

## ECI CIRCUIT BREAKERS for DISTRIBUTION TRANSFORMERS

### INFORMATION

#### GENERAL :

ECI breakers are available as “Standard Class” units, having fixed length top leads without terminals, and “Custom Class” units, which allow variation of the top lead length and terminal hole size. The breaker classes are described below.

#### STANDARD CLASS BREAKERS :

- Catalog Number 7561ZF--99.
- Types:
  - AHT-1 (T-1), Thermal trip control.
  - T-12, Thermal and Magnetic trip control.
- Styles:
  - Without Light Switch and Without Emergency Overload.
  - With Light Switch and With Emergency Overload.
- Includes wire and spring (if required).
- Lower Leads : (braided copper with terminal).
  - Length is from edge of contact bar to center line of terminal hole.
- Upper Leads :
  - Braided copper without terminal:
    - Length is measured from restraining staple to the end of the lead.
  - Braided copper with terminal:
    - Length is from restraining staple to center line of terminal hole.
  - Leads do not have connection identification.
  - Leads do not have paper insulation sleeve.
- Standard or Catalog Pricing.

#### CUSTOM BREAKERS :

- Catalog Number 7561ZJ--99, 7561ZK--99, 7561ZM--99 or 7561ZP--99.
- All breaker features are same as STANDARD BREAKERS except the upper lead length.
- Upper lead is combination of copper braid and copper strap.
  - Length of copper braid is 6.5 inches.
  - Additional lead length is 0.050 inch thick by 1.0 inch wide copper strap welded to the copper braid. Units with single braided lead have a single strap welded to the lead. Units, 10 and 15 kVA, with two braided leads have both leads welded to a single strap. Units 25 kVA and higher with two braided leads have a strap welded to each lead.
  - Lead lengths are available in one inch increments from 8.00 inches to 25.00 inches from the restraining staple to the center line of the connection hole.
  - Copper strap has 0.406 or 0.531 inch diameter connection hole.
  - Copper strap is embossed with “A” and “D” connection identification letters.
- Upper leads are provided with paper insulation sleeve.
- Priced by quotation based on Standard Breaker price and specific lead lengths.

**ECI CIRCUIT BREAKERS for DISTRIBUTION TRANSFORMERS**

**CATALOG NUMBER AND FEATURE TABLE**

**STANDARD BREAKERS - WITHOUT LIGHT SWITCH AND EMERGENCY OVERLOAD**

Transformer kVA		Catalog No.	Identification Stamp (ink) Dwg. No.	O/L Dwg. Breaker	Ampere Rating	Lower Lead Length (in.)	Top Leads			
120/240 volt secondary	240/480 volt secondary						No. Leads	Lead Size**	Lengh "L" (in.)	O/L Dwg. Leads
		7561	2501K	2551J102						

**TYPE AHT-1 (T-1) – THERMAL TRIP ONLY**

Fig.

5	10	ZF3299	212G01	Fig. 02	21	2.1	1	7/150	6.50	F08
7.5	15	ZF3399	212G02	Fig. 02	31	2.1	1	7/150	6.50	F08
10		ZF3499	212G03	Fig. 02	42	2.1	2	7/150	6.50	F08
15		ZF3599	212G04	Fig. 02	63	2.1	2	7/150	6.50	F08
25	50	ZF3699	212G05	Fig. 02	104	2.1	2	7/7/37	6.50	F08
	25	ZF5199	212G06	Fig. 02	52	2.1	2	7/150	6.50	F08
	37.5	ZF5299	212G07	Fig. 02	78	2.1	2	7/150	6.50	F08

**TYPE T-12 – THERMAL AND MAGNETIC TRIP**

Fig.

25	50	ZF8799	213G06	Fig. 04	104	2.1	2	7/7/37	6.50	F08
25	50	ZF9799	213G03	Fig. 04	104	2.1	2	7/7/37	1.70*	F07
37.5	75	ZF8399	213G04	Fig. 06	156	4.1	2	7/7/37	6.50	F08
37.5	75	ZF9399	213G01	Fig. 06	156	4.1	2	7/7/37	1.70*	F07
50	100	ZF8499	213G05	Fig. 06	208	4.1	2	7/7/37	6.50	F08
50	100	ZF9499	213G02	Fig. 06	208	4.1	2	7/7/37	1.70*	F07
25	50	ZF8799	213G06	Fig. 04	104	2.1	2	7/7/37	6.50	F08
25	50	ZF9799	213G03	Fig. 04	104	2.1	2	7/7/37	1.70*	F07
37.5	75	ZF8399	213G04	Fig. 06	156	4.1	2	7/7/37	6.50	F08
37.5	75	ZF9399	213G01	Fig. 06	156	4.1	2	7/7/37	1.70*	F07
50	100	ZF8499	213G05	Fig. 06	208	4.1	2	7/7/37	6.50	F08
50	100	ZF9499	213G02	Fig. 06	208	4.1	2	7/7/37	1.70*	F 07

\* Upper leads have terminals with 0.281 diameter hole.

\*\* Individual wires 0.005 inch diameter.

- Upper leads do not have terminal or insulating tubes unless noted by \*.
- Lower leads have terminal with 0.281 diameter hole.
- Lower leads do not have insulating tubes.
- Custom breakers with varying top lead lengths are available. See page A1-2 for Custom Breaker description and limitations.

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CATALOG NUMBER AND FEATURE TABLE

STANDARD BREAKERS - WITH LIGHT SWITCH AND EMERGENCY OVERLOAD

Transformer kVA		Catalog No.	Identification Stamp (ink) Dwg. No.	O/L Dwg. Breaker	Ampere Rating	Lower Lead Length (in.)	Top Leads			
120/240 volt secondary	240/480 volt secondary	7561	2501K	2551J102			No. Leads	Lead Size**	Lengh "L" (in.)	O/L Dwg. Leads

TYPE AHT-1 (T-1) – THERMAL TRIP ONLY

Fig.

5	10	ZF4499	182G01	Fig. 01	21	2.1	1	7/150	6.50	08
7.5	15	ZF4599	182G02	Fig. 01	31	2.1	1	7/150	6.50	08
10		ZF4699	182G03	Fig. 01	42	2.1	2	7/150	6.50	08
15		ZF4799	182G04	Fig. 01	63	2.1	2	7/150	6.50	08
25	50	ZF4899	182G05	Fig. 01	104	2.1	2	7/7/37	6.50	08
	25	ZF5999	182G06	Fig. 01	52	2.1	2	7/150	6.50	08
	37.5	ZF6099	182G07	Fig. 01	78	2.1	2	7/150	6.50	08

TYPE T-12 – THERMAL AND MAGNETIC TRIP

Fig.

25	50	ZF8899	185G06	Fig. 03	104	2.1	2	7/7/37	6.50	08
(A) 25	50	ZF9899	185G03	Fig. 03	104	2.1	2	7/7/37	1.70*	07
37.5	75	ZF8599	185G04	Fig. 05	156	4.1	2	7/7/37	6.50	08
37.5	75	ZF9599	185G01	Fig. 05	156	4.1	2	7/7/37	1.70*	07
50	100	ZF8699	185G05	Fig. 05	208	4.1	2	7/7/37	6.50	08
50	100	ZF9699	185G02	Fig. 05	208	4.1	2	7/7/37	1.70*	07

\* Upper leads have terminals with 0.281 diameter hole.

\*\* Individual wires 0.005 inch diameter.

(A) Was catalog number 7561ZG6099 prior to November 1988.

- Upper leads do not have terminal or insulating tubes unless noted by \*.
- Lower leads have terminal with 0.281 diameter hole.
- Lower leads do not have insulating tubes.
- Custom breakers with varying top lead lengths are available. See page A1-2 for Custom Breaker description and limitations.