORGO.	CHKD.	APRD.			
REV	DATE	DESCRIPTION							



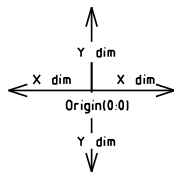
CU	CU Description
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HX5_T_150		HENDRIX Termination			
ITEM NUMBER	STOCK CODE	DESCRIPTION	QTY ROD	UNIT OF MEASURE	REMARKS
1	IC0097	Termination Bracket 3 x Thimble clevis 3 x D - shackle 3 x Strain Insulators	1	ea	
2	IC0108	Dead-end Grip 150mm <sup>2</sup> Neoprene Coated	3	ea	
3	AB6733	Pole bolt M16 x 400mm with washers	2	ea	
4	AB6025	Eye Bolt, M16 x 400mm with washers	1	ea	
5	IC0105	Dead-end Grip, Messenger wire	1	ea	
6	CT0011	Clevis Thimble, Cond. 7/2.50 - 19/3.25	1	ea	
7	FL0402	BiMetal Lug 150mm <sup>2</sup> , Al barrel, Cu Palm	3	ea	
8	IC0104	Insulation Sleeve for Termination Lug on Hendrix	3	ea	



HENDRIX SPACER COVERED CONDUCTOR SYSTEM

STRAIN INSULATORS NOT INCLUDED IN THIS CU  
 WHEN USED IN CONJUNCTION WITH POLE TOP SWITCH,  
 STRAIN INSULATORS ARE INCLUDED IN HV19



Design Dimensions

	X dim	Y dim
Messenger	0	230

Origin - Crossarm king bolt (0.0)

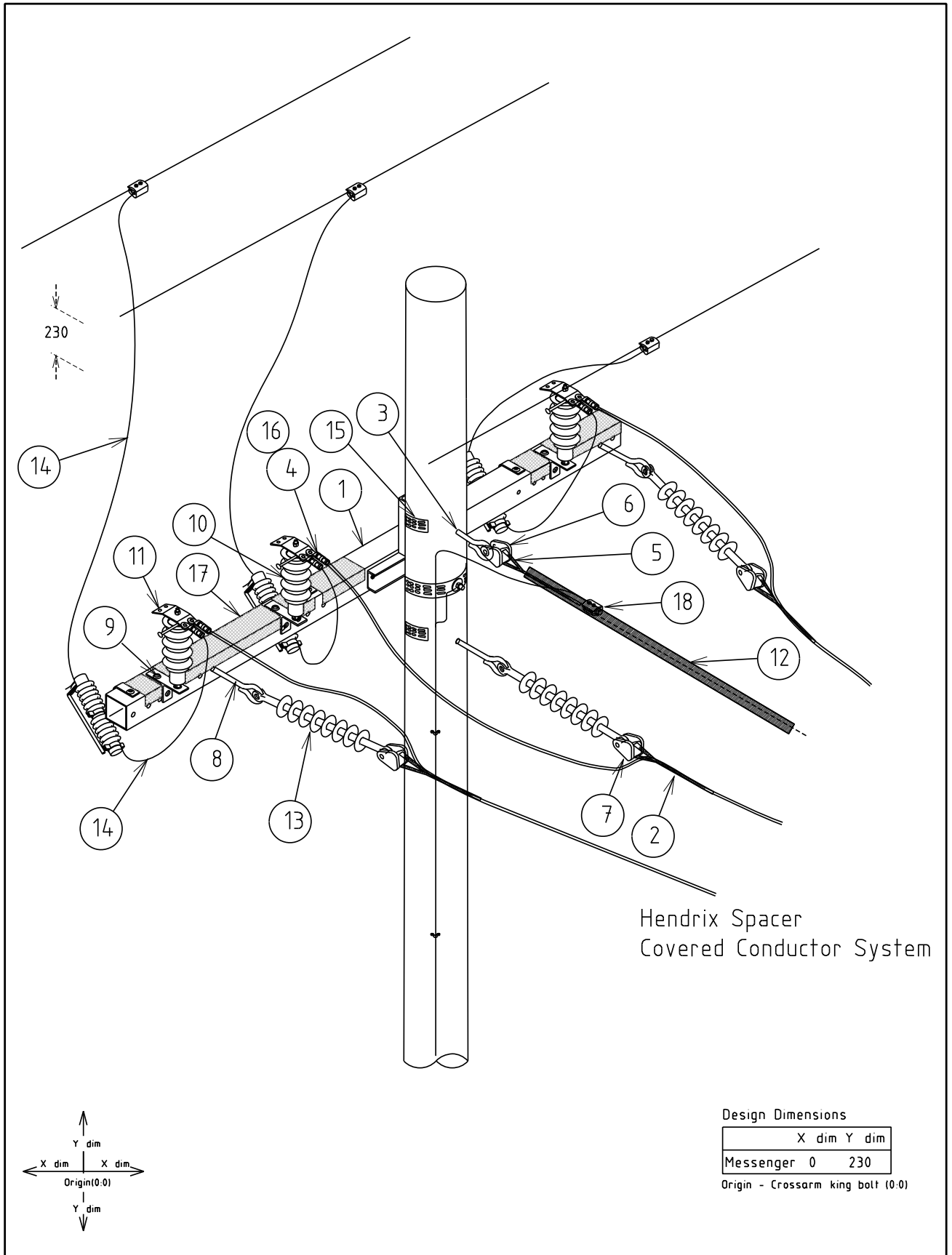
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				TERMINATION ONTO SURGE ARRESTERS			SCALE: NTS		DRG. No. HX06-1	
							CHECKED: REE		REV. C	
							APPROVED: GRANT STACY		SHT.	
REV	DATE	DESCRIPTION	ORGD.	CHKD.	APROD.					
C	30.06.16	CROSSARM TYPE CHANGED & REARRANGED ACCORDINGLY	JC	REE	GS					
B	14.04.14	FORMAT CHANGED		REE	GS					
A	10.04.13	ORIGINAL ISSUE								



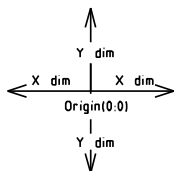
CU	CU Description
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HX6_1_TSA150		HENDRIX Termination on Surge Arresters			
ITEM NUMBER	STOCK CODE	DESCRIPTION	QTY ROD	UNIT OF MEASURE	REMARKS
1	CB1121	Crossarm, Metal 2.4m Long	1	ea	
2	CB3025	HV Crossarm T-Bracket	1	ea	
3	CC0125	PG Clamp Bi-Metal 25 - 150sq	1	ea	
4	IC0108	Dead-end Grip 150mm <sup>2</sup> : Neoprene Coated	3	ea	
5	AB6733	Pole bolt M16 x 400mm with washers	2	ea	
6	CB3060	Metal Retaining Strap 50mm x 1.3m	1	ea	
7	FL0402	BiMetal Lug 150mm <sup>2</sup> , Al barrel, Cu Palm	3	ea	
8	IC0105	Dead-end Grip, Messenger wire	1	ea	
9	CT0011	Clevis Thimble, Cond. 7/2.50 - 19/3.25	1	ea	
10	CT0015	Clevis Thimble, Cond. 37/3.78 (400mm <sup>2</sup> )	3	ea	
11	AB6020	Eye Bolt M16 x 200mm with washers	3	ea	
12	GA4002	Surge Arrester 22kV, 10kA	3	ea	
13	GF1591	Copper Bus Conductor plate	3	ea	
14	IC0109	Insulation Sleeve	1	ea	
15	CB0486	Stand-off bracket	3	ea	
16	CE7541	Dispersion Plate	2	ea	
17	IC0104	Insulation Sleeve for Termination Lug on Hendrix	3	ea	
18	CC0511	PG Clamp cu 19/211-37/2.36	1	ea	





Hendrix Spacer  
Covered Conductor System



Design Dimensions

	X dim	Y dim
Messenger	0	230

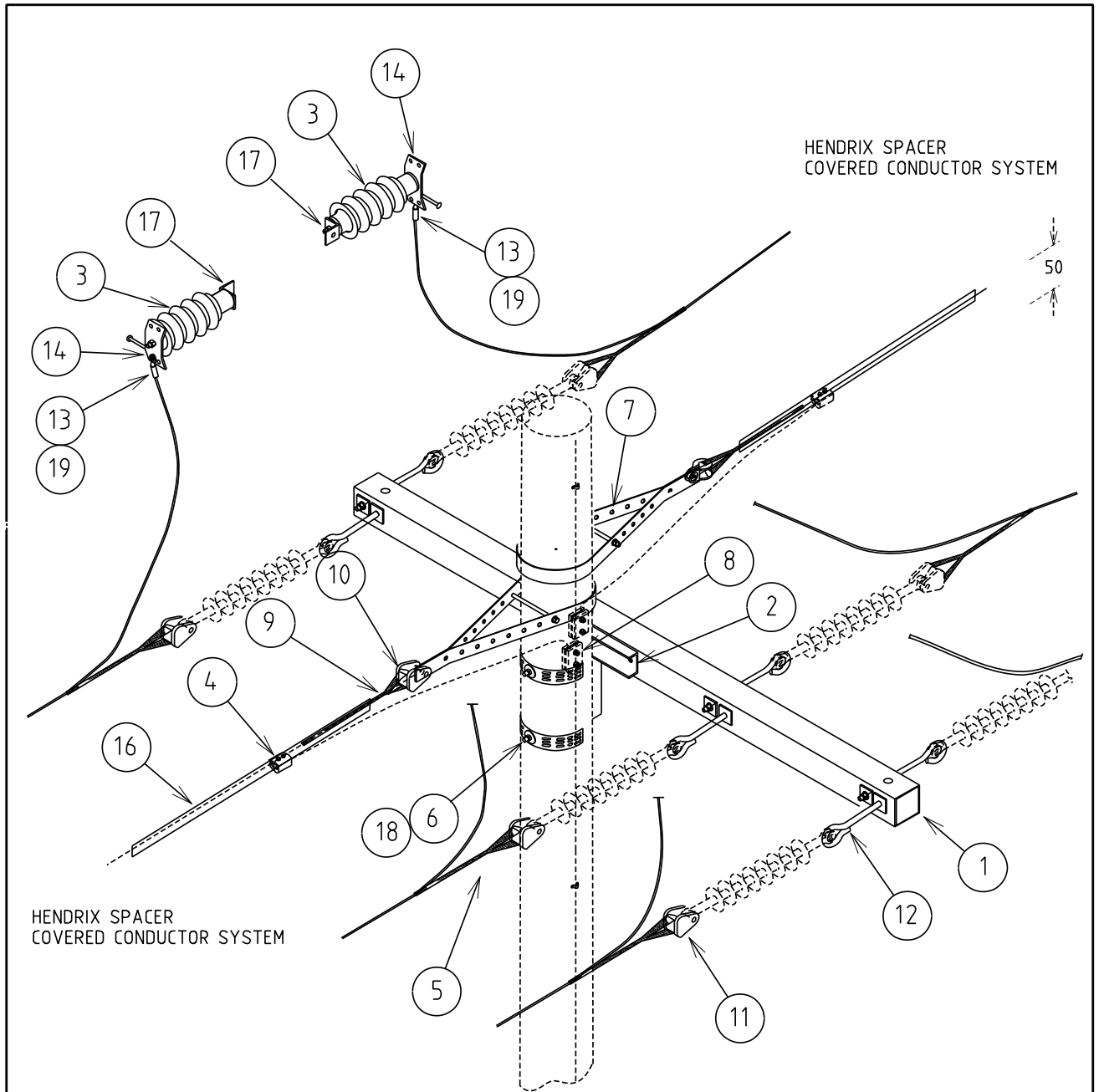
Origin - Crossarm king bolt (0,0)

				COMPATIBLE UNIT			DISTRIBUTION DESIGN CATALOGUE		westernpower	
E	15.06.15	ITEM No. ADDED FOR CROSSARM		REE	REE	GS	DRAWN: JRR		DATE: 14-04-2014	DRG. No.
D	20.01.15	BIRD COVER ADDED		JC	REE	GS	ORIGINATED:		SCALE: NTS	HX06-2
C	14.04.14	FORMAT CHANGED				GS	CHECKED: REE			
B	06.01.14	ORIGINAL ISSUE					APPROVED: GRANT STACY		REV. E	SHT.
REV	DATE	DESCRIPTION		ORGD.	CHKD.	APRD.				

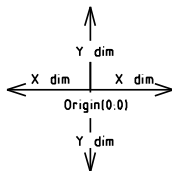


CU	CU Description
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HX6_2_TSA150		HENDRIX Termination on Surge Arresters w/o X-arm			
ITEM NUMBER	STOCK CODE	DESCRIPTION	QTY ROD	UNIT OF MEASURE	REMARKS
1	CC0125	PG Clamp Bi-Metal 25 - 150sq	1	ea	
2	IC0108	Dead-end Grip 150mm <sup>2</sup> , Neoprene Coated	3	ea	
3	CB3060	Metal Retaining Strap 50mm x 1.3m	1	ea	
4	FL0402	BiMetal Lug 150mm <sup>2</sup> , Al barrel, Cu Palm	12	ea	
5	IC0105	Dead-end Grip, Messenger wire	1	ea	
6	CT0011	Clevis Thimble, Cond. 7/2.50 - 19/3.25	1	ea	
7	CT0015	Clevis Thimble, Cond. 37/3.78 (400mm <sup>2</sup> )	3	ea	
8	AB6020	Eye Bolt M16 x 200mm with washers	3	ea	
9	CZ0366	Crossarm Bolt 130mm Long Steel, Galv	3	ea	
10	GA4002	Surge Arrester 22kV, 10kA	3	ea	
11	GF1591	Copper Bus Conductor plate	3	ea	
12	IC0109	Insulation Sleeve	1	ea	
13	IC0013	Strain Insulator	3	ea	
14	FT0150	LVABC 150sq mm 4x4m	1	ea	
15	CE7541	Dispersion Plate	3	ea	
16	IC0104	Insulation Sleeve for Termination Lug on Hendrix	12	ea	
17	CB3002	Crossarm bird cover	4	ea	



STRAIN INSULATORS NOT INCLUDED IN THIS CU  
 WHEN USED IN CONJUNCTION WITH POLE TOP SWITCH,  
 STRAIN INSULATORS ARE INCLUDED IN HV19



Design Dimensions

Messenger	X dim	Y dim
LHS	0	0
Front	0	50

Origin - Top messenger strap (0:0)

				COMPATIBLE UNIT			DISTRIBUTION DESIGN CATALOGUE		westernpower	
				TITLE			DRAWN: JRR		DATE: 14-04-2014	
				TERMINATION - SERIES TAP			SCALE: NTS		DRG. No. HX07	
							CHECKED: REE		REV. D	
							APPROVED: GRANT STACY		SHT.	
REV	DATE	DESCRIPTION	ORGD.	CHKD.	APROD.					
D	30.06.16	CROSSARM TYPE CHANGED & REARRANGED ACCORDINGLY	JC	REE	GS					
C	14.04.14	FORMAT CHANGED	IM	JC	GS					
B	06.01.14	ORIGINAL ISSUE								



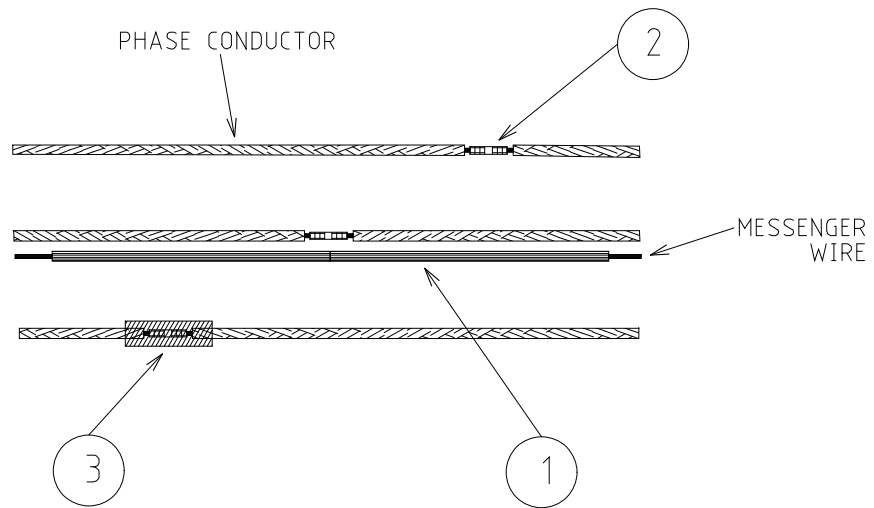
CU	CU Description
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HX7_TST150 HENDRIX Termination Series Tap Terminated Messenger Wire					
ITEM NUMBER	STOCK CODE	DESCRIPTION	QTY ROD	UNIT OF MEASURE	REMARKS
1	CB1121	Crossarm, Metal 2.4m Long	1	ea	
2	CB3025	HV Crossarm T-Bracket	1	ea	
3	GA4002	Surge Arrester 22kV, 10kA	6	ea	
4	CC0125	PG Clamp Bi-Metal 25 - 150sq	2	ea	
5	IC0108	Dead-end Grip 150mm, Neoprene Coated	6	ea	
6	AB6733	Pole bolt M16 x 400mm with washers	2	ea	
7	CB3060	Metal Retaining Strap 50mm x 1.3m	2	ea	
8	CC0511	PG Clamp cu 19/211-37/2.36	2	ea	
9	IC0105	Dead-end Grip, Messenger wire	2	ea	
10	CT0011	Clevis Thimble, Cond. 7/2.50 - 19/3.25	2	ea	
11	CT0015	Clevis Thimble, Cond. 37/3.78 (400mm <sup>2</sup> )	6	ea	
12	AB6020	Eye Bolt M16 x 200mm with washers	6	ea	
13	FL0402	BiMetal Lug 150mm <sup>2</sup> , Al barrel, Cu Palm	6	ea	
14	GF1591	Copper Bus Conductor plate	6	ea	
16	IC0109	Insulation Sleeve	2	ea	
17	CB0486	Stand-off bracket	6	ea	
18	CE7541	Dispersion Plate	2	ea	
19	IC0104	Insulation Sleeve for Termination Lug on Hendrix	6	ea	



CU	CU Description
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HX8_ITO		HENDRIX Intermediate Tap-off			
ITEM NUMBER	STOCK CODE	DESCRIPTION	QTY RQD	UNIT OF MEASURE	REMARKS
1	IC0109	Insulation Sleeve	2	ea	
2	CC0138	PG Clamp AI 7/2.50 - 19/3.25	3	ea	
3	FJ0186	Joint Cover, Gel-Wrap	3	ea	



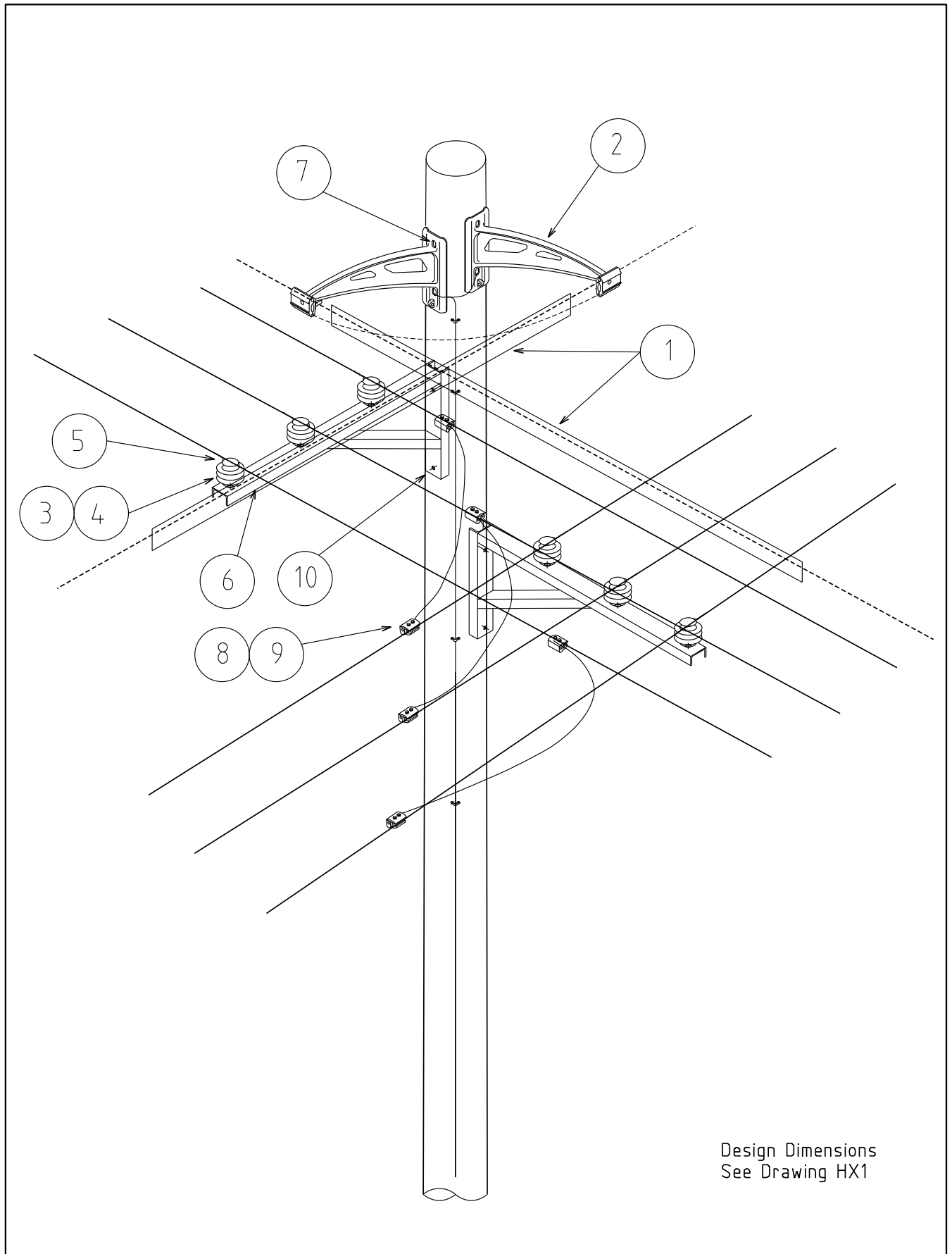
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				MID SPAN FULL TENSION JOINT		ORIGINATED: SCALE: NTS		HX09	
						CHECKED: REE		REV. SHT.	
						APPROVED: GRANT STACY		A	
A	03.02.09	ORIGINAL ISSUE							
REV	DATE	DESCRIPTION	ORGD.	CHKD.	APRD.				



CU	CU Description
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HX9_150		Mid span full tension joint			
ITEM NUMBER	STOCK CODE	DESCRIPTION	QTY ROD	UNIT OF MEASURE	REMARKS
1	IC0109	Insulation Sleeve	1	ea	
2	CJ0490	Full tension crimp joint	3	ea	
3	IC0103	Insulation cover, cold shrink, set of three	1	ea	





Design Dimensions  
See Drawing HX1

				COMPATIBLE UNIT			DISTRIBUTION DESIGN CATALOGUE				
				TITLE			DRAWN: JRR		DATE: 14-04-2014		DRG. No.
				INTERMEDIATE POLE CROSSING			ORIGINATED:		SCALE: NTS		HX10
							CHECKED: REE		APPROVED:		
							APPROVED: GRANT STACY		REV. C	SHT.	
R No	DATE	DESCRIPTION		ORGO	CHGD	APRD					
C	05 08 15	ITEM 10 ADDED		AK	JC	GS					
B	16 07 14	FORMAT CHANGED AND ITEM 9 ADDED		REE	GS						
A	10 04 14	ORIGINAL ISSUE									



CU	CU Description
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HX10_IX		Intermediate pole crossing			
ITEM NUMBER	STOCK CODE	DESCRIPTION	QTY ROD	UNIT OF MEASURE	REMARKS
1	IC0109	Insulation Sleeve	2	ea	
2	IC0094	Hendrix Intermediate Bracket	2	ea	
3	IC0100	Line Post Insulator (Hendrix)	6	ea	
4	CP0099	Insulator Stud	6	ea	
5	IC0098	Covered Tie Wire	6	ea	
6	IC0102	Hendrix L bracket	2	ea	
7	AB6733	Pole bolt M16 x 400mm with washers	4	ea	
8	CC0138	PG Clamp Al 7/2.50 - 19/3.25	6	ea	
9	FJ0186	Joint Cover, Gel-Wrap	6	ea	
10	AB6736	Pole bolt M12 x 400mm with washers	4	ea	