# ASCO Series 165 Residential/ Light Commercial Automatic Transfer Switches.

## **Time Delays**

- 3-second time delay to override momentary utility source.
- 15-second transfer to emergency time delay to allow engine generator to stabilize after starting.
- 15-second time delay after transfer to the standby source to ignore momentary voltage dips on the generator during initial loading.
- 5-minute time delay on retransfer to allow utility source to stabilize prior to transferring the load back to utility.
- 1-minute unloading running time delay for engine generator cool-down before shutdown.

#### **Product Features**

- Nominal voltage 120/240 V 60 Hz, single phase.
- Listed to UL 1008 for total system loads (motors and all other electrical loads).
- Meets National Electrical Code (NEC) and National Fire Protection Association (NFPA) requirements.
- True double-throw contacts (no intentional off position), with inherent mechanical interlocking to prevent connection of generator and utility source.
- Convenient terminals to connect neutral and ground conductors from service and load feeders.
- Available in Type 1 (indoor) and Type 3R (outdoor) enclosures.
- Manually-operated Series 165 Transfer Switches are also available. See back cover.
- Available from stock.

# **Diagnostic Indicators**

The 165 Automatic Transfer Switch has a unique built-in automatic digital diagnostic monitoring system, which provides status on potential system problems such as: generator failed to start; generator over frequency; transfer switch did not transfer; and more. It's one more way you can count on ASCO to provide continuous power protection...anytime.

### **External Power Connections**

# Withstand and Close-On Ratings

Switch Rating (amps)	Wire Size Range
100	(1) #8 to 3/0 AWG
200*	(1) #8 to 3/0 AWG

<sup>\*</sup> UL listed for 200 amps with copper conductors only.

All Series 165 switches are furnished with a neutral bar

Switch Rating (amps)	When Used With Current Limiting Fuses	When Used With Circuit Breakers
100	200,000	10,000
200	200,000	10,000

# and lugs to accommodate cable sizes shown above. | The content of the content of

# **ASCO Series 165 PTLC Power**

# **Transfer Load Center**

#### **Product Features**

- · Suitable for use as service entrance equipment.
- Load Center rated at 200 amps, 240/60 Hz single phase.
   10 kA withstand rating.
- 2 pole Series 165 Automatic Transfer Switch.
- Service disconnect breakers for utility and generator sources.
- Integral mounted and wired two-stage surge Suppression (TVSS's) utilizing Silicon Avalance Diode (SAD) technology.
- Independent visual LED indication on each TVSS Module for convenient protection status.
- Remote indication for TVSS's hardwired (Form C Dry Contacts).
- Load center available in either 30 or 42 position configuration, suitable for distribution breakers (not supplied) rated 20 amps per pole.
- Modular design for ready access to components from the front of the enclosure for easy replacement.
- UL Type 1 Enclosure



# **Suppression Module Specifications**

Nominal Clamp Voltage 211 Vpk 230 Vpk
 Response Time < 5ns < 20ns</li>
 Peak Pulse Energy 520 Joules > 2500 Joules
 Peak Pulse Current (8X20µs) up to 24 kA 156 kA
 Protection Overcurrent & Overvolatge (thermal)

Primary

Secondary

# **Agency Approvals**

- UL 67 (Panelboard)
- UL 1449 Recognized (Surge Suppressors)
- UL 1008 (Automatic Transfer Switch)
- NEC (National Electrical Code) and NFPA (National Fire Protection Agency) approval (Automatic Transfer Switch)

Protect
your home,
business, and
peace of mind
with the
ASCO Series 165
Automatic
Transfer Switch.

# Why should you choose an ASCO Automatic Power Transfer Switch?

Customer service, rock-solid dependability, and the industry's highest performance have made ASCO the first choice in emergency power for more than 110 years. Our power transfer switches are used in more emergency power backup systems worldwide than any other. ASCO is the name behind most of the technological advances in transfer switch design, and we have more patents than all other manufacturers combined. ASCO transfer switches are the first choice for installations of every kind, from homes and small businesses to the largest financial data centers and hospitals in the world.

# What you should know about UL 1008—and your safety.

The Series 165—and every ASCO Transfer Switch—meets or exceeds the stringent requirements of UL 1008, the only UL transfer switch standard. It even says so right on the front panel. If you don't see the UL Automatic Transfer Switch label...you're not getting the best protection money can buy.

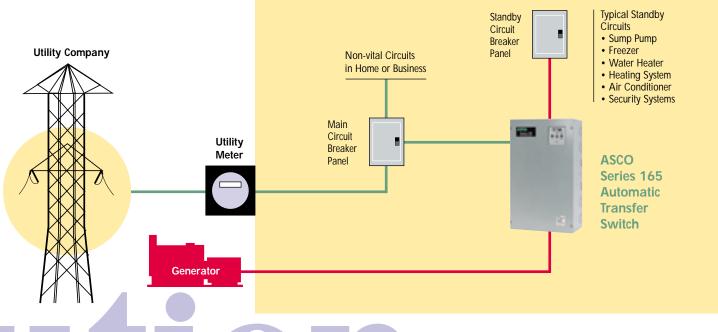


#### Performance sets the Series 165 apart.

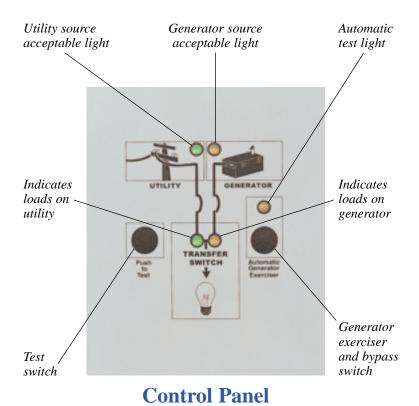
The Series 165 Automatic Transfer Switch incorporates the latest technology developed by ASCO for dependable operation in any environment.

- When utility power fails for just 3 seconds or more, the Series 165 Automatic Transfer Switch signals the generator to start.
- In less than 30 seconds your electrical power is restored.
- Once the Series 165 Automatic Transfer Switch senses utility power has reached an acceptable voltage level for a period of time, it automatically reconnects your power.
- It then smoothly shuts the generator down after a 1-minute cool-down period to extend generator life.
- The Series 165 Automatic Transfer Switch automatically performs a test to simulate utility power failure every 14 days.
- The user-friendly control panel also allows you to manually run a test at the push of a button.
- LED indicators let you know the availability of both power sources and transfer switch positions.

# **System Diagram**



# Power Solution



User-friendly control panel with easy to understand symbols and all the necessary visual indicators to inform the operator of transfer switch and power source status.

# Series 165 Automatic Transfer Switch



# **Ordering Information**

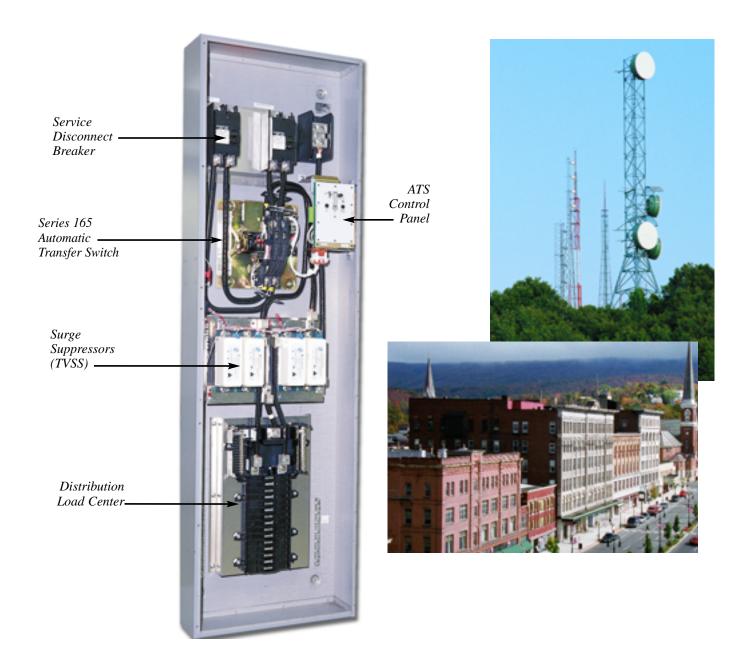
To order an ASCO Series 165 Transfer Switch, refer to the catalog numbers below.

#### **Automatic Transfer Switch**

Automatic Transfer Switch				
Catalog Number	Enclosure	Ampere		
165A2100F3C	Type 1 Indoor	100		
165A2200F3C	Type 1 Indoor	200		
165A2100F3F	Type 3R Outdoor	100		
165A2200F3F	Type 3R Outdoor	200		

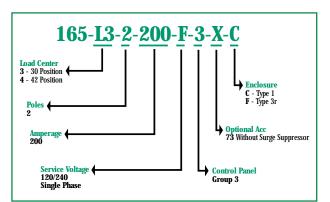
### **Automatic Transfer Switch Dimensions and Weights**

1	Switch Rating	Enclosure	Poles	Width	Height	Depth	Weight
ļ				inches (mm)	inches (mm)	inches (mm)	lb (kg)
	100	Type 1 Indoor	2	14.25 (362)	24 (610)	8 (203)	67 (31)
	200	Type 1 Indoor	2	14.25 (362)	24 (610)	8 (203)	67 (31)
	100	Type 3R Outdoor	2	14.75 (375)	25 (635)	8.5 (216)	82 (37)
	200	Type 3R Outdoor	2	14.75 (375)	25 (635)	8.5 (216)	82 (37)



# **Operating Information**

# **External Power Connections**



Wire Size Range (1) #8 to 3/0 AWG

\*UL listed for 200 amps with copper conductors only.

	Enclosu				
Enclosure Width		Width	Height	Depth	Weight
		inches (mm)	inches (mm)	inches (mm)	lb (kg)
	Type 1	20 (508)	65 (1651)	5.75 (146.05)	110 (50)