



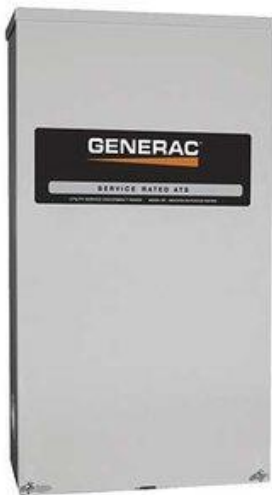
Automatic Transfer Switches

We offer a complete line of Generac automatic transfer switches to meet the requirements of virtually any residential or light commercial applications.

These switches are easy to install with consistently named connections for all termination points, which are labeled the same in the generator as in the transfer switch.

Complete Power

- **RTSW**
 - Service rated single phase
 - Available in 100, 150, 200, 300, or 400 amp
- **RTSC**
 - Non-service rated single phase
 - Available in 100, 200, or 400 amp
- **RTSC (Cabinet)**
 - Non-service rated single phase or 3 phase
 - 600 or 800 amp
- **RTSE (Canada)**
 - Service rated single phase
 - 100 or 200 amp



Managed Power

- **RTSW**
 - Manages up to 4 large loads
 - Service entrance rated single phase
- **RTSC**
 - Manages up to 4 large loads
 - Non-service rated single phase



Essential Circuits

- **RTS Series**
 - Full menu of switches to match loads
- **Pre-Wired Switch**
 - 50 or 100 amp, single phase
 - 10, 12, or 16 pre-wired circuits
 - NEMA 1 rating
- **GenReady**
 - 200 amp, single phase
 - 40 circuit capacity
 - NEMA 1 and 3R ratings
- **NEMA 3R Limited Circuit**
 - 100 amp, single phase
 - 16 circuits, expandable to 24

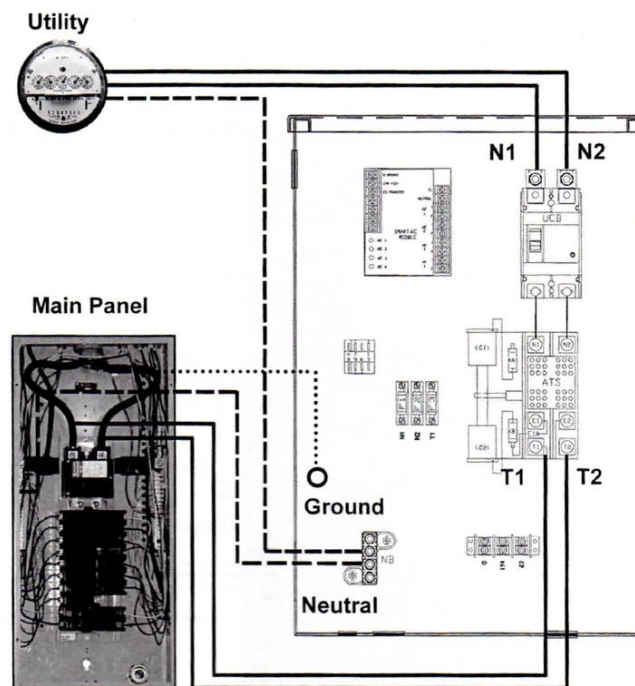
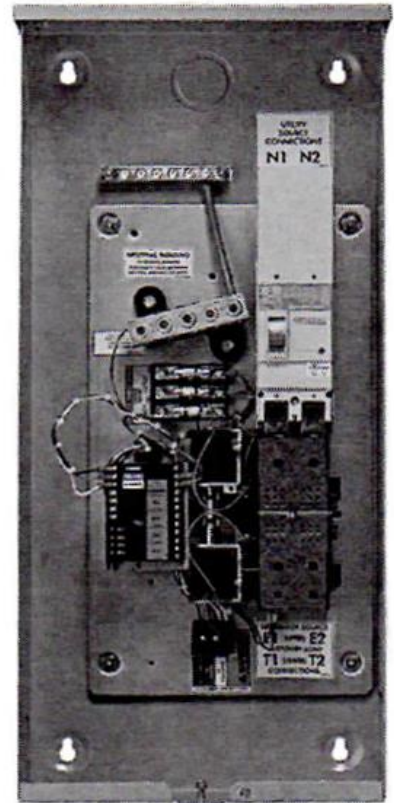


Utility Connections

Power leads from the utility always connect to the N1 and N2 lugs, which are clearly marked in all Generac transfer switches.

Service Rated Switches, Whole House Applications

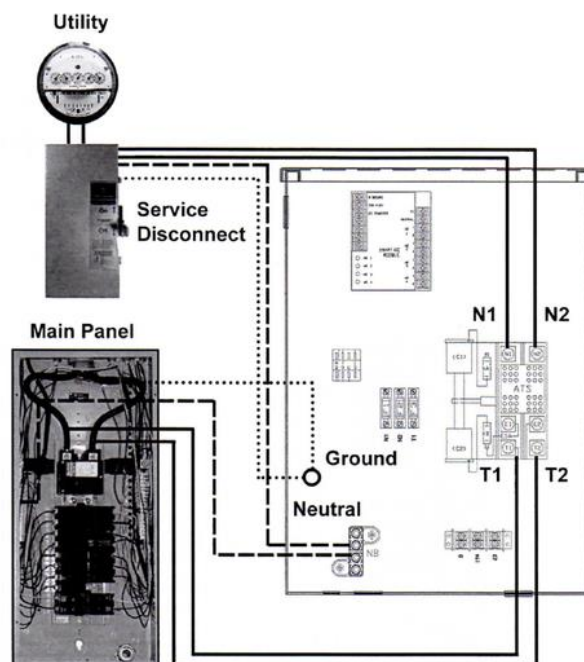
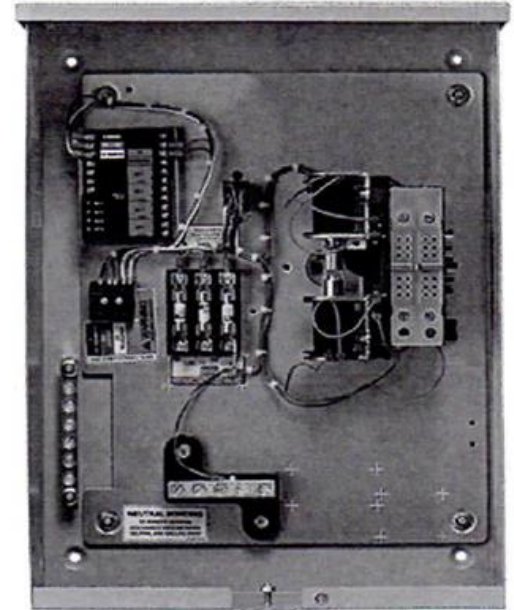
- Transfer switch is fed by the meter
- Utility power leads connect to N1 and N2 at top main breaker
- Main breaker feeds N1 and N2 on the transfer contactor via bus
- Main disconnect in main/sub panel connects to T1 and T2 at bottom of transfer contactor
- Utility neutral and sub-panel connect to neutral bar in transfer switch
- Grounding and bonding must be moved to the transfer switch



Utility Connections

Non-service Rated, Whole House Applications

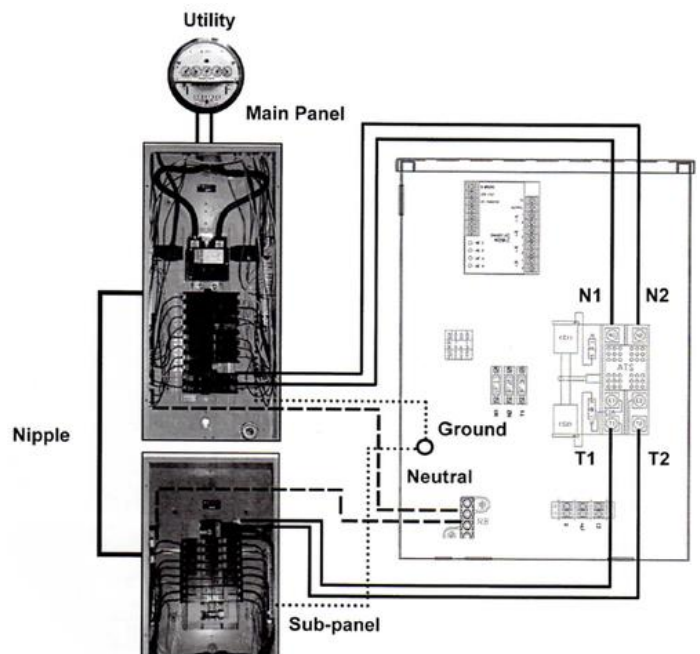
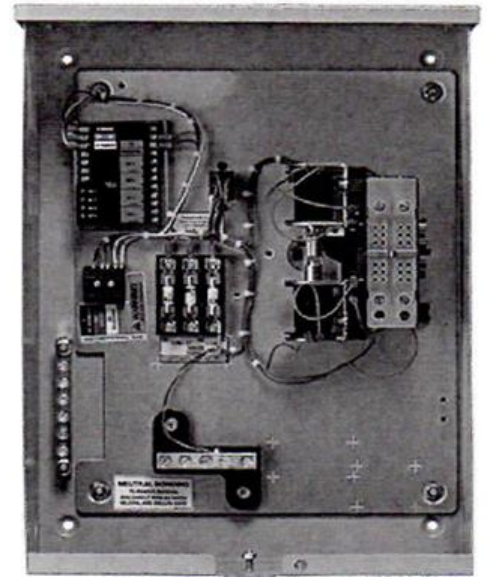
- A separate service disconnect is required for whole house
- Meter feeds service disconnect
- Disconnect feeds transfer switch
- Utility power leads connect to N1 and N2 on transfer contactor
 - If 3 phase, N1, N2, and N3
- Main disconnect in mail/priority sub-panel connects to T1 and T2 at the bottom of the transfer contactor.
 - If 3 phase, T1, T2, and T3
- Utility neutral and sub-panel neutral connect to neutral bar in transfer switch
- Grounding and bonding must be moved to service disconnect (if not already there)



Utility Connections

Non-service Rated, Selected Circuit Applications

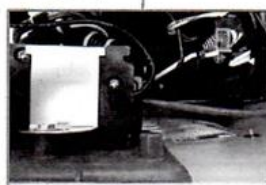
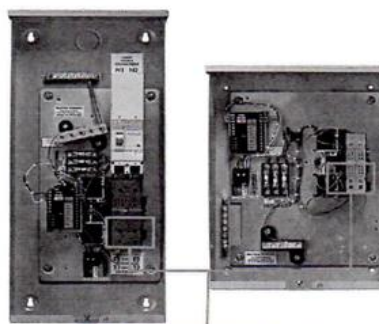
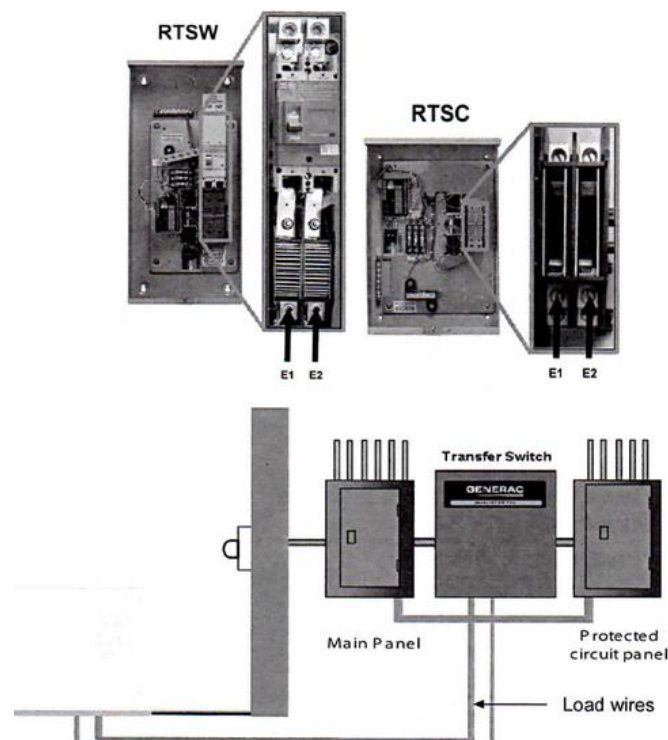
- Meter feeds service disconnect in main panel
- Install 2 pole breaker in main panel
- Breaker amp rating should be \leq transfer switch rating
- Utility supply breaker leads connect to N1 and N2 on transfer contactor
 - If 3 phase, N1, N2, and N3
- Main disconnect in priority sub-panel connects to T1 and T2
 - If 3 phase, T1, T2, and T3
- Utility neutral and sub-panel neutral, connect to neutral bar in transfer switch
- Identify circuits to be backed up
- Remove branch circuits from main panel and splice to protected panel through nipple junction box if the AHJ doesn't allow panel splicing in the main panel
- If AHJ does not allow panel splices, install junction box
- Splice inside junction box



Generator Connections

All RTS Series Switches

- Connect power leads to E1 and E2 (E3 if 3 phase) in transfer switch
- Connect E1 and E2 leads to breaker in generator
- Run neutral and equipment ground to generator in same conduit
- Control wires can be run in same conduit as well



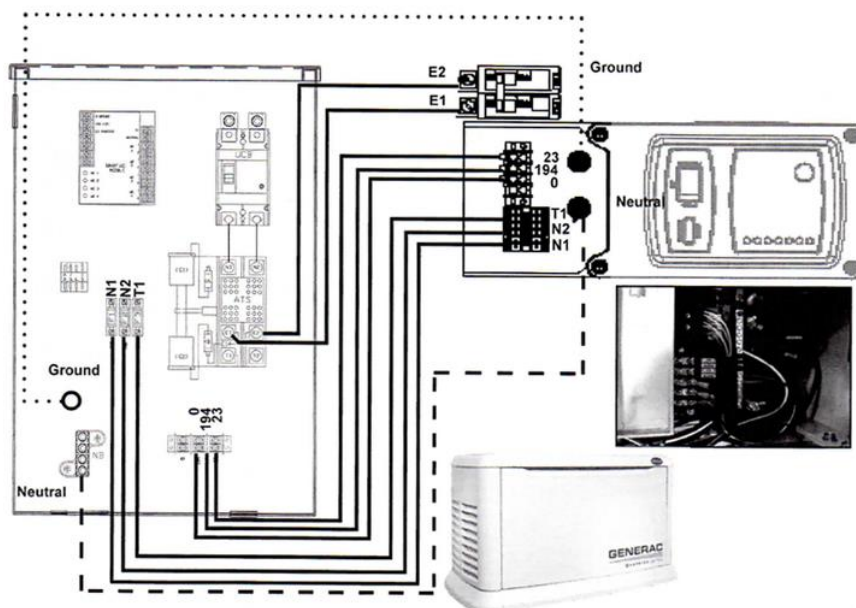
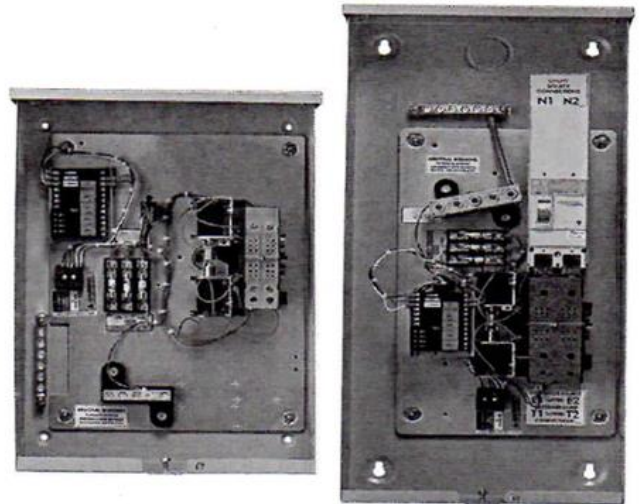
Air-cooled connection

Air-cooled Generators

RTS Series service and non-service rated switches

Connecting the transfer switch to the generator:

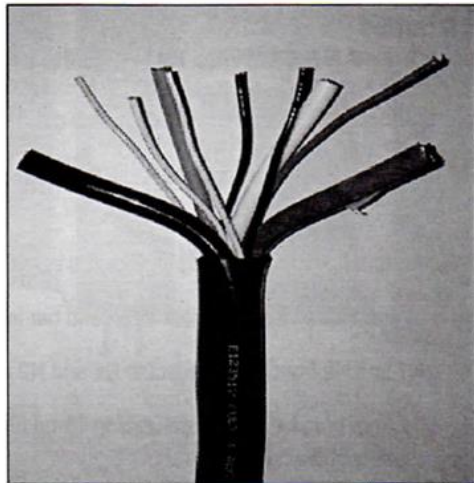
- Connect E1 and E2 from ATS to E1 and E2 on generator disconnect breaker
- Neutral from transfer switch to neutral bar in generator
- Ground from transfer switch to ground bar in generator
- N1 and N2 from ATS connect to N1 and N2 on terminal strip
- T1 from transfer switch connects to T1 on terminal strip (battery charging circuit)
- 23, 194, and 0 from ATS connect to 23, 194, and 0 on generator terminal strip



Generator Connections

10 Conductor Composite Cable

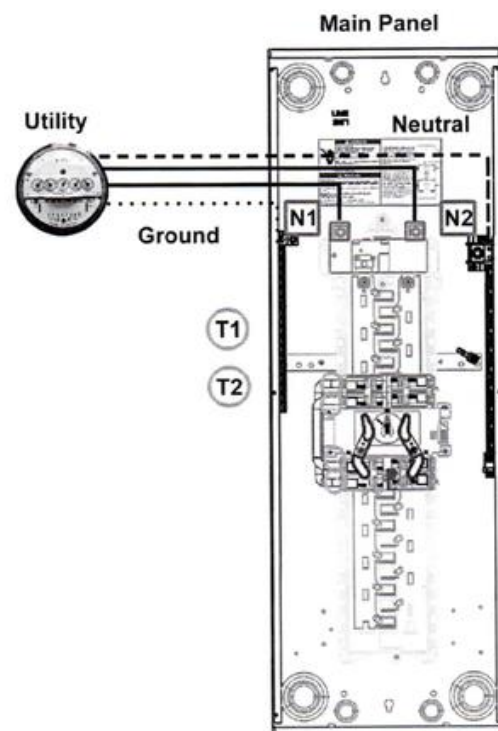
- 2 sizes
 - 16 kW and below
 - 20 kW and 22 kW
- Wires included
 - Power leads, neutral and ground
 - Control wires
 - N1, N2, T1
 - 194, 23, 0
 - Run up to 115 feet



Utility Connections

GenReady Service Rated Switch, Essential Circuits Applications

- Service rated panel with integrated service disconnect
 - Meter feeds main disconnect in transfer switch N1 and N2
 - Main breaker feeds utility supply breaker which feeds lower portion of panel (priority)
- T connections are interconnected to both upper and lower utility supply breaker
- Upper portion of the panel is not backed by generator

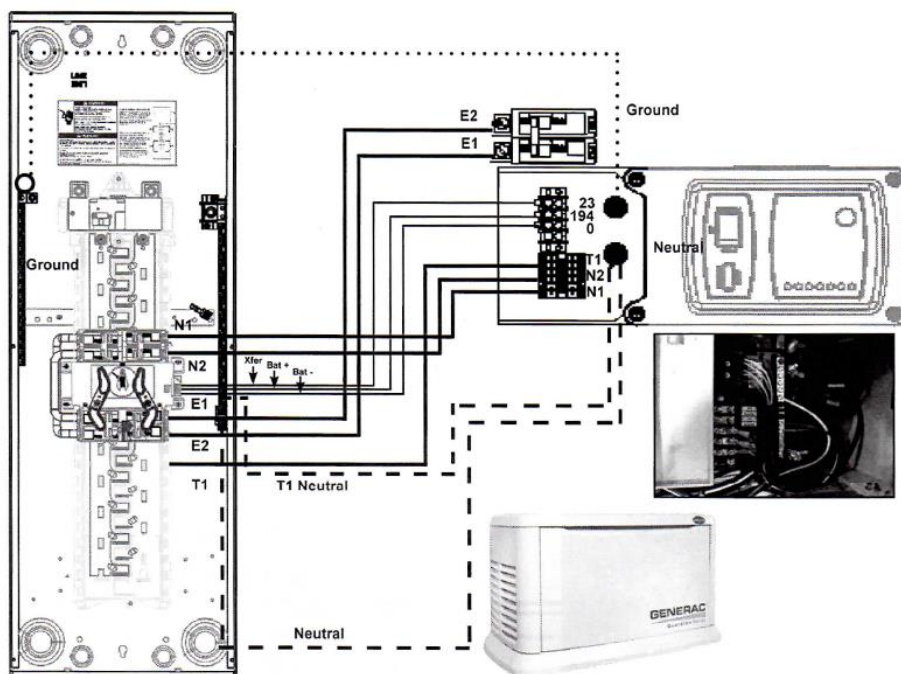
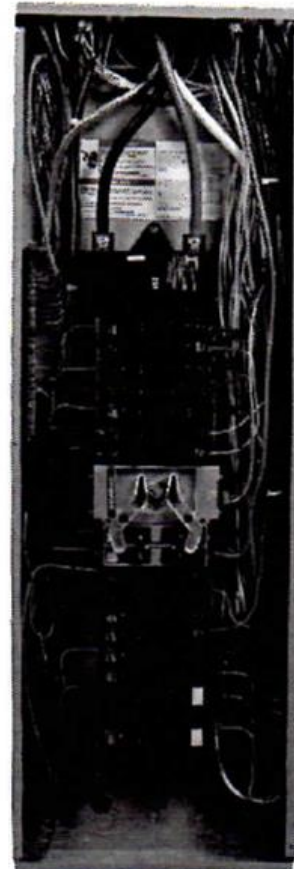


Air-Cooled Generators

GenReady Service Rated Switch

Connecting the transfer switch to the generator:

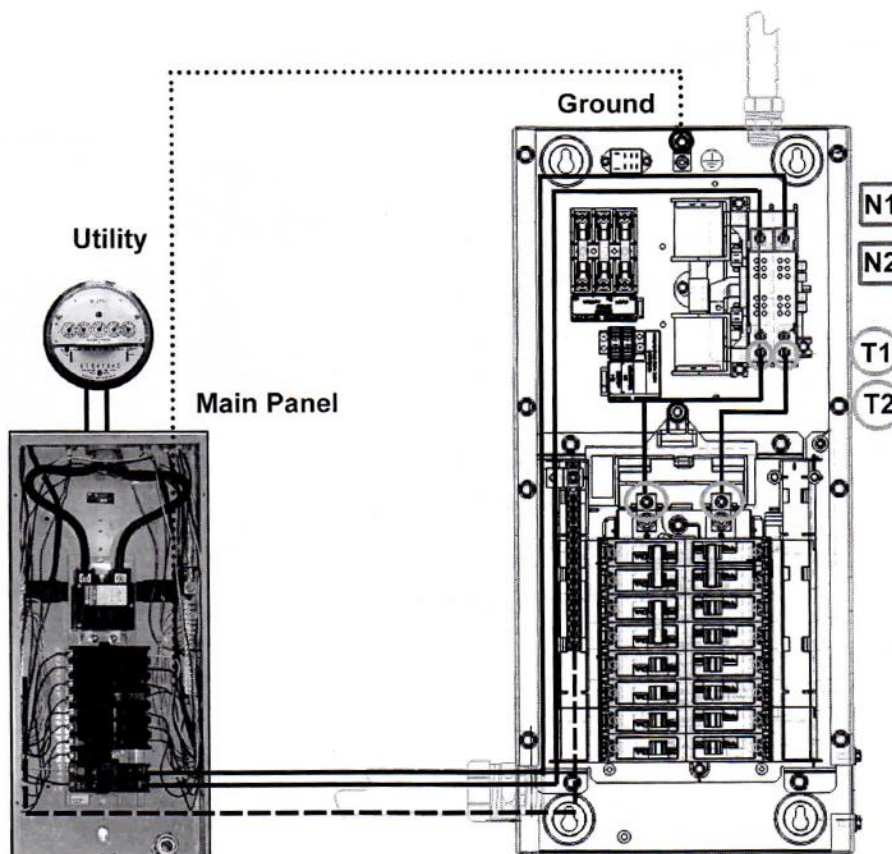
- E1 and E2, on lower supply breaker, are connected to generator breaker
- Sensing breaker
 - N1, N2
- Control wires
 - XFER = 23
 - Bat+ = 194
 - Bat- = 0
- Battery charging unit



Utility Connections

Pre-wired Switch, Non-service Rated, Essential Circuits Applications

- Meter feeds main panel, main panel feeds transfer switch
- Install feeder breaker in main panel
- Move priority circuits from main panel to load center using pre-wired 2-foot whip
 - Match breaker size in main panel and pre-wired switch
 - Move neutral with every circuit
 - If 2 circuits share a neutral, both circuits must be moved
 - Required by NEC



Air-Cooled Generators

Pre-wired Switch, Non-service Rated

Connecting the transfer switch to the generator:

- Both 5 foot whip and 30 foot whip contain E1, E2, and all generator leads
- Run 30 foot whip from transfer switch to junction box and connect to terminal posts E1, E2, and neutral
- Run 5 foot whip from generator to junction box and connect to terminal posts E1, E2 and neutral
 - May come pre-wired
- Run both grounds to grounding stud in junction box
- Connect plug connections for control wires

