TERMINAL STRIP


CONTACT SWITCHING DIAGRAM

| SWITCH POSITION | $\begin{gathered} \text { L1 } \\ 1 \end{gathered}$ | T1 | 5 | 4 | $\begin{aligned} & \mathrm{L} 2 \\ & \mathrm{~T} 2 \end{aligned}$ | 2 | $\begin{gathered} \mathrm{L} 3 \\ 3 \end{gathered}$ | T3 | 6 | 13 | 23 24 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LINE |  | $\triangle$ |  |  | $\searrow$ |  |  | $\searrow$ |  | Y |  |
| OFF |  |  |  |  |  |  |  |  |  |  |  |
| DRIVE | $\chi$ |  |  | $\triangle$ |  |  | $>$ |  | $4$ |  | $\triangle$ |
| TEST | $\triangle$ |  |  |  |  |  |  |  |  |  | $\triangle$ |

Advance Controls, Inc. 4505 18TH STREET EAST BRADENTON, FL 941-746-3221
U.S. PATENT \#5,721,449

| DATE | DRAWING NUMBER | REV |
| :--- | :---: | :--- |
| $06 / 02 / 99$ | SCH8408 |  |

INVERTER BYPASS SAFETY SWITCH TYPICAL CONNECTION DIAGRAM DIRECT CONTROL W/O OVERLOAD

## IBYSS (Inverter Bypass Safety Switch)

## Features

- "OFF" position functions as a Motor Disconnect
- Manual operation with positive break contacts for reliable circuit transfer
- No contactors, relays, solenoids or coils to consume power, stick or burn out
- Complete isolation of the Inverter from both the incoming and outgoing power
- Full voltage across the line motor starting up to 50 HP
- Full voltage Contactor / Starter starting up to 400 HP
- Gold Flash auxiliary contacts for reliable control signals to PLC's and other logic level devices Furnished with either 1 or 2 auxiliary contacts:
With 1 auxiliary, the contact closes in the "DRIVE" and "TEST" positions.
With 2 auxiliaries, one contact closes in the "LINE" position and one contact closes in the "DRIVE" and "TEST" positions.
- "TEST" position Standard - allows power into the inverter without allowing power to flow to the application
- Switches can be door mounted or sub-panel mounted
- 3 styles of Handle Assemblies are available:

Selector style - non-lockable
Lockout style - meets OSHA 1910 requirements
Panel mount disconnect style - meets OSHA 1910 requirements and locks enclosure door closed

- Basic open switch for inclusion in customer's panel
- Factory assembled in an enclosure with easy to wire Terminal Strip for simple field installation
- UL cUL Listed through 125 Amps and 125 HP
- UR and cUR recognized through 400 Amps and 400 HP
- U.S. Patent \#5,721,449
- Three Phase Only


## Approvals

${ }^{\text {©(UL) us }} \mathrm{CY} 017, \mathrm{CY} 032, \mathrm{CY} 040, \mathrm{CY} 063, \mathrm{CY} 100$

## FILE NUMBER: E101686




Technical Data - UL508
Maximum Voltage: 600 VAC

| General Information |  |  |  |
| :---: | :---: | :---: | :---: |
| SWITCH SERIES | AMP RATING | WIRE SIZE |  |
|  |  | MIN | MAX |
| CY017 | 20 | 18 | 12 |
| CY032 | 40 | 16 | 10 |
| CY040 | 60 | 14 | 6 |
| CY063 | 85 | 10 | 3 |
| CY100 | 125 | 6 | 1 |


| Direct Control in "LINE" position |  |  |  |
| :---: | :---: | :---: | :---: |
| HORSEPOWER |  |  |  |
| $\mathbf{2 0 0 / 2 0 8}$ V | $\mathbf{2 4 0}$ V | $\mathbf{4 6 0}$ V | $\mathbf{5 7 5}$ V |
| 5 | 7.5 | 10 | 10 |
| 10 | 15 | 20 | 20 |
| 15 | 20 | 30 | 30 |
| 20 | 20 | 30 | 40 |
| 20 | 25 | 40 | 50 |


| Starter Control in "LINE" position |  |  |  |
| :---: | :---: | :---: | :---: |
| HORSEPOWER |  |  |  |
| $\mathbf{2 0 0 / 2 0 8} \mathbf{V}$ | $\mathbf{2 4 0} \mathbf{V}$ | $\mathbf{4 6 0} \mathbf{V}$ | $\mathbf{5 7 5} \mathbf{~}$ |
| 5 | 5 | 10 | 15 |
| 10 | 15 | 30 | 30 |
| 15 | 20 | 40 | 50 |
| 25 | 30 | 60 | 75 |
| 40 | 50 | 100 | 125 |

