

# INSTALLATION • OPERATION • MAINTENANCE INSTALLATION • OPERATION • MAINTENANCE INSTALLATION • OPERATION • MAINTENANCE

# STAR-DELTA AUXILIARY CURRENT TRANSFORMER

# **APPLICATION**

This device provides a small compact three-phase current transformer to supply delta current to the impedance elements of Type HZ and HCZ Impedance Relays. The use of this transformer eliminates the necessity of connecting the main current transformers in delta.

# **CHARACTERISTICS**

This assembly consists of three single-phase transformers mounted in one case, Figure 1 and 2. The ratio of the individual transformers is 5 to 5 amperes or 8.66 to 5 amperes. The secondaries are internally connected in delta with 3 terminals brought out. The primaries are brought out to separate terminals and are intended to be connected in start to the main current transformers.

Using the 5 to 5 ratio (primary terminals 1-3) and with 5 amperes in the main transformer, the actual current in the relay windings is 8.66. Using the 8.66 tap (primary terminals 1-2) the relay current is 5 amperes.

# **CAPACITY**

This transformer unit does not have sufficient capacity to carry the burden of the entire HZ relay but was designed to handle only the three impedance elements or the first and second impedance elements and the directional element.

The burden of the transformer, 5 to 8.66 ratio, is 3.5 V.A. per phase at 5 amperes 10° lag.

# STAR-DELTA AUXILIARY CURRENT TRANSFORMER

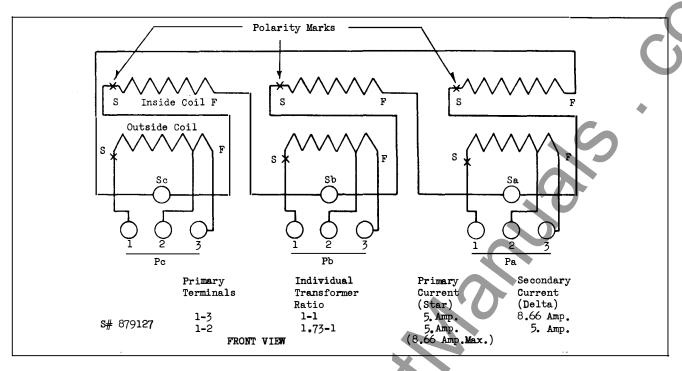


Fig. 1—Internal Wiring Diagram Of The Three Phase Star-Delta Auxiliary Current Transformer.

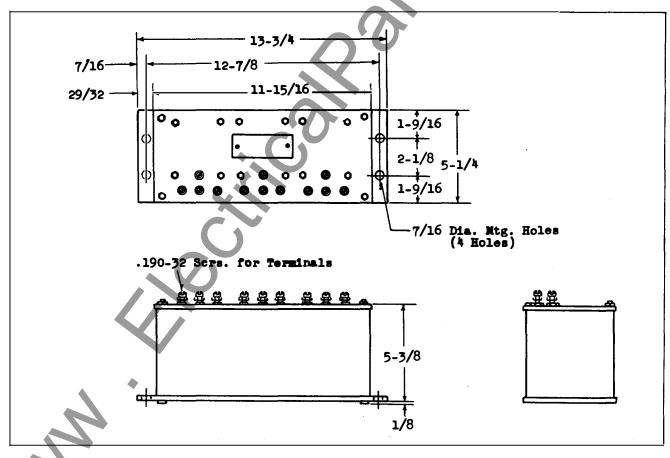


Fig. 2—Outline And Drilling Plan Of The Three Phase Star-Delta Auxiliary Current Transformer. For Reference Only.

# WESTINGHOUSE ELECTRIC CORPORATION METER DIVISION NEWARK, N.J.



# INSTALLATION • OPERATION • MAINTENANCE INSTALLATION • OPERATION • MAINTENANCE

# STAR-DELTA AUXILIARY CURRENT TRANSFORMER

# **APPLICATION**

This device provides a small compact threephase current transformer to supply delta current to the impedance elements of Type HZ and HCZ Impedance Relays. The use of this transformer eliminates the necessity of connecting the main current transformers in delta.

# **CHARACTERISTICS**

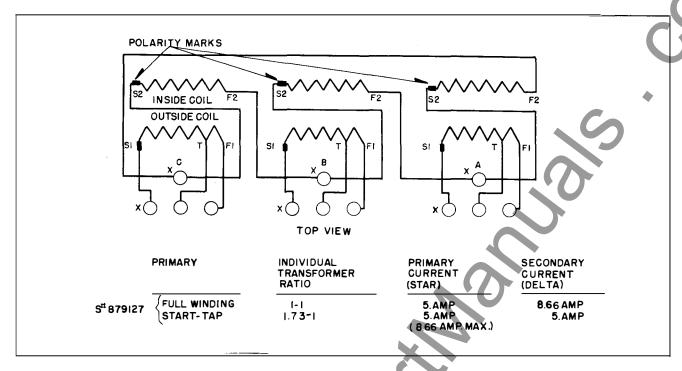
This assembly consists of three single-phase transformers mounted in one case, Figure 1 and 2. The ratio of the individual transformers is 5 to 5 amperes or 8.66 to 5 amperes. The secondaries are internally connected in delta with 3 terminals brought out. The primaries are brought out to separate terminals and are intended to be connected in start to the main current transformers.

Using the 5 to 5 ratio (primary terminals 1-3) and with 5 amperes in the main transformer, the actual current in the relay windings is 8.66. Using the 8.66 tap (primary terminals 1-2) the relay current is 5 amperes.

## CAPACITY

This transformer unit does not have sufficient capacity to carry the burden of the entire HZ relay but was designed to handle only the three impedance elements or the first and second impedance elements and the directional element.

The burden of the transformer, 5 to 8.66 ratio, is 3.5 V.A. per phase at 5 amperes 10° lag.



\* Fig. 1—Internal Wiring Diagram Of The Three Phase Star-Delta Auxiliary Current Transformer.

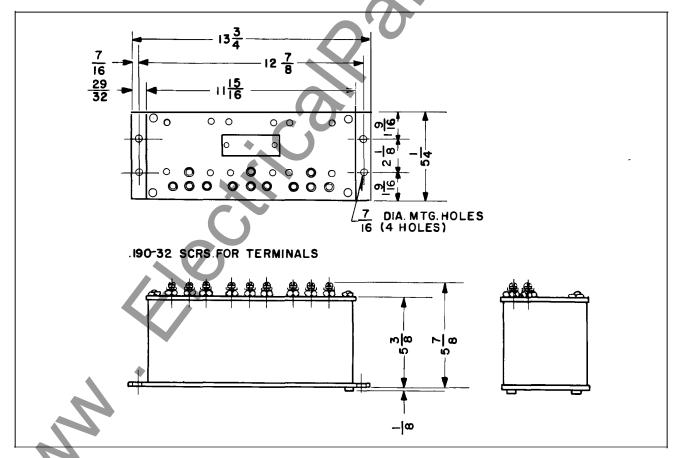


Fig. 2—Outline And Drilling Plan Of The Three Phase Star-Delta Auxiliary Current Transformer. For Reference Only.

# WESTINGHOUSE ELECTRIC CORPORATION METER DIVISION NEWARK, N.J.

# Westinghouse

### STAR-DELTA AUXILIARY CURRENT TRANSFORMER

STYLE NO. 879127

#### INSTRUCTIONS

for Balancing CTE

#### APPLICATION

This device provides a small, compact three-phase current transformer to supply delta current to the impedance elements of Type HZ and HCZ Impedance Relays. The use of this transformer eliminates the necessity of connecting the main current transformers in delta.

#### CHARACTERISTICS

This assembly consists of three single-phase transformers mounted in one case, Figure 1 and 2. The ratio of the individual transformers is 5 to 5 amperes or 8.66 to 5 amperes. The secondaries are internally connected in delta with 3 terminals brought out. The primaries are brought out to separate terminals and are intended to be connected

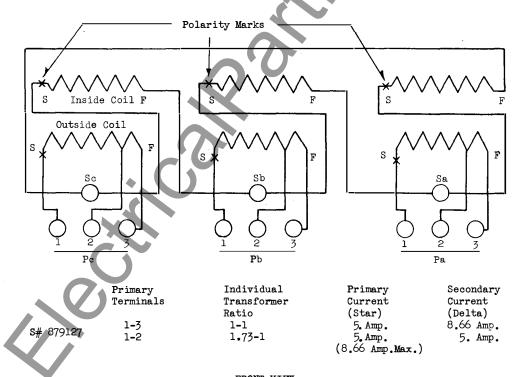
in star to the main current transformers.

Using the 5 to 5 ratio (primary terminals 1-3) and with 5 amperes in the main transformer, the actual current in the relay windings is 8.66. Using the 8.66 tap (primary terminals 1-2) the relay current is 5 amperes.

### CAPACITY

This transformer unit does not have sufficient capacity to carry the burden of the entire HZ relay but was designed to handle only the three impedance elements or the first and second impedance elements and the directional element.

The burden of the transformer, 5 to 8.66 ratio, is 3.5 V.A. per phase at 5 amperes  $10^{\circ}$  lag.



FRONT VIEW

Figure 1
Internal wiring diagram of the three phase star-delta auxiliary current transformer.

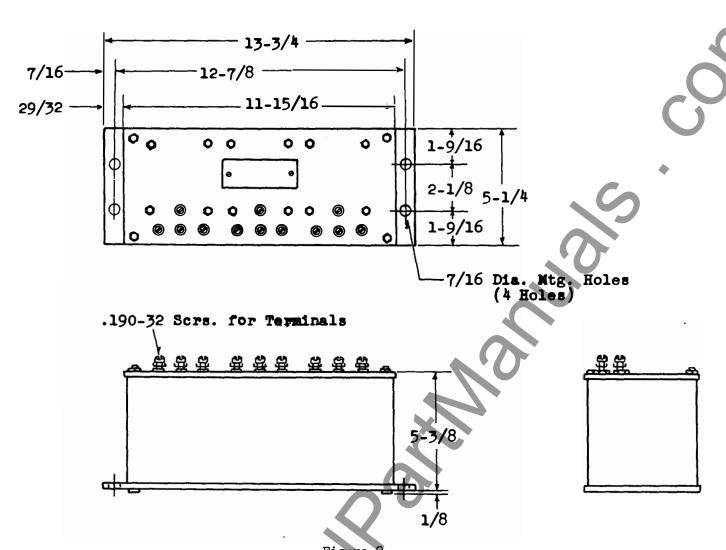


Figure 2 Outline and drilling plan of the three phase star-delta auxiliary current transformer.