

AUTOMATIC AC POWER TRANSFER SWITCH

FOR USE WITH SERIES 1747 DC-TO-AC INVERTERS



Model 1747-ATS

Features:

- Enables two AC sources to provide automatic redundant power to essential loads
- 120-VAC, 60-Hz, single phase
- High-Speed transfer circuitry
- Compact 1U (1.75" high) enclosure

The Model 1747-ATS automatic ac power transfer switch enables a Series 1747 dc-ac inverter to operate in a redundant manner with a second ac source to provide backup power for essential ac loads. The unit integrates power-failure sensing and automatic high-speed switchover circuitry in a 1U (1.75-inch high) rack-mount enclosure.

Typical applications employ a dc-to-ac power inverter coupled with commercial ac power (or a second inverter) via the Model 1747-ATS to provide an uninterruptible ac power system at equipment sites where battery backup is present such as wireless/wireline telecom facilities and electric-utility substations.

Model 1747-ATS AC TRANSFER SWITCH

SPECIFICATIONS

OPERATING VOLTAGE AND FREQUENCY	120 Vac, 60 Hz nominal (50 Hz available)
MAXIMUM POWER RATING	2200 VA
SOURCE COMPATIBILITY	Intended for installation using standard premises wiring practices wherein both ac sources share a common neutral connection . Intended for use with sine-wave ac power sources, but compatible with most "quasi-sine" and "stepped" waveshapes (consult factory for additional information).
AUTOMATIC TRANSFER	The load power present at the output receptacles is normally provided by the preferred ac source. However, if the preferred source is interrupted, an internal transfer switch automatically transfers the load to the backup ac power source. The transfer time from preferred to backup is short (2-3 msec. typical), and such transfers are normally not detected by even highly sensitive loads. Upon restoration of the preferred source, the transfer circuitry monitors the ac line for about 4 seconds to verify its stability before transferring back to the preferred source.
TEMPERATURE RANGE	OPERATING: -10°C to +50°C STORAGE: -40°C to +85°C
FRONT-PANEL CONTROLS AND INDICATORS	A combination circuit breaker/on-off switch (20-ampere rating) is provided in series with the ac line connection for each of the two power sources. Two LED status indicators display which ac source ("preferred" or "backup") is providing power to the output receptacles, and a third LED indicates the absence of one of the sources ("alarm" condition).
REAR-PANEL WIRING CONNECTIONS	Flexible power cords (3-conductor / #12 AWG, 9 feet in length), terminated with NEMA type 5-20P plugs, are provided for connection to the two ac sources. The ac output connection is provided through a standard NEMA type 5-20R ac duplex receptacle. Access to a set of Form C contacts (normally open and normally closed) is provided via a three-position terminal block having maximum voltage, current and power ratings of 125 volts (ac or dc), 2 amperes and 60 watts, respectively. Connection to chassis ground is provided via a #10-32 stud and locking nut.
SIZE IN INCHES (MM)	1.7 (44) high x 17.0 (432) wide x 5.5 (140) deep, excluding mounting brackets and front/rear panel protrusions.
WEIGHT	Approximately 6 pounds
ACCESSORIES INCLUDED	User information guide, mating connector for Form C contacts, mounting brackets for 19-inch rack mounting; brackets for 23-inch mounting are available upon request.

Products

For information about this and other Wilmore power-conversion equipment such as dc-to-ac inverters, dc-to-dc converters, switching power supplies, and custom power solutions, please contact our sales department.