

**Service Entrance Rated
Power Frame Type
Open and Delayed Transitions**

Power Series Transfer Switch

1200-5000 Amps



Automatic Transfer Switch, 100% Service Entrance Rated
1200 – 5000A, up to 600VAC, 50/60 Hz
3 or 4 poles
NEMA 1 or 3R
Open Transition with Inphase or Delayed Transition
UL1008 Listed
CSA C22.2 No. 178 Certified

CODES AND STANDARDS:



UL1008 Listed



NFPA 70, 99, 110, 37



NEC 700, 701, 702, 708



ISO9001, 8528, 3046, 7637, Pluses #2b, 4



NEMA ICS10, MG1, 250, ICS6, AB1



ANSI C62.41



Seismic: IBC 2009, CBC 2010, IBC 2012, ASCE 7-05, ASCE 7-10, ICC-ES AC-156 (2012)



IEC 61000 EMC Testing & Measuring



CSA C22.2 No. 178 Certified

DESCRIPTION:

Generac's Service Entrance Power Series Transfer Switch integrates automatic power switching with required disconnecting, grounding, and bonding for use as service entrance equipment. The integrated service entrance power switch meets all National Electrical Code requirements for service entrance use in a compact package. The switches are rated for full load transfers in critical operating, emergency, legally required, and optional power systems. Designed with integral over current protection and a 100% rated disconnect breaker for unmatched safety, performance, and reliability. The full assembly is listed to UL 1008 with exceptional 3 cycle withstand and close on ratings.

Generac's Power Frame Type Transfer Switch has short time ratings for selective coordination and a high speed switching time of < 3 cycles to minimize the effect of power disturbances. Solid-state trip units can be integrated into the power switching section. This eliminates the need for separate upstream protective devices, saving cost and space. Available with various combinations of long, short time, instantaneous, ground fault protection and communications. The mechanism has a fully rated 4th pole operating on a common crossbar. A fully rated 4th pole eliminates the typical problems with a 3 pole overlapping neutral designs.

With an integral contact wear indication, preventative maintenance can be scheduled when convenient for the user. The control's color display and mimic bus diagrams simplifies programming, routine operation, data presentation, and setting adjustments. The intuitive, grouped data screens along with the supervisory and highly customizable data acquisition allow the user to customize to their needs. Standard features include Modbus® RTU, extensive user customizable input/outputs, 450 event log with event capture for the most recent 12, with 3 phase sensing on both sources, plus load for voltage, frequency, sequencing, loss, and unbalance.

Service Entrance Rated Power Frame Type, Open and Delayed Transitions

STANDARD FEATURES:

- High Withstand and Close on Ratings
- Safe manual transfer under load
- Front Access
- Cable or bus entry is Top, Bottom or Both
- Isolated Compartments for improved safety
- 4.3 inch Color Display
- Mimic diagram with Source Available and Connected LED indication
- Event logging and recording 450 time-stamped events
- System TEST pushbutton
- Programmable plant exerciser
- Field-selectable multi-tap transformer panel permits operation on a wide range of system voltages
- Modbus® RTU

VOLTAGE AND FREQUENCY SENSING:

- 3-Phase under and over voltage sensing on normal and emergency sources, plus load
- Under and over frequency sensing on normal, emergency, and load
- 3-Phase sequence sensing for phase sensitive loads
- 3-Phase voltage unbalance and loss sensing

CONTACTS:

- Source available:
 - Source-1 Present, 2-N.O. & 2 N.C.
 - Source-2 Present, 2-N.O. & 2 N.C.
- Switch position:
 - Source-1 Position, 1-N.O. & 1-N.C.
 - Source-2 Position, 1-N.O. & 1 N.C.
- Pre Transfer Contacts: 1-N.O. & 1 N.C.

Standard Control Parameters Available

CONTROL INPUTS (4 STANDARD):

- Monitor Mode
- Bypass Timers
- Lockout
- Manual Retransfer On/Off
- Manual Retransfer
- Slave In
- Remote Engine Test
- Preferred Source Selection
- Go to Emergency
- Emergency Inhibit
- ATS on Bypass
- Go to Neutral

CONTROL OUTPUTS (4 STANDARD):

- Load sequence
- Selective Load shed
- Load bank control
- Pre/post-transfer
- Pre-transfer
- User remote control
- Source 1 available (standard)
- Source 2 available (standard)
- Source 1 connected
- Source 2 connected
- ATS not in automatic
- General alarm
- ATS in test
- Engine test aborted
- Cooldown in process
- Engine start contact status
- Generator 1 start status
- Generator 2 start status
- Emergency inhibit on
- ATS on bypass

Up to 20 available with Expandable Input/Output Modules

OPTIONAL FEATURES:

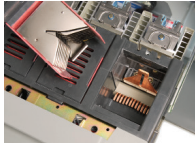
- Dual Draw Out
- Digital Multi-function Power Quality Metering
- Ethernet Connectivity
- Remote Annunciator Panel with control
- Remote Multi Switch Annunciator Panel with control
- 2 or 4 position selector switch
- TVSS
- Stainless steel cover for controller
- Selectable Retransfer
- Manual Generator Retransfer

SERVICE ENTRANCE RATED:

For service entrance and other applications, Digitrip solid-state trip units can be integrated into the power switching section. This eliminates the need for separate upstream protective devices, saving cost and space. Available with various combinations of long, short time, instantaneous, ground fault protection and communications. Contact factory for optional trip units.

Service Entrance Rated Power Frame Type, Open and Delayed Transitions

Contact Wear Indication



ATC-900
Controller



Drawout Power Case
Switch or Breaker
is Optional



Source 2

Keyed Switch for Service Entrance Option

2000A Drawout

TRANSFER SWITCH WITHSTAND RATINGS:

Systems Coordination Information—Withstand, Closing and Interrupting Ratings

Rating When Used with Upstream Circuit Breaker

Transfer Switch Ampere Rating	3 Cycle 600V (kA)	30 Cycle ² 600V (kA)
1200	100	85
1600	100	85
2000	100	85
2500	100	85
3000	100	85
3200	100	85
4000	100	85 ¹
5000	—	85 ¹

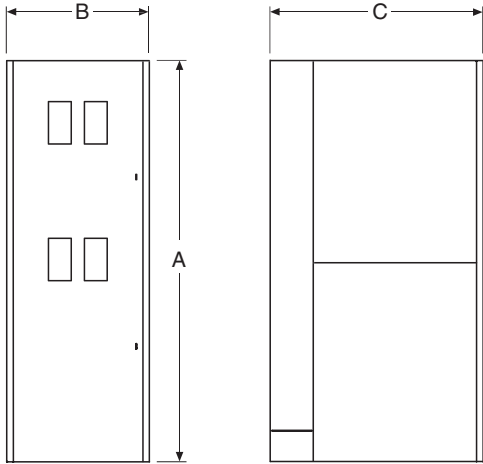
1. UL 1066 short-time rating

2. Ratings used for coordination with upstream breakers with short-time ratings

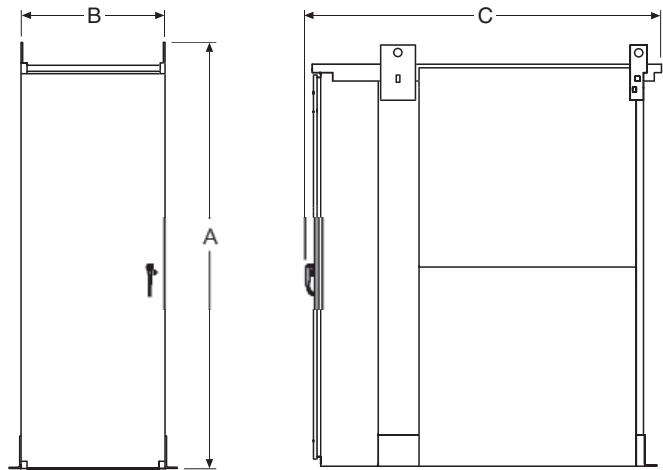
Service Entrance Rated Power Frame Type, Open and Delayed Transitions

UNIT DIMENSIONS:

1200–3200A Fixed-Mount NEMA 1



1200–3200A Fixed-Mount NEMA 3R



*For enclosures alternative than NEMA 1 and 3R, contact factory.

Power Frame Fixed-Mount Transfer Switches

Approximate Dimensions in Inches (mm)

NEMA 1 Enclosed Fixed-Mount Transfer Switch						NEMA 3R Enclosed Fixed-Mount Transfer Switch					
Ampere Rating	Number of Poles	Height A	Width B	Depth C	Shipping Weight Lbs (kg)	Ampere Rating	Number of Poles	Height A	Width B	Depth C	Shipping Weight Lbs (kg)
1200-2000	3	90.00 (2286.0)	32.00 (812.8)	48.00 (1219.2)	1050 (477)	1200-2000	3	90.00 (2286.0)	32.00 (812.8)	63.00 (1600.2)	1600 (726)
1200-2000	4	90.00 (2286.0)	32.00 (812.8)	48.00 (1219.2)	1250 (568)	1200-2000	4	90.00 (2286.0)	32.00 (812.8)	63.00 (1600.2)	1800 (817)
2500-3200	3	90.00 (2286.0)	44.00 (1117.6)	48.00 (1219.2)	1900 (863)	2500-3200	3	90.00 (2286.0)	44.00 (1117.6)	63.00 (1600.2)	2400 (1090)
2500-3200	4	90.00 (2286.0)	44.00 (1117.6)	48.00 (1219.2)	2000 (910)	2500-3200	4	90.00 (2286.0)	44.00 (1117.6)	63.00 (1600.2)	2500 (1135)

Note

* At 4000 and 5000A, the standard design is drawout. See drawout dimensions.

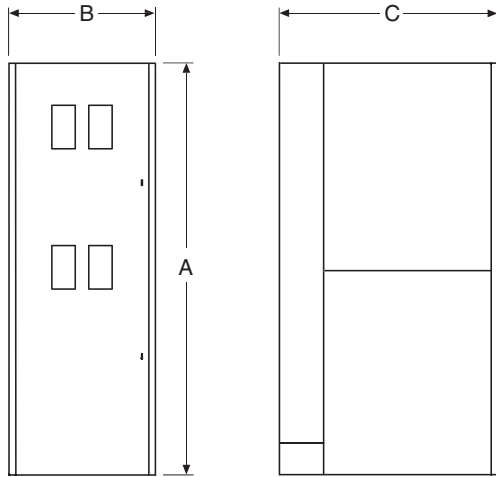
Standard Terminals

Ampere Rating	Normal, Emergency, and Load	Neutral
1200-2000	(6) 3/0-750 MCM	(24) 4/0-500 MCM
2500-3200	(9) 3/0-750 MCM	(36) 4/0-500 MCM

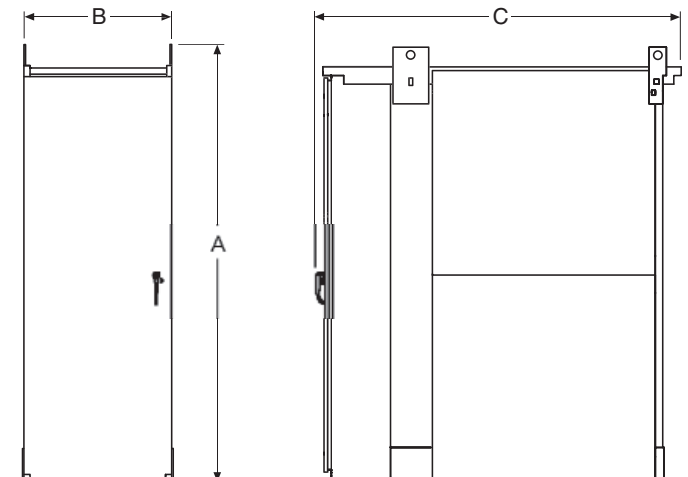
Service Entrance Rated Power Frame Type, Open and Delayed Transitions

UNIT DIMENSIONS:

1200–3200A Drawout NEMA 1



1200–3200A Drawout NEMA 3R



*Seismic mounting brace adds an additional 3 inches to each side - front left and front right side and 3 inches additional to rear side.

Power Frame Drawout Transfer Switches

Approximate Dimensions in Inches (mm)

NEMA 1 Enclosed Drawout Transfer Switch						NEMA 3R Enclosed Drawout Transfer Switch					
Ampere Rating	Number of Poles	Height A	Width B	Depth C	Shipping Weight Lbs (kg)	Ampere Rating	Number of Poles	Height A	Width B	Depth C	Shipping Weight Lbs (kg)
1200-2000	3	90.00 (2286.0)	32.00 (812.8)	60.00 (1524.0)	1600 (727)	1200-2000	3	90.00 (2286.0)	32.00 (812.8)	75.00 (1905.0)	2100 (953)
1200-2000	4	90.00 (2286.0)	32.00 (812.8)	60.00 (1524.0)	1900 (864)	1200-2000	4	90.00 (2286.0)	32.00 (812.8)	75.00 (1905.0)	2400 (1090)
2500-3200	3	90.00 (2286.0)	44.00 (1117.6)	60.00 (1524.0)	2500 (1136)	2500-3200	3	90.00 (2286.0)	44.00 (1117.6)	75.00 (1905.0)	3000 (1362)
2500-3200	4	90.00 (2286.0)	44.00 (1117.6)	60.00 (1524.0)	2800 (1273)	2500-3200	4	90.00 (2286.0)	44.00 (1117.6)	75.00 (1905.0)	3300 (1499)

Standard Terminals

Ampere Rating	Normal, Emergency, and Load	Neutral
1200-2000	(6) 3/0-750 MCM	(24) 4/0-500 MCM
2500-3200	(9) 3/0-750 MCM	(36) 4/0-500 MCM

*For 4000 and 5000A dimensions, please contact factory.