24-hour protection no matter when trouble strikes

ASCO SERIES 300
Power Transfer Switches for Power Outage Protection

Where would you be without a constant flow of electrical power? We often take for granted that power will always be around when we need it. In reality, power failures are very common. And when the power goes out, your business suffers. Power failures are unpredictable. They can occur at any time and for any number of reasons—a bolt of lightning, a power surge, a blackout, an accident or even equipment failure. They come without warning and often at the most inconvenient times.

It’s for this reason that many businesses and other entities have invested in emergency power backup systems. Typically, the system consists of an engine generator and an automatic transfer switch (ATS) which transfers the load from the utility to the generator.

An ATS with built-in control logic monitors your normal power supply, senses interruptions and unacceptable abnormalities. When the utility power fails, the ATS automatically starts the engine and transfers the load after the generator has reached proper voltage and frequency. This happens in a matter of seconds after the power failure occurs. When the utility power has been restored, the ATS will automatically switch the load back, and after a time delay, it will shut down the engine. With an Automatic Transfer Switch, you are protected 24 hours a day, seven days a week.
Typical Applications

**Telecom**
In the telecommunications industry, providing a high level of service and dependability is crucial. Lost power means an interruption in service for your customers and lost business for your company. For instance, with cell sites scattered across a wide geographical region and in many remote areas, the chances of an interruption in power are increased, making Automatic Transfer Switches a valuable resource at each location. To maintain dependable service, each cell site must be monitored 24 hours a day. This can be very difficult without some type of remote monitoring and testing capability. The SERIES 300 Transfer Switch, combined with ASCO’s monitoring and control management system, is a cost-effective, packaged solution which can help meet both of these challenging objectives without a major investment at each cell site. With ASCO’s connectivity solutions you can remotely monitor and control numerous sites from around the corner or around the world.

**Agriculture**
Maintaining electrical power is vital to an agriculture operation. If the flow of power is interrupted, your operation could be at risk unless the backup generator is quickly activated. A prolonged power outage can affect numerous aspects of the operation, from housing and feeding livestock to processing and producing the end product. With an ASCO SERIES 300 Transfer Switch, power will automatically be transferred over to your backup generator, eliminating the need to manually switch from utility to generator. When power is restored, the ASCO SERIES 300 Transfer Switch will, after an adjustable time delay to allow for utility stabilization, automatically switch the load back to the utility service.

**Commercial / Retail, Light Industrial**
The retail industry is very competitive. An electrical power failure can have a dramatic impact on a retailer’s bottom line. If power is interrupted during peak shopping times, the effect could be extremely damaging to present and future business. A power interruption will not only suspend shopping, it can also create safety problems, result in lost transaction data, lost account information and damage to data collection equipment. In addition, retailers who rely on controlled climates to protect valuable inventory could suffer even greater losses, especially if the power failure occurs at a time when no one is available to rectify the situation. To avoid any of these power outage problems, simply install a backup generator with an ASCO SERIES 300 Transfer Switch and power outage concerns will be a thing of the past.

**Municipal**
The ASCO SERIES 300 Transfer Switch can be a critical component of a municipal government’s emergency power backup system. Residents of townships, cities and counties rely on police, fire, ambulance/first aid and other critical public sector services. An interruption in power would affect the ability of emergency services to effectively respond to the needs of the community. When time is a critical factor, such as when responding to a fire alarm or an emergency call, an ASCO SERIES 300 Transfer Switch can be a lifesaver, switching power to the backup generator. While not all municipal services are a matter of life and death, they are always expected to be there.

CALL US TODAY
1-888-POWER-58
REQUEST A QUOTE
parts@genpowerusa.com
SHOP ONLINE
www.genpowerusa.com
**ASCO SERIES 300 Power Transfer Switches**

**Maximum Reliability & Excellent Value**

With a SERIES 300 Transfer Switch, you get a product backed by ASCO Power Technologies, the industry leader responsible for virtually every major technological advance in the Transfer Switch industry.

The ASCO SERIES 300 was designed for one purpose—to automatically transfer critical loads in the event of a power outage. Each and every standard component was designed by ASCO engineers for this purpose.

The SERIES 300 incorporates the Group G controller with enhanced capabilities for dependable operation in any environment. A user friendly control interface with a 128x64 graphical LCD display and intuitive symbols allow for ease of operation while visual LED indicators verify transfer switch status. Operating parameters and feature settings can be adjusted without opening enclosure door.

The rugged construction and proven performance of the ASCO SERIES 300 assure the user of many years of complete reliability. The SERIES 300 is even designed to handle the extraordinary demands placed on the switch when switching stalled motors and high inrush loads.

ASCO’S SERIES 300 modular, compact design makes it easy to install, inspect and maintain. All parts are accessible from the front so switch contacts can be easily inspected.

**Features**

- The SERIES 300 is listed to UL 1008 standard for total system loads and CSA standard C22.2 for automatic transfer switches.
- Meets NFPA 110 for Emergency and Standby Power Systems and the National Electrical Code (NEC) Articles 700, 701 and 702.
- Controller is RoHS compliant (Restriction of Hazardous Substances).

**UL Listed Withstand & Close-On Ratings**

<table>
<thead>
<tr>
<th>Switch Ratings Amps</th>
<th>Available Symmetrical Amperes RMS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Current Limiting Fuses</td>
</tr>
<tr>
<td></td>
<td>480V Max.</td>
</tr>
<tr>
<td>30</td>
<td>100kA</td>
</tr>
<tr>
<td>70 - 150</td>
<td>200kA</td>
</tr>
<tr>
<td>200</td>
<td>200kA</td>
</tr>
<tr>
<td>230</td>
<td>100kA</td>
</tr>
<tr>
<td>260, 400</td>
<td>200kA</td>
</tr>
<tr>
<td>150,200,230,260,400</td>
<td>Series 3ADTS/3NDTS Only</td>
</tr>
<tr>
<td></td>
<td>200kA</td>
</tr>
<tr>
<td>600</td>
<td>200kA</td>
</tr>
<tr>
<td>800,1000,1200</td>
<td>200kA</td>
</tr>
<tr>
<td>1600, 2000</td>
<td>200kA</td>
</tr>
<tr>
<td>2600, 3000</td>
<td>200kA</td>
</tr>
</tbody>
</table>

**Notes:**

1. Current limiting fuse should be class J type through 400 amps: use Class L type above 400 - amp fuse rating
2. Refer to publication 1128 for specific manufacturer’s breakers.

**Fig. 1:** ASCO Power Transfer Switch rated 200 amperes

- 30 through 3000 amps in a compact design.
- Available to 600 VAC, single or three phase.
- True double-throw operation: The single solenoid design is inherently inter-locked and prevents contacts from being in contact with both sources at the same time.
- There’s no danger of the SERIES 300 ATS transferring loads to a dead source because the unique ASCO single-solenoid operator derives power to operate from the source to which the load is being transferred.
- Easy to navigate 128x64 graphical LCD display with keypad provides LED indicators for switch position, source availability, not in auto, and alert condition.
- Integrated multilingual user interface for configuration and monitoring.
- Delayed transition operation is now available (Dual Operator Configuration).
- Non-automatic operation can be selected using the keypad without opening enclosure door.
- Relay expansion module with extra relays for accessory outputs (Optional).
- Includes soft keys for test function and time delay bypass as standard features.
- Historical event log (Optional).
- Statistical ATS system monitoring information.
- Diagnostic Functions.
- Password protection to prevent unauthorized tampering of settings.
- Adjustable time-delay feature prevents switch from being activated due to momentary utility power outages and generator dips.
- Supplied with solid neutral termination.
- Optional switched neutral pole available.
- Field modification accessory kits available.
- Available for immediate delivery.

CALL US TODAY 1-888-POWER-58
REQUEST A QUOTE parts@genpowerusa.com
SHOP ONLINE www.genpowerusa.com
Designed to Fit Anywhere

The ASCO Series 300 product line represents the most compact design of automatic power transfer switches in the industry. With space in electrical closets being at a premium, the use of wall or floor-mounted ASCO Power Transfer Switches assures designers optimum utilization of space.

All transfer switches through 2000 amps are designed to be completely front accessible. This permits the enclosures to be installed flush to the wall and still allows installation of all power cabling and connections from the front of the switch. Cable entrance plates are also standard on the 1600 and 2000 amp units to install optional side-mounted pull boxes for additional cable bending space.
The Series 300 incorporates the group “C” controller with enhanced capabilities for dependable operation in any environment.

**Time Delays**
- Engine start time delay – delays engine starting signal to override momentary normal source outages – adjustable to 0 to 6 seconds (Feature 1C)
- Transfer to emergency time delay – adjustable 0 to 60 minutes (Feature 2B)
- Emergency source stabilization time delay to ignore momentary transients during initial generator set loading – adjustable 0 to 4 seconds (Feature 1F)
- Re-transfer to normal time delay – adjustable 0 to 10 hours (Feature 3A)
- Unloaded running time delay for engine cooldown – adjustable 0 to 60 minutes (Feature 2E)
- Pre and post signal time delay for selective load disconnect with a programmable bypass on source failures – adjustable 0 to 5 minutes (specify ASCO Optional accessory 31Z)
- Optional fully programmable engine exerciser with seven independent routines to exercise the engine generator, with or without loads, on a daily, weekly, bi weekly or monthly basis (Specify ASCO optional accessory feature bundle 11BE)
- Delayed transition load disconnect time delay – adjustable 0 to 5 minutes.

**Standard Selectable Features**
- Inphase monitor to transfer motor loads, without any intentional off time, to prevent inrush currents from exceeding normal starting levels.
- Engine exerciser to automatically test backup generator each week—with or without load 20 minutes not adjustable.
- Commit to transfer.
- Selective load disconnect control contacts (two provided) which operate with time delay prior to and/or after load transfer and re-transfer.
- 60Hz or 50Hz selectable switch.
  Three – phase/single - phase selectable switch.

**Remote Control Features**
External Inputs for connecting:
- Remote test switch.
- Remote contact for test or for peak shaving applications. If emergency source fails, switch will automatically transfer back to normal source if acceptable.
- Inhibit transfer to emergency.
- Remote time delay bypass switch emergency to normal.

**Control and Display Panel**
- Easy to navigate 128x64 graphical LCD display with keypad provides LED indicators for switch position, source availability, not in auto, and alert condition. It also includes test and time delay bypass soft keys.

**Voltage & Frequency Sensing**
- 3 — Phase under and over voltage settings on normal and single phase sensing on emergency source.
- Under and over frequency settings on normal and emergency.
- True RMS Voltage Sensing with +/-1% accuracy
- Frequency Sensing Accuracy is +/- 0.1Hz
- Voltage and Frequency parameters adjustable in 1% increments
- Selecting settings : single or three phase voltage sensing on normal, and single phase sensing on emergency; 50 or 60 Hz
- Load current sensing card (Optional)
ASCO® SERIES 300 Group G Offers Sophisticated Functionality

The new Group G controller offers an intuitive, easy to navigate 128*64 graphical LCD display with soft keypad and provides (6) LED indicators

- Switch Position (green for normal, red for emergency LED)
- Source Availability (green for normal, red for emergency LED)
- "Not In Auto" (amber LED)
- Common Alarm (amber LED)

The ASCO group "G" controller is self contained with an integrated display (no other components are required for efficient operation).

The controller allows for open or delayed transition transfer operation (both automatic, and non automatic configurations).

Integrated multilingual user interface for configuration and monitoring (this design approach allows greater application flexibility).

Multiple source sensing capabilities of voltage, frequency (under frequency sensing on normal and emergency sources), and optional current card, single and three phase (Does not require an external metering device).

Fig. 9: Door-Mounted Control & Display Panel

1. Common Alarm
2. Not In Auto Indicator
3. Scroll, Up/Down Arrows
4. Escape Key
5. Enter Key
6. LED Source Availability and Switch Position Indicators
   Transfer / Time Delay Override control push-button

Status

- Normal OK
- Load on Normal
- Press Test Transfer

Alarms

- Alarm 1 of 1
- Loss of E when on E
- Press Acknowledge Alarms

Source

- Normal
- Emergency
- \% 207V
- \% 206V
- \% 207V
- 60Hz

Data Logging

- TS Total Transfers
- TS Transfer Time
- 5.0 Sec.
- Press Bypass Timer

Communication

- \% 207V
- \% 204V
- \% 205V
- \% 204A
- 60Hz

Settings

- Enter Password

Gen Status

- S/N:ER125200004
- S/W:694063-066
- ASCO
- Gen Room
- Thu 05/23/13 09:07:16

Engine Exerciser

- Engine Exerciser
- Present Time 09:08:16
- Program To
- Engine With Load
**Accessory 1UP**
UPS back up power to allow controller to run with LCD display for 30 seconds without AC power

**Accessory 11BE Feature Bundle Consists of:**
A fully programmable engine exerciser with seven independent routines to exercise the engine generator, with or without loads, on a daily, weekly, bi-weekly or monthly basis. Engine exerciser setting can be displayed and changed from the user interface keypad.

Event Log display shows the event number, time and date of event, event type, and event reason (if applicable). A maximum of 300 events can be stored.

RS 485 Communications Port Enabled
Common Alarm Output Contact

**Accessory 18RX**
Relay expansion module (REX) provides for some commonly used accessory relays, includes one form C contact for source availability of normal (18G), and one contact for availability of emergency (18B) (contact rating 5 amps @ 30Vdc or @125 Vac resistive). Additional output relay is provided, the default is to indicate a common alarm. (See operator’s manual for configurable options).

**Accessory 23GA1 (Single Phase), and 23GB (Three Phase)**
Load current metering card, measures either single or three phase load current
Note1: This feature is not available with a Power Meter Option (135L)

**Accessory 14AA/14BA**
Auxiliary contacts to indicate position of main contacts. Two (2) for normal and two (2) for emergency position (one set is standard).

**Accessory 44A**
Strip Heater with thermostat for extremely cold areas to prevent condensation and freezing of this condensation. External 120 volt power source required.

**Accessory 44G**

**Field Conversion Kits for Series 300 Transfer Switches**

<table>
<thead>
<tr>
<th>Kit No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>935147</td>
<td>Feature Bundle Includes Engine Exerciser/Event Log/RS 485/ Common Alarm Output Contact (Acc. 11BE) Dongle</td>
</tr>
<tr>
<td>935148</td>
<td>REX Module with Source Availability Contacts (Acc. 18RX)</td>
</tr>
<tr>
<td>935149</td>
<td>UPS to allow controller to run for 3 minutes minimum without AC Power (Acc. 1UP)</td>
</tr>
<tr>
<td>935150</td>
<td>1/3 Phase load current sensing card only (Acc. 23GA/GB)</td>
</tr>
<tr>
<td>K613127-001</td>
<td>Strip Heater (125 watt) 120 volt (Acc.44A)</td>
</tr>
<tr>
<td>K613127-002</td>
<td>Strip Heater (125 watt) 208-480 volt (Acc.44G)</td>
</tr>
<tr>
<td>948551</td>
<td>Quad - Ethernet Module (Acc. 72EE)</td>
</tr>
<tr>
<td>K609027</td>
<td>Cable Pull Box (1600 - 2000 amp)</td>
</tr>
</tbody>
</table>

**Accessory 72EE**
Connectivity Module, enabling remote monitoring and control capabilities (Pages 12-14)

**Accessory 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.

**Accessory 73**
Surge Suppressor (TVSS) Rated 65kA

**Accessory 62W**
Audible alarm with silencing feature to signal each time switch transfers to emergency (City of Chicago requirement)

**Accessory 37B**
6’ Extension harness for units shipped open type to accommodate customer mounting of controls and switch

**Accessory 37C**
9’ Extension harness for units shipped open type to accommodate customer mounting of controls and switch

**Accessory 135L2**
Power Meter on load side (Includes shorting block and CT’s)
Note2: This feature is not available with Load Current Metering Option (23GA, or 23GB)

**Accessory 30AA3**
Load – shedding circuit initiated by opening of a customer – supplied contact

**Accessory 30BA3**
Load – shedding circuit initiated by removal of customer – supplied voltage (* Specify voltage)
Note3: Accessory 30AA, and 30BA are only available for 3ADTS/3NDTS (Delayed Transition Transfer Switch)
**SERIES 300 Transfer Switch Ordering Information**

To order an ASCO SERIES 300 Power Transfer Switch, complete the following catalog number:

| 3 | + | A | + | TS | + | A | + | 3 | + | 600 | + | N | + | GX | + | C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A | Automatic | TS | Conventional 2 Position | A | Solid Neutral | 2 Poles 1φ | Continuous rating | C3 | 302, 702, 1042, 1505, 20045, 2304245, 26025, 40025, 6005, 8005, 10005, 12005, 16005, 20005, 26005, 30005 |
| N | Non-Automatic | DTS | Delayed Transition | B1 | Switched Neutral | 3 Poles 3φ | Voltage Code | A1 | 115 |
|   |           |         |                  | B |            | | | B2 | 120 |
|   |           |         |                  | C |            | | | B3 | 208 |
|   |           |         |                  | D |            | | | C1 | 220 |
|   |           |         |                  | E |            | | | C2 | 230 |
|   |           |         |                  | F |            | | | C3 | 240 |
|   |           |         |                  | G |            | | | C4 | 380 |
|   |           |         |                  | H |            | | | C5 | 400 |
|   |           |         |                  | J |            | | | C6 | 415 |
|   |           |         |                  | K |            | | | C7 | 440 |
|   |           |         |                  | L |            | | | C8 | 460 |
|   |           |         |                  | M |            | | | C9 | 480 |
|   |           |         |                  | N |            | | | C10 | 575 |
|   |           |         |                  | Q |            | | | C11 | 600 |
|   |           |         |                  | R |            | | | C12 |       |

**Notes:**
1. Specify neutral code "C" for 260 and 400 amperes only for 3ATS/3NTS
2. Available 30-600 amperes size switches available in non-secure type enclosures
3. 115-120 volt available 30-400 amps only. For other voltages contact ASCO.
4. 200 and 230 amp rated switches for use with copper cable only.
5. Switch sizes 800 - 3000 amperes, and 150 - 400 ampere 3ADTS/3NTS provided in secure type outdoor enclosures when required.
6. Use 3R for 1200, 2000, 2600, and 3000
7. Type 304 stainless steel is standard. Suitable for indoor or outdoor use where there may be caustic or alkali chemicals in use.

---

**SERIES 300 External Power Connections**

Sizes UL-Listed Solderless Screw-Type Terminals

<table>
<thead>
<tr>
<th>Switch Rating (Amps)</th>
<th>Ranges of AL-CU Wire Sizes (Unless Specified Copper Only)</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 - 2302</td>
<td>One #14 to 4/0 AWG</td>
</tr>
<tr>
<td>260, 400</td>
<td>Two 1/0 AWG to 250 MCM or One 4/0 AWG to 600 MCM</td>
</tr>
<tr>
<td>600</td>
<td>Two 2/0 AWG to 600 MCM</td>
</tr>
<tr>
<td>800, 1000, 1200</td>
<td>Four 1/0 to 600 MCM</td>
</tr>
<tr>
<td>1600, 2000</td>
<td>Six 1/0 to 600 MCM</td>
</tr>
<tr>
<td>2600, 3000</td>
<td>Twelve 3/0 to 600 MCM</td>
</tr>
</tbody>
</table>

---

**Extended Warranties for SERIES 300 Transfer Switches (3ATS/3NTS/3ADTS)**

<table>
<thead>
<tr>
<th>Catalog No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3EXW300</td>
<td>Three-Year Extended Warranty (Parts &amp; Labor)</td>
</tr>
<tr>
<td>4EXW300</td>
<td>Four-Year Extended Warranty (Parts &amp; Labor)</td>
</tr>
<tr>
<td>5EXW300</td>
<td>Five-Year Extended Warranty (Parts &amp; Labor)</td>
</tr>
</tbody>
</table>

**Notes:**
1. Standard Warranty is (24) months, 2 years from date of shipment. Extended warranty is in addition to the two years, for total of 3, 4, or 5 years.

---

**Notes:**
1. All SERIES 300 switches are furnished with a solid neutral plate (unless switched neutral configuration is specified) and terminal lugs.
2. 200 and 230 amp rated switches for use with copper cable only. Refer to paragraph 310.15 of the NEC for additional information.
3. Use wire rated 75°C minimum for all power connections.
### UL Type 1 Enclosure

<table>
<thead>
<tr>
<th>Switch Rating Amps</th>
<th>Phase Poles</th>
<th>Neutral Code</th>
<th>Dimensions, In. (mm)</th>
<th>Approx. Shipping Weight Lb. (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>30, 70, 100, 104, 150, 200</td>
<td>2 A</td>
<td>18 (457)</td>
<td>31 (787)</td>
<td>13 (330)</td>
</tr>
<tr>
<td>230, 260, 400</td>
<td>2 B or C</td>
<td>18 (457)</td>
<td>48 (1219)</td>
<td>13 (330)</td>
</tr>
<tr>
<td>150, 200, 230, 260, 400</td>
<td>2 A</td>
<td>24 (610)</td>
<td>56 (1422)</td>
<td>14 (356)</td>
</tr>
<tr>
<td>600</td>
<td>2 A</td>
<td>24 (610)</td>
<td>63 (1600)</td>
<td>17 (432)</td>
</tr>
<tr>
<td>800, 1000</td>
<td>2 A</td>
<td>34 (864)</td>
<td>72 (1829)</td>
<td>20 (508)</td>
</tr>
<tr>
<td>1200</td>
<td>2 A</td>
<td>34 (864)</td>
<td>72 (1829)</td>
<td>20 (508)</td>
</tr>
<tr>
<td>1600, 2000</td>
<td>3 A</td>
<td>38 (965)</td>
<td>87 (2210)</td>
<td>23 (584)</td>
</tr>
<tr>
<td>2600, 3000</td>
<td>3 A</td>
<td>38 (965)</td>
<td>91 (2311)</td>
<td>60 (1524)</td>
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</tbody>
</table>

### UL Type 3R, 4 or 12 Enclosure

<table>
<thead>
<tr>
<th>Switch Rating Amps</th>
<th>Phase Poles</th>
<th>Neutral Code</th>
<th>Dimensions, In. (mm)</th>
<th>Approx. Shipping Weight Lb. (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>30, 70, 100, 104</td>
<td>2 A</td>
<td>17 1/2 (445)</td>
<td>35 (886)</td>
<td>11 5/8 (295)</td>
</tr>
<tr>
<td>2 B</td>
<td>17 1/2 (445)</td>
<td>35 (886)</td>
<td>11 5/8 (295)</td>
<td>87 (40)</td>
</tr>
<tr>
<td>3 A</td>
<td>17 1/2 (445)</td>
<td>35 (886)</td>
<td>11 5/8 (295)</td>
<td>87 (40)</td>
</tr>
<tr>
<td>230, 260, 400</td>
<td>3 A</td>
<td>18 (458)</td>
<td>50 1/2 (1284)</td>
<td>14 1/3 (364)</td>
</tr>
<tr>
<td>150, 200, 230</td>
<td>3 A</td>
<td>24 (607)</td>
<td>63 (1593)</td>
<td>18 1/5 (468)</td>
</tr>
<tr>
<td>260, 400</td>
<td>3 A</td>
<td>24 (607)</td>
<td>63 (1593)</td>
<td>18 1/5 (468)</td>
</tr>
<tr>
<td>600</td>
<td>3 A</td>
<td>24 (607)</td>
<td>63 (1593)</td>
<td>18 1/5 (468)</td>
</tr>
<tr>
<td>800, 1000</td>
<td>3 A</td>
<td>34 (859)</td>
<td>72 (1821)</td>
<td>20 (506)</td>
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<tr>
<td>1200</td>
<td>3 A</td>
<td>34 (859)</td>
<td>72 (1821)</td>
<td>20 (506)</td>
</tr>
<tr>
<td>1600, 2000</td>
<td>3 A</td>
<td>41 (1037)</td>
<td>95 1/2 (2415)</td>
<td>33 1/2 (848)</td>
</tr>
<tr>
<td>2600, 3000</td>
<td>3 A</td>
<td>41 (1037)</td>
<td>96 (2429)</td>
<td>74 (1872)</td>
</tr>
</tbody>
</table>
ASCO®

Series 300 72EE Monitoring and Control

72EE enables basic local or remote monitoring for ASCO Series 300 Transfer Switches.

### 72EE Features

**Control Features**
- ATS Transfer/Re-transfer
- ATS Timer Bypass
- Generator Start
- Generator Test

**Monitoring Features**
- ATS and Generator Stats
- Alarms
- Voltage and Frequency
- Statistics and Activity
- Email Notifications
- Event Log (300 Events)
- Optional Monitoring Features
  - Energy Consumption,
    Acc 135L Required
  - Power Demand,
    Acc 135L Required

**Connectivity Features**
- Modbus (over Ethernet or Serial)
- SNMP Protocol
- AES 128 Bit Encryption
- Four Port Ethernet Switch

---

**72EE Also Enables Enhanced PowerQuest CPMS Functionality**

- 5310 Series Single Channel Annunciator
- 5350 Series Eight Channel Annunciator
- 5700 Critical Power Management Systems

Sample drawing for demonstration purposes only. Consult ASCO for exact connection specifications.
Content rich monitoring screens enable real time information for power metering, event logs, voltages, time delays and alerts. The 72EE also allows for switch transfer remotely.
Additional Optional PowerQuest Components

5160 Connectivity Module

The ASCO 5160 Remote Connectivity Unit (RCU) provides 10 Ethernet and Dual-Fiber Optic connections in a NEMA 3R enclosure.

5210, 5220 Power Manager

ASCO 5210 (left) and 5220 (right) Power Meters measure, displays and provides single- or 3-phase Energy and Power information

5310, 5350 Annunciators

ASCO 5310(left) and 5350(right) ATS Remote Annunciators provide distributed monitoring of transfer switch position and source availability as well as transfer test and re-transfer control.

5710, 5750, 5790 Display Terminals

5700 Critical Power Management Systems (5790 shown) provides various levels of monitoring, control and management capability of power equipment. It seamlessly monitors ASCO transfer switches as well as generators, breakers, paralleling buss, panel boards and other power equipment via a 5221 PMU. It consists of servers and touch screen interfaces.

Control

The control capabilities allows remote transfer and retransfer of the ATS, while allowing you to view time delays and bypass functions. The generators can also be called to start and stop for emergency situations as well as for testing and maintenance. Running the generator periodically ensures that the battery is charged for power anomalies and increases reliability. Generator Pick-up and drop-out setpoints are also viewable for comprehensive understanding of control events.

Monitoring

Monitor transfer switch and generator health, system state, metering and review calculated transfer statistics and activity. Active control timer information allows the operator to anticipate an automated control action, such as, generator start or ATS transfer. The device can also interface to an email server to keep users up-to-date on alarms and critical power events with alerts.

In addition the 72EE can interface to an optional 5210 Power Meter, (stand alone - or with the ATS Acc. 135L), for enhanced monitoring features, such as, power metering, demand and energy usage.

Connectivity

Connect and extract ATS and metering data using industry standard open protocols, such as, Modbus and SNMP. An integrated four port Ethernet Switch maximizes connectivity options and flexibility. Embedded password protection will only allow access to appropriate users, while utilizing AES 128-bit encryption for enhanced data security per National Institute of Standards and Technology (NIST).
ASCO PowerQuest® Power Monitoring and Control Systems

The PowerQuest® family is the most comprehensive communication, monitoring and control solution ever offered by Emerson Network Power. It empowers you. It provides the ability to test, manage loads, optimize the bus bar, remotely monitor and otherwise be aware of the status of your facility’s utility source and on-site power. It provides reports for events, tests, energy use or settings and gets data directly from generators and transfer switches.

Whether user’s require standard monitoring and control, or a comprehensive Critical Power Management System, PowerQuest can satisfy your needs.

Hardware. Software. Installation and testing. Service. And upgrades and technology refreshes. A truly complete solution for all your communication, monitoring and control needs.

This web enabled management system is based on open protocols. As communications amongst equipment improve, so does the performance of critical power systems.

PowerQuest provides monitoring, alarming and control of Critical Power Management Systems, which comprise transfer switches, paralleling control switchgear, gensets, circuit breakers, UPS, loadbanks, distribution and other gear. It also integrates with building management systems.

BE EMPOWERED

PowerQuest can enable you to:

• Monitor and control power transfer switches, paralleling control switchgear, gensets, breakers, UPS, bus bars and other equipment
• Monitor normal and emergency voltages and frequency and their settings
• Know transfer switch position and source availability
• Transfer and re-transfer loads for system testing
• View and adjust transfer switch time-delay settings
• Receive automatic alerts or selected system alarms on system operation via E-mail or pager
• View transfer switch event log and know the transfer switch test schedule
• Generate reports for alarms, energy consumption, settings, historical logs and code mandated tests

For more PowerQuest product information see publication 3245