

Power Series Transfer Switch

1,200 – 5,000 Amps

Service Entrance Rated · Power Frame Type · Open and Delayed Transition

- Automatic Transfer Switch, 100% Service Entrance Rated
- 1,200 – 5,000 A, Up to 600 VAC, 50/60 Hz
- 3 or 4 Poles
- NEMA 1 or 3R
- Open Transition with Inphase or Delayed Transition
- UL 1008 Listed
- CSA C22.2 No. 178 Certified



Image used for illustration purposes only

Codes and Standards

Not all codes and standards apply to all configurations. Contact factory for details.



UL 1008 Listed



CSA C22.2 No. 178 Certified



NFPA 37, 70, 99, 110



NEC 700, 701, 702, 708



NEMA ICS10, MG1, 250, ICS6, AB1



ANSI C62.41



IEC 61000 EMC Testing and Measuring



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

Description

Generac's Service Entrance Power Frame Type Transfer Switches integrate 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 design.

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 three phase sensing on both sources, plus load for voltage, frequency, sequencing, loss, and unbalance.

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STANDARD FEATURES

GENERAL

- High Withstand and Closing Ratings
- Safe Manual Transfer Under Load
- Front Access
- Cable or Bus Entry is Side, Rear, Top and Bottom
- Isolated Compartments for Improved Safety
- ATC-900 Controller
- 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
- Operating Temperature -4 ° to 158 °F (-20 ° to 70 °C)

VOLTAGE AND FREQUENCY SENSING

- Three Phase Under and Over Voltage Sensing on Normal and Emergency Sources, Plus Load
- Under and Over Frequency Sensing on Normal, Emergency and Load
- Three Phase Sequence Sensing for Phase Sensitive Loads
- Three Phase Voltage Unbalance and Loss Sensing

CONFIGURABLE OPTIONS

GENERAL

- Drawout Construction
- 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
- Transient Voltage Surge Suppression (TVSS)
- Padlockable Cover for Controller
- Padlockable Cover for Device Panel
- Selectable Retransfer
- Manual Generator Retransfer

CONTACTS

- Source Available:
 - Source-1 Present, 1-N.O. and 1-N.C.
 - Source-2 Present, 1-N.O. and 1-N.C.
- Switch Position:
 - Source-1 Position, 1-N.O. and 1-N.C.
 - Source-2 Position, 1-N.O. and 1-N.C.

STANDARD CONTROL PARAMETERS AVAILABLE

- Up to 20 Available with Expandable Input/Output Modules

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
- 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

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 including trip units equipped with an Archflash Reduction Maintenance System.*

CAM-LOK™ QUICK CONNECT TERMINALS

- Male Receptacle, E1016 Series
- Color Coded to Industry Standard
- Hinged Thermoplastic Covers
- 100% Ground Ampacity

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Contact Wear Indication



Drawout Power Case
Switch or Breaker
is Optional



ATC-900
Controller



Source 1

Source 2

Keyed Switch for Service Entrance Option

Multi-Tap Transformer

2,000A Drawout

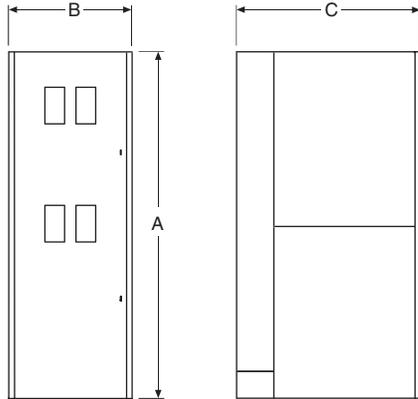
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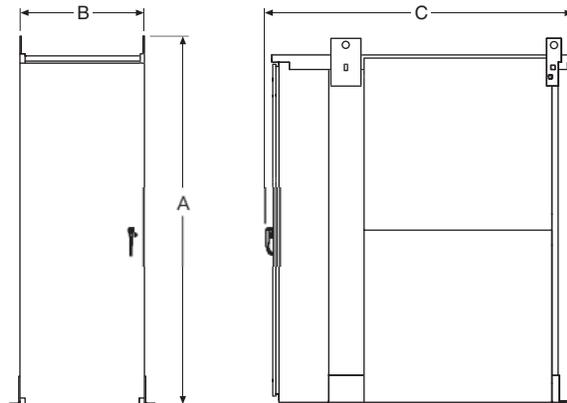
Service Entrance Rated · Power Frame Type · Open and Delayed Transition

UNIT DIMENSIONS*

1,200 3,200A Fixed-Mount NEMA 1



1,200 3,200A Fixed-Mount NEMA 3R



Service Entrance Rated, Power Frame Type, Open and Delayed Transition, 1,200 – 3,200 A, Fixed Mount

Amperes	Poles	Enclosure Type (NEMA)	in (mm)			Cu/Al		lbs (kg)
			A (Height)	B (Width)	C (Depth)	Load Side, Normal and Standby Source	Neutral Connection	Weight
1,200-2,000	3	1	90.0 (2286)	32.0 (813)	48.0 (1219)	(6) 1/0-750 MCM	(24) 4/0-500 MCM	1,050 (477)
		3R	90.0 (2286)	32.0 (813)	63.0 (1600)	(6) 1/0-750 MCM	(24) 4/0-500 MCM	1,600 (727)
	4	1	90.0 (2286)	32.0 (813)	48.0 (1219)	(6) 1/0-750 MCM	–	1,250 (568)
		3R	90.0 (2286)	32.0 (813)	63.0 (1600)	(6) 1/0-750 MCM	–	1,800 (818)
2,500-3,200	3	1	90.0 (2286)	44.0 (1118)	48.0 (1219)	(9) 1/0-750 MCM	(36) 4/0-500 MCM	1,900 (864)
		3R	90.0 (2286)	44.0 (1118)	63.0 (1600)	(9) 1/0-750 MCM	(36) 4/0-500 MCM	2,400 (1,090)
	4	1	90.0 (2286)	44.0 (1118)	48.0 (1219)	(9) 1/0-750 MCM	–	2,000 (909)
		3R	90.0 (2286)	44.0 (1118)	63.0 (1600)	(9) 1/0-750 MCM	–	2,500 (1,136)

* All measurements are approximate and for estimation purposes only. Specification characteristics may change without notice. Contact a Generac Power Systems Industrial Dealer for detailed installation drawings. Contact factory for dimensions on Cam-Lok™ option switches.

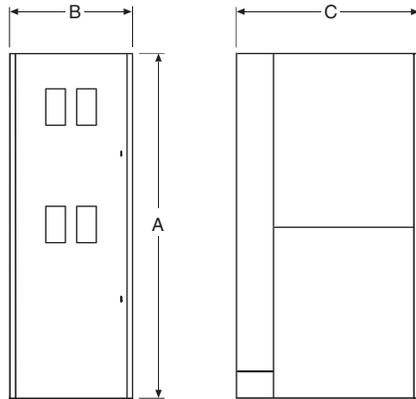
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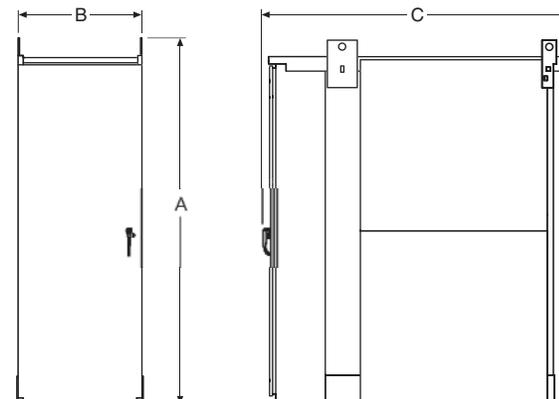
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UNIT DIMENSIONS*

1,200 3,200A Drawout NEMA 1



1,200 3,200A 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.

Service Entrance Rated, Power Frame Type, Open and Delayed Transition, 1,200 – 3,200 A, Drawout

Amperes	Poles	Enclosure Type (NEMA)	in (mm)			Cu/Al		lbs (kg)
			A (Height)	B (Width)	C (Depth)	Load Side, Normal and Standby Source	Neutral Connection	Weight
1,200-2,000	3	1	90.0 (2286)	32.0 (813)	60.0 (1,524)	(6) 1/0-750 MCM	(24) 4/0-500 MCM	1,600 (727)
		3R	90.0 (2286)	32.0 (813)	75.0 (1905)	(6) 1/0-750 MCM	(24) 4/0-500 MCM	2,100 (953)
	4	1	90.0 (2286)	32.0 (813)	60.0 (1,524)	(6) 1/0-750 MCM	–	1,900 (864)
		3R	90.0 (2286)	32.0 (813)	75.0 (1905)	(6) 1/0-750 MCM	–	2,400 (1,091)
2,500-3,200	3	1	90.0 (2286)	44.0 (1118)	60.0 (1,524)	(9) 1/0-750 MCM	(36) 4/0-500 MCM	2,500 (1,136)
		3R	90.0 (2286)	44.0 (1118)	75.0 (1905)	(9) 1/0-750 MCM	(36) 4/0-500 MCM	3,000 (1,364)
	4	1	90.0 (2286)	44.0 (1118)	60.0 (1,524)	(9) 1/0-750 MCM	–	2,800 (1,273)
		3R	90.0 (2286)	44.0 (1118)	75.0 (1905)	(9) 1/0-750 MCM	–	3,300 (1,500)

For 4,000 and 5,000 A dimensions, please contact factory.

UL 1008 Withstand and Closing Ratings

Ampere Rating	Rating When Used with Upstream Circuit Breaker	
	3 Cycle 600 V (kA)	30 Cycle ² 600 V (kA)
1,200	100	85
2,000	100	85
2,500	100	85
3,000	100	85
3,200	100	85
4,000	100	85
5,000	–	85 ¹

¹ UL 1066 short-time withstand rating

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

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