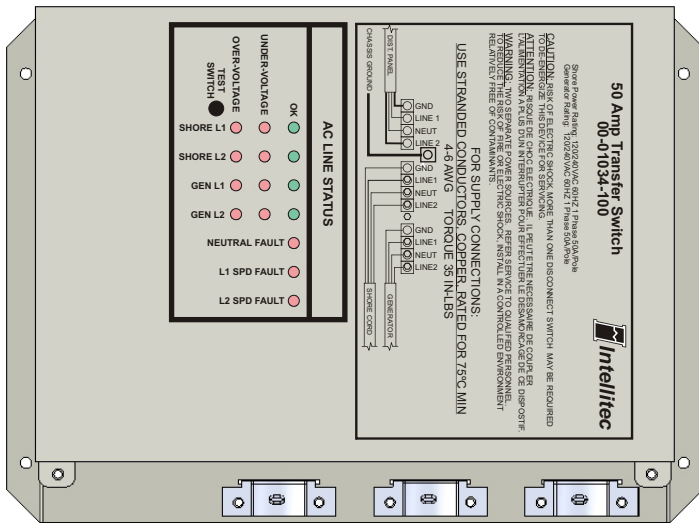


50 Amp Transfer Switch



Functional Description

Intellitec's 50 Amp Transfer Switch automatically selects from available power sources, either generator or shore power, to feed the main distribution panel of the coach. The generator power source has priority over the shore power source, which means that if safe and adequate supply voltages are present at the generator input, the Transfer Switch will connect L1, L2, and Neutral from the generator to the corresponding inputs on the distribution panel, disregarding the presence or absence of safe and adequate supply voltage at the shore power inputs.

If safe and adequate supply voltage is not available from the generator, but is available from the shore power cord, the Transfer Switch will connect L1, L2, and Neutral from the shore power cord to the corresponding inputs on the distribution panel.

The unit determines if safe and adequate voltages are present by continually measuring the voltages present at both shore power and generator inputs prior to and after the transfer. If the voltages present between L1 and neutral and L2 and neutral are within 95-132Vac and within 5% of each other, and the voltage between neutral and safety ground is less than 5Vac, the source is considered safe and adequate and a transfer will occur. If the selected source voltages stray outside of the safe and adequate thresholds listed above, the transfer switch will disconnect that source from

the distribution panel. In this manner, the transfer switch protects the loads connected through the distribution panel from the destructive exposure to over-voltage, under-voltage, and open-neutral conditions.

In addition, the -100 Model incorporates basic lightning protection at the output to the distribution panel. The -200 Model incorporates surge protection which not only protects distribution panel loads from lightning induced transient voltages but also protects those loads from supply induced transient voltages.

All versions of the 50 Amp Transfer Switch feature a local status display, visible through the cover of the Transfer Switch, that indicates the status of the shore power and generator sources, and if a fault exists in the system. Additionally, on the -200 Model, there is an indication of the status of the Surge Protection Devices (SPD). This allows trouble-shooting of the system without opening the Transfer Switch.

An optional 00-00949-000 Remote Display is also available when the Transfer Switch is used in conjunction with a 00-00997 Energy Management System. This offers a convenient text display of power status and fault messages on an LCD touch panel.

Installation

The Transfer Switch should be mounted in a dry location, protected from direct exposure to moisture and chemicals. The unit should be installed and wired in accordance with ANSI/NFPA 70, "National Electrical Code" (NEC) requirements. The unit should be mounted to a flat mounting surface. Four holes are provided on the flanges of the base to accommodate #10 screws.

Connections

The Transfer Switch is connected to the L1, L2, Neutral and Chassis Ground at the Generator and Shore Power inputs, and Distribution Panel output, via screw secured collar clamps rated for 4-6 AWG. Only Stranded copper wire with a minimum temperature rating of 75° C should be utilized for these field connections. The unit is equipped with individual cable clamps to secure the cables and provide strain-relief. A separate collar clamp is mounted to the metal base and is available to bond the metal base to the chassis.

A 3-pin Mate-N-Lock connector is mounted through the rear of the cover to connect to the Remote Display.



Intellitec

131 Eisenhower Lane North
Lombard, IL 60148
630.268.0010 / 1.800.251.2408
FAX 630.916.7890

50 Amp Transfer Switch

Specifications:

Models: 00-01034-000/No Surge Protection.

00-01034-100/Lightning Protection.

00-01034-200/Full Lightning/Surge Protection.

UL 1008 Rating:

50Amps, 120/240Vac Split Single-Phase, Full Load Transfer.

Maximum Ambient Temperature:

122 Degrees F (50 Degrees C).

Minimum Ambient Temperature:

-40 Degrees F (-40 Degrees C).

Field Wiring Connection:

13ea. Collar Clamps/Screws rated for, 4-6 AWG Stranded Copper.

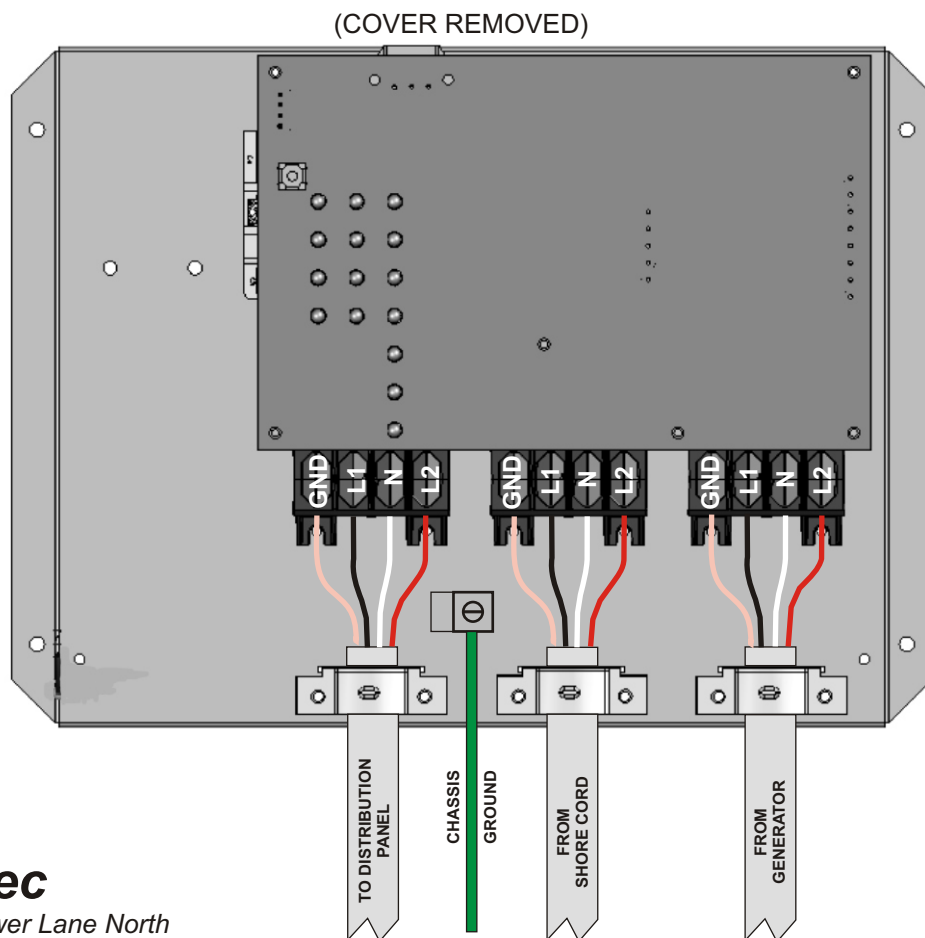
Remote Display Connection:

3 Pin polarized connector (Mating Connector: AMP (Tyco) 1-480700-0)

Optional Remote Display:

Models: 00-00939-000 - Can only be utilized in a system incorporating a Multi-Point Master, Smart Energy Management System (EMS), or PMC Master. Consult marketing for configuration possibilities.

Wiring Diagram:



Intellitec

131 Eisenhower Lane North

Lombard, IL 60148

630.268.0010 / 1.800.251.2408

FAX 630.916.7890

P/N 53-01034-000 Rev. X2 090908