Control Switches and Indicating Lights for Conventional 2-Position Switches

- Switch position indicating lights (16 mm, industrial grade LEDs).
- Source acceptability indicating lights with true indication of the acceptability of each source, as determined by the voltage, frequency, voltage unbalance, and phase sequence settings of the control panel (16mm, industrial grade LEDs).
- Three position (16mm, industrial grade type) selector switch:
- Automatic: Normal maintained position.
- Test: Momentary position to simulate normal source failure for system test function.
- Reset Delay Bypass: Momentary position to bypass transfer and re-transfer time delay.

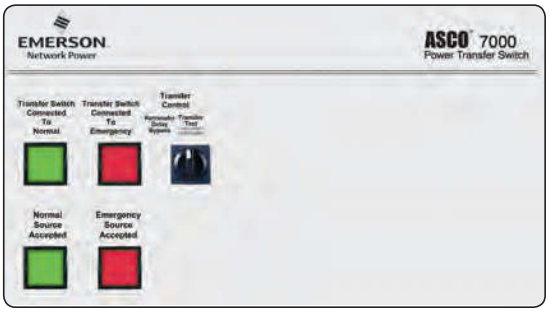

Fig. 16: 7000 Series User Controls and Indicators.

Control Switches and Indicating Lights for Closed Transition Switches

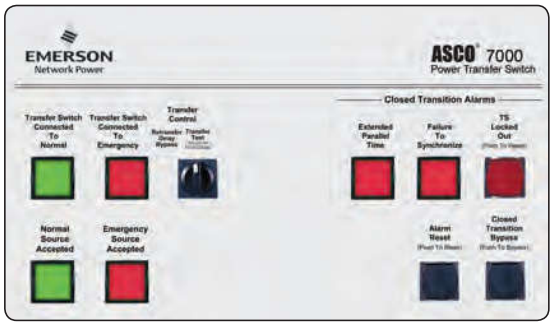

Fig. 17: 7000 Series User Controls and Indicators.

- Extended Parallel Time - Provides visual indication when the pre-set extended parallel time has been exceeded. The controls automatically open the emergency or normal main contacts. Separate contact also available to shunt trip external breaker.
- Failure To Synchronize - Visually displays a failure to synchronize alarm if the time delay settings is exceeded, during closed transition transfer operation.
- TS Locked Out - Prevents transfer in either direction if the extended parallel time is exceeded.
- Alarm Reset - Resets extended parallel and failure to synchronize alarms.
- Closed Transition Bypass - Pushbutton allows transfer between sources in an open transition mode.

7000 Series Power Control Center

Fig. 18: 7000 Series Power Control Center.

The 7000 Series microprocessor controller is a Power Control Center which allows the user to easily access detailed information on: system status; power source parameters; voltage, frequency and time delay settings; optional feature settings; historical event log; and system diagnostics. A four line, (20) character LCD has a backlit display which enables easy viewing under all conditions. The user can navigate through all screens using only six buttons, which also allows selection of: (18) different source parameter settings; (16) standard time delays; (12) standard feature settings; up to seven independent engine exercise routines; and even the language (English, German, Spanish, French, etc.) which appears on the display.

Since the Power Control Center must be visible and operable through the enclosure door, it has been qualified for use in industrial and outdoor applications. This includes installation in Type 3R (outdoor/rainproof), 4 (weatherproof) and 12 (indoor/industrial) enclosures. For applications with regular exposure to direct sunlight a double door for UV protection is recommended.

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EMERSON Network Power

May 18, 2016

ASCO POWER TECHNOLOGIES L.P, CHICAGO SALES OFFICE 603 E. DIEHL ROAD, SUITE 139, NAPERVILLE, IL 60563 FAX# 630-505-4055

Automatic Transfer Switch Bill of Material

Webster University

Designation	Amps	Poles	Neutral	Voltage	Service Entrance	Bypass	Transition	Catalog Number	Accessories Included
ATS-LS	230	4	Switched	480	No	Yes	Delayed	J7ADTBB30230N5XC	18B,18G,31Z,72EE2
ATS-SB	400	4	Switched	480	No	Yes	Delayed	J7ADTBB30400N5XC	18B,18G,31Z,67JB,72EE2

ACCESSORIES DESCRIPTION

Accessory Code	Description
18B/18G	2pole D/T contacts that operate when emergency and normal source voltage is present at transfer switch terminals
31Z	Selective Load disconnect circuit to provide a pre-transfer and/or post transfer signal when transferring from emergency to normal and/or normal to emergency. The signal can be programmed to occur during all transfers or only when the transfer is occurring between two live sources. The length of the pre and post transfer delays can be set to 0-5 minutes 59 seconds.
67JB	Side pullbox for J Bypass Switch 150A-600A
72EE2	5170 Quad-Ethernet Module provides transfer switch dashboard screen with password protected control capabilities, email alerts and open protocol support in a single module with an integrated 4 port Ethernet switch.

ATS-LS
Detailed Information

AMPS : 0400			
Product Description	: 7000 Series, ~~Delayed~~ Open Transition, Not Service Entrance Rated	Catalog Number	: J7ADTBB30400N5XC
Service Voltage	: 277/480	Optional Accessories	: 18B/18G,31Z,67JB,72EE2
By-pass Isolation	: ~~Yes~~ NO See Addendum 2-2	Number of Poles	: 4, Switched [B] Neutral
Withstand Rating Frame = J, Switch Rating = 0400 , Series = 7000	: See WCR table above	Quantity of Cables & Lug Size	: (2) 1/0 – 250 MCM AL/CU or (1) #4 – 600 MCM AL/CU
Enclosure	1(C) Type 1 Enclosure	Service	: Three Phase, 4-wire

ACCESSORIES DESCRIPTION

Accessory Code	Description
18B/18G	2pole D/T contacts that operate when emergency and normal source voltage is present at transfer switch terminals
31Z	Selective Load disconnect circuit to provide a pre-transfer and/or post transfer signal when transferring from emergency to normal and/or normal to emergency. The signal can be programmed to occur during all transfers or only when the transfer is occurring between two live sources. The length of the pre and post transfer delays can be set to 0-5 minutes 59 seconds.
67JB	Side pullbox for J Bypass Switch 150A-600A
72EE2	5170 Quad-Ethernet Module provides transfer switch dashboard screen with password protected control capabilities, email alerts and open protocol support in a single module with an integrated 4 port Ethernet switch.

DRAWINGS FOR APPROVAL

Drawing Number	Description
802093	Composite Enclosure Outline and Mounting Diagram
806099-003	Three Phase Wiring Diagram

ASCO Power Technologies

EMERSON Network Power

ATS-SB
Detailed Information

AMPS : 0400			
Product Description	: 7000 Series, ~~Delayed~~ Open Transition, Not Service Entrance Rated	Catalog Number	: J7ADTBB30400N5XC
Service Voltage	: 277/480	Optional Accessories	: 18B/18G,31Z,67JB,72EE2
By-pass Isolation	: ~~Yes~~ NO See Addendum 2-2	Number of Poles	: 4, Switched [B] Neutral
Withstand Rating Frame = J, Switch Rating = 0400 , Series = 7000	: See WCR table above	Quantity of Cables & Lug Size	: (2) 1/0 – 250 MCM AL/CU or (1) #4 – 600 MCM AL/CU
Enclosure	1(C) Type 1 Enclosure	Service	: Three Phase, 4-wire

ACCESSORIES DESCRIPTION

Accessory Code	Description
18B/18G	2pole D/T contacts that operate when emergency and normal source voltage is present at transfer switch terminals
31Z	Selective Load disconnect circuit to provide a pre-transfer and/or post transfer signal when transferring from emergency to normal and/or normal to emergency. The signal can be programmed to occur during all transfers or only when the transfer is occurring between two live sources. The length of the pre and post transfer delays can be set to 0-5 minutes 59 seconds.
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72EE2	5170 Quad-Ethernet Module provides transfer switch dashboard screen with password protected control capabilities, email alerts and open protocol support in a single module with an integrated 4 port Ethernet switch.

DRAWINGS FOR APPROVAL

Drawing Number	Description
802093	Composite Enclosure Outline and Mounting Diagram
806099-003	Three Phase Wiring Diagram

WM TAO & ASSOCIATES
CONSULTING ENGINEERS

Shop Drawing Submittal Review

Transmitted To: Cannon Design

Date: July 27, 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	264000E02	(Submittal No. 264000-002)
		• ATS Distribution

Remarks:

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.

7955 Manchester Road, Suite 125 • St. Louis, Missouri 63143-2711 • Phone: 314-884-7600 • Fax: 314-884-7601

If enclosures are not as noted, please notify us at once.

Sara Trout (314) 884-7645

WTASHOP - Webster ISB - 26 4000-002

From: STL-CAC <STL-CAC@CANNONDESIGN.COM>
To: 'Patrick Garner' <pgarner@wmtao.com>, WTASHOP <wtashop@wmtao.com>
Date: 7/5/2016 11:41 AM
Subject: Webster ISB - 26 4000-002
Cc: "Patel, Kelvin" <kpatel@CANNONDESIGN.COM>, "Grossman, Lynn" <lgrossman@C...
Attachments: 264000-002 ATS Distribution.pdf

Attached for review.

Melissa Pirtle
Construction Admin
CANNONDESIGN
1100 Clark Ave
St. Louis, Missouri 63102
T 314.425.8797 • M
cannondesign.com

CANNONDESIGN

SUBMITTAL IDENTIFICATION SHEET

To be completed by Contractor/CM

WEBSTER UNIVERSITY ISB
PROJECT NAME

8274 BIG BEND BLVD
ADDRESS

NUMBER

WEBSTER UNIVERSITY
OWNER

CANNON DESIGN
ARCHITECT / ENGINEER

Joe Voypick
SUBMITTED BY

264000-002
CONTRACTOR / CM SUBMITTAL NO.

CANNON DESIGN SUBMITTAL NO.

DRAWING / DETAIL REFERENCE

264000
SPECIFICATION SECTION / PARAGRAPH

Guarantee Electrical
MANUFACTURER / SUPPLIER

ITEM / PRODUCT ID

REQUIRED DATE

PRIORITY

◯ CRITICAL

ITEM BEING SUBMITTED (check only one)

- ◯ Shop Drawings
- ◯ Samples (_____ copies)
- ◯ LEED Submittal
- ◯ Certification / Qualifications
- ◯ Record Documents
- ◉ Product Data
- ◯ Coordination Drawing
- ◯ Calculations
- ◯ Schedules
- ◯ O&M Manuals
- ◯ Other _____

ITEM BEING SUBMITTED FOR (check only one)

◉ Action ◯ Information Only ◯ Record

REMARKS OR DEVIATIONS

CONTRACTOR / CM CERTIFICATION
(SUBMITTALS NOT CERTIFIED WILL BE RETURNED WITHOUT REVIEW)

PARIC

PARIC CORPORATION
SUBMITTAL STAMP

THIS SHOP DRAWING HAS BEEN REVIEWED BY PARIC CORPORATION

Subcontractor remains responsible for dimensions, quantities, coordination with other trades and compliance with contract documents.

By:
Devin D. Gates

Joe Voypick
REVIEWED BY

7/5/16
DATE

To be completed by Reviewer

26 4000-002
CANNON DESIGN SUBMITTAL NUMBER

7/5/16
RECEIVED DATE

- ◯ A. No Exceptions Taken
  No further review of submittal is required.
- ◯ B. Make Corrections Noted
  Incorporate corrections in work; resubmission is not required.
- ◯ C. Revise and Resubmit
  Revise as noted, and resubmit for review.
- ◯ D. Rejected
  Submittal is not in compliance with Contract Documents; provide new submittal.
- ◯ E. For Record / Information Only
  Submittal was reviewed for Record / Information purposes only.
- ◯ F. Not Required for Review
  Submittal is not required by Contract Documents and has not been reviewed.

Review is for conformance with the design concept of this project and for general compliance with contract documents. Contractor is responsible for quantities, dimensions and compliance with contract documents and for information that pertains to fabrication processes, construction techniques and coordination of this work with all trades which will be affected thereby. This review is null and void if submittal deviates from contract documents and does not indicate or note deviations.

A/E COMMENTS ◯ See attached sheet(s) for additional comments

REVIEWED BY

DATE

77 Westport Plaza
Suite 250
St. Louis, MO 63146

TRANSMITTAL

No. 15051-0115

Paric Corporation

PROJECT: 15051-Webster University Interdisciplinary Science Building

DATE: 07/05/2016

TO: Cannon Design
1100 Clark Ave
St Louis MO 63102

RE: ATS 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		264000-002	1		07/05/2016	ATS Distribution	Submitted

NOTES:

CC: Paric Corporation, Kathy Bathe

Project Coordinator: Paric Corporation, Kathy Bathe

Signed: _____
Devin Gates

GUARANTEE
ELECTRICAL CONSTRUCTION

3415 Bent Avenue
St. Louis, MO 63116
Phone: (314) 772-5400
Fax: (314) 772-2526

Transmittal

To Paric Corporation

Date 7/1/16

Job Number 11317

Job Name Webster Univ. ISB Building

Attention Devin Gates

Transmittal Number 11317-006

We are sending you:

- X Attached
- ___ Under separate cover, the following:
- ___ Preliminary Drawings
- ___ Samples
- ___ Construction Drawings
- ___ Copy of Letter
- ___ Specifications
- ___ Other

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

These are transmitted as checked:

- X For Your Review & Comment
- X For Approval
- ___ For Your File
- ___ As Requested
- ___ Approved As Noted
- ___ Returned For Corrections
- ___ Approved As Submitted
- ___

Copy: Transmittal Enclosure

___ ___
___ ___
___ ___

Rick Branstetter

Signed: Rick Branstetter, Project Manager