# RICHARDSON HIGH SCHOOL - RICHARDSON ISD RICHARDSON, TEXAS JOB #15047957

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### **IMPORTANT:**

PLEASE NOTE THE FOLLOWING INFORMATION:

THE PROJECT MANAGER FOR THIS SYSTEM IS SHAWN FERNANDEZ.

ANY QUESTIONS CONCERNING THIS SYSTEM SHOULD BE DIRECTED TO THE PROJECT MANAGER WHO CAN BE REACHED AT OUR FACTORY:

THE TOLL FREE NUMBER IS: 1-800-688-4116
THE FACTORY NUMBER IS: 608-831-4116
THE FAX NUMBER IS: 608-836-1736

FOR SYSTEM ENERGIZATION, CONTACT THE PROJECT MANAGER AT LEAST THREE WEEKS PRIOR TO YOUR REQUESTED DATE.



### ETC, Inc.

3031 Pleasant View Rd PO Box 620979 Middleton WI 53562-0979 Tel +1 608 831 4116 Toll Free +1 800 688 4116 Fax +1 608 836 1736 etcconnect.com

### UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES

ORIGINAL FILE:

### CONTRACT WITH:

TEXAS SCENIC

### REPRESENTATIVE:

HORTON CONTROLS GROUP

### PROJECT MANAGER:

SHAWN FERNANDEZ

### APPLICATIONS ENGINEER:

### DRAWING TITLE:

TITLE PAGE/DRAWING INDEX

BL	01/03/18	SUBMITTAL
BY	DATE	REV.

### JOB:

RICHARDSON HIGH SCHOOL

— RICHARDSON ISD

### LOCATION:

RICHARDSON, TEXAS

### JOB NUMBER:

15047957

### DRAWING

### **PROJECT NOTES**

### SECTION 1 - CONTACTS:

### **MANUFACTURER:**

ETC, Inc. 3031 Pleasant View Road P.O. Box 620979 Middleton, Wisconsin, U.S.A. 53562 Tel: 800-888-4116 Fax: 608-836-1736

PROJECT MANAGER:
Shawn Fernandez
Direct Tel: 877-512-2300
E-mail: shawn.fernandez@etcconnect.com

### CONTRACT WITH:

Texas Scenic 8053 Potranco Road San Antonio, Texas 78251-2915 Tel: 800-292-7490 Fax: 210-256-8887

### REPRESENTATIVE:

Horton Controls Group 101 Turtle Creek Boulevard Dallas, Texas 75207-6807 Tel: 214-658-9030 Fax: 469-208-2420

### CONSULTANT:

Schuler Shook Dallas 325 North Saint Paul Street Dallas, Texas 75201-3890 Tel: 214-747-8300

### **SECTION 2 - GENERAL NOTES:**

- A.) Dimmer Rack generates approximately 4% of connected load as heat output.

  Dimmer Room must have climate control. Maintain between 32 degrees Fahrenheit (0 degrees Centigrade) to 104 degrees Fahrenheit (40 degrees Centigrade), humidity between 30%-95%, non-condensing and an altitude below 6500 feet (2000 meters).

  Consult ETC for installations above 6500 feet (2000 meters).
- B.) Dimmer Rack requires a minimum of 10" top clearance for proper air ventilation The Dimmer System also requires a minimum of 6" clearance on the left side to allow door-swing for proper module insertion/removal.
- C.) Only the following Control Wiring substitutions may be used:
  (All network connections to be terminated per TIA/EIA 568B standards.)

Belden 9729:	Belden 8471:	Belden 1583A:
General C0910A IMB PC244T Vest Penn DA2402	Alpha 1899C Belden 5200UE Carol C8661 TMB PCLP1PT TMB PCLP2PT West Penn 225	Comm Scope 5504 West Penn 4245 Cat 5 or better

### Plenum Versions (when required)

Belden 89729	Belden 6200UE	Belden 1585A
Belden 82729	Carol C8621	West Penn 254245
Manhattan M42891 West Penn DA252402	TMB PCLP1PTP TMB PCLP2PTP	

- D.) Please contact ETC, Inc. if deviations from the control riser are necessary.
- E.) ETC, Inc. Distribution Equipment Wire Range: All data connection terminals: 10 - 22 AWG. All 20A terminal blocks: 8 - 22 AWG.

### F.) Load circuit wiring shall have individual neutrals.

- G.) Sensor and Unison Dimming Rack Load Terminations are provided as follows: 50A, 20A, 15A, 10A . . . 4 AWG. Max.
- H.) Line Feeds to be determined by others.
- I.) Primary Feed Terminations are provided as follows:

Dimmer Rack Type:	Wire Range:
Sensor SR3-6 Sensor SR3-12 Sensor SR3-24 Sensor SR3-48	Single 14 AWG 2/0 Dual 6 AWG 250 MCM Dual 6 AWG 350 MCM Dual 2 AWG 600 MCM
Unison DRd6 (1P,3P) Unison DRd12 (3P) Unison DRd12 (1P) Unison DRd12 (1P) Unison AX6 (1P,3P) with MCB Unison AX12 (1P) with 400A. MCB Unison AX12 (3P) with 200A. MCB Unison AX12 (3P) with 200A. MCB Unison AX12X (1P,3P) with Min Lugs Unison AX12X (1P,3P) with MCB	Single 14 AWG 2/0 Single 6 AWG 350 MCM Single 6 AWG 350 MCM Single 8 AWG 350 MCM Dual 2/0 - 400 MCM Single 8 AWG 350 MCM Dual 4 AWG 500 MCM Dual 4 AWG 500 MCM Dual 4 AWG 400 MCM

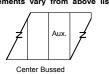
Unison DRd dimmer racks must use copper feed conductors. Branch circuit conductors terminating in Sensor and Unison DRd dimmer racks must be copper. Feeder conductors terminating in Sensor racks and Unison DRd Auxiliary (AX Series) racks must be copper or aluminum. For Sensor dimmer racks and Aux bays consult the manual for maximum current ratings. Unison DRd Auxiliary rack ratings are the same for copper or aluminum feeders. Utilize 90°C conductors at 75°C ampacity limits specified by the National Electrical Code. For conductor sizing and conduit fill, all branch circuit and feeder neutrals shall be considered current carrying conductors.

### J.) Sensor Auxiliary Rack Feed Terminations are as follows:

Aux.	Bay Configuration:	Wire Max. Size Per Phase:	Wire Max. Size For Neutral:
Main Lugs	800A. Max. (19" and 30")	Dual 2 AWG 600 MCM	Dual 2 AWG 600 MCM
	1000-2000A. (30" only)	6X 2 AWG 600 MCM	6X 2 AWG 600 MCM
65K AIC MCB	300-400A. (19" only)	Dual 3/0 - 500 MCM	Dual 2 AWG 600 MCM
	600A. (19" and 30")	Triple 1 AWG 500 MCM	Dual 2 AWG 600 MCM
	800A. (19" and 30")	Triple 1 AWG 500 MCM	Dual 2 AWG 600 MCM

### (MCB = Main Circuit Breaker AIC = Amps Interrupt Current) Please contact ETC, Inc. if requirements vary from above listing







K.) ETC recommends that all flourescent lamps be pre-burned for 100 hours at full. It is our experience that fluorescent lamps will dim correctly and perform for longer hours if this is followed. Shorter periods of burn in may reduce dimming effectiveness and increase the lamp failure rate.

Echo Relay Panel Main Feed Cal	ble Specification
Purpose and Type:	Wire Range:
Main Lugs 120/240V 1Ø Main Lugs 120/208V 3Ø Main Lugs 277/480V 3Ø	4 AWG 300 MCM
Main Circuit Breaker 120/240V 1Ø, 100A, 22kA	1 AWG 300 MCM
Main Circuit Breaker 120/240V 1Ø, 200A, 22kA	1 AWG 300 MCM
Main Circuit Breaker 120/208V 3Ø 200A, 10kA Main Circuit Breaker 120/208V 3Ø 200A, 22kA Main Circuit Breaker 120/208V 3Ø 200A, 42kA	3/0 - 300 MCM
Main Circuit Breaker 120/208V 3Ø, 100A, 10kA	8 AWG 3/0
Main Circuit Breaker 277/480V 3Ø 200A, 14kA Main Circuit Breaker 277/480V 3Ø 200A, 65kA Main Circuit Breaker 277/480V 3Ø 150A, 14kA	6 AWG 350 MCM
Ground Input Lug (all models)	4 AWG 300 MCM

Purpose and Type:	Wire Range:
Main Lugs 120/240V 1Ø	6 AWG 250 kcmil (16 mm²-120 mm²)
Main Lugs 120/208V 3Ø	(10 11111 - 120 11111 )
Main Circuit Breaker 22kA 20/240V 1Ø, 100A	4 AWG-1 AWG
Main Circuit Breaker 22kA  20/208V 3Ø, 100A	(25 mm²-50 mm²)
Main Circuit Breaker 22kA 120/240V 1Ø, 200A	1 AWG-300 kcmil
Main Circuit Breaker 22kA 120/208V 3Ø, 200A	(50 mm²-150 mm²)
Main Circuit Breaker 65kA  20/240V 1Ø, 100A	4 AWG-300 kcmil
Main Circuit Breaker 65kA 120/208V 3Ø, 100A	(25 mm²-150 mm²)
Main Circuit Breaker 65kA  20/240V 1Ø, 200A	4 AWG-300 kcmil
Main Circuit Breaker 65kA 20/208V 3Ø, 200A	(25 mm <sup>2</sup> -150 mm <sup>2</sup> )
Main Circuit Breaker 65kA  20/240V 1Ø, 400A	3/0 AWG-250 kcmil
Main Circuit Breaker 65kA 20/208V 3Ø, 400A	(95 mm²-120 mm²)
Neutral Input Lug all models)	6 AWG-350 kcmil (16 mm²-150 mm²)
Ground Input Lug	6 AWG-350 kcmil
48-breaker and all Iso ground)	(16 mm²-150 mm²)
Ground Input Lug	14 AWG-2/0

Load Wire Specification for Sensor IQ		
Purpose and Type (all models):	Wire Range:	
	14 AWG-10 AWG (2.5 mm²-6 mm²)	
Neutral, Ground, and Iso Ground	8 AWG (10 mm²)	
	6 AWG-4 AWG (16 mm²-25 mm²)	
Circuit Proglar Output	16 AWG-6 AWG Solid, Class B, C & K (1 mm²-10 mm² Solid, Class 1, 2 & 5)	
Circuit Breaker Output	Note: Also UL listed for 2 x 12 AWG or 2 x 10 AWG stranded Class B, C, and K Stranded wire only.	

### SECTION 3 - SYSTEM STARTUP

### NOTIFICATION:

- 1.) Please notify ETC Project Management three weeks prior to needing a system startup.
- 2.) No part of this system shall be energized without the knowledge of ETC, Inc.

### ETC CONTRACTOR CHECKLIST:

If a System Startup is included with the purchase of the system, the following checklist notes the conditions that must be met before the Field Service Technician can startup the system. Please review the checklist with the installing contractor.

These items MUST be completed before the ETC Field Service Technician arrives at the site!

- ☐ All dimmer and relay panels are rigidly attached to the mounting surface.
- ☐ Dimmer panel(s) have sufficient access to the front and left for door clearance with TEN INCHES of unobstructed clearance above the fan(s).
- ☐ Feeder cable is pulled into the rack(s) and terminated in accordance with the ETC installation manuals.
- the ETC installation manuals.

  All branch circuits originating from the dimmer or relay panel(s) are installed and terminated on both ends.
- □ All loads have separate neutrals.
- All air gaps in the dimmer panel(s) are sealed, making each dimmer rack section an airtight enclosure.
- $\hfill \square$  Any equipment racks must be mounted and powered as specified in drawings.
- ☐ Control cables are proper type and are installed as specified in the ETC submittal drawings.
- ☐ All back boxes are mounted and supplied with specified data cable tails at least three feet long.
- ☐ All control cable runs are installed as specified in the ETC submittal drawings.
- □ All control cable is labeled at BOTH ends as specified in the ETC submittal drawings.
- ☐ If system was sold as "Terminations By Others", all data terminations must be completed
  ☐ All appropriate personnel are scheduled and available for training.
- ☐ All 0-10V fixture lines are metered to ensure no line voltage is present between conductors
- or between conductors and ground and are terminated properly.

  All RDM/DMX fixtures are addressed and documentation is available for the ETC technician.
- ☐ A complete and accurate load schedule is available for the ETC technician.



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UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES

ORIGINAL FILE:

NOTES.DWG

CONTRACT WITH:

TEXAS SCENIC

REPRESENTATIVE:

HORTON CONTROLS GROUP

PROJECT MANAGER:

SHAWN FERNANDEZ

APPLICATIONS ENGINEER:

DAN BORUD

DRAWING TITLE:

PROJECT NOTES

IOP:		
ву	DATE	REV.
BL	01/03/18	SUBMITTA

### JOB:

RICHARDSON HIGH SCHOOL — RICHARDSON ISD

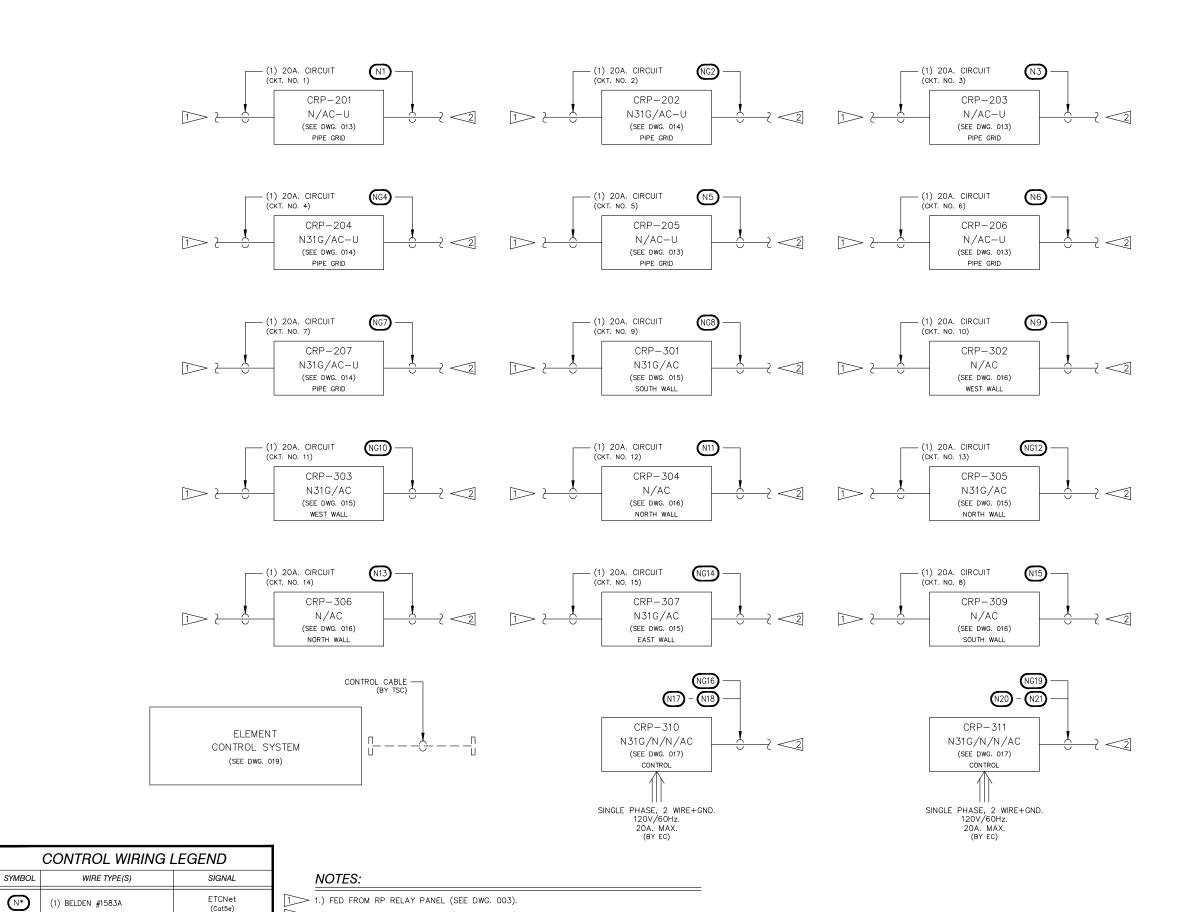
LOCATION:

RICHARDSON, TEXAS

JOB NUMBER:

15047957

DRAWING:



2 2.) FROM SPR EQUIPMENT RACK (SEE DWG. 003).

3.) ALL CONTROL WIRING IS PROVIDED BY EC UNLESS NOTED OTHERWISE.

ALL NETWORK CONNECTIONS TO BE TIA/EIA 568B.

4.) ALL ETCNet RUNS SHALL BE CONTINUOUS, UNSPLICED RUNS LESS THAN 250 FEET (76 METERS).

ETCNet WITH GROUND

(1) #14 AWG. STRANDED GND WIRE

\* = WIRE IDENTIFICATION NUMBER (NOT QUANTITY)

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### ORIGINAL FILE:

RISER-SENSOR.DWG

### CONTRACT WITH:

TEXAS SCENIC

### REPRESENTATIVE:

HORTON CONTROLS GROUP

### PROJECT MANAGER:

SHAWN FERNANDEZ

### APPLICATIONS ENGINEER: DAN BORUD

### DRAWING TITLE:

CONTROL RISER

JOB:		
ву	DATE	REV.
BL	01/03/18	SUBMITTAL

RICHARDSON HIGH SCHOOL - RICHARDSON ISD

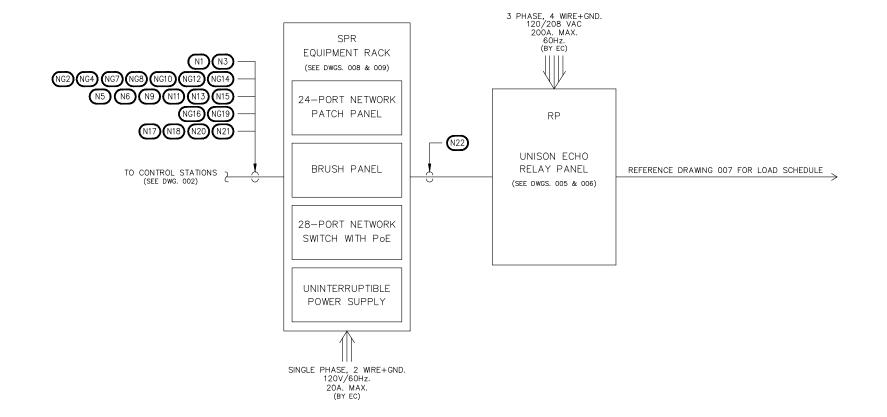
### LOCATION:

RICHARDSON, TEXAS

### JOB NUMBER:

15047957

### DRAWING:



CONTROL WIRING LEGEND			
SYMBOL	WIRE TYPE(S)	SIGNAL	
N*)	(1) BELDEN #1583A	ETCNet (Cat5e)	
NG*	(1) BELDEN #1583A (1) #14 AWG. STRANDED GND WIRE	ETCNet WITH GROUND (Cat5e)	
* = WIRE IDENTIFICATION NUMBER (NOT QUANTITY)			

### NOTES:

- 1.) ALL CONTROL WIRING IS PROVIDED BY EC UNLESS NOTED OTHERWISE.
- 2.) ALL ETCNet RUNS SHALL BE CONTINUOUS, UNSPLICED RUNS LESS THAN 250 FEET (76 METERS). ALL NETWORK CONNECTIONS TO BE TIA/EIA 568B.



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UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES

### ORIGINAL FILE:

RISER-SENSOR.DWG

### CONTRACT WITH:

TEXAS SCENIC

### REPRESENTATIVE:

HORTON CONTROLS GROUP

### PROJECT MANAGER:

SHAWN FERNANDEZ

### APPLICATIONS ENGINEER:

DAN BORUD

### DRAWING TITLE:

POWER RISER

JOB:		
ВҮ	DATE	REV.
BL	01/03/18	SUBMITTA

### JOB:

RICHARDSON HIGH SCHOOL — RICHARDSON ISD

### LOCATION:

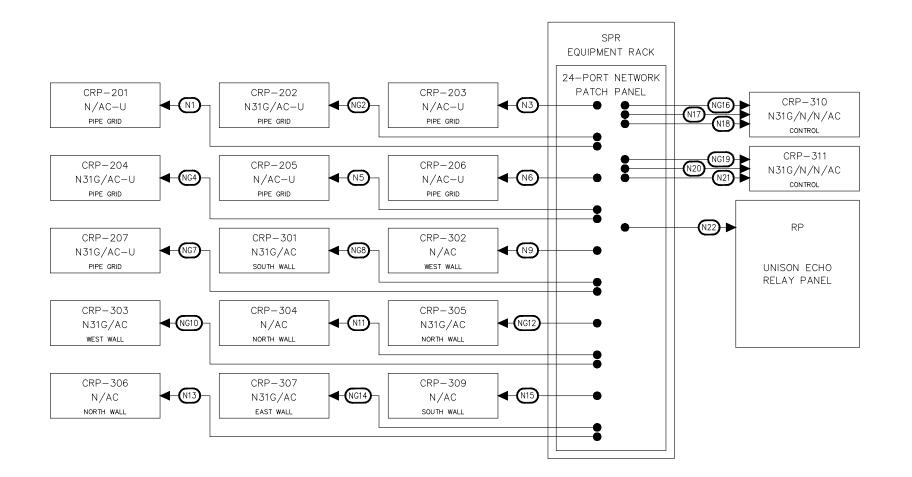
RICHARDSON, TEXAS

### JOB NUMBER:

15047957

### DRAWING:

# CONTROL WIRING LEGEND \* = WIRE IDENTIFICATION NUMBER (NOT QUANTITY) (1) BELDEN #1583A (ETCNet - Cat5e) (1) BELDEN #1583A (1) #14 AWG. STRANDED GND WIRE (ETCNet WITH GROUND - Cat5e) NOTES: 1.) ALL CONTROL WIRING IS PROVIDED BY EC UNLESS NOTED OTHERWISE. 2.) ALL ETCNet RUNS SHALL BE CONTINUOUS, UNSPLICED RUNS LESS THAN 250 FEET (76 METERS). ALL NETWORK CONNECTIONS TO BE TIA/EIA 568B.





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UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES

ORIGINAL FILE:

WIRE DIAGRAM.DWG

CONTRACT WITH:

TEXAS SCENIC

REPRESENTATIVE:

HORTON CONTROLS GROUP

PROJECT MANAGER:

SHAWN FERNANDEZ

APPLICATIONS ENGINEER:

DAN BORUD

DRAWING TITLE:

ETCNet

CONTROL WIRING DIAGRAM

BL 01/03/18 SUBMITTAL
BY DATE REV.

JOB

RICHARDSON HIGH SCHOOL - RICHARDSON ISD

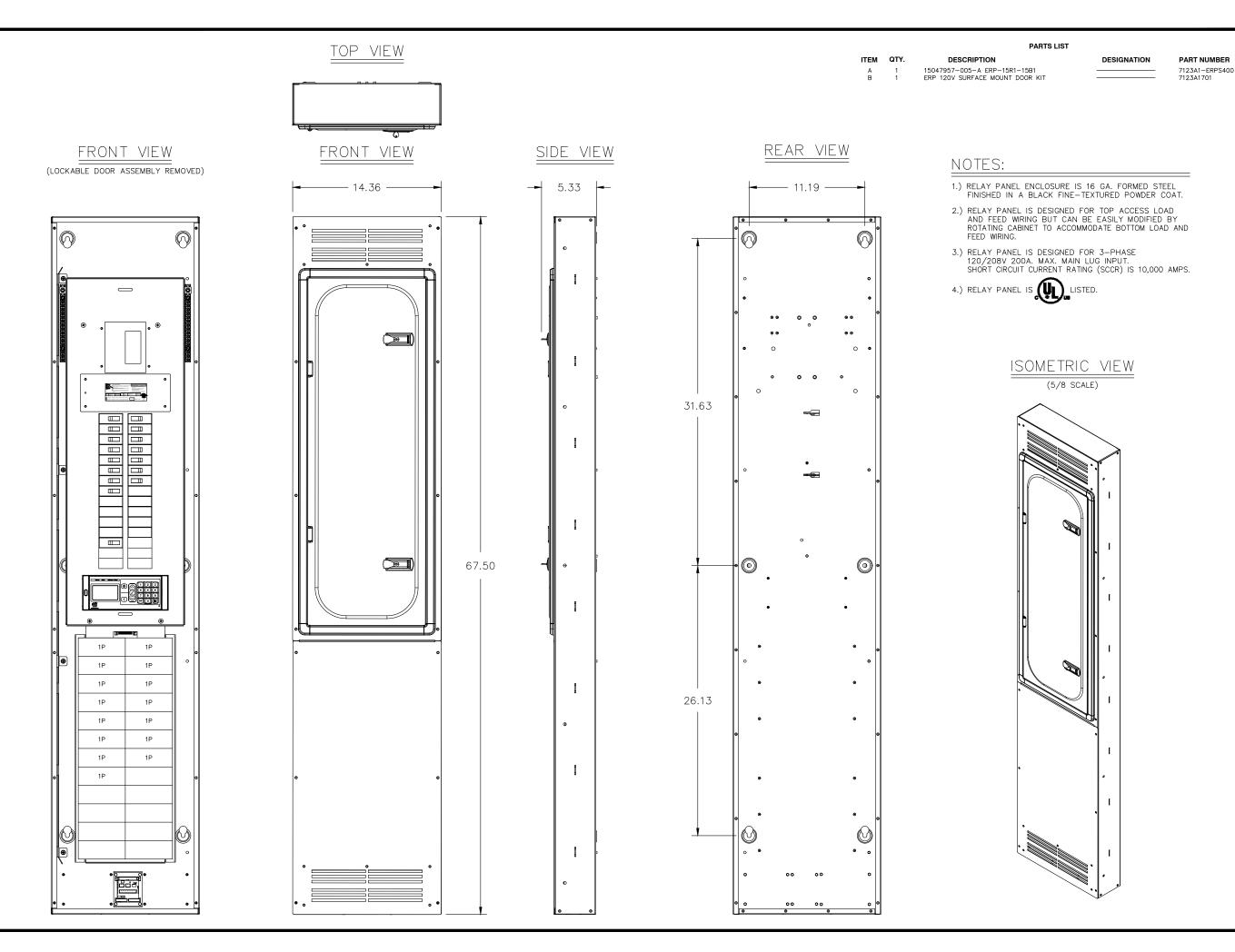
LOCATION:

RICHARDSON, TEXAS

JOB NUMBER:

15047957

DRAWING:





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ORIGINAL FILE:

ECHO RELAY PANEL - 120.DWG

CONTRACT WITH:

TEXAS SCENIC

REPRESENTATIVE:

HORTON CONTROLS GROUP

PROJECT MANAGER:

SHAWN FERNANDEZ

APPLICATIONS ENGINEER:

DRAWING TITLE:

DAN BORUD

RP.

RELAY PANEL (120V)

PHYSICAL

BL 01/03/18 SUBMITTAL
BY DATE REV.

JOB:

ов:

RICHARDSON HIGH SCHOOL - RICHARDSON ISD

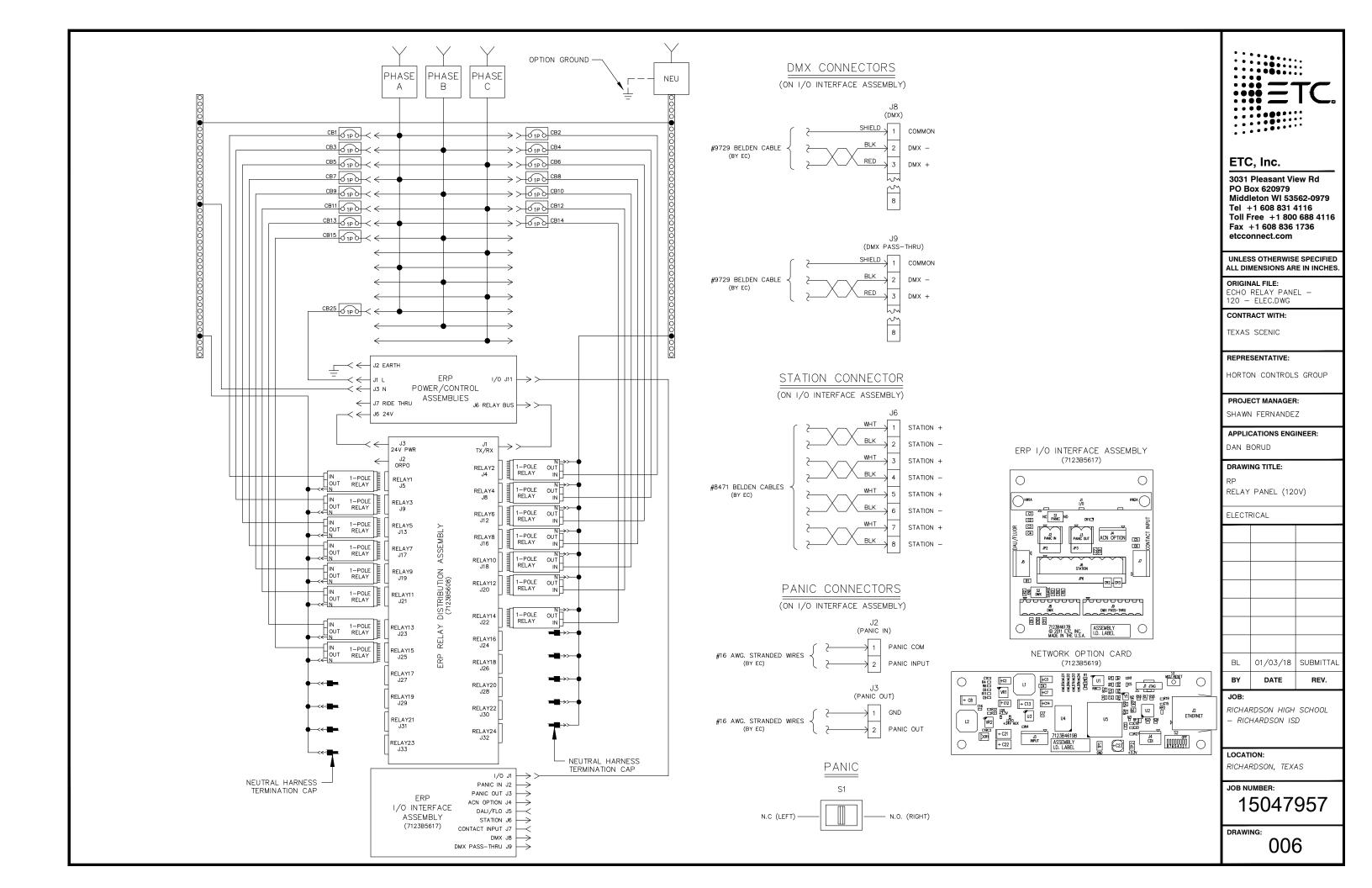
LOCATION:

RICHARDSON, TEXAS

JOB NUMBER:

15047957

DRAWING:





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UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES

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### ONTRACT WITH:

### PRESENTATIVE:

### ROJECT MANAGER:

### AN BORUD

### RAWING TITLE:

JOB:		
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BL	01/03/18	SUBMITTAL

RICHARDSON HIGH SCHOOL - RICHARDSON ISD

### LOCATION:

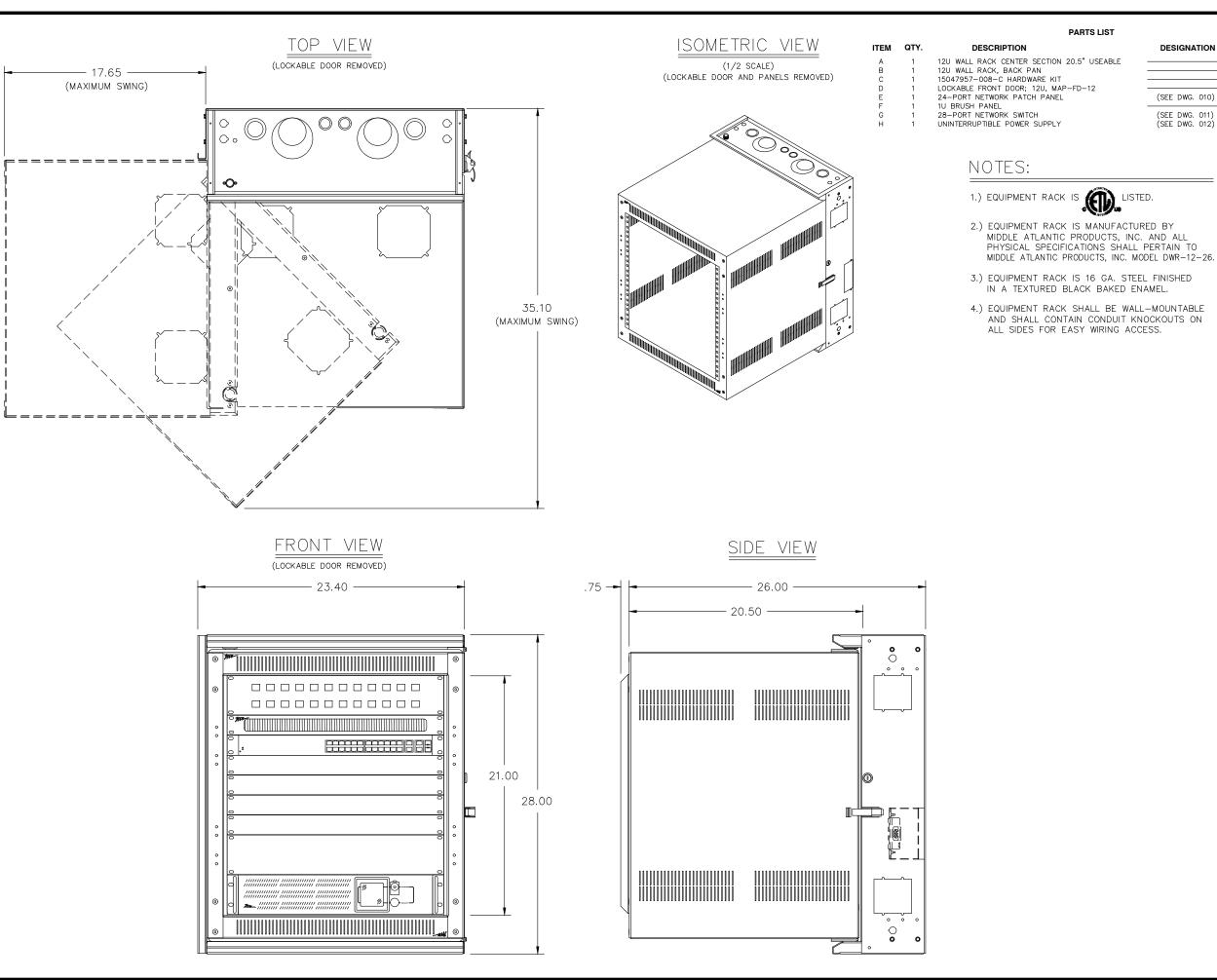
RICHARDSON, TEXAS

### JOB NUMBER:

15047957

### DRAWING:

	LOAD PER CIRCUIT (VA)	RELAY	LOAD LOCATION	LOAD DESCRIPTION	DMX ADDRESS	VOLTAGE RATING	RELAY NUMBER
CONTRACT WITH:		RATING					
TEXAS SCENIC		20 A	CRP 201	PRODUCTION LT.	1	120	1
REPRESENTATIVE:		20 A	CRP 202	PRODUCTION LT.	2	120	2
HORTON CONTROLS GROUP		20 A	CRP 203	PRODUCTION LT.	3	120	3
PROJECT MANAGER:		20 A	CRP 204	PRODUCTION LT.	4	120	4
SHAWN FERNANDEZ		20 A	CRP 205	PRODUCTION LT.	5	120	5
APPLICATIONS ENGINEER:		20 A	CRP 206	PRODUCTION LT.	6	120	6
DAN BORUD		20 A	CRP 207	PRODUCTION LT.	7	120	7
DRAWING TITLE:		20 A	CRP 309	PRODUCTION LT.	8	120	8
RP LOAD SCHEDULE		20 A	CRP 301	PRODUCTION LT.	9	120	9
		20 A	CRP 302	PRODUCTION LT.	10	120	10
		20 A	CRP 303	PRODUCTION LT.	11	120	11
		20 A	CRP 304	PRODUCTION LT.	12	120	12
		20 A	CRP 305	PRODUCTION LT.	13	120	13
		20 A	CRP 306	PRODUCTION LT.	14	120	14
		20 A	CRP 307	PRODUCTION LT.	15	120	15
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12U WALL RACK CENTER SECTION 20.5" USEABLE 12U WALL RACK, BACK PAN 15047957-008-C HARDWARE KIT LOCKABLE FRONT DOOR; 12U, MAP-FD-12 24-PORT NETWORK PATCH PANEL

(SEE DWG. 010) (SEE DWG. 011)

DESIGNATION

(SEE DWG. 012)

### PART NUMBER PJE1090 PJE1091-FIN

TL47957-ARCH1 PJE1070 SGE1061 \_\_\_\_\_

### ETC, Inc.

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### ORIGINAL FILE:

MAP-DWR-12-26.DWG

### CONTRACT WITH:

TEXAS SCENIC

### REPRESENTATIVE:

HORTON CONTROLS GROUP

### PROJECT MANAGER:

SHAWN FERNANDEZ

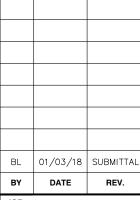
### APPLICATIONS ENGINEER:

DAN BORUD

### DRAWING TITLE:

EQUIPMENT RACK

PHYSICAL



RICHARDSON HIGH SCHOOL - RICHARDSON ISD

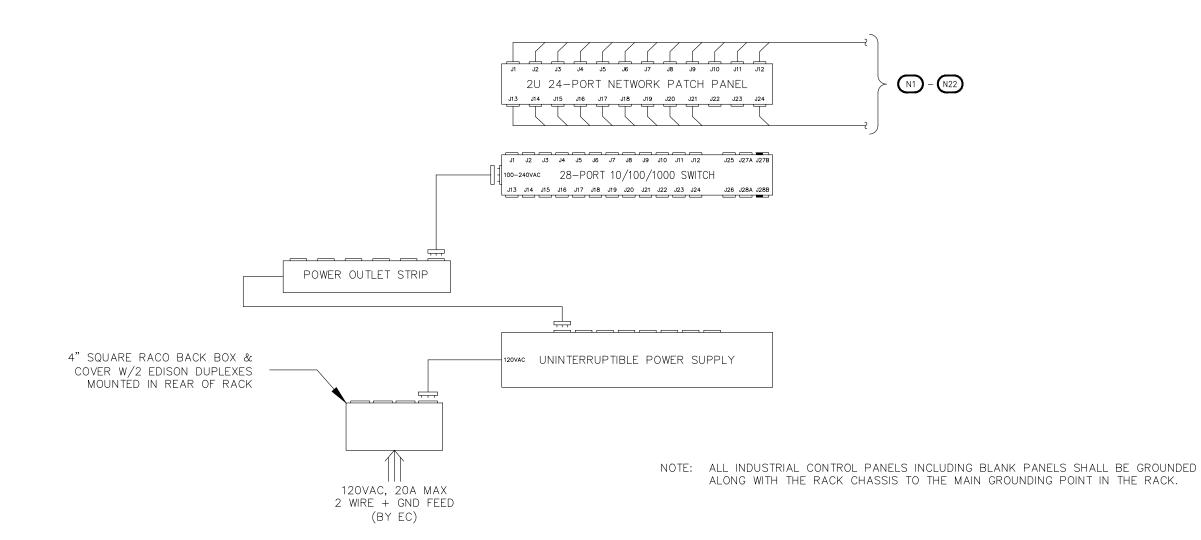
### LOCATION:

RICHARDSON, TEXAS

### JOB NUMBER:

15047957

### DRAWING:





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### ORIGINAL FILE:

MAP-DWR-12-26.DWG

### CONTRACT WITH:

TEXAS SCENIC

### REPRESENTATIVE:

HORTON CONTROLS GROUP

### PROJECT MANAGER:

SHAWN FERNANDEZ

### APPLICATIONS ENGINEER:

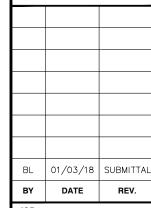
DAN BORUD

### DRAWING TITLE:

SPR

EQUIPMENT RACK

ELECTRICAL



### JOB

RICHARDSON HIGH SCHOOL - RICHARDSON ISD

### LOCATION:

RICHARDSON, TEXAS

### JOB NUMBE

15047957

### DRAWING:

1.) PATCH PANEL IS .06 ALUMINUM FINISHED IN A BLACK FINE—TEXTURED POWDER COAT.

2.) ALL NOMENCLATURE IS ENGRAVED IN WHITE.

TEM	QTY.	DESCRIPTION
Α	1	15047957-010-A 24 PORT PATCH PANEL
В	22	CAT5e CONNECTOR, 8-POSITION
С	2	SNAP-IN BLANK, BLACK
D	22	CAT5e CABLE RJ45 UTP 2FT

NOTES:

### DESIGNATION

HUBBELL™ SFBB10

(NOT SHOWN)

TL47957-ARCH2 N2027 PJE1021 N4035

PART NUMBER

# ETC.

### ETC, Inc.

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### ORIGINAL FILE:

PATCH-PANEL-24.DWG

### CONTRACT WITH:

TEXAS SCENIC

### REPRESENTATIVE:

HORTON CONTROLS GROUP

### PROJECT MANAGER:

SHAWN FERNANDEZ

### APPLICATIONS ENGINEER:

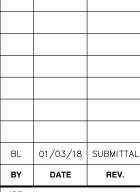
DAN BORUD

### DRAWING TITLE:

24-PORT

NETWORK PATCH PANEL

PHYSICAL



### JOB:

RICHARDSON HIGH SCHOOL — RICHARDSON ISD

### LOCATION:

RICHARDSON, TEXAS

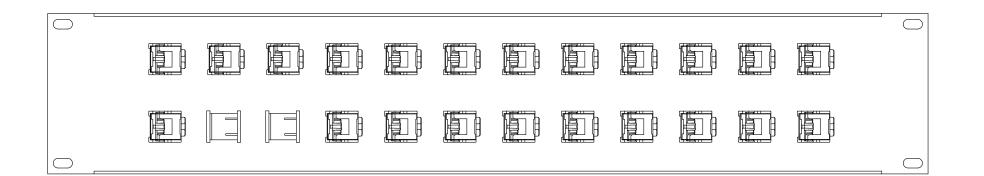
### JOB NUMBER:

15047957

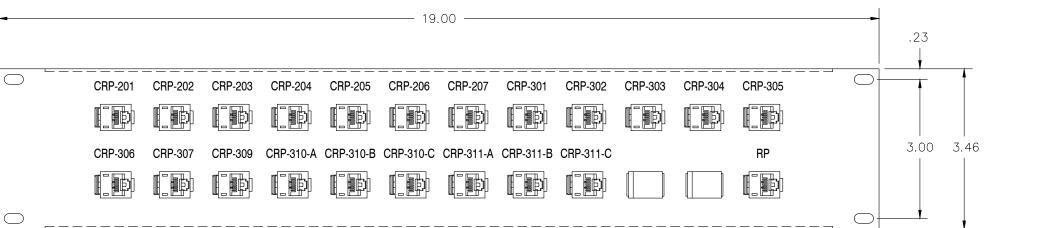
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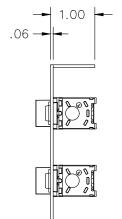
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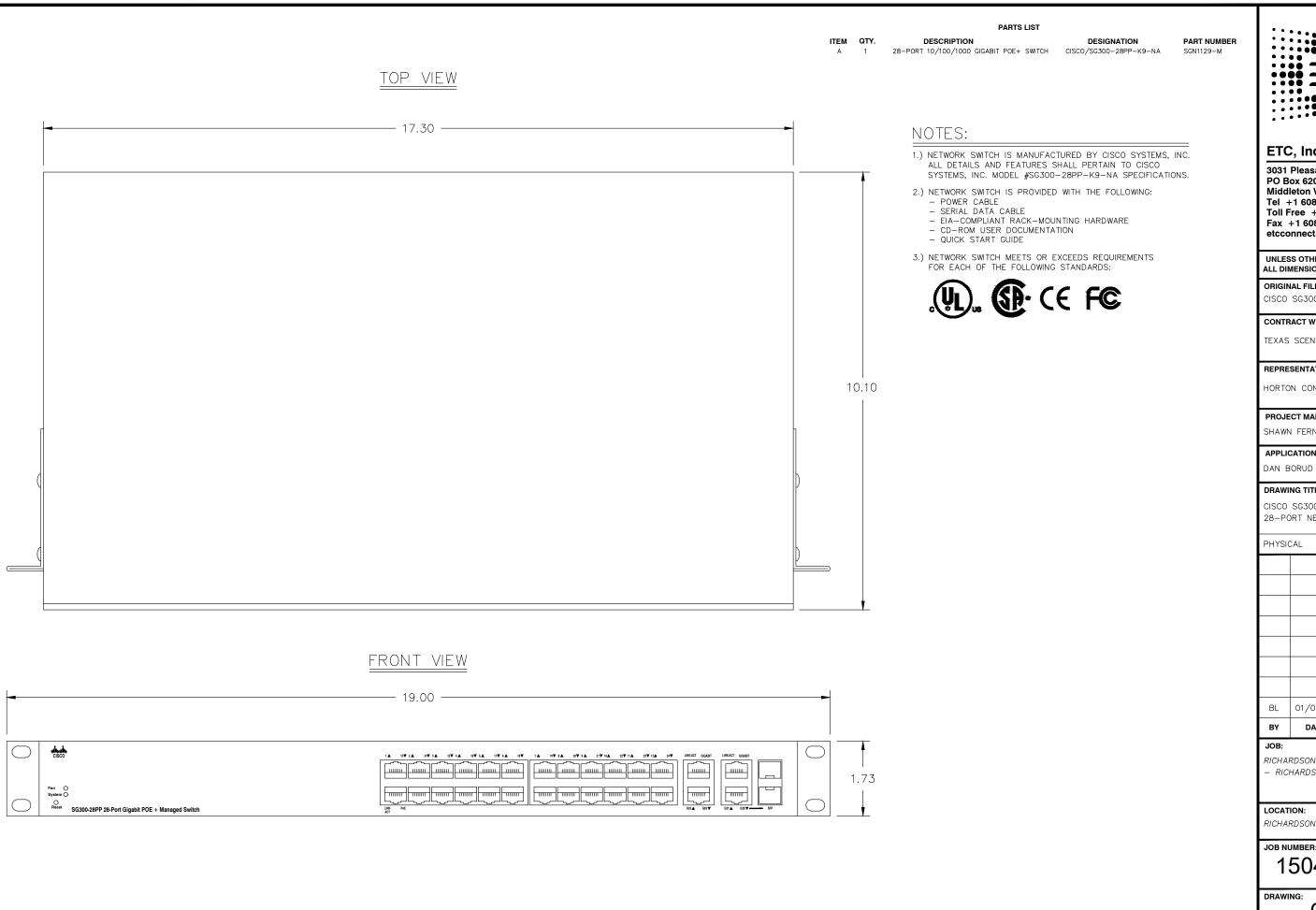
### REAR VIEW



FRONT VIEW SIDE VIEW







**=**T

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UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES

### ORIGINAL FILE:

CISCO SG300-28PP.DWG

### CONTRACT WITH:

TEXAS SCENIC

### REPRESENTATIVE:

HORTON CONTROLS GROUP

### PROJECT MANAGER:

SHAWN FERNANDEZ

### APPLICATIONS ENGINEER:

### DRAWING TITLE:

CISCO SG300-28PP 28-PORT NETWORK SWITCH

### PHYSICAL

01/03/18 | SUBMITTAL DATE REV.

RICHARDSON HIGH SCHOOL - RICHARDSON ISD

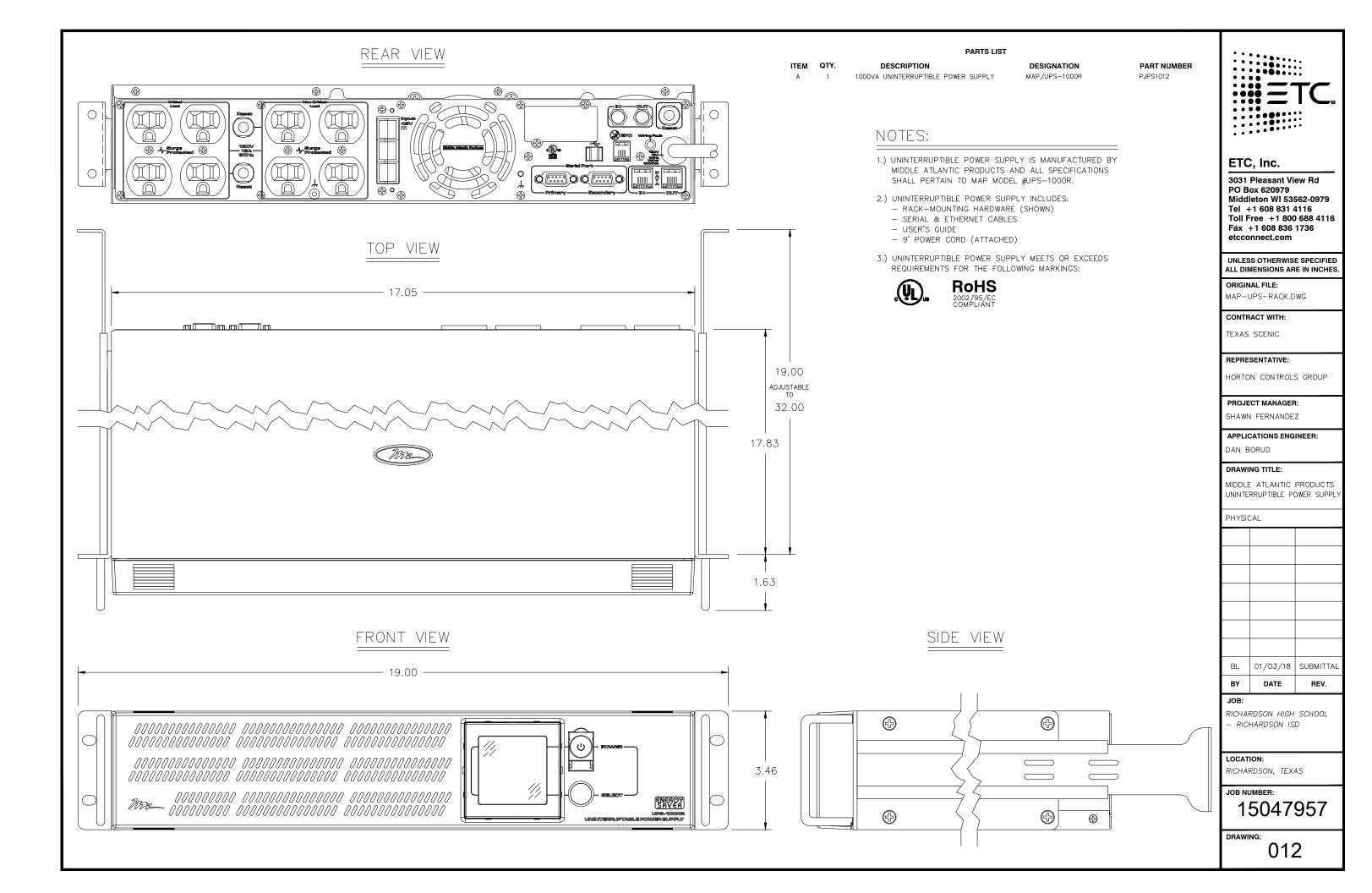
### LOCATION:

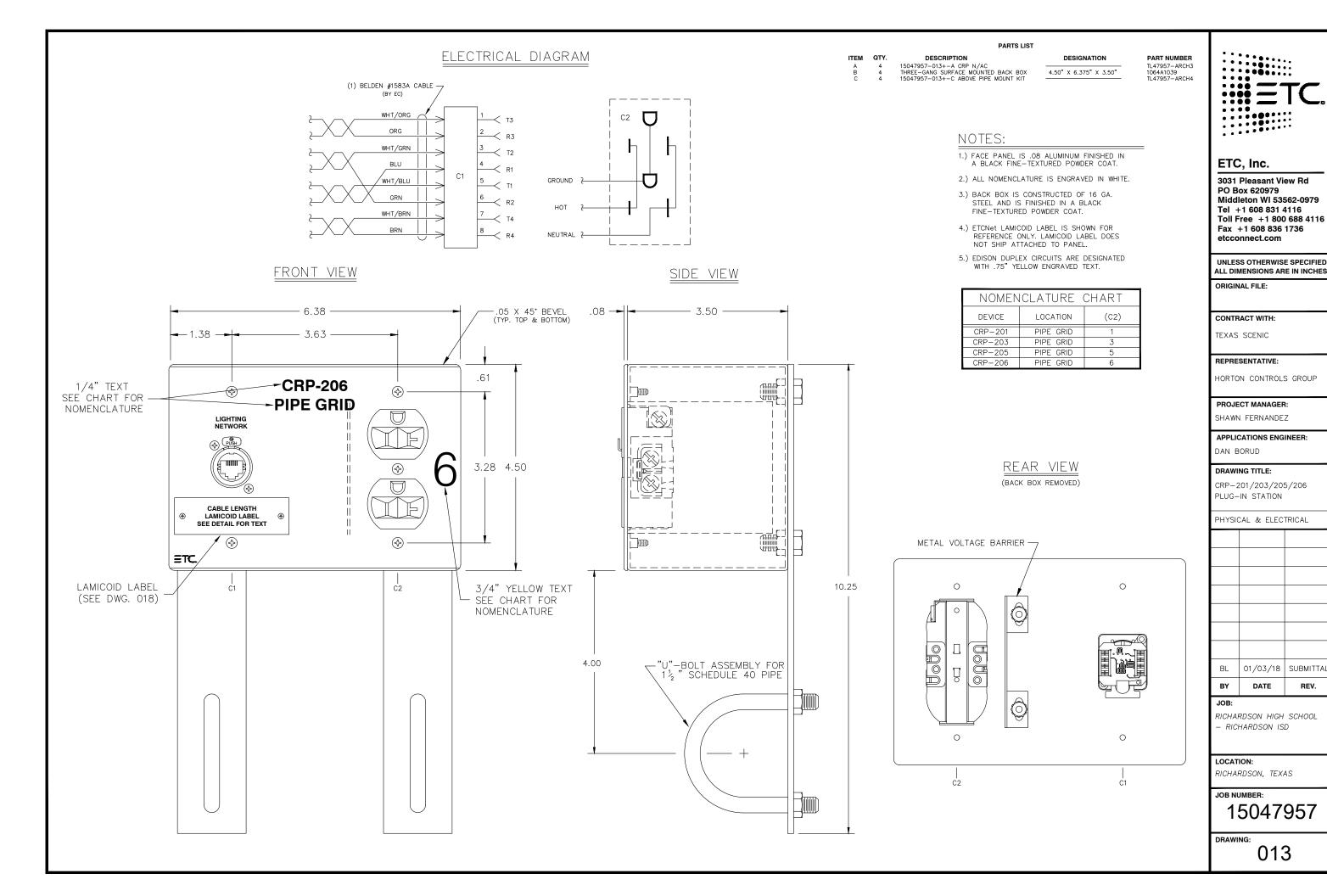
RICHARDSON, TEXAS

### JOB NUMBER:

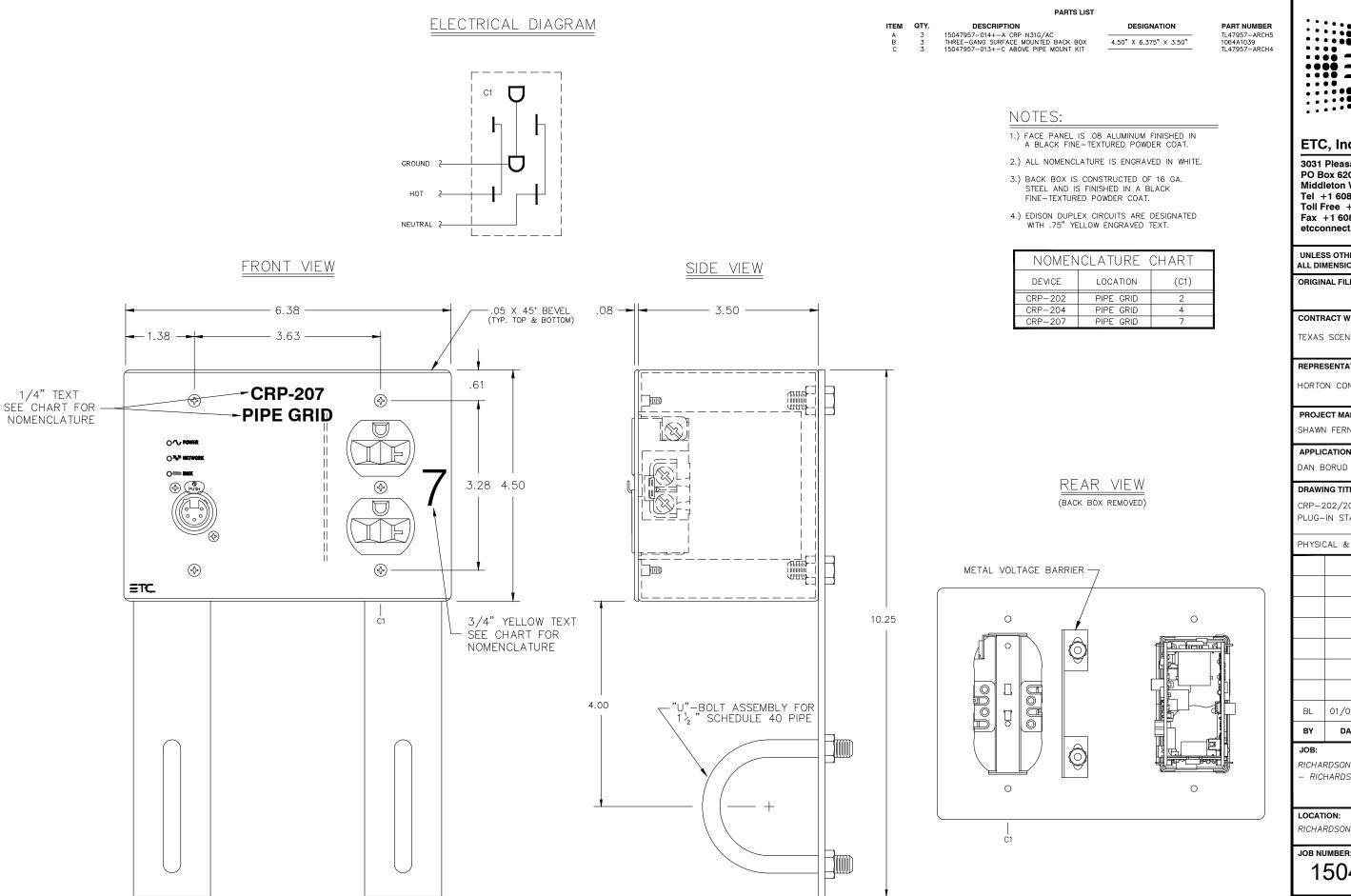
15047957

### DRAWING:





REV.





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UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES

ORIGINAL FILE:

CONTRACT WITH:

TEXAS SCENIC

REPRESENTATIVE:

HORTON CONTROLS GROUP

PROJECT MANAGER:

SHAWN FERNANDEZ

APPLICATIONS ENGINEER:

DRAWING TITLE:

CRP-202/204/207 PLUG-IN STATION

PHYSICAL & ELECTRICAL

.IOB·		
BY	DATE	REV.
BL	01/03/18	SUBMITTAI

RICHARDSON HIGH SCHOOL - RICHARDSON ISD

LOCATION:

RICHARDSON, TEXAS

JOB NUMBER:

15047957

DRAWING:

NOTES:

DEVICE

CRP-301 CRP-303

CRP-305

CRP-307

ITEM QTY. DESCRIPTION 15047957-014+-A CRP N31G/AC

0

DESIGNATION

1.) FACE PANEL IS .08 ALUMINUM FINISHED IN A BLACK FINE-TEXTURED POWDER COAT.

2.) ALL NOMENCLATURE IS ENGRAVED IN WHITE.

RACO #697 (OR EQUIVALENT), AND IS SUPPLIED BY OTHERS.

3.) BACK BOX SHALL BE THREE GANG 3.50" DEEP

GANGABLE BACK BOX IS NOT ACCEPTABLE.

NOMENCLATURE CHART

LOCATION

SOUTH WALL

WEST WALL

NORTH WALL

EAST WALL

(C1)

13

0

4.) EDISON DUPLEX CIRCUITS ARE DESIGNATED WITH .75" YELLOW ENGRAVED TEXT.

PART NUMBER TL47957-ARCH5 **=**T

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UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES

ORIGINAL FILE:

CONTRACT WITH:

TEXAS SCENIC

REPRESENTATIVE:

HORTON CONTROLS GROUP

PROJECT MANAGER:

SHAWN FERNANDEZ

APPLICATIONS ENGINEER:

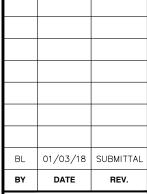
DAN BORUD

DRAWING TITLE:

CRP-301/303/305/307

PLUG-IN STATION

PHYSICAL & ELECTRICAL



RICHARDSON HIGH SCHOOL - RICHARDSON ISD

LOCATION:

RICHARDSON, TEXAS

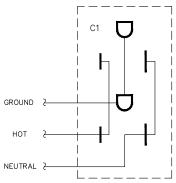
JOB NUMBER:

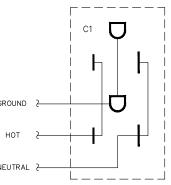
15047957

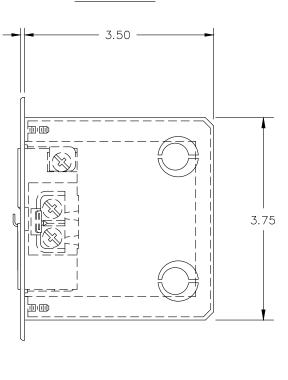
DRAWING:

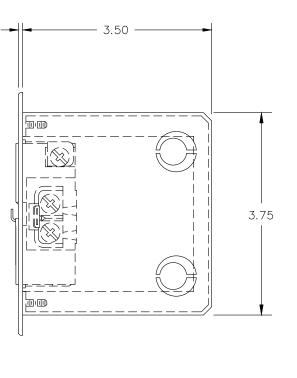
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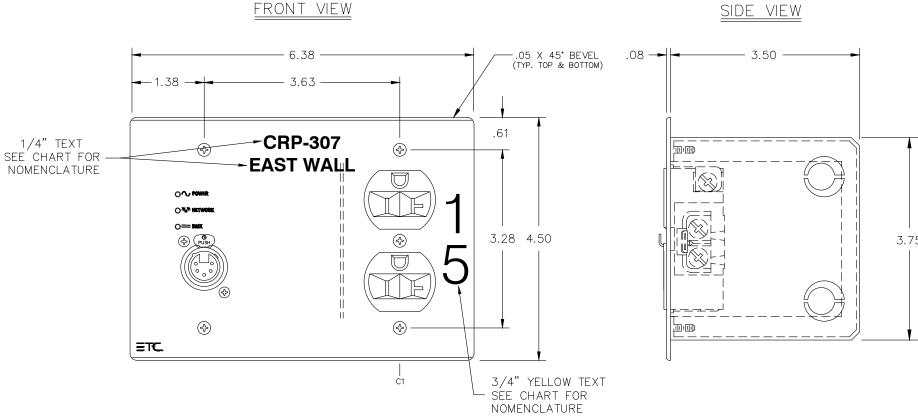
### ELECTRICAL DIAGRAM

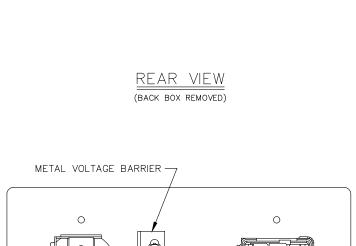








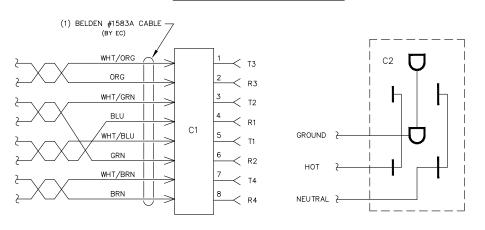




ITEM QTY. DESCRIPTION 15047957-013+-A CRP N/AC DESIGNATION

PART NUMBER

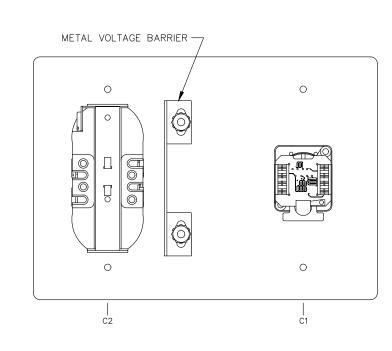
### ELECTRICAL DIAGRAM



### NOTES:

- 1.) FACE PANEL IS .08 ALUMINUM FINISHED IN A BLACK FINE-TEXTURED POWDER COAT.
- 2.) ALL NOMENCLATURE IS ENGRAVED IN WHITE.
- 3.) BACK BOX SHALL BE THREE GANG 3.50" DEEP RACO #697 (OR EQUIVALENT), AND IS SUPPLIED BY OTHERS. GANGABLE BACK BOX IS NOT ACCEPTABLE.
- 4.) ETCNet LAMICOID LABEL IS SHOWN FOR REFERENCE ONLY. LAMICOID LABEL DOES NOT SHIP ATTACHED TO PANEL.
- 5.) EDISON DUPLEX CIRCUITS ARE DESIGNATED WITH .75" YELLOW ENGRAVED TEXT.

NOMENCLATURE CHART			
DEVICE	LOCATION	(C2)	
CRP-302	WEST WALL	10	
CRP-304	NORTH WALL	12	
CRP-306	NORTH WALL	14	
CRP-309	SOUTH WALL	8	



REAR VIEW (BACK BOX REMOVED) **=**T

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UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES

ORIGINAL FILE:

CONTRACT WITH:

TEXAS SCENIC

REPRESENTATIVE:

HORTON CONTROLS GROUP

PROJECT MANAGER:

SHAWN FERNANDEZ

APPLICATIONS ENGINEER:

DAN BORUD DRAWING TITLE:

CRP-302/304/306/309 PLUG-IN STATION

PHYSICAL & ELECTRICAL

JOB:		
BY	DATE	REV.
BL	01/03/18	SUBMITTAL

RICHARDSON HIGH SCHOOL - RICHARDSON ISD

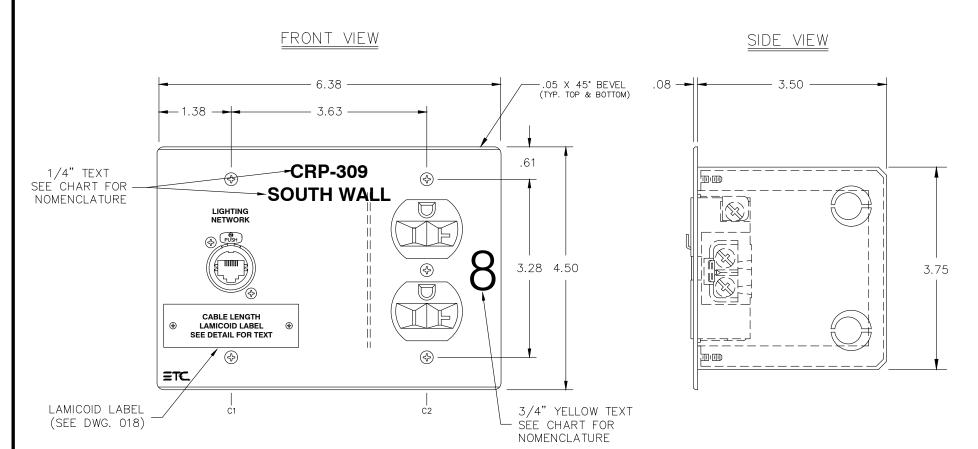
LOCATION:

RICHARDSON, TEXAS

JOB NUMBER:

15047957

DRAWING:



DESCRIPTION

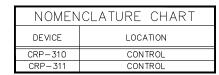
15047957-017-A CRP N31G/N/N/AC

NOTES:

1.) FACE PANEL IS .08 ALUMINUM FINISHED IN A BLACK FINE—TEXTURED POWDER COAT.

- 2.) ALL NOMENCLATURE IS ENGRAVED IN WHITE.
- 3.) BACK BOX SHALL BE FOUR—GANG 3.50" DEEP RACO #698 (OR EQUIVALENT), AND IS SUPPLIED BY OTHERS. GANGABLE BACK BOX IS NOT ACCEPTABLE.
- 4.) ETCNet LAMICOID LABEL IS SHOWN FOR REFERENCE ONLY. LAMICOID LABEL DOES NOT SHIP ATTACHED TO PANEL.

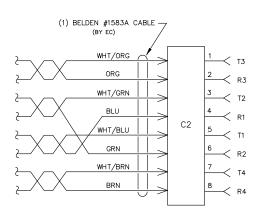
### ELECTRICAL DIAGRAM

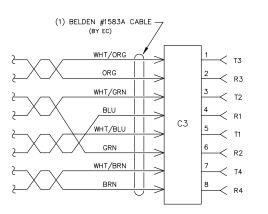


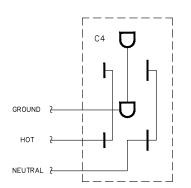
DESIGNATION

PART NUMBER

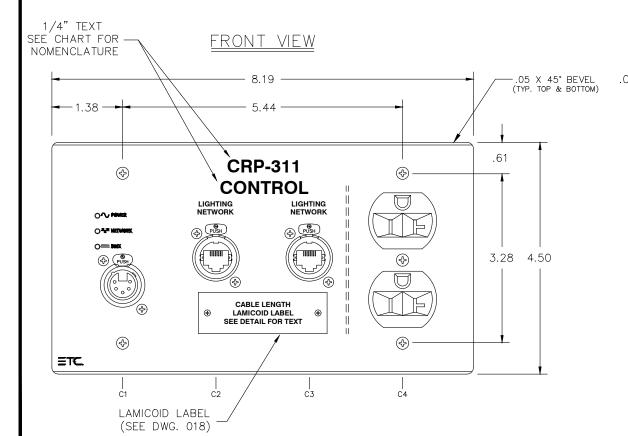
TL47957-ARCH6

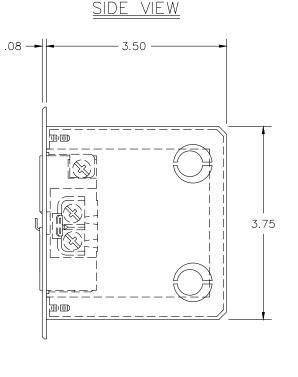




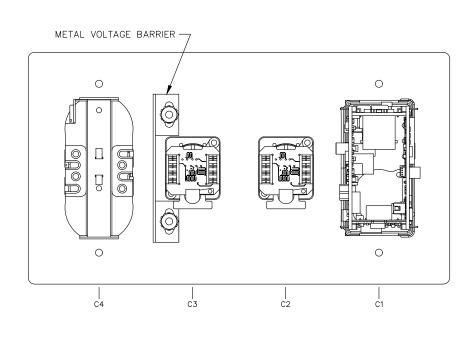


ITEM QTY.





### REAR VIEW (BACK BOX AND WIRE CONNECTORS REMOVED)





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UNLESS OTHERWISE SPECIFIED
ALL DIMENSIONS ARE IN INCHES

### ORIGINAL FILE:

ECPB-D-D-N-N.DWG

### CONTRACT WITH:

TEXAS SCENIC

### REPRESENTATIVE:

HORTON CONTROLS GROUP

### PROJECT MANAGER:

SHAWN FERNANDEZ

### APPLICATIONS ENGINEER:

DAN BORUD

### DRAWING TITLE:

CRP-310/311 PLUG-IN STATION

### PHYSICAL & ELECTRICAL

IOD.		
BY	DATE	REV.
BL	01/03/18	SUBMITTAL

### JOB:

RICHARDSON HIGH SCHOOL — RICHARDSON ISD

### LOCATION:

RICHARDSON, TEXAS

### JOB NUMBER:

15047957

### DRAWING:

ITEM QTY.

DESCRIPTION CUSTOM LAMICOID LABEL SCR #4x3/16 PhPHST TYPE B BO DESIGNATION

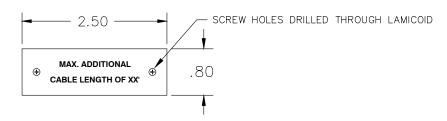
PART NUMBER 1100A4008 HW1235

### NOTES:

- 1.) LABEL IS A BLACK LAMICOID WHICH SHALL BE LASER MARKED WITH .10 HIGH WHITE NOMENCLATURE PER CHART.
- 2.) XX' MAXIMUM ADDITIONAL CABLE LENGTH TO BE DETERMINED PRIOR TO MANUFACTURING.

### LAMICOID LABEL DETAIL

(DIMENSIONS TYPICAL FOR ALL)



	LAMICOID LABEL DESIGNATION CHART			
DEVICE I.D. #	NET RUN I.D. #	CABLE LENGTH	MAX. ADDITIONAL CABLE LENGTH (XX')	REFERENCE DWG.#
CRP-201	N1			013
CRP-203	N3			013
CRP-205	N5			013
CRP-206	N6			013
CRP-302	N9			016
CRP-304	N11			016
CRP-306	N13			016
CRP-309	N15			016
CRP-310	N16-N18			017
CRP-311	N19-N21			017



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UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES

### ORIGINAL FILE:

ETCNet LABEL.dwg

### CONTRACT WITH:

TEXAS SCENIC

### REPRESENTATIVE:

HORTON CONTROLS GROUP

### PROJECT MANAGER:

SHAWN FERNANDEZ

### APPLICATIONS ENGINEER:

DAN BORUD

### DRAWING TITLE:

ETCNet LAMICOID LABEL

PHYSICAL

BL	01/03/18	SUBMITTAL
ву	DATE	REV.
JOB:		

RICHARDSON HIGH SCHOOL - RICHARDSON ISD

### LOCATION:

RICHARDSON, TEXAS

### JOB NUMBER:

15047957

### DRAWING:

### NOTES:

- 1.) CONTROL CONSOLE FACE PANEL IS .060 STEEL FINISHED IN AN ELECTROLESS NICKEL POWDER COAT. CHASSIS IS .062 ALUMINUM FINISHED IN A BLUE/BLACK POWDER COAT.
- 2.) FACE PANEL AND REAR PANEL NOMENCLATURE ARE REVERSE—SILKSCREENED ONTO ADHESIVE LEXAN LABELS.
- 3.) APPROXIMATE WEIGHT OF CONSOLE IS 27 lbs. (12.2 kg)
- 4.) CONTROL CONSOLE INCLUDES 6 FT. (1.8 METER) IEC POWER CABLE, 3-BUTTON/SCROLLER MOUSE AND DUST COVER. (NOT SHOWN FOR DRAWING CLARITY.)
- 5.) CONTROL CONSOLE MEETS OR EXCEEDS REQUIREMENTS FOR THE FOLLOWING MARKINGS:

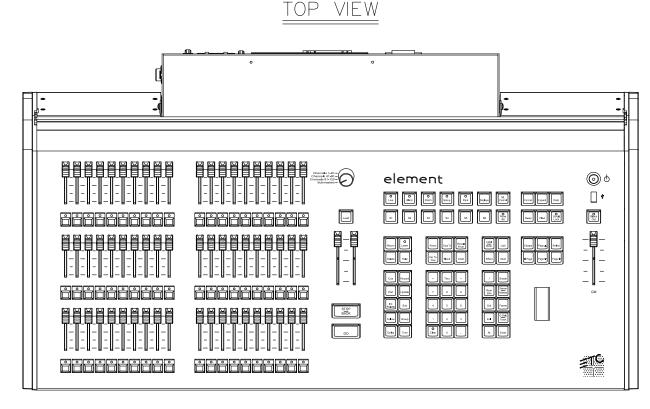


ISOMETRIC VIEW

# 

ITEM QTY.

## (3/4 SCALE)



PARTS LIST

DESCRIPTION

REAR VIEW

ELEMENT 60 CONTROL CONSOLE

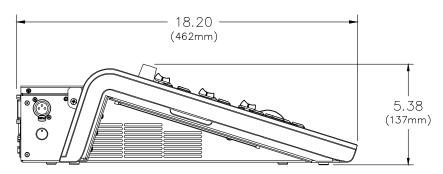
DESIGNATION

(500 CHANNEL)

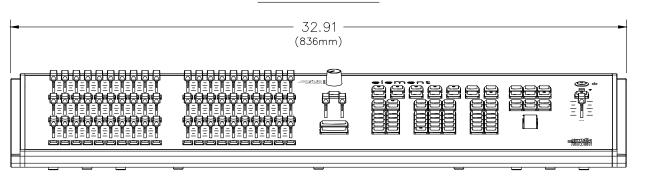
PART NUMBER

4330A1132

### SIDE VIEW



### FRONT VIEW





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UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES

### ORIGINAL FILE:

ELEMENT-60.DWG

### CONTRACT WITH:

TEXAS SCENIC

### REPRESENTATIVE:

HORTON CONTROLS GROUP

### PROJECT MANAGER:

SHAWN FERNANDEZ

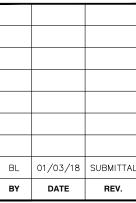
### APPLICATIONS ENGINEER:

DAN BORUD

### DRAWING TITLE:

ELEMENT 60 CONTROL CONSOLE

### PHYSICAL



### JOB:

RICHARDSON HIGH SCHOOL — RICHARDSON ISD

### LOCATION:

RICHARDSON, TEXAS

### JOB NUMBER:

15047957

### DRAWING: