

Service Entrance Rated
Molded Case Type
Open and Delayed Transition

## **Power Series Transfer Switch**

100-1000 Amps



Automatic Transfer Switch, 100% Service Entrance Rated 100 – 1000A, Available to 600 VAC, 50/60 Hz Single & Three phase 2, 3 or 4 poles NEMA 1, 3R, or 4x Open and 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 equipment 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 overcurrent protection and 100% rated disconnect breaker for unmatched performance, safety, and reliability. The internal dead front cover allows for manual operation under load with a permanently affixed handle. The full assembly is listed to UL 1008 with exceptional withstand and close on ratings.

The microprocessor-based ATS controller offers standard features of Modbus® RTU and pretransfer contacts, with 3-Phase sensing on both sources plus load for voltage, frequency, sequencing, loss and unbalance. The mimic diagram displays source availability and connection, providing "at a glance" indication, further simplifying users interface. The controller is designed beyond industry EMC standards with a time-stamped history log.

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#### STANDARD FEATURES:

- Double-throw, mechanically interlocked transfer mechanism
- · High withstand and closing ratings
- LCD-based display for programming, system diagnostics and Help Menu display
- Mimic diagram with Source Available and Connected LED indication
- Top, bottom and side cable entry
- · Time-stamped history log

- System TEST pushbutton
- Programmable plant exerciser OFF, daily, 7 day interval selectable run time 0-600 minutes no load/load with failsafe
- Safe manual operation under full load with permanently affixed operating handle
- Modbus® RTU
- · Field programmable time delays

## **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.

### **OPTIONAL FEATURES:**

- ATC-900 Digital Controller
- Space Heater with Thermostat
- · Digital Multi-function Power Quality Metering
- Ethernet Connectivity
- Remote Annunciator Panel with controller
- · Maintenance Selector Switch
- Remote Multi Switch Annunciator Panel with controller

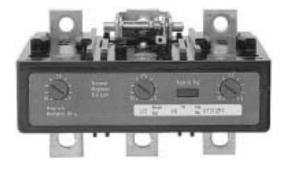
- TVSS
- · Stainless steel cover for controller
- · Emergency Inhibit
- · General Alarm Indication
- · Selectable Retransfer
- · Manual Generator Retransfer

## FAST, POWERFUL AND SAFE POWER SWITCHING MECHANISM:

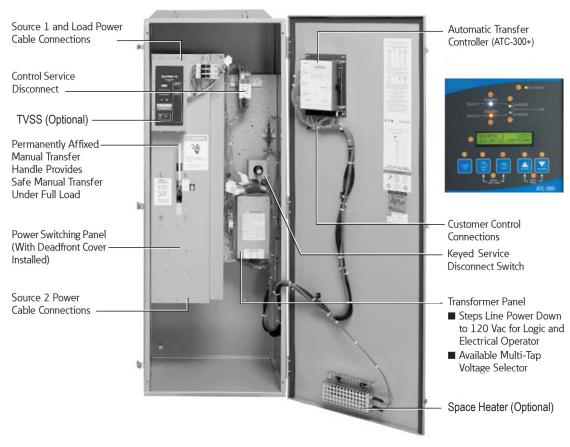
The power panel utilizes a unidirectional gear motor mechanism. The power panel can be operated manually under a full load.

## INTEGRAL OVERCURRENT PROTECTION CAPABILITY:

The Service Entrance Power Transfer Switch trip units are integrated in to the power switching section. This eliminates the need for separate upstream protective devices, saving cost and space.



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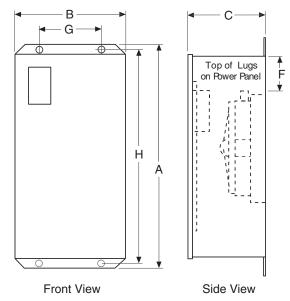
**Components of Automatic Transfer Switches** 

UL1008 Withstand and Close on Ratings as Listed (kA)							
Switch Ampere Rating	3-Cycle Rating			Ratings When Used with Upstream Fuse			
	240 Vac	480 Vac	600 Vac	Maximum Fuse Rating	Fuse Type	600 Vac	
100	100	65	25	200	J, T	200	
225	100	65	25	400	J, T	200	
300	100	65	25	400	J, T	200	
400	100	65	25	400	J, T	200	
600	100	65¹	25	1200	J, T	200	
800	65	50¹	25	1600	L	200	
1000	65	50¹	25	1600	L	200	
Notes							

<sup>1</sup> Four-pole configuration is 35kA for 600, 800 and 1000A.

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## **UNIT DIMENSIONS:**



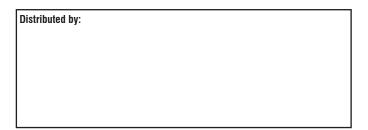
<sup>\*</sup>Top, bottom and side cable entry

## Molded Case Transfer Switches Dimensions in Inches (mm)

		Wall Mount En	closure		Bolt Pattern		
Ampere		Height A	Width B	Depth <sup>1</sup> C	Horizontal G	Vertical H	Weight Lbs (kg)
100	HFD <sup>1</sup>	47.74 (1213.0)	20.81 (528.6)	17.22 (437.0)	10.75 (273.0)	46.44 (1180.0)	232 (105)
225	HFD <sup>1</sup>	35.61 (904.0)	20.06 (509.5)	13.34 (339.0)	10.75 (273.0)	34.31 (904.0)	150 (68)
225	HFD	47.74 (1213.0)	20.81 (528.6)	17.22 (437.0)	10.75 (273.0)	46.44 (1180.0)	232 (105)
225	HKD	56.00 (1422.4)	20.81 (528.6)	18.40 (467.4)	11.00 (279.4)	45.50 (1155.7)	305 (138)
300	HKD	53.00 (1346.2)	25.81 (655.6)	18.40 (467.4)	11.00 (279.4)	53.50 (1358.9)	295 (134)
400	HLD	53.00 (1346.0)	25.81 (655.6)	16.65 (422.9)	16.00 (406.4)	51.50 (1308.0)	425 (193)
600	HLD <sup>1</sup>	64.00 (1625.6)	25.81 (655.6)	18.40 (467.4)	16.00 (406.4)	62.50 (1588.0)	475 (214)
600	HMDL	76.74 (1949.2)	25.81 (655.6)	19.50 (495.3)	16.00 (406.4)	75.15 (1908.8)	480 (218)
800	HMDL <sup>1</sup>	76.74 (1949.2)	25.81 (655.6)	19.50 (495.3)	16.00 (406.4)	75.15 (1908.8)	510 (231)
800–1000	HNB	76.74 (1949.2)	25.81 (655.6)	19.50 (495.3)	16.00 (406.4)	75.15 (1908.8)	540 (245)

#### Notes

<sup>\*</sup> For all dimensions and terminations confirm with submittal information.



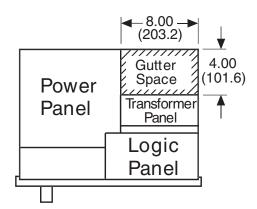
### Standard Terminals Dimensions in Inches (mm)

Cu/Al Rated Terminal Lugs (MCM)

	Breaker	Normal and Emergency		
Ampere	Frame	Sources	Load	Neutral <sup>1</sup>
100	HFD	(1) #14-1/0	(1) #14-1/0	(3) #14-1/0
225	HFD	(1) #6-300	(1) #6-300	(3) #4-300
225	HKD	(1) #3-350	(1) #6-350	(3) #4-350
225	HKD	(1) #3-350	(1) #6-350	(3) #4-350
300	HKD	(1) #3-350	(1) #6-350	(3) #4-350
400	HLD	(1) 4/0-600	(2) #1-500	(6) 250-350
600	HLD	(1) 3/0-350	(2) #1-500	(6) 250-350
600	HMDL	(2) #1-500	(2) #1-500	(12) 4/0-500
600 (four-pole)	NB	(3) 3/0-400	(3) 3/0-400	(3) 3/0-500
800	HMDL	(3) 3/0-400	(3) 3/0-400	(12) 4/0-500
800	HNB	(3) 3/0-500	(4) 4/0-500	(12) 4/0-500
1000	HNB	(3) 3/0-500	(4) 4/0-500	(12) 4/0-500

#### Not

## **Available Gutter Space**



Top View



 $<sup>1\ \ 240/120</sup>V, single-phase, three-wire or 208V, three-phase, four-wire systems only, without multi-tap transformer.$ 

<sup>1</sup> Applies to standard two and three pole configurations with solid neutral.