



Image Shown may not Reflect Actual Package

ATC-100 CONTROLLER

The ATC-100 is a comprehensive and multifunctional microprocessor-based ATS controller. It is a compact and self-contained panel-mounted device that is designed to replace traditional relay and solid-state logic panels.

The ATC provides both fixed and jumper-selectable settings to allow for a range of applications. It operates from all system voltages between 120 and 480 Vac, single-phase and three phase at 50 or 60 Hz. The ATC-100 monitors the condition of the three-phase line to line voltage and the frequency of both the utility and generator power sources. It can also be set up for single-phase operation. The ATC-100 provides the necessary intelligence to ensure that the transfer switch operates properly through a series of selectable sensing and timing functions

FEATURES

- Source 1 sensing:
 - Undervoltage / underfrequency
 - Overfrequency
- Source 2 sensing:
 - Undervoltage / overfrequency
- Controller settings via jumpers located at the rear of the unit
- Mimic diagram with source available and connected LED indication
- System test pushbutton
- Plant Exerciser - Selectable day, off, 7, 14 or 28 day intervals with fixed 15 minute run time
- Monitor utility and generator power source voltages and generator power source frequency
- Provides undervoltage protection of the utility and generator power sources
- Provides underfrequency and overfrequency protection of the generator power source
- Permits easy customer setup
- Permits system testing
- In-phase transition

PRODUCT SPECIFICATIONS



ATC-100 CONTROLLER SPECIFICATIONS

Description	Specification
Input control voltage	95 to 145 Vac 50/60 Hz
Voltage measurements of	Utility V_{AB} generator V_{AB} Utility V_{BC} generator V_{BC} Utility V_{CA} generator V_{CA}
Voltage measurement range	0 to 575 Vac rms (50/60 Hz)
Voltage measurement accuracy	± 1% of full scale
Frequency measurements of	Generator
Frequency measurement range	40 Hz to 70 Hz
Frequency measurement accuracy	±0.3 Hz over the measurement range
Undervoltage dropout	80% of the nominal system voltage
Undervoltage pickup	90% of the nominal system voltage
Underfrequency dropout range	90% of the nominal system frequency
Underfrequency pickup range	95% of the nominal system frequency
Overfrequency dropout range	115% of the nominal system frequency
Overfrequency pickup range	110% of the nominal system frequency
Operating temperature range	-20 to +70°C (-4 to +158°F)
Storage temperature range	-30 to +85°C (-22 to +185°F)
Operating humidity	0 to 95% relative humidity (noncondensing)
Operating environment	Resistant to ammonia, methane, nitrogen, hydrogen and hydrocarbons
Generator start relay	5A, 1/6 hp @ 250 Vac 5A @ 30 Vdc with a 150W maximum load
K1, K2 relays	10A, 1-3 hp @ 250 Vac 10A @ 30 Vdc
Applicable testing	UL-recognized component UL 1008, UL 991 Environmental IEC 61000-4-2, 61000-4-3, 61000-4-4, 61000-4-5, 61000-4-6, 61000-4-11 CISPR 11, Class B FCC Part 15, Class B CSA 22.2-178
Enclosure compatibility	NEMA 1, NEMA 3R and NEMA 12 UV-resistant ATC-100 faceplate

ATC-100 CONTROLLER SETPOINTS

Description	Range	Factory Default	Fixed / Jumper
Time delay engine start	3 seconds	3 seconds	Fixed setting
Time delay normal to emergency	2 or 15 seconds	15 seconds	Jumper selectable
Time delay emergency to normal	5 minutes	5 minutes	Fixed setting
Time delay engine cool off	5 minutes	5 minutes	Fixed setting
Time delay emergency fail timer	6 seconds	6 seconds	Fixed setting
Nominal frequency	50 or 60 Hz	As ordered	Jumper selectable
Nominal voltage	120, 208, 220, 230, 240, 380, 415, or 480	As ordered	Jumper selectable
Three-phase or single-phase	1 or 3	As ordered	Jumper selectable
Utility undervoltage dropout	80% of nominal voltage	80% of nominal voltage	Fixed setting
Generator undervoltage dropout	80% of nominal voltage	80% of nominal voltage	Fixed setting
Utility undervoltage pickup	90% of nominal voltage	90% of nominal voltage	Fixed setting
Generator undervoltage pickup	90% of nominal voltage	90% of nominal voltage	Fixed setting
Generator underfrequency dropout	90% of nominal frequency	90% of nominal frequency	Fixed setting
Generator underfrequency pickup	95% of nominal frequency	95% of nominal frequency	Fixed setting
Generator overfrequency dropout	Off or 115% of nominal frequency	115% of nominal frequency	Jumper selectable
Generator overfrequency pickup	Off or 110% of nominal frequency	110% of nominal frequency	Jumper selectable
Generator test on/off	Off, no load transfer, load transfer	Off	Jumper selectable
Generator test interval	7, 14 or 28 day	7-day	Jumper selectable
Engine run test time	15 minutes	15 minutes	Fixed setting
Sync time	10 minutes	10 minutes	Fixed setting
Time delay emergency fail timer	6 seconds	6 seconds	Fixed setting
Time delay neutral	Disabled (0 seconds) or Enable (2 seconds)	Enable (2 seconds) Disabled	Jumper selectable (for 2 position)

Information contained in this publication may be considered confidential. Discretion is recommended when distributing. Materials and specifications are subject to change without notice.

CAT, CATERPILLAR, their respective logos, "Caterpillar Yellow," the "Power Edge" trade dress as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

www.Cat-ElectricPower.com