

Vigilant Automatic Transfer Switches

100A to 1250A

The Vigilant Series ATS is designed to automatically transfer critical loads in the event of a power outage. It consists of a simple, rugged design while maintaining the flexibility required to meet the needs of residential, agricultural, and light industrial applications.

- Rugged Contactor Design – Double Throw, Mechanically Interlocked.
- Galvanized Steel Enclosure.
- Externally accessible Exerciser Clock and Lamps.
- 5-Year Warranty.



DynaGen's VTSC100 Controller Board

The VTSC100 Logic Controller Board is at the heart of every Vigilant Automatic Transfer Switch. It is designed to provide all basic transfer switch control functions with simplicity, flexibility, and durability.

Features include:

- Powered from genset battery for isolation against line transients.
- Integrated voltage and frequency sensing.
- Adjustable transfer delays using on-board potentiometers.
- Fused remote start contact relays.
- Adjustable drop-out & pick-up values for voltage and frequency.
- Internal test switch included.

Conformally Coated

Every VTSC controller board is thoroughly conformally coated to create an effective barrier against moisture, fungus and other contaminants that can cause:

- Short circuits.
- Corrosion of conductors and solder joints.
- Electrical leakage between circuits.
- Mechanical stress of components.
- Loss of insulation protection.



Galvanized Corrosion Protection Standard on all Vigilant Enclosures

The Vigilant enclosure is made from duplex coated, galvanized G90 grade steel and meets American Society for Testing and Materials (ASTM) standard A653. The service life of our galvanized steel enclosures is more than twice that of regular steel.



Operator Interface with external access

DynaGen's easy-to-use, 7-day exerciser clock gives you full control over day and time. The exerciser clock and indicator lamps are both accessible from outside the transfer switch. There's no need to open the door to adjust the clock or view the status of the transfer switch, even with the NEMA 3 enclosure option.



Specifications (Standard Withstand Models)

Operating Temperature: -20 to +70 °C; Operating Humidity: 0-95% Relative, Non-Condensing

Ratings	Voltage	UL Withstand Ratings*	Poles	Enclosure H x W x D	Lbs.	Lug Capacities
100 Amp	120/240	10KA	2	16"x14"x6" [†]	25	1/0 to 14AWG
200 Amp	120/240	10KA	2	24"x20"x6" [†]	55	1/0 to 250MCM
400 Amp**	120/240, 120/208, 277/480	10KA	2, 3, 4	48"x30"x13"	190	4 to 600MCM
600 Amp**	120/240, 120/208, 277/480	12KA	2, 3, 4	60"x30"x25"	425	2 to 600MCM
1000 Amp**	120/240, 120/208, 277/480	20KA	2, 3, 4	60"x36"x25"	510	2 to 600MCM
1250 Amp**	120/240, 120/208, 277/480	25,000A	2, 3, 4	60"x36"x25"	542	2 to 600MCM

*Please consult factory for specific protective device specifications and ratings.

• 100A and 200A approved UL1008 - Optional Standby Systems / • 400A through 1250A approved UL1008 - Emergency Systems

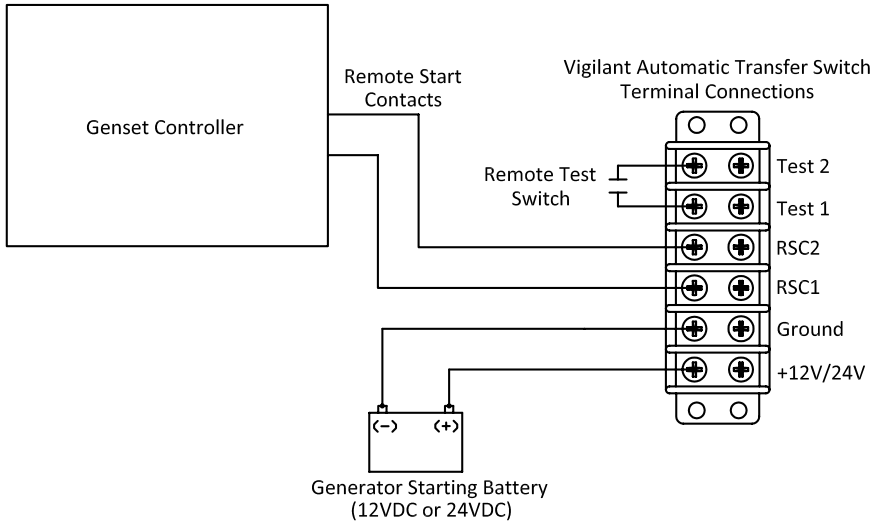
** Supplied standard in NEMA3 only

[†]Add 1" to depth if N3 enclosure is selected

VTSC100 ATS Controller Specifications

Control Board Power	12 or 24VDC (factory jumpers); Standby Draw: 25mA
Remote Start Contacts	10A Max, SPST
Time Delay Engine Start (TDES)	0 to 32s adjustable
Time Delay Normal to Emergency (TDNE)	0 to 64s adjustable
Time Delay Emergency to Normal (TDEN)	0 to 256s adjustable
Time Delay Engine Cooldown (TDEC)	0 to 256s adjustable
Time Delay on Neutral (if available)	0 to 64s adjustable
Normal & Emergency Undervoltage Sensing (Phase to Neutral +/-2%)	Dropout: 82% to 89% adjustable; Pickup: 87% to 94%
Normal & Emergency Overvoltage Sensing (Phase to Neutral +/-2%)	Dropout: 118% to 111% adjustable; Pickup: 113% to 106%
Normal & Emergency Underfrequency Sensing (Phase to Neutral +/-1%)	Dropout: 88% to 95% adjustable
Normal & Emergency Overfrequency Sensing (Phase to Neutral +/-1%)	Dropout: 105% to 112% adjustable

Typical Wiring to Genset.



Ordering Information

VTS2	-	0400	-	2	-	240	-	12 - X -	-	N3	-LS
		↓		↓		↓		↓		↓	
		Ampere Rating		Number Poles		Voltage		Delay-on-Neutral		Enclosure Type	
		↓		↓		↓		↓		↓	
		0100 0200 0400 0600 1000 1250		2 = 2 Pole 3 = 3 Pole 4 = 4 Pole		240 = 120/240 208 = 120/208 480 = 277/480		X = Standard D = Delay-on-Neutral (standard on 600A and above)		N1 = Nema 1 N3 = Nema 3 (N1 comes with knock-outs. N3 is standard on 400A and above)	

Example: VTS2-0400-2-240-12-X-N3
 ATS Rated 400 Amp, Single-Phase 2-Pole, 120/240V, NEMA 3 enclosure

Note: Please consult factory for "LM" version that provides compatibility to Briggs and Stratton generators with Power Management System.

Available Accessories:
 ACC0107 - Keyed Locks for Enclosure

To find out more visit
www.VigilantATS.info

Vigilant Load Center

100A Automatic Transfer Switch with Breaker Panel

The Vigilant Load Center is ideally suited for residential and light commercial applications. It eliminates the need for a separate sub-panel and fits snugly between two studs. The unit also includes the full-featured VTSC100 controller which allows easy adjustment of time delays and voltage/frequency settings.

- Rugged contactor-based double throw switch.
- Eliminates the need for separate sub-panel.
- Robust full-featured controls (see VTSC100 controls on page 20).
- Externally accessible Exerciser Clock and LED's.
- Square D QO panel accepts 12 Regular or 24 Mini Circuit Breakers (optionally supplied).
- 5-Year Warranty.



Flexible and Easy-to-Use Exerciser



Lightweight and Easy to Install – the Vigilant Load Center fits snugly between two studs and has plenty of conveniently placed knock-outs

Specifications

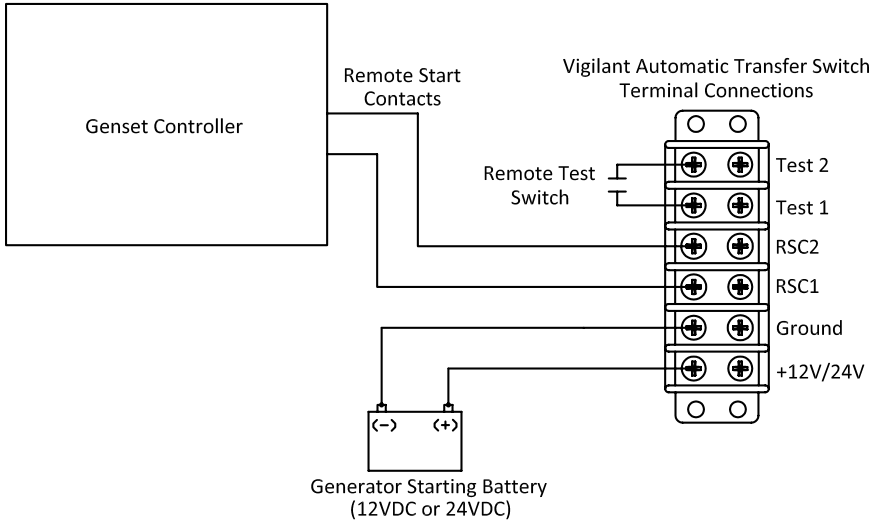
Operating Temperature: -20 to +70 °C; Operating Humidity: 0-95% Relative, Non-Condensing

AC Rating	Voltage	UL Withstand Ratings*	Poles	Enclosure (H x W x D)	Lbs.	Lug Capacities
100 Amp	120/240	10KA	2	26" x 14.25" x 6"	45	1/0 to 14Cu or 1/0 to 12Al

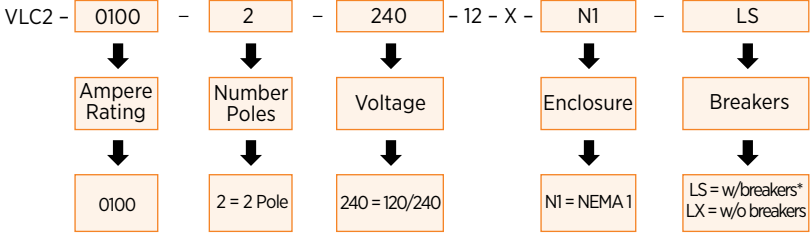
Controller – See Page 21 for VTSC100 controller specifications

*Please consult factory for specific protective device specifications and ratings. UL1008 – Optional Standby Systems

Typical Wiring to Genset.



Ordering Information



Example: VLC2-0100-2-240-12-X-N1-LS
 100Amp, single-phase 2-pole, 120/240, Nema 1 enclosure, with breakers*.

- *Breakers supplied:
- Five 15A single pole
 - Three 20A single pole
 - One 20A double pole

Note: Consult factory for 'No Logic' version supplied without VSTC-100 controller.

To find out more visit
www.VigilantATS.info