AUTOMATIC TRANSFER SWITCH
OLD GROUP 8 / GROUP 9 CONTROL PANEL

Your Company Logo

OWNER Example Owner | PAGE 1

PLANT Example Plant | AMBIENT TEMP. °F | DATE 10/13/2014

SUBSTATION TRANSFER SWITCHES | HUMIDITY % | JOB # RANSFER SWITCHES

POSITION GENERAL | ASSET ID

NAMEPLATE DATA

MANUFACTURER | SERIAL NO. | TYPE

CATALOG NO. | SYSTEM VOLTAGE | AMPACITY

WIRING NO. | CONTROLS TYPE: ☐ ELECTROMECHANICAL ☐ SOLID STATE ☐ MICROPROCESSOR

INSTALLED OPTIONS

MOTHER BOARD CHECK OUT

TEST POINT	REFERENCE	AS FOUND (VAC)	AS LEFT (VAC)
NORMAL (CP14 DISCONNECTED)			
1 - 15	82.6 - 91.4 VAC		
2 - 15	82.6 - 91.4 VAC		
3 - 15	82.6 - 91.4 VAC		
4 - 15	21.8 - 24.1 VAC		
5 - 15	21.8 - 24.1 VAC		
6 - 15	21.8 - 24.1 VAC		
7 - 15	21.8 - 24.1 VAC		
8 - 15	21.8 - 24.1 VAC		
9 - 15	21.8 - 24.1 VAC		
10 - 15	28.5 - 31.5 VDC		
11 - 15	115.9 - 128.1 VDC		
EMERGENCY (CP30 DISCONNECTED)			
10 - 15	26.1 - 28.9 VDC		
12 - 15	82.6 - 91.4 VAC		
13 - 15	21.8 - 24.1 VAC		
14 - 15	21.8 - 24.1 VAC		

A1 BOARD						A2 BOARD											
SWITCH S18 TESTS						SWITCH S18 TESTS											
TEST KIT SWITCH NO.		CKT BOARD TEST VLTG	TEST KIT SWITCH NO.		CKT BOARD TEST VLTG	TEST KIT SWITCH NO.		CKT BOARD TEST VLTG	TEST KIT SWITCH NO.		CKT BOARD TEST VLTG	TEST KIT SWITCH NO.		CKT BOARD TEST VLTG	TEST KIT SWITCH NO.		CKT BOARD TEST VLTG
SPECIFIED VALUES	6	115 - 125	AS FOUND VALUES	6		SPECIFIED VALUES	2	111 - 121	S14 ON	2		S14 OFF	2		S14 OFF	2	
	7	28.5 - 31.5		7			3	28 - 31	S15 OFF	3		S15 ON	3		S15 OFF	3	
	8	10.4 - 11.9		8			4	9.3 - 10.3		4			4			4	
							5	10.4 - 11.9	S16 OFF	5		S16 OFF	5		S16 ON	5	

COMMENTS:

DEFICIENCIES:

TEST EQUIPMENT USED: | TESTED BY: Default Administrator

AUTOMATIC TRANSFER SWITCH TEST
NEW GROUP 8 OR 9 CONTROL PANEL

Your Company Logo

OWNER Example Owner | PAGE 2

PLANT Example Plant | AMBIENT TEMP. °F | DATE 10/13/2014

SUBSTATION TRANSFER SWITCHES | HUMIDITY % | JOB # RANSFER SWITCHES

POSITION GENERAL | ASSET ID

NAMEPLATE DATA

MANUFACTURER | SERIAL NO. | TYPE

CATALOG NO. | SYSTEM VOLTAGE | AMPACITY

WIRING NO. | CONTROLS TYPE: ☐ ELECTROMECHANICAL ☐ SOLID STATE ☐ MICROPROCESSOR

INSTALLED OPTIONS

CONTROL PANEL TEST

SWITCH S18 TEST - NORMAL								SWITCH S18 TESTS - EMERGENCY							
TEST KIT SWITCH NO.			CKT BOARD TEST VLTG	TEST KIT SWITCH NO.			CKT BOARD TEST VLTG	TEST KIT SWITCH NO.			CKT BOARD TEST VLTG	TEST KIT SWITCH NO.			CKT BOARD TEST VLTG
SPECIFIED	**NORMAL**	2	111 - 121	AS LEFT	**NORMAL**	2		SPECIFIED	**EMERGENCY**	3	25.8 - 28.8	AS LEFT	**EMERGENCY**	3	
		3	28 - 31			3				5	10.6 - 12.2			5	
		4	10 - 11.6			4									
		5	10.6 - 12.2			5									

TIME DELAY CALIBRATION

		POTENTIO-METER/ ACTUATOR	AS FOUND ACTUATOR UP/DOWN	AS FOUND TIMING	SPECIFIED ACTUATOR UP/DOWN	SPECIFIED TIMING	AS LEFT ACTUATOR UP/DOWN	AS LEFT TIMING
ACC NO. 1	OVERRIDE MOMENTARY OUTAGES ADJUSTMENT RANGE 0.5 TO 6 SEC. FACTORY SET @ 1 SEC.	P4 / NA						
ACC NO. 2B	TRANSFER TO EMERGENCY ADJUST RANGE UP: 0-60 SEC DOWN 0-8 MIN FACTORY SET @ 0 SEC.	P2 / 2						
ACC NO. 2E	NO-LOAD ENGINE COOL DOWN ADJUST RANGE UP: 0-8 SEC DOWN 0.5-30 MIN FACTORY SET @ 5 MINS	P3 / 3						
ACC NO. 3	RE-TRANSFER TO NORMAL ADJUST RANGE UP: 0 SEC DOWN: 0.5-30 MIN FACTORY SET @ 30 MINS	P1 / 1						

SENSOR SETTINGS (120V BASE)

		AS FOUND READING	AS FOUND %	SPECIFIED READING	SPECIFIED %	AS LEFT READING	AS LEFT %
NORMAL SOURCE PICKUP VOLTAGE ADJUSTMENT RANGE 85 TO 100% FACTORY SET @ 90%	PHASE A						
	PHASE B						
	PHASE C						
NORMAL SOURCE DROPOUT VOLTAGE ADJUSTMENT RANGE 75 TO 98% FACTORY SET @ 85%	PHASE A						
	PHASE B						
	PHASE C						
EMERGENCY SOURCE VOLTAGE ADJUSTMENT RANGE 85 TO 100% FACTORY SET @ 90%	PICKUP						
	DROPOUT				15% FIXED		
EMERGENCY SOURCE FREQUENCY ADJUSTMENT RANGE 90 TO 100% FACTORY SET @ 95%	PICKUP						
	DROPOUT				12% FIXED		

COMMENTS:

DEFICIENCIES:

TEST EQUIPMENT USED: | TESTED BY: Default Administrator

AUTOMATIC TRANSFER SWITCH TEST

Your Company Logo

OWNER Example Owner | PAGE 3

PLANT Example Plant | AMBIENT TEMP. °F | DATE 10/13/2014

SUBSTATION TRANSFER SWITCHES | HUMIDITY % | JOB # RANSFER SWITCHES

POSITION GENERAL | ASSET ID

NAMEPLATE DATA

MANUFACTURER | SERIAL NO. | TYPE

CATALOG NO. | SYSTEM VOLTAGE | AMPACITY

WIRING NO. | CONTROLS TYPE: ☐ ELECTROMECHANICAL ☐ SOLID STATE ☐ MICROPROCESSOR

INSTALLED OPTIONS

DESCRIPTION	INSPECTED	CONDITION	CLEAN/LUBE
OVERALL CLEANLINESS	☐		
INSULATING MEMBERS	☐		
MECHANICAL CONNECTIONS	☐		
STRUCTURAL MEMBERS	☐		
MAIN CONTACTS	☐		
ARCING CONTACTS	☐		

DESCRIPTION	INSPECTED	CONDITION	CLEAN/LUBE
ARCING CHUTES	☐		
OPERATING MECHANISM	☐		
CONTACT SEQUENCE	☐		
GROUND CONNECTION	☐		
AUXILIARY DEVICES	☐		
LOAD CONDUCTOR NO. SIZE	☐ CU	☐ AL	

TIME DELAYS		SPECIFIED		AS FOUND		AS LEFT	
OVERRIDE MOMENTARY OUTAGES ADJUSTMENT RANGE: FACTORY SET @ SEC							
TRANSFER TO EMERGENCY ADJUSTMENT RANGE: FACTORY SET @ SEC							
NO LOAD ENGINE COOL DOWN ADJUSTMENT RANGE: FACTORY SET @ MIN							
RE-TRANSFER TO NORMAL ADJUSTMENT RANGE: FACTORY SET @ MIN							
SENSOR SETTINGS NOMINAL VOLTAGE:		VOLTS & HZ	%	VOLTZ & HZ	%	VOLTS & HZ	%
NORMAL SOURCE PICKUP VOLTAGE ADJUSTMENT RANGE: FACTORY SET @ %	PHASE A						
	PHASE B						
	PHASE C						
NORMAL SOURCE DROPOUT VOLTAGE ADJUSTMENT RANGE: FACTORY SET @ %	PHASE A						
	PHASE B						
	PHASE C						
EMERGENCY SOURCE VOLTAGE ADJUSTMENT RANGE: FACTORY SET @ %	PICKUP						
	DROPOUT						
EMERGENCY SOURCE FREQUENCY ADJUSTMENT RANGE: FACTORY SET @ %	PICKUP						
	DROPOUT						

POLE RESISTANCE

TESTED FROM LINE TO LOAD TERMINALS

EQPT. TEMP °C

TCF TO 20°C

NORMAL				
POLE	AS FOUND	20°C	AS LEFT	20°C
A				
B				
C				
N				

EMERGENCY				
POLE	AS FOUND	20°C	AS LEFT	20°C
A				
B				
C				
N				

COMMENTS:

DEFICIENCIES:

TEST EQUIPMENT USED: | TESTED BY: Default Administrator

AUTOMATIC TRANSFER SWITCH CONTROLS TEST

Your Company Logo

OWNER Example Owner | PAGE 4

PLANT Example Plant | AMBIENT TEMP. °F | DATE 10/13/2014

SUBSTATION TRANSFER SWITCHES | HUMIDITY % | JOB # RANSFER SWITCHES

POSITION GENERAL | ASSET ID

NAMEPLATE DATA

MANUFACTURER | SERIAL NO. | TYPE

CATALOG NO. | SYSTEM VOLTAGE | AMPACITY

WIRING NO. | CONTROLS TYPE: ☐ ELECTROMECHANICAL ☐ SOLID STATE ☐ MICROPROCESSOR

INSTALLED OPTIONS

TIME DELAYS	AS FOUND	SPECIFIED	AS LEFT
OVERRIDE MOMENTARY OUTAGES ADJUSTMENT RANGE: FACTORY SET @ SEC			
TRANSFER TO EMERGENCY ADJUSTMENT RANGE: FACTORY SET @ SEC			
NO-LOAD ENGINE COOL DOWN ADJUSTMENT RANGE: FACTORY SET @ MIN			
RE-TRANSFER TO NORMAL ADJUSTMENT RANGE: FACTORY SET @ MIN			

NOMINAL VOLTAGE:

SENSOR SETTINGS		AS FOUND		SPECIFIED		AS LEFT	
		VOLTS & HZ	%	VOLTZ & HZ	%	VOLTS & HZ	%
NORMAL SOURCE PICKUP VOLTAGE ADJUSTMENT RANGE: FACTORY SET @ VOLTS	PHASE A						
	PHASE B						
	PHASE C						
NORMAL SOURCE DROPOUT VOLTAGE ADJUSTMENT RANGE: FACTORY SET @ VOLTS	PHASE A						
	PHASE B						
	PHASE C						
EMERGENCY SOURCE VOLTAGE ADJUSTMENT RANGE: FACTORY SET @ VOLTS	PICKUP						
	DROPOUT						
EMERGENCY SOURCE FREQUENCY ADJUSTMENT RANGE: FACTORY SET @ HERTZ	PICKUP						
	DROPOUT						

COMMENTS:

DEFICIENCIES:

TEST EQUIPMENT USED: | TESTED BY: Default Administrator

AUTOMATIC TRANSFER SWITCH TEST
OLD GROUP 8 OR GROUP 9 CONTROL PANEL

Your Company Logo

OWNER Example Owner | PAGE 5

PLANT Example Plant | AMBIENT TEMP. °F | DATE 10/13/2014

SUBSTATION TRANSFER SWITCHES | HUMIDITY % | JOB # RANSFER SWITCHES

POSITION GENERAL | ASSET ID

NAMEPLATE DATA

MANUFACTURER | SERIAL NO. | TYPE

CATALOG NO. | SYSTEM VOLTAGE | AMPACITY

WIRING NO. | CONTROLS TYPE: ☐ ELECTROMECHANICAL ☐ SOLID STATE ☐ MICROPROCESSOR

INSTALLED OPTIONS

A1 BOARD						A2 BOARD											
SWITCH S18 TESTS						SWITCH S18 TESTS											
TEST KIT SWITCH NO.		CKT BOARD TEST VLTG	TEST KIT SWITCH NO.		CKT BOARD TEST VLTG	TEST KIT SWITCH NO.		CKT BOARD TEST VLTG	TEST KIT SWITCH NO.		CKT BOARD TEST VLTG	TEST KIT SWITCH NO.		CKT BOARD TEST VLTG	TEST KIT SWITCH NO.		CKT BOARD TEST VLTG
SPECIFIED VALUES	6	115 - 125	AS FOUND VALUES	6		SPECIFIED VALUES	2	111 - 121	S14 ON	2		S14 ON	2		S14 ON	2	
	7	28.5 - 31.5		7			3	28 - 31	S15 OFF	3		S15 OFF	3		S15 OFF	3	
	8	10.4 - 11.9		8			4	9.3 - 10.3	S16 OFF	4		S16 OFF	4		S16 OFF	4	
							5	10.4 - 11.9		5			5			5	

TIME DELAY CALIBRATION

		AS FOUND	SPECIFIED	AS LEFT
ACC NO. 1	OVERRIDE MOMENTARY OUTAGES ADJUSTMENT RANGE 0.5 TO 6 SEC. FACTORY SET @ 1 SEC.			
ACC NO. 2B	TRANSFER TO EMERGENCY ADJUST RANGE UP: 0-60 SEC DOWN 0-8 MIN FACTORY SET @ 0 SEC.			
ACC NO. 2E	NO-LOAD ENGINE COOL DOWN ADJUST RANGE UP: 0-8 SEC DOWN 0.5-30 MIN FACTORY SET @ 5 MINS			
ACC NO. 3	RE-TRANSFER TO NORMAL ADJUST RANGE UP: 0 SEC DOWN: 0.5-30 MIN FACTORY SET @ 30 MINS			

SENSOR SETTINGS (120V BASE)

		READING	%	READING	%	READING	%
NORMAL SOURCE PICKUP VOLTAGE ADJUSTMENT RANGE 85 TO 100% FACTORY SET @ 90%	PHASE A						
	PHASE B						
	PHASE C						
NORMAL SOURCE DROPOUT VOLTAGE ADJUSTMENT RANGE 75 TO 98% FACTORY SET @ 85%	PHASE A						
	PHASE B						
	PHASE C						
EMERGENCY SOURCE VOLTAGE ADJUSTMENT RANGE 85 TO 100% FACTORY SET @ 90%	PICKUP						
	DROPOUT				15% FIXED		
EMERGENCY SOURCE FREQUENCY ADJUSTMENT RANGE 90 TO 100% FACTORY SET @ 95%	PICKUP						
	DROPOUT				12% FIXED		

COMMENTS:

DEFICIENCIES:

TEST EQUIPMENT USED: | TESTED BY: Default Administrator

ASCO TRANSFER SWITCH CALIBRATION REPORT
NEW GROUP 7 CONTROL PANEL

Your Company Logo

OWNER Example Owner | PAGE 6

PLANT Example Plant | AMBIENT TEMP. °F | DATE 10/13/2014

SUBSTATION TRANSFER SWITCHES | HUMIDITY % | JOB # RANSFER SWITCHES

POSITION GENERAL | ASSET ID

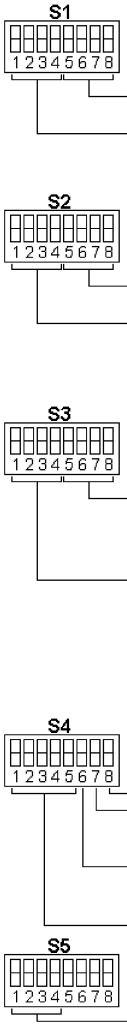
NAMEPLATE DATA

MANUFACTURER | SERIAL NO. | TYPE

CATALOG NO. | SYSTEM VOLTAGE | AMPACITY

WIRING NO. | CONTROLS TYPE: ☐ ELECTROMECHANICAL ☐ SOLID STATE ☐ MICROPROCESSOR

INSTALLED OPTIONS



TIME DELAYS	AS FOUND	SPECIFIED	AS LEFT
OVERRIDE MOMENTARY OUTAGES			
ADJUSTMENT RANGE 0 TO 6 SEC. OFF OFF ON OFF			
FACTORY SET @ 1 SEC. 5 6 7 8	___ SEC	___ SEC	___ SEC
TIMING TEST RESULTS			
RETRANSFER TO NORMAL			
ADJUSTMENT RANGE 0 TO 30 MIN. OFF OFF ON OFF			
FACTORY SET @ 30 MIN. 1 2 3 4	___ MIN	___ MIN	___ MIN
TIMING TEST RESULTS			
NO LOAD ENGINE COOL DOWN			
ADJUSTMENT RANGE 0 TO 60 MIN. OFF OFF ON OFF			
FACTORY SET @ 5 MIN. 5 6 7 8	___ MIN	___ MIN	___ MIN
TIMING TEST RESULTS			
TRANSFER TO EMERGENCY			
ADJUSTMENT RANGE 0 TO 5 MIN. OFF OFF OFF OFF			
FACTORY SET @ 0 SEC. 1 2 3 4	___ SEC	___ SEC	___ SEC
TIMING TEST RESULTS			

SENSOR SETTINGS		AS FOUND VOLTS	AS FOUND %	SPECIFIED VOLTS	SPECIFIED %	AS LEFT VOLTS	AS LEFT %
NORMAL SOURCE PICKUP VOLTAGE ADJUSTMENT RANGE 85 TO 100% FACTORY SET @ 90%	PHASE A						
	PHASE B						
	PHASE C						
DIP SWITCH OFF ON OFF ON SETTINGS 5 6 7 8		5 6 7 8					
EMERGENCY SOURCE VOLTAGE PICKUP ADJUSTMENT RANGE 85 TO 100% FACTORY SET @ 90%	PICKUP						
	DROPOUT						
DIP SWITCH OFF ON OFF ON SETTINGS 1 2 3 4		1 2 3 4					
EMERGENCY FREQUENCY OFF FACTORY SET @ 60 HERTZ 8		8					
PHASE SELECTION OFF OFF = 3 PHASE ON = 1 PHASE 7		7					
IN-PHASE MONITOR OFF ON = ACTIVE, OFF = OFF 6		6					
NORMAL SOURCE DROP-OUT VOLTAGE ADUSTMENT RANGE 75 TO 98% FACTORY SET @ 94%	PHASE A						
	PHASE B						
	PHASE C						
EMERGENCY FREQUENCY PICKUP ADJ. RANGE 90-100% FACTORY SET @ 95%		1 2 3 4					

COMMENTS:

DEFICIENCIES:

TEST EQUIPMENT USED: | TESTED BY: Default Administrator

AUTOMATIC TRANSFER SWITCH TEST
TS UNIT

Your Company Logo

OWNER Example Owner | PAGE 7

PLANT Example Plant | AMBIENT TEMP. °F | DATE 10/13/2014

SUBSTATION TRANSFER SWITCHES | HUMIDITY % | JOB # RANSFER SWITCHES

POSITION GENERAL | ASSET ID

NAMEPLATE DATA

MANUFACTURER | SERIAL NO. | TYPE

CATALOG NO. | SYSTEM VOLTAGE | AMPACITY

WIRING NO. | CONTROLS TYPE: ☐ ELECTROMECHANICAL ☐ SOLID STATE ☐ MICROPROCESSOR

INSTALLED OPTIONS

DESCRIPTION	INSPECTED	CONDITION	CLEAN/LUBE
OVERALL CLEANLINESS	☐		
INSULATING MEMBERS	☐		
MECHANICAL CONNECTIONS	☐		
STRUCTURAL MEMBERS	☐		
CUBICLE	☐		
RACKING DEVICES	☐		
CONTACT FINGERS	☐		
MAIN CONTACTS	☐		
ARCING CONTACTS	☐		
ARC CHUTES	☐		
OPERATING MECHANISM	☐		
CONTACT SEQUENCE	☐		
GROUND CONNECTION	☐		
AUXILIARY DEVICES	☐		
LOAD CONDUCTOR NO./ PHASE:	SIZE:	KCM: ☐ CU ☐ AL	

POLE RESISTANCE

EQUIPMENT TEMPERATURE °C | TEMPERATURE CORRECTION FACTOR 20°C, TCF

R_T = TOTAL POLE RESISTANCE AT 85°C

R_M = TOTAL POLE RESISTANCE AT TEST TEMPERATURE

T_S = TEMPERATURE FOR DESIRED RESISTANCE (20°C)

T_M = AMBIENT TEMPERATURE

T_K = TEMP. RESISTANCE CONSTANT (°C)

COPPER = 234.5°C

$$R_T = R_M \frac{T_S + T_K}{T_M + T_K}$$

NORMAL				
POLE	AS FOUND	20°C	AS LEFT	20°C
A				
B				
C				
N				

MICRO-OHMS LINE TO LOAD

EMERGENCY				
POLE	AS FOUND	20°C	AS LEFT	20°C
A				
B				
C				
N				

MICRO-OHMS LINE TO LOAD

COMMENTS:

DEFICIENCIES:

TEST EQUIPMENT USED: | TESTED BY: Default Administrator