

Contactor Type Closed Transition

Power Series Transfer Switch

100-1200 Amps



Automatic Transfer Switch
100 – 1200A, up to 600VAC, 50/60 Hz
3 or 4 poles
NEMA 1 or 3R
Closed 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 Contactor type transfer switches are double-throw and with an over center design to ensure safe, positive transfer between power sources. The switches are 3 cycle rated to ease breaker selection and coordination. The mechanism is field proven and operated via a reliable, compact solenoid for high speed transfer of loads between power sources. The contacts are silver composite for long life, resisting pitting or burning. The switches are rated for full load transfers in critical operating, emergency, legally required, and optional power systems.

The control's 4.3 inch color display and mimic bus diagram 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 configure to their needs. Standard features include Modbus® RTU, extensive user customizable input/ outputs, 450 event log with capture for the most recent 12 events, plus phase unbalance and 3 phase sensing on both sources.

An automatic closed transition transfer switch (make-before-break) requires the normal and emergency sources to be synchronized. The controller monitors the voltage and frequency of both power sources with an anticipitory algorithm; phase angles must be within 8 electrical degrees. A synchronization timer is initiated (TSCT, 1-60 min adjustable) to complete the transfer and parallels 100ms or less. If the TSCT times out and the transfer switch has not reached synchronization, the transfer switch will remain connected to the current Source, and a failure to transfer alarm will be displayed. The switch can also be configured to operate in open transition mode if there is a fail to transfer in closed transition.

Power Series, Contactor Type, Closed Transition

STANDARD FEATURES:

- Double-throw and solenoid operated with overcenter designed mechanism
- Front Access
- · Entry is Top and/or Bottom
- 4.3 inch Color Display
- Mimic diagram with Source Available and Connected LED indication
- Field-selectable multi-tap transformer panel permits operation on a wide range of system voltages
- · Event logging and recording 450 time-stamped events
- System TEST pushbutton
- · Programmable plant exerciser
- 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
- · 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

Up to 20 available with Expandable Input/Output Modules

OPTIONAL FEATURES:

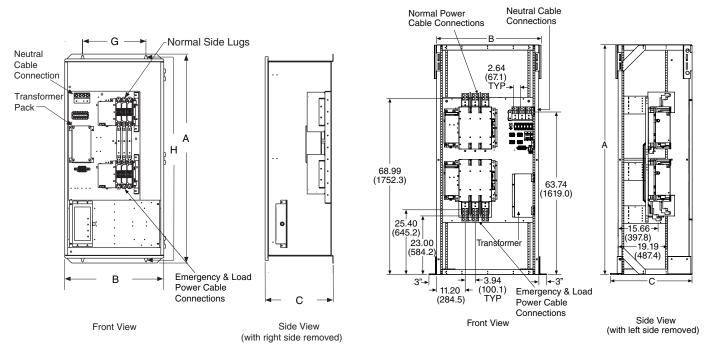
- · Digital Multi-function Power Quality Metering
- · Ethernet Connectivity
- · Remote Annunciator Panel with control
- · Remote Multi Switch Annunciator Panel with control
- · 2 or 4 Position Selector Switch

- TVSS
- · Stainless steel cover for controller
- Selectable Retransfer
- · Manual Generator Retransfer

Power Series, Contactor Type, Closed Transition

Automatic Up to 400A Wallmount

Automatic 600-1200A Floor Standing



^{*} For switched neutral applications, connect to terminals marked 'NN', 'EN' and 'LN'. Neutral assembly will not be provided.

Contactor Type, Closed Transition

Approximate Dimensions in Inches (mm)

			Encl	osure		Bolt Pattern		Standard Terminations		
480 V	Amperes	Transition	Height A	Width B	Depth C	Horizontal G	Vertical H	Load Side, Normal and Emergency Source	Neutral Connection	Weight lbs(kg)
	100	Closed	52.74 (1339.6)	25.00 (635.0)	17.18 (436.4)	16.00 (406.0)	51.68 (1312.6)	(1) #14-2/0	(3) #14-2/0	190 (86)
	200	Closed	52.74 (1339.6)	25.00 (635.0)	17.18 (436.4)	16.00 (406.0)	51.68 (1312.6)	(1) #6-250 MCM	(3) 1/0-250 MCM	210 (95)
	400	Closed	71.02 (1803.9)	31.11 (790.2)	14.69 (373.0)	21.50 (546.0)	70.17 (1782.3)	(2) 3/0-250 MCM	(6) 250-500 MCM	420 (191)
	600-1200 ¹	Closed	90.00 (2286.0)	46.00 (1168.4)	32.00 (812.8)	*	*	(4) 1/0-750 MCM	(12) 1/0-750 MCM	900 (405)

600 V

		Height	Width	Depth	Horizontal	Vertical	Emergency	Neutral	
Amperes	Transition	Α	В	С	G	Н	Source	Connection	Weight lbs(kg)
100	Closed	52.74 (1339.6)	25.00 (635.0)	17.18 (436.4)	16.00 (406.0)	51.68 (1312.6)	(1) #6-250 MCM	(3) #14-1/0	210 (95)
200 1	Closed	71.02 (1803.9)	31.11 (790.2)	14.69 (373.0)	21.50 (546.0)	70.17 (1782.3)	(1) #6-250 MCM	(3) 1/0-250 MCM	420 (191)
400–1200 ¹	Closed	90.00 (2286.0)	46.00 (1168.4)	32.00 (812.8)	*	*	(4) 1/0-750 MCM	(12) 1/0-750 MCM	800 (363)

Load Side, Normal and

Note

- 1 For NEMA 3R, add 14.60 inches (370.80mm) to depth.
- * Floor Standing Units

^{*} Transformer pack is not included with 240/120V, single-phase or 208/120V, three-phase systems.

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TECHNICAL DATA AND SPECIFICATIONS:

UL 1008 Withstand and Close-On Ratings as Listed (kA):

UL 1008 Ampere Rating	480V	480V	600V	600V	Rating When Used with Upstream Fuse				
	Any Breaker	Specific Breaker	Any Breaker	Specific Breaker	Rating (kA)	Test Voltage	Fuse Type	Maximum Fuse Amperes	
100	10	30	10	22	100	480	RK5	200	
200	10	30	22	35	100	600	RK5	400	
400	30	50	50	65	200	600	RK5	600	
600	50	65	50	65	200	600	L	1600	
800	50	65	50	65	200	600	L	1600	
1000	50	65	50	65	200	600	L	1600	
1200	50	65	50	65	200	600	L	1600	

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