

Item No.	Qty.	Catalog Number / Details
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SWITCHBOARD

062-00

1

Designation: US-1

Square D Custom Swbd
QED Switchboard

Square D Custom Swbd
Designed and Tested in accordance with:
UL 891/NATIONAL ELECTRIC CODE/NEMA PB-2
System Voltage - 480Y/277V 3Ph 4W 60Hz
Source Description - Single Main
System Ampacity - 1600A
Bussing - Silver Plated Copper
Neutral Bus - 100%
Max Available Fault Current (RMS) - 35kA
Enclosure - Type 1
Accessibility: Front and Rear
Taped Horizontal Through Bus
Micrologic Hand Held Test Kit
Drawout Breaker Lifting Assembly 3 pole
Equipment Nameplate White Surface/Black
Letters, Adhesive (Field Installed)
Exterior Paint Color - ANSI 61
Ground Lug provided for each device
SIS Control Wire
Copper Ground Bus
Certified Test Report Required
Seismic Qualified
Specials: CPT control power for xfmr fan
Special CPT control power for xfmr fan #:
CR-435261

Dimensions

2 - 36" Wide Section(s)
1 - 24" Wide Section(s)
3 - 60" Deep Enclosure(s)
Dimensions: 96.00" W X 60" Max D X 91.5" H
Approximate Weight: 2825.00 lbs / 1281.42 kgs

Incoming Requirements

Suitable for Use As Service Entrance
Entry Point: Right of Lineup, Through the Side
Square D Transformer Connection
Line Side Connection - Fire Pump Lugs
SPD with Surge Rating 120kA
SPD Dry Contacts
Includes Surge Counter
Power Meter - PM8244
3 CTs PM8244 w/ Display - 3 phase 4 wire wye
1600A

Item No.	Qty.	Catalog Number / Details
		Mains

	1	1600AF/1600AT 100% 3 Pole Stored Energy, Drawout Mounted Circuit Breaker, UL: Type NW Ammeter Trip Unit, Long Time, Short Time, Instantaneous, Ground Fault Overcurrent Trip Switch 1A/1B Form C Contact (SDE) Auxiliary Switches 4A-4B Shunt Trip - 120Vac Drawout Crank Contact Wear Indication - Visual Cradle Cell Keying Nameplate - White Surface / Black Letters, Adhesive (Field Installed)
		Feeder

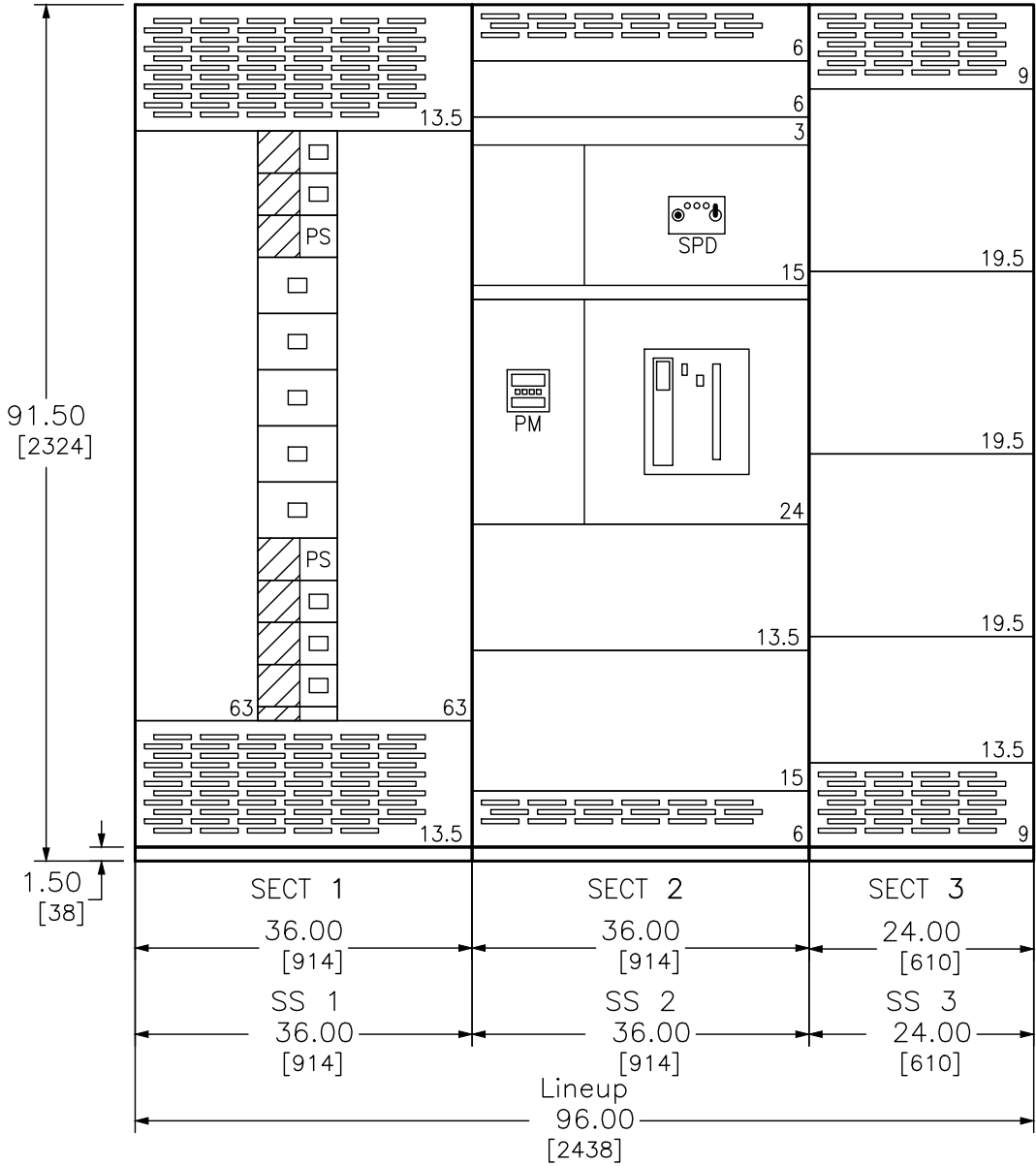
	2	250AS/175AT 480V 80% Rated 35 kA 3 Pole UL, Group Mounted Electronic Trip Circuit Breaker: Type JG Standard Trip Unit, Long Time, Instantaneous
	3	250AS/225AT 480V 80% Rated 35 kA 3 Pole UL, Group Mounted Electronic Trip Circuit Breaker: Type JG Standard Trip Unit, Long Time, Instantaneous
	2	225AT 480V 80% Rated 35 kA 3 Pole UL, Group Mounted Electronic Prepared Space: Type JG
	2	400AS/350AT 480V 80% Rated 35 kA 3 Pole UL, Group Mounted Electronic Trip Circuit Breaker: Type LG Standard Trip Unit, Long Time, Instantaneous Lug Kit AL400L61K3
	3	400AS/400AT 480V 80% Rated 35 kA 3 Pole UL, Group Mounted Electronic Trip Circuit Breaker: Type LG Standard Trip Unit, Long Time, Instantaneous
		Common Feeder Features: Nameplate - White Surface / Black Letters, Adhesive (Field Installed)

REV	DESCRIPTION	BY	DATE										
-	----	--	--/--/--	-	----	--	--/--/--	-	----	--	--/--/--	-	----

T-bus
19.5 in

T-bus
36.5 in

T-bus
19.5 in



SWITCHBOARD GENERAL NOTES

PRODUCT DESCRIPTION & RATINGS

Power System Data

480Y/277V 3Ph 4W 60Hz / 3 Phase Wye
Solidly Grounded
System Short Circuit Current Rating: 35kA RMS
Incoming Section 3 Close Coupled to Transformer Through the Side/Right of Lineup

Bus System Data

1600A Silver Plated Copper Main Bus
(2) .25x2.00 IN/6x51 mm Cu Bus Bar Per Phase/Neutral
(1) .25x.875 IN/6x22 mm Cu Ground Bus
Insulated/Taped bus

Enclosure Data

Type 1 Free Standing
Exterior Paint Color: ANSI 61
Front & Rear Accessibility Required
Handling: Rollers & Lifting Assemblies
Nameplate Mounting Type: Adhesive (Field Installed)
Equipment Nameplate: White Surface/Black Letters
Device Nameplate: White Surface / Black Letters

Estimated Shipping Weight

Shipping Split 1 1090.00 lbs / 494.42 kgs
Shipping Split 2 1105.00 lbs / 501.23 kgs
Shipping Split 3 630.00 lbs / 285.77 kgs
Complete Lineup 2825.00 lbs / 1281.42 kgs

Code Standards

U.L. Deadfront and suitable for use as Service Entrance
when not more than six (6) disconnecting means are provided.

Rating Nameplates

ST1- Deadfront- Section Bus 1600A
ST2- Service Entrance - Section Bus 1600A
ST3- Deadfront- Section Bus 300A

PRODUCT INFORMATION

Wiring

All wiring to be SIS Wire type

Instruction Bulletins

Reference 80043-055 For Handling, Installation,
Anchoring, Inspection And Maintenance Information

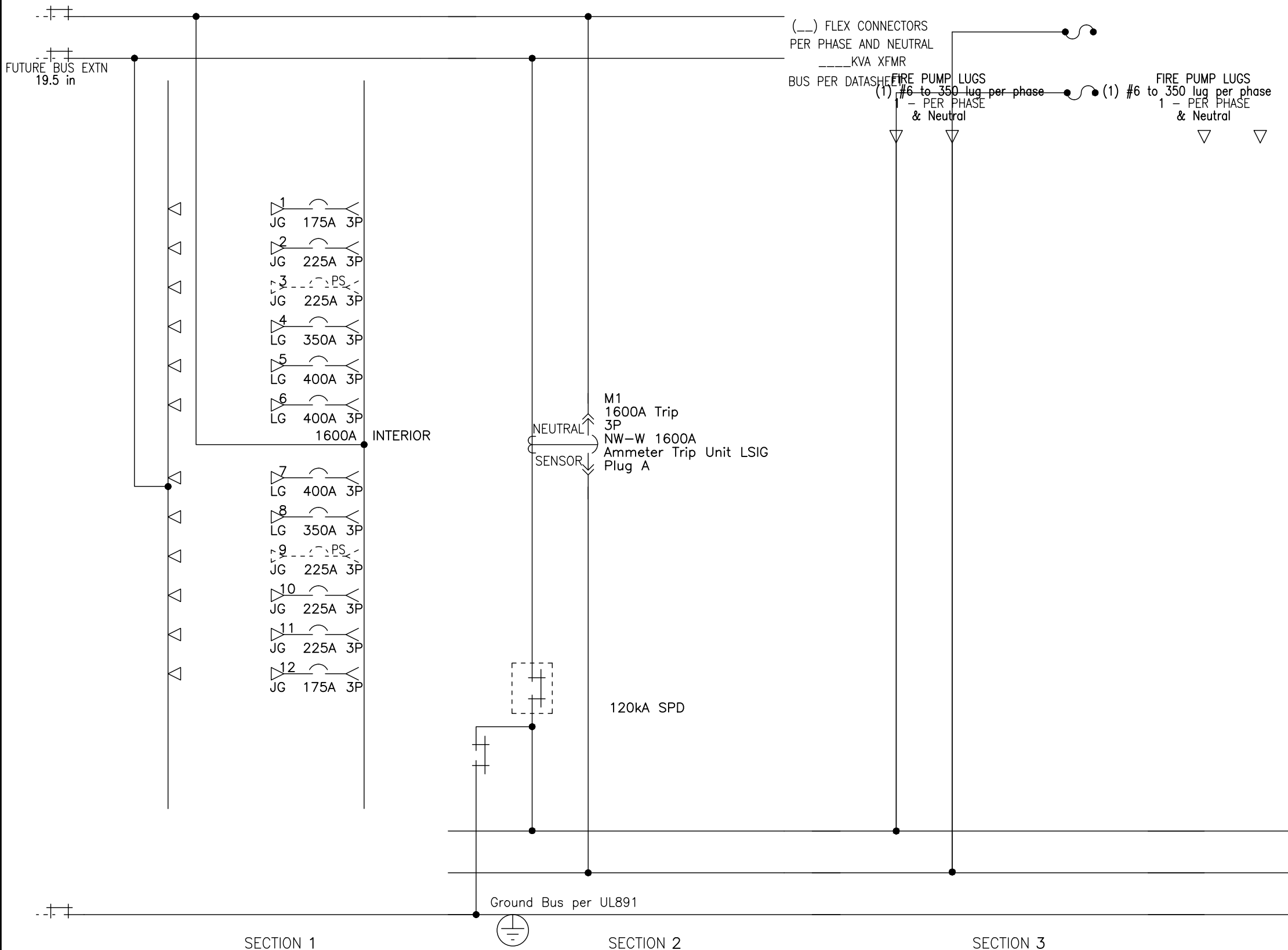
Product Accessories/Options

Certified Test Report
Seismic Qualified
24V Trip Unit Display Power
Masterpact NW 3-Pole Breaker Lifting Bar Assembly
Test Kit (Handheld)

DUAL DIMENSIONS: INCHES
MILLIMETERS

JOB NAME:	WEBSTER UNIVERSITY ISB	EQUIPMENT DESIGNATION:	US-1
JOB LOCATION:	WEBSTER GROVES MO	EQUIPMENT TYPE:	QED Switchboard
DRAWN BY:	(Q2C)	DRAWING TYPE:	ELEVATION VIEW
ENGR:			
DATE:	June 13 2016		
DRAWING STATUS:	QUOTE	NOT FOR CONSTRUCTION	DWG# F37999262-01
			PG 1 OF 2 REV -

REV	DESCRIPTION	BY	DATE										
-	----	--	--/--/--	-	----			--	--/--/--	-	----	--	--/--/--



JOB NAME:	WEBSTER UNIVERSITY ISB	EQUIPMENT DESIGNATION:	US-1
JOB LOCATION:	WEBSTER GROVES MO	EQUIPMENT TYPE:	QED Switchboard
DRAWN BY:	(Q2C)	DRAWING TYPE:	ONE LINE
ENGR:			
DATE:	June 13 2016		
DRAWING STATUS:	QUOTE	DWG#	037999262-01
		PG	1
		OF	2
		REV	-

REV	DESCRIPTION	BY	DATE	-	----	--	--/--/--	-	----	--	--/--/--
-	----	--	--/--/--	-	----	--	--/--/--	-	----	--	--/--/--

POWER STYLE QED-2 SWITCHBOARD

SECT NO	CKT NO	GMD HEIGHT	DEVICE/FRAME RATING	TRIP AMP	FUSE/TRIP	#P	DESIGNATION	N/P	LUG/WIRE INFORMATION				ACCESSORIES / NOTES
									QTY	PHASE WIRE RANGE	QTY	NEUT WIRE RANGE	
-	-	-	Equipment Nameplate	-	-	-	US-1	Yes	-	-	-	-	-
1	1	4.5 in	JG 250A	175A	S-LI	3P	1NH1-4NH1	Yes	1	3/0 - 350 kcmil	1	3/0 - 350kcmil	
1	2	4.5 in	JG 250A	225A	S-LI	3P	SPARE	Yes	1	3/0 - 350 kcmil	1	3/0 - 350kcmil	
1	3	4.5 in	JG 250A (PS)	(225A)	(LI)	3P	Blank Nameplate	Yes	1	3/0 - 350 kcmil	1	3/0 - 350kcmil	
1	4	6 in	LG 400A	350A	S-LI	3P	SB1	Yes	1	600 kcmil	1	600 kcmil	LK5
1	5	6 in	LG 400A	400A	S-LI	3P	ATSSB	Yes	2	3/0 - 250 kcmil	2	3/0 - 250 kcmil	
1	6	6 in	LG 400A	400A	S-LI	3P	SPARE	Yes	2	3/0 - 250 kcmil	2	3/0 - 250 kcmil	
1	7	6 in	LG 400A	400A	S-LI	3P	BNH1	Yes	2	3/0 - 250 kcmil	2	3/0 - 250 kcmil	
1	8	6 in	LG 400A	350A	S-LI	3P	SB2	Yes	1	600 kcmil	1	600 kcmil	LK5
1	9	4.5 in	JG 250A (PS)	(225A)	(LI)	3P	Blank Nameplate	Yes	1	3/0 - 350 kcmil	1	3/0 - 350kcmil	
1	10	4.5 in	JG 250A	225A	S-LI	3P	1NH2	Yes	1	3/0 - 350 kcmil	1	3/0 - 350kcmil	
1	11	4.5 in	JG 250A	225A	S-LI	3P	ATSLS	Yes	1	3/0 - 350 kcmil	1	3/0 - 350kcmil	
1	12	4.5 in	JG 250A	175A	S-LI	3P	SPARE	Yes	1	3/0 - 350 kcmil	1	3/0 - 350kcmil	
2	-	-	120kA SPD	-	-	-	-	-	-	-	-	-	SPD
2	M1	-	NW 1600A Plug A	1600A	A-LSIG	3P	MAIN	Yes	-	-	-	-	GF,SDE1,OF4,MX1,CCKK,PM8K,TU

LEGEND	
CCKK	Cradle Cell Key Kit
GF	Ground Fault
LK5	AL400L61K3 Lug Kit
MX1	Shunt Trip
OF4	4 Form C Breaker Aux Contacts
PM8K	Power Meter PM8XXX
SDE1	Over Current Trip Switch
SPD	Surge Protection Device
TU	24V Trip Unit Display Power

NAMEPLATE INFORMATION:	JOB NAME: WEBSTER UNIVERSITY ISB	EQUIPMENT DESIGNATION: US-1
MOUNTING TYPE: Adhesive (Field Installed)	JOB LOCATION: WEBSTER GROVES MO	EQUIPMENT TYPE: QED Switchboard
EQUIPMENT: White Surface/Black Letters	DRAWN BY: (Q2C)	DRAWING TYPE: SCHEDULE
DEVICE: White Surface / Black Letters	ENGR:	
	DATE: June 13 2016	
	DRAWING STATUS: QUOTE	
DWG# 037999262-01		PG 2 OF 2 REV -

Shop Drawing Submittal Review

Transmitted To: Cannon Design

Date: July 19, 2016

Attention: stl-cac@cannondesign.com

Contact Person / WTA Field Inspector:
Patrick Garner

Project Name: Webster University-**ISB**

Reviewed by: Bill Shaw

Project No. WT 14127.01

☐

UPS

☐

Courier

☒

Email

Copies	No.	Description
1 PDF	264000E01	(Submittal No. 264000-001) Electrical Distribution

Submittal Review Comments

Circuit breaker size and position shall match panel schedules on sheets E0503, 504, 505, & 506.

c: Kelvin Patel
Kpatel@cannondesign.com

☐ Furnish as Submitted

☐ Furnish as Noted

☐ Rejected

☒ ***Revise & Resubmit**

☐ Reviewed

☐

Corrections or comments made on shop drawings during this review do not relieve contractor from compliance with requirements of drawings and specifications. This check is only for review of general conformance with the design concept of project and general compliance with information given in contract documents. Contractor is responsible for: confirming and correlating all quantities and dimensions; selecting fabrication processes and techniques of construction; coordinating his work with that of all other trades; and performing his work in a safe and satisfactory manner.

WTASHOP - Webster ISB - 26 4000-001

From: STL-CAC <STL-CAC@CANNONDESIGN.COM>
To: 'Patrick Garner' <pgarner@wmtao.com>, WTASHOP <wtashop@wmtao.com>
Date: 7/5/2016 11:40 AM
Subject: Webster ISB - 26 4000-001
Cc: "Patel, Kelvin" <kpatel@CANNONDESIGN.COM>, "Grossman, Lynn" <lgrossman@C...>
Attachments: 264000-001 Electrical Distribution.pdf

Attached for review.

Melissa Pirtle

Construction Admin

CANNONDESIGN

1100 Clark Ave
St. Louis, Missouri 63102
T [314.425.8797](tel:314.425.8797) • M
cannondesign.com





77 Westport Plaza
Suite 250
St. Louis, MO 63146

TRANSMITTAL

No. 15051-0114

Paric Corporation

PROJECT: 15051-Webster University Interdisciplinary Science Building

DATE: 07/05/2016

TO: Cannon Design
1100 Clark Ave
St Louis MO 63102

RE: Electrical Distribution

ATTN: Kelvin Patel

JOB: 15051

WE ARE SENDING:	SUBMITTED FOR:	ACTION TAKEN:
☐ Shop Drawings	☒ Approval	☐ Approved as Submitted
☐ Letter	☐ Your Use	☐ Approved as Noted
☐ Prints	☐ As Requested	☐ Returned After Loan
☐ Change Order	☐ Review and Comment	☐ Resubmit
☐ Plans		☐ Submit
☐ Samples	SENT VIA:	☐ Returned
☐ Specifications	☐ Attached	☐ Returned for Corrections
☒ Other: Product Data	☐ Separate Cover Via:	☐ Due Date:

Item	Package	Code	Rev.	Copies	Date	Description	Status
Submittal		264000-001	1		07/05/2016	Electrical Distribution	Submitted

NOTES:

CC: Paric Corporation, Kathy Bathe

Project Coordinator: Paric Corporation, Kathy Bathe

Signed: _____
Devin Gates

Transmittal

To Paric Corporation

Date 7/1/16

Job Number 11317

Job Name Webster Univ. ISB Building

Attention Devin Gates

Transmittal Number 11317-005

We are sending you:

☒ Attached

☐ Under separate cover, the following:

☐ Preliminary Drawings

☐ Samples

☐ Construction Drawings

☐ Copy of Letter

☐ Specifications

☐ Other _____

Quantity	Drawing #	Date/Revision	Description
1			Submittal for Distribution - Spec Section
			26 40 00

These are transmitted as checked:

☒ For Your Review & Comment

☐ Approved As Noted

☒ For Approval

☐ Returned For Corrections

☐ For Your File

☐ Approved As Submitted

☐ As Requested

☐

Copy:

Transmittal

Enclosure

Rick Branstetter

Signed: Rick Branstetter, Project Manager

Webster University ISB

Approval Drawing Package

Factory Order #: 37999262

06/13/2016

Distributor:
Graybar

Contractor/Installer:
Guarantee Electric / TD4

Consulting Engineer:
Wm Tao & Associates

Lou Feldhaus
Sales Representative

Jake Kaufman
Project Manager
North American Operating Division
(636) 329-2265
jacob.kaufman@schneider-electric.com

Life Is On

Schneider
Electric

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UNIT SUBSTATION LITERATURE

Unit Substation Brochure

HVL 5...38 kV Load Interrupter Switchgear - Brochure

Power Dry II- Dry-Type, Small Power Transformer Brochure

Model 98A Digital Temperature Controller For Medium Voltage Transformers

Power-Style QED-2 Switchboard Brochure

Internal Modular SPD Brochure

PowerLogic PM8000 Series Intermediate Metering Technical Data Sheet

NW Breaker Brochure

Micrologic Trip Units for Masterpact Circuit Breakers Brochure

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1EL1

1SH1 - 1SL1

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Integrated Power Center 2 (IPC2)

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PANELBOARD SCHEDULE AND DRAWINGS

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I-Line Panelboard Handout

NF Panelboard Handout

NQ Panelboard Handout

I-Line SPD

Internal Modular SPD Brochure

SurgeLoc SPD for NQ Panelboards

CONTACTORS AND STARTERS

BILL OF MATERIALS AND DRAWINGS

8538SCG

8538SCA - EF-1

8538SCA - KEF-1

2510FG

LITERATURE

Manual Starters - Type F

Manual Starters - Type M and T

8538 Combination Starter Catalog

SAFETY SWITCHES

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H361

HU362

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MCTAS-485 Terminator

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BILL OF MATERIALS

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LPJ Fuses 1 - 60 Amps

LPJ Fuses 70 - 600 Amps