

ASCO SERIES 165 Power Transfer Switches



ASCO®


EMERSON™
Network Power

An Automatic Transfer Switch helps prevent...

- Your business or home from losing power during bad weather or utility power equipment failures
- The loss of valuable information needed from your computer to keep your business going or maintain important personal data
- Frozen and ruptured water pipes, flooded basements, as well as loss of heat, well water, air conditioning, sump pump, and other vital systems
- Frozen foods from thawing, and refrigerated foods from spoiling
- Personal injury and generator damage by eliminating the possibility of connecting the utility and generator at the same time



ASCO is there for you even when you're not.

Computers, communication and information systems, security systems, cash registers, heating systems, water heaters, refrigerators and freezers, air conditioners, sump pumps, well pumps...nearly every system in your business or home depends on electric power. It's easy to take that power for granted, but when it fails, the results can be disastrous. Generators can restore power to these vital systems...but they can only operate when someone turns them on! So what do you do when no one is around?

ASCO SERIES 165 Automatic Transfer Switch products provide all the intelligence your generator needs to make sure the power stays on when utility power fails. It automatically senses loss of utility power, and signals your generator to start and restore power to your business or home. The SERIES 165 Automatic Transfer Switch will automatically transfer your vital loads back to utility power when it has been restored.

Working hand in hand with your generator, ASCO's SERIES 165 Automatic Transfer Switch silently provides dependable 24-hour protection from a power failure, and springs into action only when needed.



Never put up with a power failure... again!



Power protection.

- Power outages cause millions of dollars of damage to businesses and residences annually... not to mention jeopardizing personal safety and convenience.
- A generator is only one piece of the solution... ASCO provides the other.
- An ASCO SERIES 165 Automatic Transfer Switch is the vital electrical link that makes continuous power virtually seamless...and hassle free.
- ASCO SERIES 165 Automatic Transfer Switches are suitable for operation with portable or permanently mounted standby generators from 2 kW to 45 kW.
- Whether you're home or not, an ASCO SERIES 165 Automatic Transfer Switch and your generator will provide the ability to maintain power to your business or home.

24-hour protection
no matter when trouble
strikes.



**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.

Power Solutions

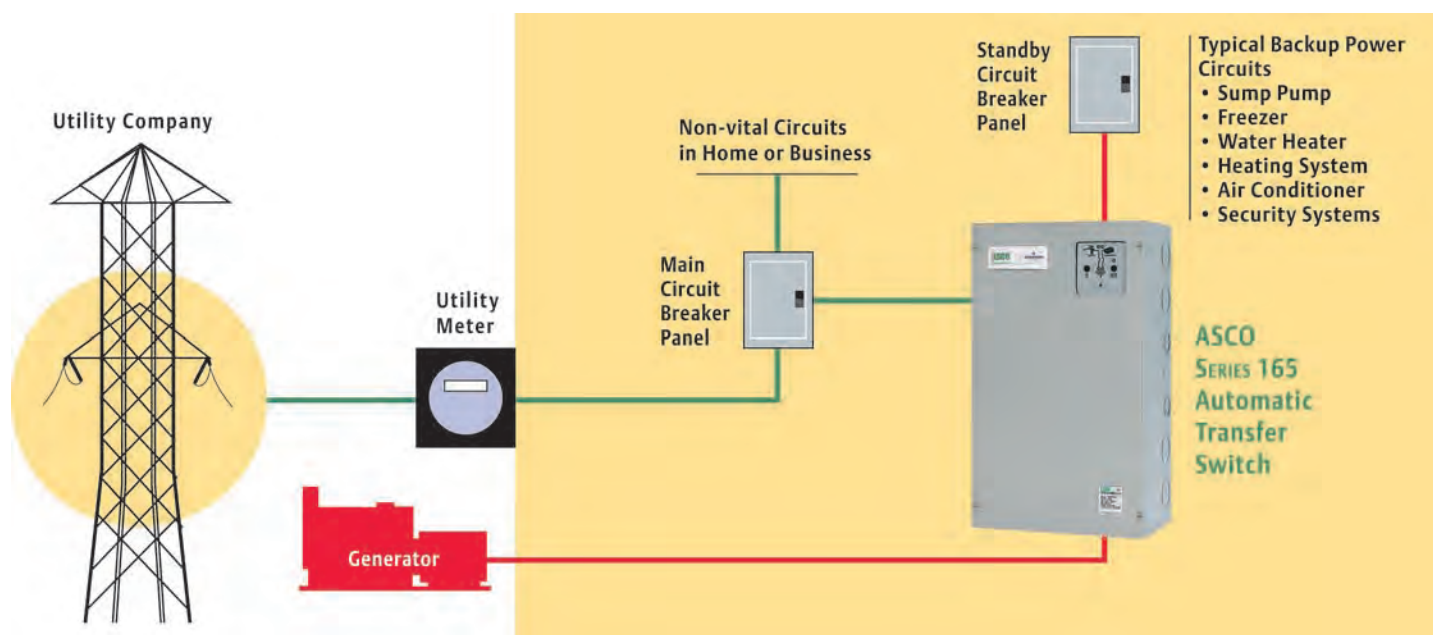


Performance sets the SERIES 165 apart.

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



Peace of Mind

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.

External Power Connections¹

Switch Rating (amps)	Wire Size Range
100	(1) #14 to 4/0 AWG
200	(1) #14 to 4/0 AWG
230	(1) #14 to 4/0 AWG

1. UL listed for 200 or 230 amps with copper conductors only. For individual dwelling units as defined in NFPA 70 (NEC), in cases where the transfer switch is between the service main disconnect and the lighting and appliance branch circuit panelboard(s), NFPA 70 allows for a reductions in size of the feeder conductors.

All other applicable requirements of NFPA 70 regarding conductor ampacities must also be adhered to. Always install electrical equipment to the requirements defined by the authority having jurisdiction.

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.
- Available from stock.

Diagnostic Indicators

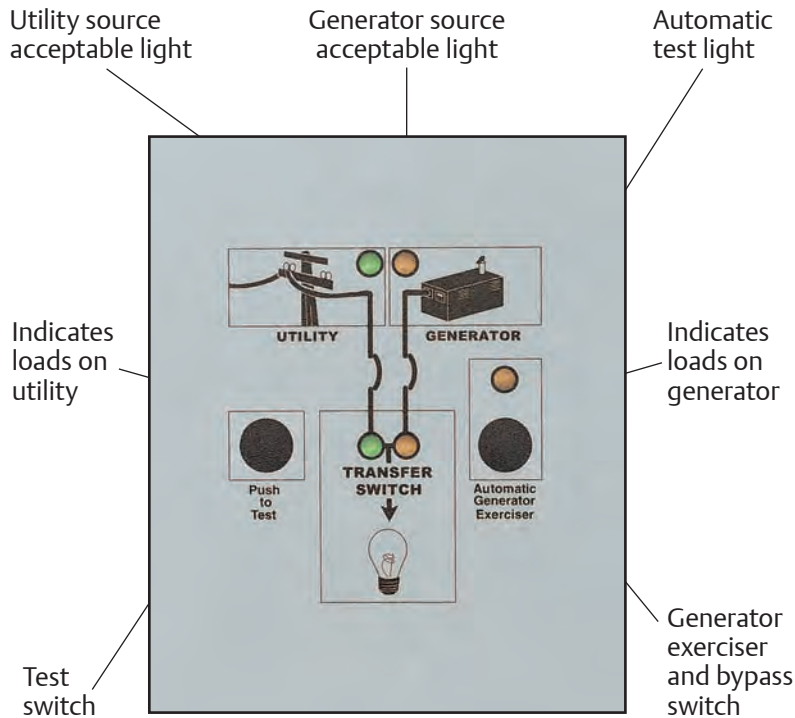
The 165 Automatic Transfer Switch has a unique built-in automatic digital diagnostic monitoring system, which provides status on potential system problems such as: generator failed to start; generator over frequency; transfer switch did not transfer; and more. It's one more way you can count on ASCO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



**SERIES 165 Automatic
Transfer Switch
In Type 3R Outdoor
Enclosure**

Withstand and Close-On Ratings

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



Control Panel

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

Automatic Transfer Switch

Catalog Number	Enclosure	Ampere
165A2100F3C	Type 1 Indoor	100
165A2200F3C	Type 1 Indoor	200
165A2230F3C	Type 1 Indoor	230
165A2100F3F	Type 3R Outdoor ¹	100
165A2200F3F	Type 3R Outdoor ¹	200
165A2230F3F	Type 3R Outdoor ¹	230

1. Type 3R enclosures provide a degree of protection against falling dirt, rain, sleet and snow. Additional protection may be required in locations subject to wind blown conditions

Automatic Transfer Switch Dimensions and Weights

Switch Rating	Enclosure	Poles	Width	Height	Depth	Weight
			inches (mm)	inches (mm)	inches (mm)	lb (kg)
100	Type 1 Indoor	2	14.25 (362)	24 (610)	8 (203)	43 (20)
200	Type 1 Indoor	2	14.25 (362)	24 (610)	8 (203)	43 (20)
230	Type 1 Indoor	2	14.25 (362)	24 (610)	8 (203)	43 (20)
100	Type 3R Outdoor	2	14.75 (375)	25 (635)	8.5 (216)	47 (22)
200	Type 3R Outdoor	2	14.75 (375)	25 (635)	8.5 (216)	47 (22)
230	Type 3R Outdoor	2	14.75 (375)	25 (635)	8.5 (216)	47 (22)