SECTION 7

TRANSFORMERS & SHUNTS

Transformers & Shunts

**(AC Current / Potential - Transformers
DC - Shunts)**

- **Empro**
- **Instrument Transformer, Inc.**

Transformers & Shunts from the following manufacuturers are also available but not shown in catalog:

- **Modutec**
- **Simpson**
- **Texmate**
- **Triplett (LFE)**
- **Veris Industries**
- **Yokogawa (YCA)**

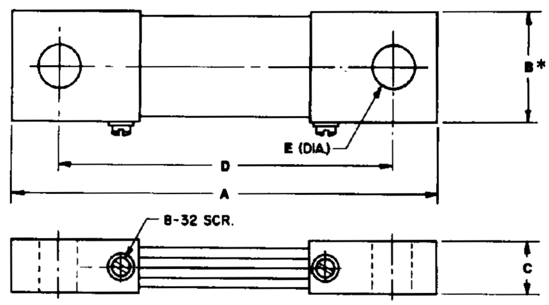
DC Ammeter Shunts

NIST CALIBRATION SERVICE AVAILABLE

TYPE A • 15 through 600 Amperes

TYPE A • 50 MV

Catalog Number	AMP	A	B*	C	D	E
A-15-50	15	4 1/8	5/8	3/8	3 5/16	11/32
A-20-50	20	4 1/8	5/8	3/8	3 5/16	11/32
A-50-50	50	4 1/8	5/8	3/8	3 5/16	11/32
A-75-50	75	4 1/8	5/8	3/8	3 5/16	11/32
A-100-50	100	4 1/8	5/8	3/8	3 5/16	11/32
A-125-50	125	4 1/8	13/16	3/8	3 5/16	11/32
A-150-50	150	4 1/8	15/16	3/8	3 5/16	11/32
A-175-50	175	4 1/8	3/4	1/2	3 5/16	11/32
A-200-50	200	4 1/8	13/16	1/2	3 5/16	11/32
A-250-50	250	4 1/8	1 1/16	1/2	3 5/16	11/32
A-300-50	300	4 1/8	1 1/4	1/2	3 5/16	11/32
A-375-50	375	4 5/8	15/16	3/4	3 5/8	13/32
A-400-50	400	4 5/8	1	3/4	3 5/8	13/32
A-500-50	500	4 5/8	1 1/4	3/4	3 5/8	13/32
A-600-50	600	4 5/8	1 1/2	3/4	3 5/8	13/32



TYPE A • 100 MV

A-50-100	50	5 3/4	5/8	3/8	4 15/16	11/32
A-75-100	75	5 3/4	5/8	3/8	4 15/16	11/32
A-100-100	100	5 3/4	5/8	3/8	4 15/16	11/32
A-150-100	150	5 3/4	15/16	3/8	4 15/16	11/32
A-200-100	200	5 3/4	13/16	1/2	4 15/16	11/32
A-250-100	250	5 3/4	1 1/16	1/2	4 15/16	11/32
A-300-100	300	5 3/4	1 1/4	1/2	4 15/16	11/32
A-375-100	375	6 1/4	15/16	3/4	5 5/16	13/32
A-400-100	400	6 1/4	1	3/4	5 5/16	13/32
A-500-100	500	6 1/4	1 1/4	3/4	5 5/16	13/32
A-600-100	600	6 1/4	1 1/2	3/4	5 5/16	13/32

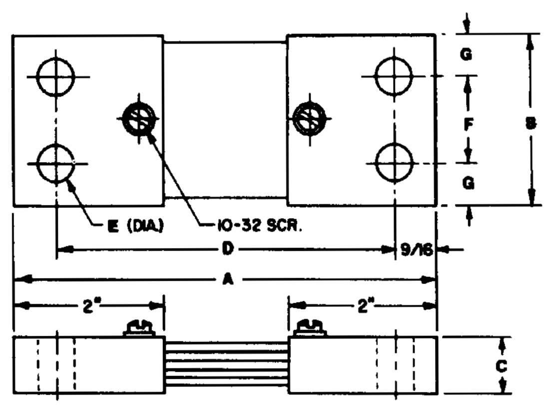
* + .040 – .015

TYPE B • 300 through 1,200 Amperes

TYPE B • 50 MV

Catalog Number	AMP	A	B	C	D	E	F	G
B-300-50	300	5 7/8	1 3/4	1/2	4 3/4	7/16	1	3/8
B-400-50	400	5 7/8	2	3/4	4 3/4	7/16	1 1/4	3/8
B-500-50	500	5 7/8	2	3/4	4 3/4	7/16	1 1/4	3/8
B-600-50	600	5 7/8	2	3/4	4 3/4	7/16	1 1/4	3/8
B-750-50	750	5 7/8	2 1/4	3/4	4 3/4	7/16	1 1/2	3/8
B-800-50	800	5 7/8	2 3/8	3/4	4 3/4	7/16	1 1/2	7/16
B-1000-50	1000	5 7/8	2 1/2	1	4 3/4	7/16	1 1/2	1/2
B-1200-50	1200	5 7/8	3	1	4 3/4	7/16	1 1/2	11/16

7



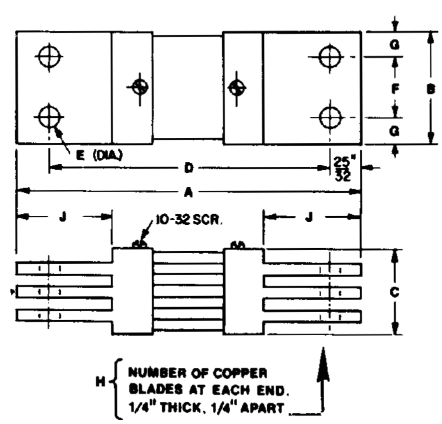
TYPE B • 100 MV

B-300-100	300	7 3/4	1 3/4	1/2	6 5/8	7/16	1	3/8
B-400-100	400	7 3/4	2	3/4	6 5/8	7/16	1 1/4	3/8
B-500-100	500	7 3/4	2	3/4	6 5/8	7/16	1 1/4	3/8
B-600-100	600	7 3/4	2	3/4	6 5/8	7/16	1 1/4	3/8
B-750-100	750	7 3/4	2 1/4	3/4	6 5/8	7/16	1 1/2	3/8
B-800-100	800	7 3/4	2 3/8	3/4	6 5/8	7/16	1 1/2	7/16
B-1000-100	1000	7 3/4	2 1/2	1	6 5/8	7/16	1 1/2	1/2
B-1200-100	1200	7 3/4	3	1	6 5/8	7/16	1 1/2	11/16

TYPE C • 1,000 through 2,000 Amperes

TYPE C • 50 MV

Catalog Number	AMP	A	B	C	D	E	F	G	H	J
C-1000-50	1000	9 1/16	2 5/8	1 1/2	7 1/2	17/32	1 1/2	9/16	2	2 5/8
C-1200-50	1200	9 1/16	3	1 1/2	7 1/2	17/32	1 1/2	3/4	2	2 5/8
C-1500-50	1500	9 1/16	3	1 1/2	7 1/2	17/32	1 1/2	3/4	2	2 5/8
C-2000-50	2000	9 1/16	3 1/4	2	7 1/2	17/32	2	5/8	3	2 5/8



TYPE C • 100 MV

C-1000-100	1000	10 7/8	2 5/8	1 1/2	9 5/16	17/32	1 1/2	9/16	2	2 5/8
C-1200-100	1200	10 7/8	3	1 1/2	9 5/16	17/32	1 1/2	3/4	2	2 5/8
C-1500-100	500	10 7/8	3	1 1/2	9 5/16	17/32	1 1/2	3/4	2	2 5/8
C-2000-100	2000	10 7/8	3 1/4	2	9 5/16	17/32	2	5/8	3	2 5/8

Temperature coefficient of resistance = ± .000015 between 40-60°C.

Empro SHUNTS ®

DC Ammeter Shunts

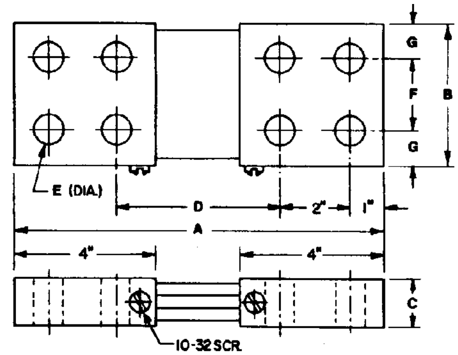
TYPE E • 1,500 through 2,000 Amperes

TYPE E • 50 MV

Catalog Number	AMP	A	B	C	D	E	F	G
E-1500-50	1500	9⅝	3	1	3⅝	7/16	2	½
E-2000-50	2000	9⅝	4	1	3⅝	7/16	2	1

TYPE E • 100 MV

Catalog Number	AMP	A	B	C	D	E	F	G
E-1500-100	1500	11¼	3	1	5¼	7/16	2	½
E-2000-100	2000	11¼	4	1	5¼	7/16	2	1



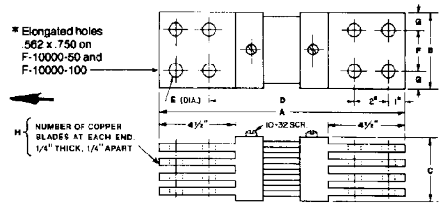
TYPE F • 2,500 through 10,000 Amperes

TYPE F • 50 MV

Catalog Number	AMP	A	B	C	D	E	F	G	H
F-2500-50	2500	12⅝	4	1½	6⅝	7/16	2	1	2
F-3000-50	3000	12⅝	4	2	6⅝	7/16	2	1	3
F-4000-50	4000	12⅝	4	3	6⅝	7/16	2	1	4
F-4500-50	4500	12⅝	4	3	6⅝	7/16	2	1	4
F-5000-50	5000	12⅝	4	3	6⅝	7/16	2	1	4
F-6000-50	6000	12⅝	4	4	6⅝	9/16	2	1	5
F-7000-50	7000	12⅝	5	4	6⅝	9/16	2½	1¼	5
F-7500-50	7500	12⅝	5	4	6⅝	9/16	2½	1¼	6
F-8000-50	8000	12⅝	5	4	6⅝	9/16	2½	1¼	6
F-9000-50	9000	12⅝	5	4	6⅝	9/16	2½	1¼	6
F-10000-50	10000	12⅝	5	5	6⅝	*	2½	1¼	7

TYPE F • 100 MV

Catalog Number	AMP	A	B	C	D	E	F	G	H
F-2500-100	2500	14¼	4	1½	8¼	7/16	2	1	2
F-3000-100	3000	14¼	4	2	8¼	7/16	2	1	3
F-4000-100	4000	14¼	4	3	8¼	7/16	2	1	4
F-4500-100	4500	14¼	4	3	8¼	7/16	2	1	4
F-5000-100	5000	14¼	4	3	8¼	7/16	2	1	4
F-6000-100	6000	14¼	4	4	8¼	9/16	2	1	5
F-7000-100	7000	14¼	5	4	8¼	9/16	2½	1¼	5
F-7500-100	7500	14¼	5	4	8¼	9/16	2½	1¼	6
F-8000-100	8000	14¼	5	4	8¼	9/16	2½	1¼	6
F-9000-100	9000	14¼	5	4	8¼	9/16	2½	1¼	6
F-10000-100	10000	14¼	5	5	8¼	*	2½	1¼	7



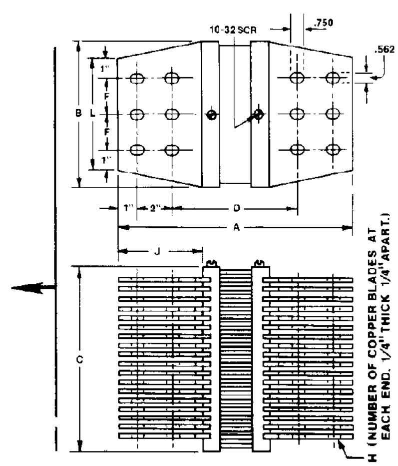
TYPE F • Over 10,000 Amperes

TYPE F • 50 MV (Over 10,000 Amps)

Catalog Number	AMP	A	B*	C	D	F	H†	J	L
F-12000-50	12000	12⅝	5¼	6	6⅝	‡	9	4½	4
F-15000-50	15000	13	8	6	7	2	9	4 19/32	6
F-18000-50	18000	13	8	6	7	2	10	4 19/32	6
F-20000-50	20000	13	8	7	7	2	10	4 19/32	6
F-25000-50	25000	13	8	10	7	2	18	4 19/32	6
F-30000-50	30000	15 11/16	8	12	9 11/16	2	22	5 7/16	6

*(B) + or – .250. †(H) ⅜" or ½" terminal blades available.

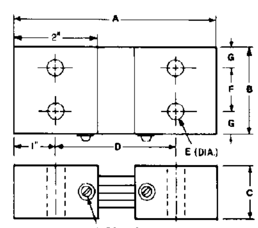
‡Four elongated holes at each end, 2" on center .562 × .750
NOTE: Type F 100 MV drop models are also available.



TYPE FL • 1,000 through 3,000 Amperes

TYPE FL • 50 MV

Catalog Number	AMP	A	B	C	D	E	F	G
FL-1000-50	1000	5	2	1¼	3	13/32	1	½
FL-1200-50	1200	5	2	1¼	3	13/32	1	½
FL-1500-50	1500	4⅞	2	1¼	2⅞	13/32	1	½
FL-2000-50	2000	4¾	2	1¼	2¾	13/32	1	½
FL-2500-50	2500	4⅝	2	1¼	2⅝	13/32	1	½
FL-3000-50	3000	4½	2	1¼	2½	13/32	1	½



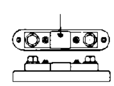
TYPE HA • 1 through 500 Amperes

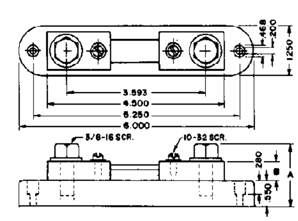
TYPE HA • 50 MV

Catalog Number	AMP	A	B
HA-1-50*	1	1.38	.500
HA-2-50*	2	1.38	.500
HA-5-50*	5	1.38	.500
HA-10-50*	10	1.38	.500
HA-20-50*	20	1.38	.500
HA-50-50*	50	1.38	.500
HA-100-50	100	1.38	.500
HA-150-50	150	1.38	.500
HA-200-50	200	1.38	.500
HA-250-50	250	1.63	.750
HA-300-50	300	1.63	.750
HA-400-50	400	1.63	.750
HA-500-50	500	1.63	.750

TYPE HA • 100 MV

Catalog Number	AMP	A	B
HA-1-100*	1	1.38	.500
HA-2-100*	2	1.38	.500
HA-5-100*	5	1.38	.500
HA-10-100*	10	1.38	.500
HA-15-100*	15	1.38	.500
HA-20-100*	20	1.38	.500
HA-25-100	25	1.38	.500
HA-50-100	50	1.38	.500
HA-75-100	75	1.38	.500
HA-100-100	100	1.38	.500
HA-200-100	200	1.38	.500
HA-300-100	300	1.63	.750
HA-500-100	500	1.63	.750





Temperature coefficient of resistance = ± .000015 between 40-60°C.

7

W.E.I.

Empro SHUNTS ®

DC Ammeter Shunts

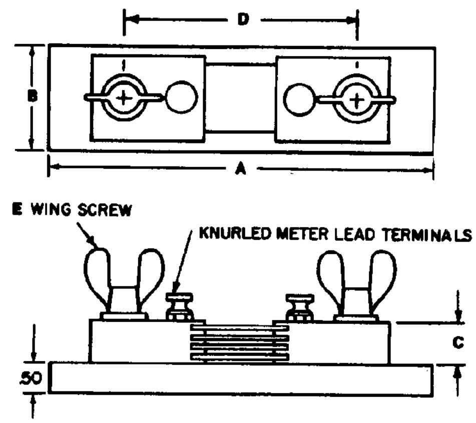
TYPE LAB • 10 through 1,000 Amperes

TYPE LAB • 50 MV

Catalog Number	AMP	A	B	C	D	E
LAB-10-50	10	5	1¼	½	3½	¼-20
LAB-15-50	15	5	1¼	½	3½	¼-20
LAB-25-50	25	5	1¼	½	3½	¼-20
LAB-50-50	50	5	1¼	½	3½	¼-20
LAB-100-50	100	5	1¼	½	3½	¼-20
LAB-150-50	150	5	1¼	½	3½	¼-20
LAB-200-50	200	5	1¼	½	3½	¼-20
LAB-250-50	250	6¾	1⅞	¾	4⅛	⅜-16
LAB-300-50	300	6¾	1⅞	¾	4⅛	⅜-16
LAB-400-50	400	6¾	1⅞	¾	4⅛	⅜-16
LAB-500-50	500	6¾	1⅞	¾	4⅛	⅜-16
LAB-600-50	600	6¾	2⅜	1	4⅛	⅜-16
LAB-750-50	750	6¾	2⅜	1	4⅛	⅜-16
LAB-1000-50	1000	6¾	2⅜	1	4⅛	⅜-16

TYPE LAB • 100 MV

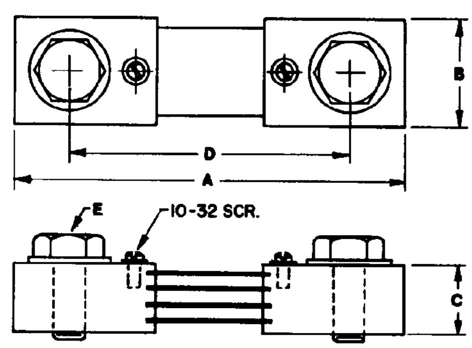
LAB-10-100	10	6¼	1¼	½	4¾	¼-20
LAB-15-100	15	6¼	1¼	½	4¾	¼-20
LAB-25-100	25	6¼	1¼	½	4¾	¼-20
LAB-50-100	50	6¼	1¼	½	4¾	¼-20
LAB-100-100	100	6¼	1¼	½	4¾	¼-20
LAB-150-100	150	6¼	1¼	½	4¾	¼-20
LAB-200-100	200	6¼	1¼	½	4¾	¼-20
LAB-250-100	250	8	1⅞	¾	5⅜	⅜-16
LAB-300-100	300	8	1⅞	¾	5⅜	⅜-16
LAB-400-100	400	8	1⅞	¾	5⅜	⅜-16
LAB-500-100	500	8	1⅞	¾	5⅜	⅜-16
LAB-600-100	600	8	2⅜	1	5⅜	⅜-16
LAB-750-100	750	8	2⅜	1	5⅜	⅜-16
LAB-1000-100	1000	8	2⅜	1	5⅜	⅜-16



TYPE TRW • 100 through 600 Amperes

TYPE TRW • 50 MV

Catalog Number	AMP	A	B	C	D	E
TRW-100-50	100	4½	1	½	3½	⅜-16 x ¾
TRW-150-50	150	4½	1	½	3½	⅜-16 x ¾
TRW-200-50	200	4½	1	½	3½	⅜-16 x ¾
TRW-250-50	250	5⅜	1⅜	⅝	4	½-13 x 1
TRW-300-50	300	5⅜	1⅜	⅝	4	½-13 x 1
TRW-400-50	400	5⅜	1⅜	⅝	4	½-13 x 1
TRW-500-50	500	5½	1½	1	4	½-13 x 1
TRW-600-50	600	5½	1½	1	4	½-13 x 1



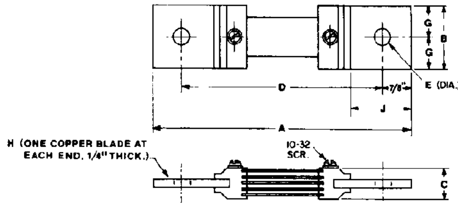
TYPE W • 300 through 1,000 Amperes

TYPE W • 50 MV

Catalog Number	AMP	A	B	C	D	E	G	J
W-300-50	300	7	1¼	1	5¼	17/32	⅝	1¾
W-400-50	400	7	1¼	1	5¼	17/32	⅝	1¾
W-500-50	500	7	1¼	1	5¼	17/32	⅝	1¾
W-600-50	600	7	1½	1	5¼	17/32	¾	1¾
W-750-50	750	7	2	1	5¼	21/32	1	1¾
W-800-50	800	7	2	1	5¼	21/32	1	1¾
W-1000-50	1000	7	2½	1	5¼	21/32	1¼	1¾

TYPE W • 100 MV

W-120-100	120	8¼	1¼	1	6½	17/32	⅝	1⅞
W-130-100	130	8¼	1¼	1	6½	17/32	⅝	1⅞
W-150-100	150	8¼	1½	1	6½	17/32	¾	1⅞
W-200-100	200	8¼	1½	1	6½	17/32	¾	1⅞
W-250-100	250	8¼	2	1	6½	17/32	1	1⅞
W-300-100	300	8¼	2	1	6½	17/32	1	1⅞
W-400-100	400	8¼	2	1	6½	17/32	1	1⅞
W-500-100	500	8¼	2½	1	6½	17/32	1¼	1⅞



Temperature coefficient of resistance = ±.000015 between 40-60°C.

7

Empro SHUNTS ®

DC Ammeter Shunts

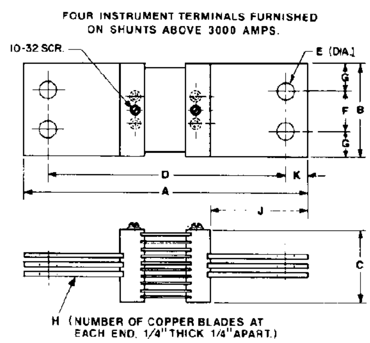
TYPE WT • 600 through 10,000 Amperes

TYPE WT • 50 MV

Catalog Number	AMP	A	B	C	D	E	F	G	H	J	K
WT-1000-50	1000	9 1/16	3	1 1/2	7 15/32	17/32	1 1/2	3/4	2	2 5/8	51/64
WT-1200-50	1200	9 1/16	3	1 1/2	7 15/32	17/32	1 1/2	3/4	2	2 5/8	51/64
WT-1500-50	1500	9 1/16	3	2	7 15/32	17/32	1 1/2	3/4	3	2 5/8	51/64
WT-2000-50	2000	9 1/16	4	2	7 15/32	17/32	2	1	3	2 5/8	51/64
WT-2500-50	2500	15 5/8	4	3	11 55/64	21/32	2	1	3	5 1/2	1 7/8
WT-3000-50	3000	15 5/8	4	3	11 55/64	21/32	2	1	4	5 1/2	1 7/8
WT-4000-50	4000	15 5/8	5	3	11 55/64	13/16	2	1 1/2	4	5 1/2	1 7/8
WT-5000-50	5000	15 5/8	5	4	11 55/64	13/16	2	1 1/2	5	5 1/2	1 7/8
WT-6000-50	6000	15 5/8	6	4	12 23/64	13/16	2 3/4	1 5/8	5	5 1/2	1 41/64
WT-7500-50	7500	15 5/8	6	4	12 23/64	13/16	2 3/4	1 5/8	6	5 1/2	1 41/64
WT-8000-50	8000	15 5/8	6	4	12 23/64	13/16	2 3/4	1 5/8	6	5 1/2	1 41/64
WT-10000-50	10000	15 55/64	8	4	12 55/64	1 1/16	3 1/2	2 1/4	6	5 17/32	1 1/2

TYPE WT • 100 MV

Catalog Number	AMP	A	B	C	D	E	F	G	H	J	K
WT-600-100	600	12	3	1 1/2	10 1/2	17/32	1 1/2	3/4	2	2 5/8	3/4
WT-750-100	750	12	3	1 1/2	10 1/2	17/32	1 1/2	3/4	2	2 5/8	3/4
WT-800-100	800	12	3	1 1/2	10 1/2	17/32	1 1/2	3/4	2	2 5/8	3/4
WT-1000-100	1000	12	3	2	10 1/2	17/32	1 1/2	3/4	3	2 5/8	3/4
WT-1200-100	1200	12	4	2	10 1/2	17/32	2	1	3	2 5/8	3/4
WT-1500-100	1500	18 1/2	4	3	15	21/32	2	1	3	5 9/32	1 3/4
WT-2000-100	2000	18 1/2	4	3	15	21/32	2	1	3	5 9/32	1 3/4
WT-2500-100	2500	18 1/2	5	3	15	21/32	2	1 1/2	3	5 9/32	1 3/4
WT-3000-100	3000	18 1/2	5	4	15	21/32	2	1 1/2	4	5 9/32	1 3/4
WT-4000-100	4000	18 9/16	5	4	15	13/16	2 1/2	1 1/4	4	5 9/32	1 25/32
WT-5000-100	5000	18 9/16	5	4	15	13/16	2 1/2	1 1/4	5	5 9/32	1 25/32
WT-6000-100	6000	18 9/16	6	4	15 1/2	13/16	3	1 1/2	5	5 9/32	1 17/32

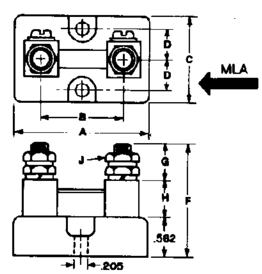


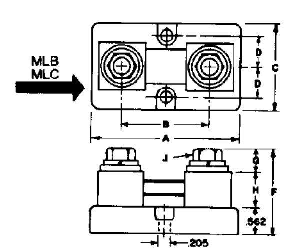
LIGHTWEIGHT TYPES • 5 through 1,200 Amperes

LIGHTWEIGHT TYPES

Empro Catalog Number	Type Designa-tion	MS Part Number	AMP	A	B	C	D	F	G	H	J
MLA-5-50			5	2.00	1.00	1.25	.437	1.688	.625	.500	1/4-28
MLA-10-50	MSA100	MS91586-8	10	2.00	1.00	1.25	.437	1.688	.625	.500	1/4-28
MLA-15-50	MSA150	MS91586-9	15	2.00	1.00	1.25	.437	1.688	.625	.500	1/4-28
MLA-20-50	MSA200	MS91586-10	20	2.00	1.00	1.25	.437	1.688	.625	.500	1/4-28
MLA-30-50	MSA300	MS91586-1	30	2.00	1.00	1.25	.437	1.688	.625	.500	1/4-28
MLA-50-50	MSA500	MS91586-2	50	2.00	1.00	1.25	.437	1.688	.625	.500	1/4-28
MLA-75-50	MSA750	MS91586-3	75	2.00	1.00	1.25	.437	1.688	.625	.500	1/4-28
MLA-80-50	MSA800	MS91586-4	80	2.00	1.00	1.25	.437	1.688	.625	.500	1/4-28
MLA-85-50	MSA850	MS91586-5	85	2.00	1.00	1.25	.437	1.688	.625	.500	1/4-28
MLA-100-50	MSA101	MS91586-6	100	2.00	1.00	1.25	.437	1.688	.625	.500	1/4-28
MLA-150-50	MSA151	MS91586-7	150	2.00	1.00	1.25	.437	1.688	.625	.500	1/4-28
MLB-170-50	MSB171	MS91587-1	170	3.25	1.50	1.75	.625	1.750	.438	.750	3/8-16 × 5/8
MLB-200-50	MSB201	MS91587-2	200	3.25	1.50	1.75	.625	1.750	.438	.750	3/8-16 × 5/8
MLB-250-50	MSB251	MS91587-3	250	3.25	1.50	1.75	.625	1.750	.438	.750	3/8-16 × 5/8
MLB-300-50	MSB301	MS91587-4	300	3.25	1.50	1.75	.625	1.750	.438	.750	3/8-16 × 5/8
MLB-400-50	MSB401	MS91587-5	400	3.25	1.50	1.75	.625	1.750	.438	.750	3/8-16 × 5/8
MLB-450-50	MSB451	MS91587-6	450	3.25	1.50	1.75	.625	1.750	.438	.750	3/8-16 × 5/8
MLB-500-50	MSB501	MS91587-7	500	3.25	1.50	1.75	.625	1.750	.438	.750	3/8-16 × 5/8
MLB-600-50	MSB601	MS91587-8	600	3.25	1.50	1.75	.625	1.750	.438	.750	3/8-16 × 5/8
MLC-800-50	MSC801	MS91588-1	800	4.50	2.16	2.50	1.00	2.125	.562	1.00	1/2-13 × 7/8
MLC-1000-50	MSC102	MS91588-2	1000	4.50	2.16	2.50	1.00	2.125	.562	1.00	1/2-13 × 7/8
MLC-1200-50	MSC122	MS91588-3	1200	4.50	2.16	2.50	1.00	2.125	.562	1.00	1/2-13 × 7/8

Temperature coefficient of resistance = ± .000015 between 40-60°C.





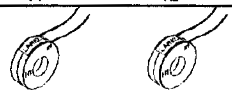
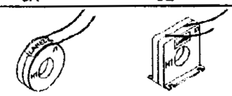
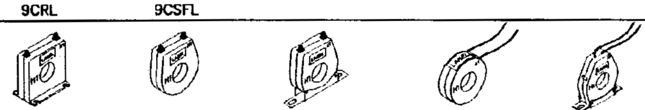
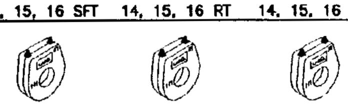
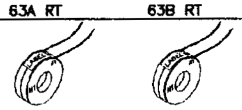
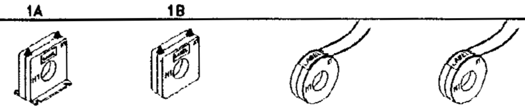
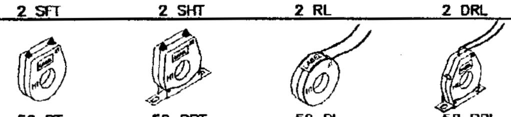
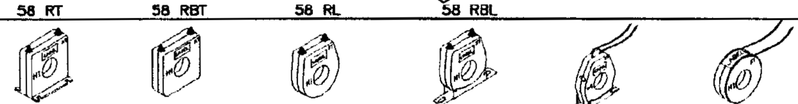
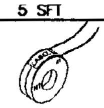
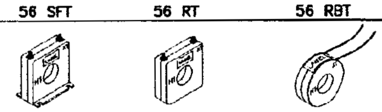
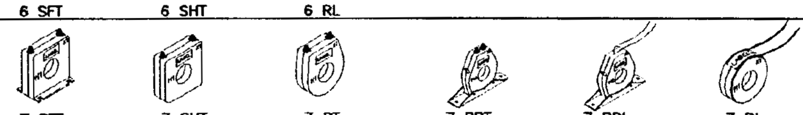
7

Instrument Transformers, Inc.

NIST CALIBRATION SERVICE AVAILABLE

Current Transformers

For Metering and Instrumentation

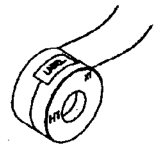
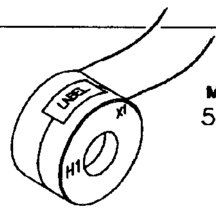
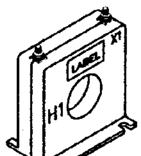
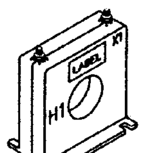
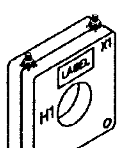
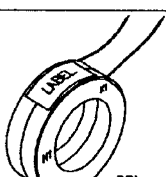
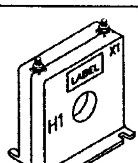
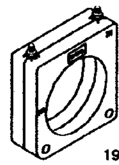
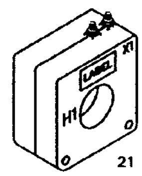
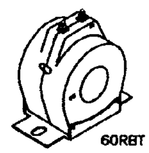
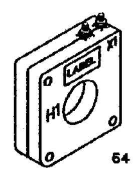
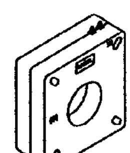
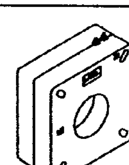
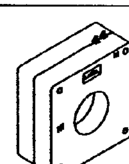
WINDOW SIZES 0.26 0.37 0.56	 11 · 12 · 13
WINDOW SIZES 0.42 0.91	 9A · 9B
WINDOW SIZE 0.64	 9CRL · 9CSFL
WINDOW SIZES 0.50 0.94 1.25	 14, 15, 16 SFT · 14, 15, 16 RT · 14, 15, 16 RBT · 14, 15, 16 RL · 14, 15, 16 RBL
WINDOW SIZES 0.56 1.25 2.00	 63A RT · 63B RT · 63C RT
WINDOW SIZE 0.64	 1A · 1B
WINDOW SIZES 1.00 1.05 1.13	 2 SFT · 2 SHT · 2 RL · 2 DRL
WINDOW SIZE 1.25	 58 RT · 58 RBT · 58 RL · 58 RBL
WINDOW SIZE 1.56	 5 SFT · 5 SHT · 5 RT · 5 RBT · 5 RBL · 5 RL
WINDOW SIZE 1.56	 5 DRL
WINDOW SIZE 2.06	 56 SFT · 56 RT · 56 RBT · 56 RL · 56 RBL
WINDOW SIZE 2.06	 6 SFT · 6 SHT · 6 RL
WINDOW SIZE 2.50	 7 SFT · 7 SHT · 7 RT · 7 RBT · 7 RBL · 7 RL
WINDOW SIZE 3.00	 76 SFT · 76 RT · 76 RBT · 76 RL · 76 RBL

Instrument Transformers, Inc.

Current Transformers

For Metering and Relaying

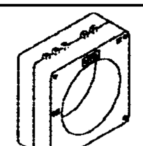
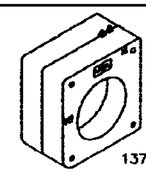
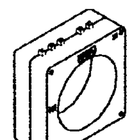
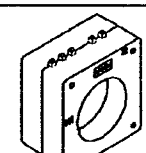
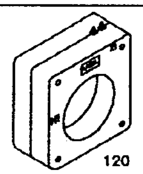
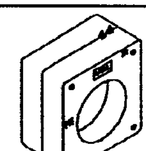
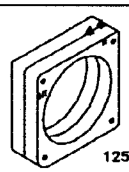
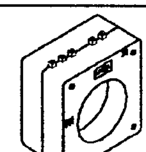
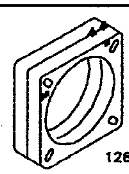
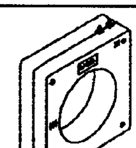
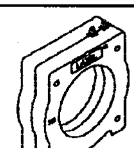
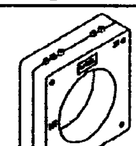
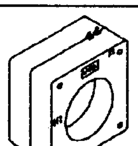
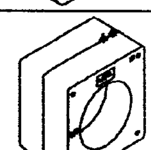
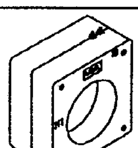
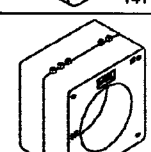
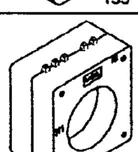
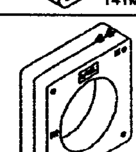
600V Class Window Type

Window Size			Body Size
1.00		MODEL 2DARL	W2.47 H2.47 D1.75
1.56		MODEL 5DARL	W3.63 H3.63 D2.06
1.56	 5ASFT	MODELS 5ASHT 5ARL 5ASFT	W3.53 H4.21 D2.15
2.06	 6ASFT	MODELS 6ASHT 6ARL 6ASFT	W4.12 H4.66 D2.12
2.50	 7ASHT	MODELS 7ASHT 7ARL 7ASFT	W4.56 H5.32 D2.13
3.25	 8RL	MODELS 8RL 8SHT	W5.73 H6.17 D1.15
1.56	 10	MODEL 10	W4.08 H5.03 D2.10
4.25	 19SHT	MODELS 19RL 19RT 19SHT	W5.92 H6.17 D1.15
1.25 1.63 2.00 2.50 3.13	 21	MODELS 21 22 23 24 25	W4.63 H5.54 D3.00
0.94 1.25 1.56	 60RBT	MODELS 60 61 62	W5.25 H4.44 D3.10
1.56 2.00 2.50	 64	MODELS 64 65 66	W4.00 H4.44 D1.75
4.00	 100	MODEL 100	W7.00 H7.00 D2.17
4.00	 110	MODEL 110	W7.00 H7.00 D2.88
2.25 2.75 3.25 4.00 4.62	 112–117	MODELS 112 113 114 115 117	W7.00 H7.12 D4.00

7

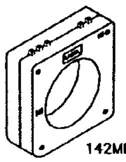
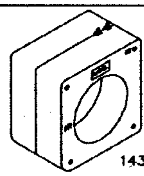
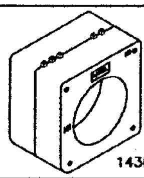
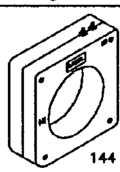
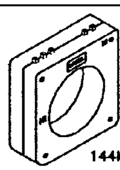
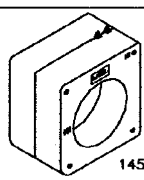
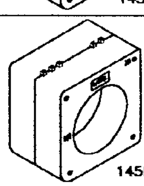
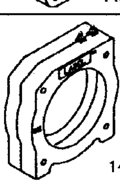
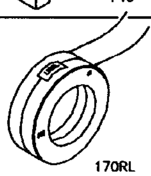
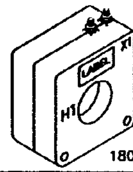
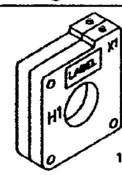
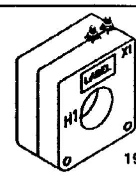
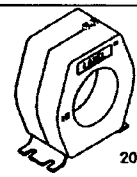
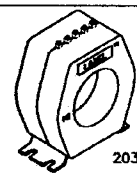
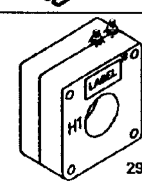
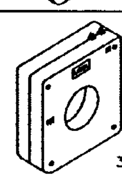
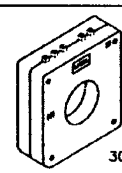
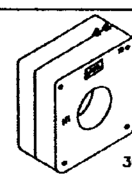
Instrument Transformers, Inc.

Current Transformers

WINDOW SIZE		MODEL	BODY SIZE	WINDOW SIZE		MODEL	BODY SIZE
4.00	 115MR	115MR	W7.00 H7.56 D4.00	5.50	 137	137	W 9.88 H10.32 D 5.00
4.62	 117MR	117MR	W7.00 H7.56 D4.00	5.50	 137MR	137MR	W 9.88 H10.32 D 5.00
5.75	 120	120	W8.50 H8.50 D2.17	6.50	 139	139	W 9.88 H10.32 D 5.00
6.31	 125	125	W8.50 H8.94 D1.28	6.50	 139MR	139MR	W 9.88 H10.32 D 5.00
8.25	 126	126	W10.48 H10.92 D 1.53	8.13	 140	140	W11.10 H11.91 D 3.00
5.50	 129	129	W8.18 H8.64 D2.63	8.13	 140MR	140MR	W11.10 H11.91 D 3.00
5.75	 130	130	W8.50 H8.94 D2.90	8.13	 141	141	W11.10 H11.91 D 6.00
5.75	 135	135	W9.21 H9.65 D3.00	8.13	 141MR	141MR	W11.10 H11.91 D 6.00
5.75	 135MR	135MR	W9.21 H9.65 D3.00	7.25	 142	142	W11.10 H11.91 D 3.00

Instrument Transformers, Inc.

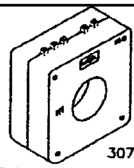
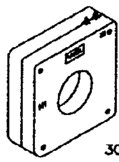
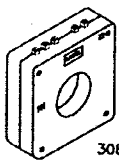
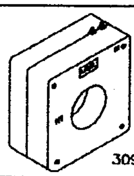
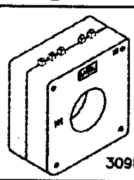
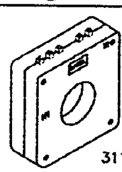
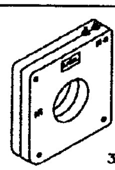
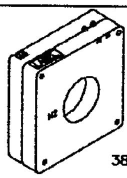
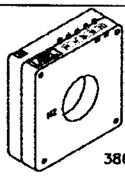
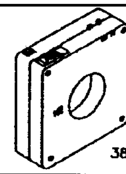
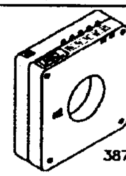
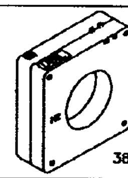
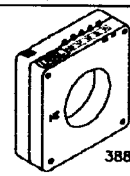
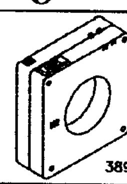
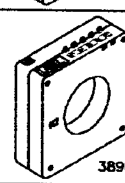
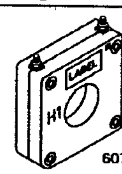
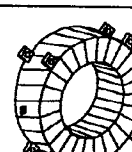
Current Transformers

WINDOW SIZE	Drawing	MODEL(S)	BODY SIZE
7.25	 142MR	142MR	W11.10 H11.91 D 3.00
7.31	 143	143	W11.10 H11.91 D 6.00
7.31	 143MR	143MR	W11.10 H11.91 D 6.00
6.00	 144	144	W11.10 H11.91 D 3.00
6.00	 144MR	144MR	W11.10 H11.91 D 3.00
6.00	 145	145	W11.10 H11.91 D 6.00
6.00	 145MR	145MR	W11.10 H11.91 D 6.00
8.25	 149	149	W11.30 H11.79 D 2.63
4.25	 170RL	170RL 170SHT	W6.73 H7.17 D1.28
2.50	 180SHT	180RL 180SHT	W4.57 H5.01 D2.19
2.50 1.25 1.50	 181	181 182 183	W4.50 H4.88 D2.19
1.25 1.75 2.13 2.50 3.06	 191	191 192 193 194 195	W4.50 H5.32 D2.19
2.50 3.50 4.88 5.25 4.50	 202	200 201 202 203 204	W 8.38 H10.15 D 4.62
5.25	 203MR	203MR	W 8.38 H10.15 D 4.62
1.50 2.25 3.00 3.38 3.75	 296	296 297 298 299 300	W5.96 H6.75 D3.00
4.50	 306	306	W10.47 H11.42 D 2.38
4.50	 306MR	306MR	W10.47 H11.42 D 2.38
4.50	 307	307	W10.47 H11.42 D 4.09

7

Instrument Transformers, Inc.

Current Transformers

WINDOW SIZE		MODEL	BODY SIZE
4.50	 307MR	307MR	W10.47 H11.42 D 4.09
5.75	 308	308	W12.45 H13.39 D 2.40
5.75	 308MR	308MR	W12.45 H13.39 D 2.40
5.75	 309	309	W12.45 H13.40 D 4.12
5.75	 309MR	309MR	W12.45 H13.40 D 4.12
4.50	 311MR	311MR	W10.47 H11.42 D 3.23
4.50	 385	385	W12.45 H13.39 D 1.75
4.50	 386	386	W14.50 H15.19 D 2.88
4.50	 386MR	386MR	W14.50 H15.19 D 2.88
4.50	 387	387	W14.50 H15.19 D 2.88
4.50	 387MR	387MR	W14.50 H15.19 D 2.88
5.75	 388	388	W14.50 H15.19 D 2.88
5.75	 388MR	388MR	W14.50 H15.19 D 2.88
5.75	 389	389	W14.50 H15.19 D 2.88
5.75	 389MR	389MR	W14.50 H15.19 D 2.88
1.47 2.31	 607	MODELS 605 607	W4.69 H5.13 D1.38
12.00	 750-SD	750-SD	W17.56 H17.56 D 7.25

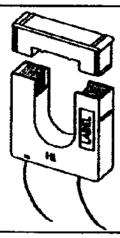
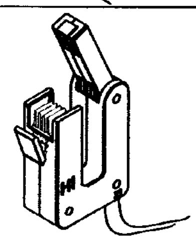
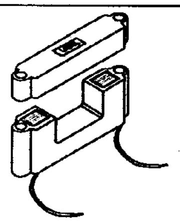
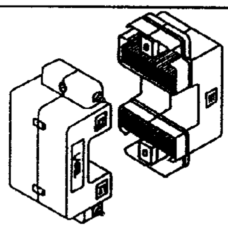
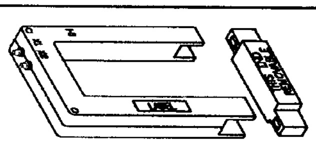
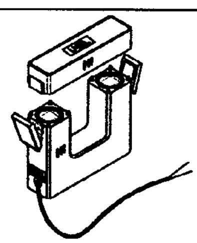
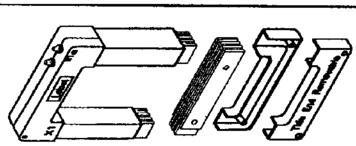
7

W.E.I.

Instrument Transformers, Inc.

Split Core Current Transformers

600V Class

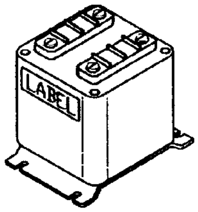
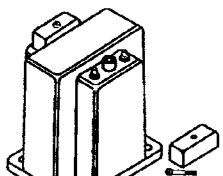
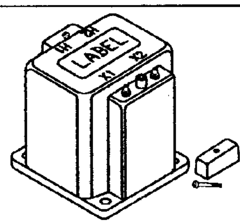
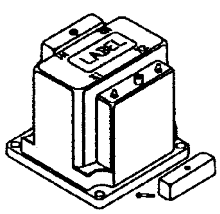
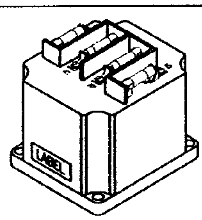
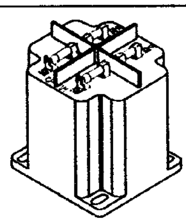
MODEL NUMBER		WINDOW SIZE Width Height	OVERALL SIZE Width Height Depth
610		1.30 x 1.47	2.75 x 2.84 x 0.78
613		0.80 x 1.95	2.70 x 3.70 x 1.25
603 603D		2.00 x 1.00 2.00 x 2.00	4.56 x 2.31 x 0.85 4.56 x 3.40 x 0.85
604		1.42 x 1.53	3.38 x 4.78 x 2.50
600 601		2.00 x 5.50 4.50 x 4.50	4.25 x 7.75 x 1.13 6.75 x 6.75 x 1.13
606 608		2.80 x 2.75 2.80 x 6.25	6.05 x 5.80 x 1.75 6.05 x 9.25 x 1.75
500		From: 4.1 x 7.1 To: 10.1 x 30.1	From: 7.30 x 10.90 x 1.63 To: 13.20 x 33.90 x 1.63

Instrument Transformers, Inc.

Voltage Transformers

600V Class

Application Data

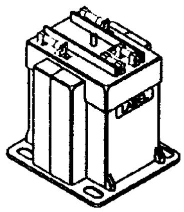
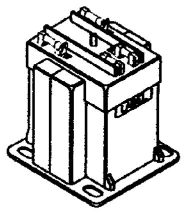
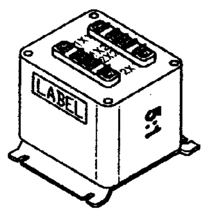
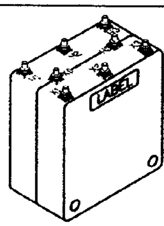
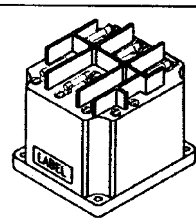
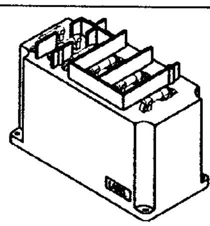
MODEL NUMBER		ACCURACY CLASS THERMAL RATING	OVERALL SIZE Width Height Depth
Single Phase			
467		± 0.5% @ 5VA 40VA @ 30° C.	3.00 x 3.63 x 3.50
468		± 0.6% @ 7.5VA 75VA @ 30° C.	3.63 x 4.06 x 2.81
465		0.6W & 1.2X 150VA @ 30° C.	3.63 x 4.25 x 3.75
460		0.6W & 1.2X 150VA @ 30° C.	4.50 x 3.88 x 4.75
460FF		0.6W & 1.2X 150VA @ 30° C.	4.57 x 4.75 x 4.32
475		0.3W, 0.6X & 1.2M 300VA @ 30° C.	4.38 x 4.63 x 4.75

7

Instrument Transformers, Inc.

Voltage Transformers

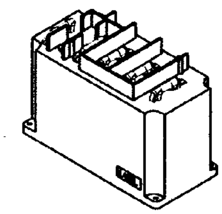
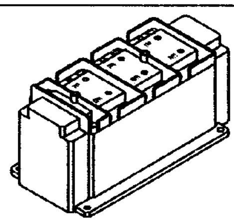
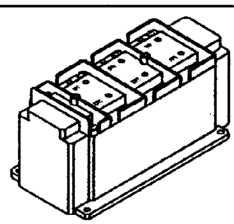
600V Class

MODEL NUMBER		ACCURACY CLASS THERMAL RATING	OVERALL SIZE Width Height Depth
Single Phase			
456, F & FF		0.3W, X, M & 0.6Y 500VA @ 30° C.	6.00 x 6.10 x 6.50
450, F & FF		0.3W, X, M, Y & 1.2Z 750VA @ 30° C.	6.00 x 6.10 x 6.50
Three Phase			
469		± 0.5% @ 5VA 40VA Per phase @ 30°C.	4.19 x 3.63 x 4.38
3VT471		± 0.5% @ 5VA 40VA Per phase @ 30°C.	4.59 x 5.57 x 3.00
3VT472		± 0.5% @ 5VA 40VA Per phase @ 30°C.	5.00 x 4.13 x 4.38
3VT468		± 0.6% @ 7.5VA 75VA @ 30°C. Per phase	7.68 x 5.38 x 3.75

7

Voltage Transformers

600V Class

MODEL NUMBER		ACCURACY CLASS THERMAL RATING	OVERALL SIZE Width Height Depth
Three Phase 2VT460		0.6W & 1.2X Per Phase 150VA Per phase @ 30°C.	7.68 x 5.38 x 3.75
3VT460		0.6W & 1.2X Per Phase 150VA Per phase @ 30°C. LINE TO NEUTRAL CONNECTION	10.25 x 4.75 x 4.75
3VT460		0.6W & 1.2X Per Phase 150VA Per phase @ 30°C. LINE TO LINE CONNECTION	10.25 x 4.75 x 4.75

CIRCLE DIAGRAM METHODS FOR THE ESTIMATION OF VOLTAGE TRANSFORMER ACCURACY CLASSES

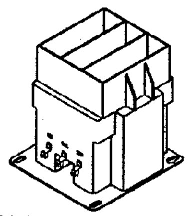
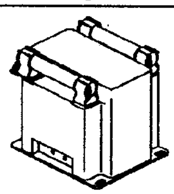
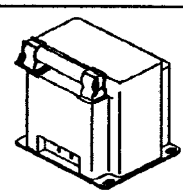
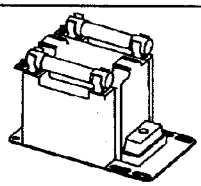
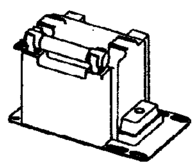
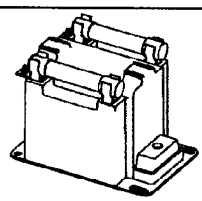
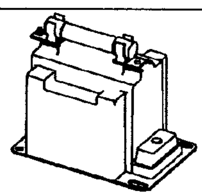
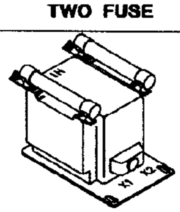
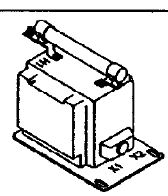
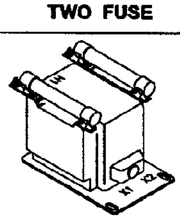
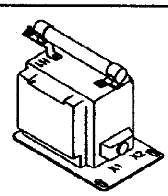
7

Voltage Transformers

Medium Voltage from 5kV to 34.5kV

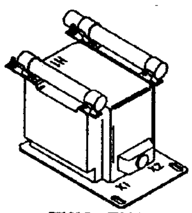
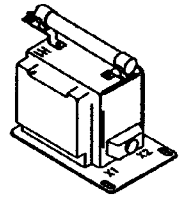
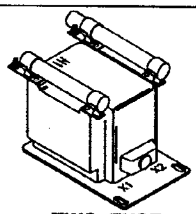
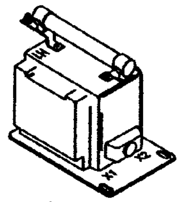
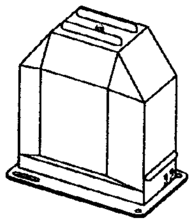
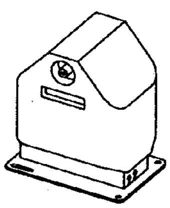
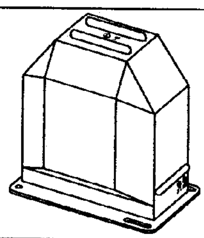
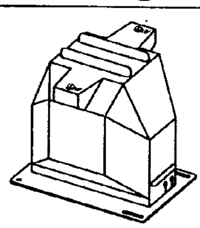
VOLTAGE TRANSFORMER GROUPS

APPLICATION NOTES

		MODEL(S)	OVERALL SIZE	VOLTAGE CLASS
		3PT3-60	W8.94 H9.50 D8.50	5kV
 TWO FUSE	 ONE FUSE	PT3-1-45 PT3-2-45	W6.82 H6.03 D5.63	5kV
 TWO FUSE	 ONE FUSE	PTG3-1-60 PTG3-2-60	W10.85 H7.07 D6.38	5kV
 TWO FUSE	 ONE FUSE	PTW3-1-60 PTW3-2-60	W9.31 H8.00 D6.38	5kV
 TWO FUSE	 ONE FUSE	PTG4-1-75 PTG4-2-75	W13.13 H13.06 D10.63	8.7kV
 TWO FUSE	 ONE FUSE	PTW4-1-75 PTW4-2-75	W15.50 H12.17 D9.25	8.7kV

7

Voltage Transformers

		MODELS	OVERALL SIZE	VOLTAGE CLASS
 TWO FUSE	 ONE FUSE	PTG5–1–110 PTG5–2–110	W13.69 H13.06 D10.63	15kV
 TWO FUSE	 ONE FUSE	PTW5–1–110 PTW5–2–110	W15.50 H12.17 D9.25	15kV
	ONE BUSHING	MODEL: PT6–1–125	W13.75 H13.44 D9.50	25kV
	TWO BUSHING	MODEL: PT6–2–125	W13.75 H15.00 D9.50	25kV
	ONE BUSHING	MODEL: PT7–1–150 PT7–1–200	W13.75 H14.94 D9.50	34.5kV
	TWO BUSHING	PT7–2–150 PT7–2–200	W16.50 H15.75 D16.25	34.5kV

7