

Variable Transformers

Ashley-Edison's Variable Transformers offer a full range of single and three phase models. Standard models include input voltages from 120VAC to 600VAC and 3 to 500 Amps. Special units for voltages to 1000 VAC are available on order. They are categorized by their input voltage, output voltage and number of phases. If you do not find the transformer that meets your application requirements, please contact us with your detailed specifications.

While today there are many modern alternatives to the Variable Transformer for controlling voltage, the load tolerant nature of the Variable Transformer ensures that it is still the best and most reliable method of control for a large variety of applications where stepless control of a distortion-free AC output and dependent parameters are essential.

Typical uses include quality control testing, electronic equipment burn-in, low voltage performance evaluation, DC rectifier / regulator analysis or other industrial and engineering applications.

Our enduring ranges of variable transformers all deliver an efficient and trouble free method of varying AC voltages with an output from zero to line voltage.



**Motorised Variable Transformers
MAE Series Three Phase**

Manual Variable Transformer AE Series Single Phase



Manual Variable Transformer AE Series Three Phase



Variable Transformers are widely used when adjustable voltages are required for quality control testing, electronic equipment burn-in, life-tests, low voltage performance evaluation, D.C. rectifier/regulator analysis or other industrial and engineering applications.

Applications

**Test Benches / Lighting Dimmer / High Voltage Test Sets
Furnace Transformer / D.C. rectifier**



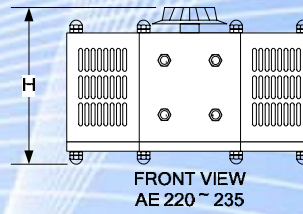
Manual Variable Transformers

Technical Specifications

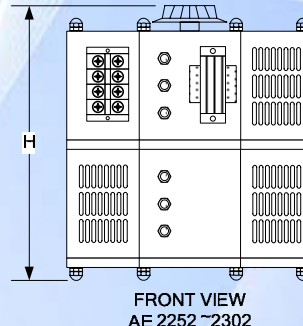
Input Voltage	+ 6% of nominal i.e. 240V models are continuous rated at 254V	Environment	Temperature range -15 to 45 °C. Derate by 2% for each additional °C Up to max 60 °C. Suitable for indoor tropical use 95% RH (non-condensing). Maximum altitude 1000m. Derate by 2.5% for each additional 500m.
Output Voltage	Continuously variable from 0 – 117% of input voltage	Warranty	One Year
Frequency	47 ~ 60Hz	Note:	- Optional Enclosure and accessories available on order - Special voltage configurations available on order
Power Factor	Any	CAUTION:	When using Variable Transformer, installation and connection must be carried out in accordance to safety standards and care must be taken to ensure local regulations are strictly adhered . The above models are intended only for installation as components and must never be used unprotected.
Efficiency	98%		
Surge ratings	10 x max current rating for 1 second 3 x max current rating for 60 seconds 2 x max current rating for 5 minutes		

Single Phase 220/240V Model: AE-HB
INPUT: 240V 50/60HZ OUTPUT: 0 ~ 280V
INPUT: 220V 50/60HZ OUTPUT: 0 ~ 257V

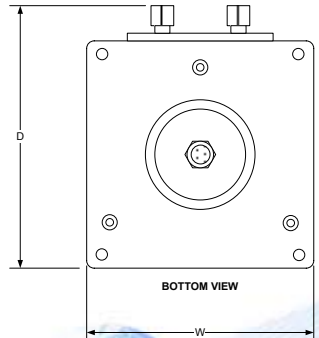
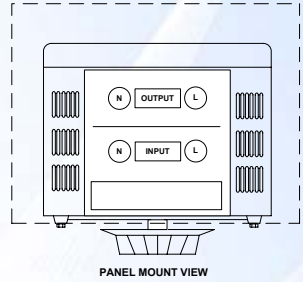
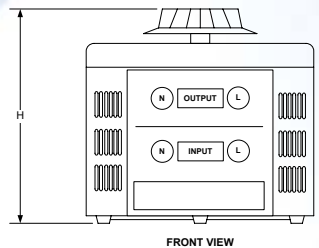
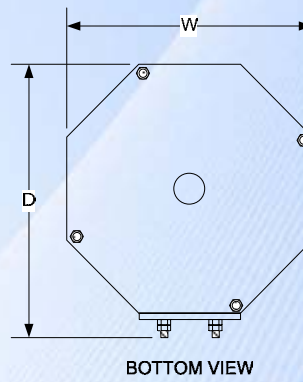
Model:	Amps	Kva at max. output volts	Output volts @ 240V	Dimensions (mm) W x H x D	Weight (Kgs)
AE-203-HB	3	0.84	0 ~ 280V	164 x 150 x 194	6
AE-205-HB	5	1.4	0 ~ 280V	164 x 150 x 194	6.5
AE-210-HB	10	2.8	0 ~ 280V	215 x 160 x 245	11
AE-215-HB	15	4.2	0 ~ 280V	215 x 160 x 245	13
AE-220-HB	20	5.6	0 ~ 280V	300 x 225 x 340	20
AE-225-HB	25	7.0	0 ~ 280V	300 x 225 x 340	23
AE-230-HB	30	8.4	0 ~ 280V	300 x 265 x 340	27
AE-235-HB	35	9.8	0 ~ 280V	300 x 265 x 345	30
AE-240-HB	40	11.2	0 ~ 280V	370 x 240 x 420	37
AE-2252-HB	50	14.0	0 ~ 280V	300 x 375 x 420	44
AE-2302-HB	60	16.8	0 ~ 280V	300 x 455 x 420	52
AE-2402-HB	80	22.4	0 ~ 280V	370 x 400 x 490	70



AE 220-HB ~ AE 235-HB



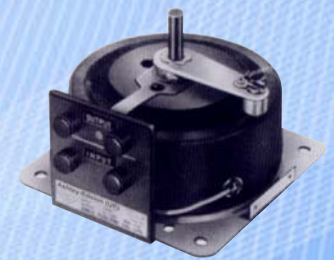
AE 240-HB



PANEL MOUNT



AE 203-HB ~ 215-HB



AE 203-HO ~ 215-HO
OPEN TYPE

Applications:
 Test Benches / Lighting Dimmer / High Voltage Test Sets
 Furnace Transformer / D.C. rectifier

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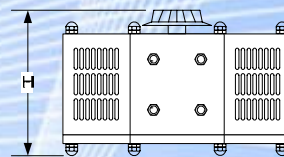
Manual Variable Transformers

Technical Specifications

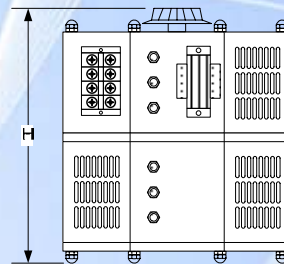
Input Voltage	+ 6% of nominal i.e. 120V models are continuous rated at 127V	Environment	Temperature range 0 to 45 °C. Derate by 2% for each additional °C Up to max 60 °C . Suitable for indoor tropical use 95% RH (non-condensing). Maximum altitude 1000m. Derate by 2.5% for each additional 500m.
Output Voltage	Continuously variable from 0 – 117% of input voltage		
Frequency	47 ~ 65Hz	Warranty	One Year
Power Factor	Any	Note: - Optional Enclosure and accessories available on order - Special voltage configurations available on order	
Efficiency	98%	CAUTION: When using Variable Transformer, installation and connection must be carried out in accordance to safety standards and care must be taken to ensure local regulations are strictly adhered . The above models are intended only for installation as components and must never be used unprotected.	
Surge ratings	10 x max current rating for 1 second 3 x max current rating for 60 seconds 2 x max current rating for 5 minutes		

Single Phase 110/120V Model: AE-LB
INPUT: 120V 50/60HZ OUTPUT: 0 ~ 140V
INPUT: 110V 50/60HZ OUTPUT: 0 ~ 129V

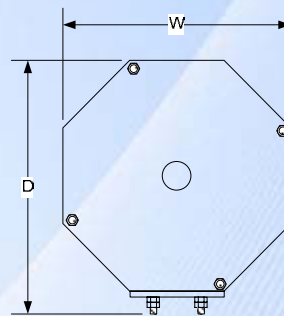
Model:	Amps	Kva at max. output volts	Output volts @ 140V	Dimensions (mm) W x H x D	Weight (Kgs)
AE-103-LB	3	0.42	0 ~ 140V	164 x 150 x 194	4.8
AE-105-LB	5	0.7	0 ~ 140V	164 x 150 x 194	5
AE-110-LB	10	1.4	0 ~ 140V	164 x 150 x 194	6.5
AE-115-LB	15	2.1	0 ~ 140V	215 x 160 x 245	10
AE-120-LB	20	2.8	0 ~ 140V	215 x 160 x 245	11.5
AE-125-LB	25	3.5	0 ~ 140V	215 x 160 x 245	13
AE-130-LB	30	4.2	0 ~ 140V	300 x 225 x 340	23
AE-135-LB	35	4.9	0 ~ 140V	300 x 265 x 340	25
AE-140-LB	40	5.6	0 ~ 140V	300 x 265 x 340	27
AE-150-LB	50	7.0	0 ~ 140V	370 x 240 x 420	73
AE-1302-LB	60	8.4	0 ~ 140V	300 x 375 x 420	44
AE-1402-LB	80	11.2	0 ~ 140V	300 x 455 x 420	52



FRONT VIEW
AE 130 ~ 140



FRONT VIEW
AE 1302 ~ 1402



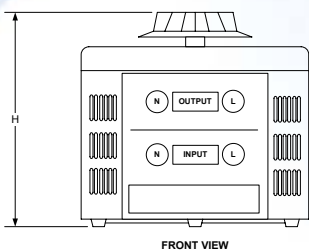
BOTTOM VIEW



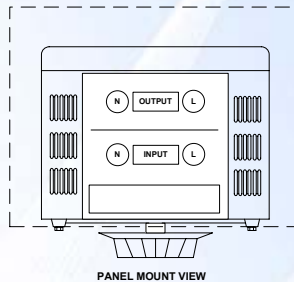
AE 120-LB ~ AE 140-LB



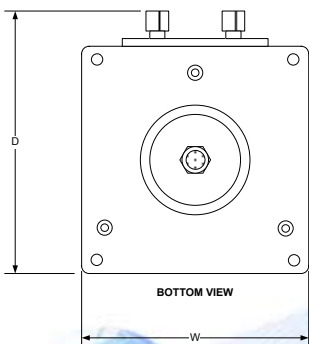
AE 150-LB



FRONT VIEW



PANEL MOUNT VIEW



BOTTOM VIEW



PANEL MOUNT



AE 103-LB ~ 125-LB



AE 103-LO ~ 125-LO
OPEN TYPE

Applications

Test Benches / Lighting Dimmer / High Voltage Test Sets
 Furnace Transformer / D.C. rectifier

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Manual Variable Transformers

Technical Specifications

Input Voltage	+ 6% of nominal i.e. 208V models are continuous rated at 220V	Environment	Temperature range 0 to 45 °C. Derate by 2% for each additional °C Up to max 60 °C . Suitable for indoor tropical use 95% RH (non-condensing). Maximum altitude 1000m. Derate by 2.5% for each additional 500m.
Output Voltage	Continuously variable from 0 – 117% of input voltage		
Frequency	47 ~ 65Hz	Warranty	One Year
Power Factor	Any	Note: - Optional Enclosure and accessories available on order - Special voltage configurations available on order	
Efficiency	98%	CAUTION: When using Variable Transformer, installation and connection must be carried out in accordance to safety standards and care must be taken to ensure local regulations are strictly adhered . The above models are intended only for installation as components and must never be used unprotected.	
Surge ratings	10 x max current rating for 1 second 3 x max current rating for 60 seconds 2 x max current rating for 5 minutes		

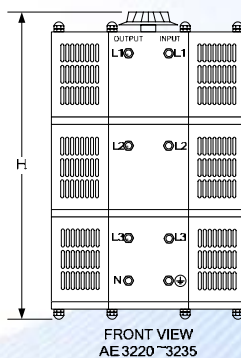
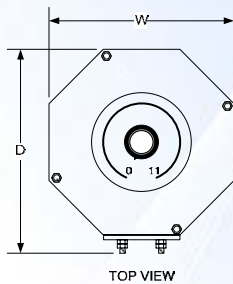
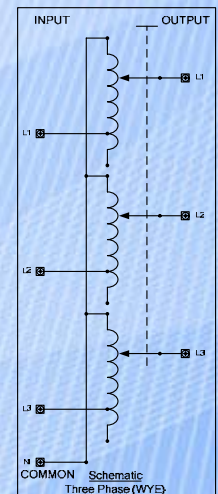
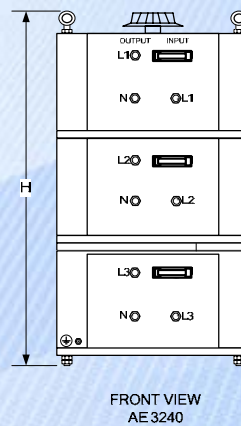
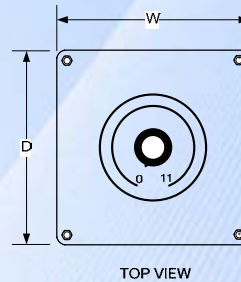
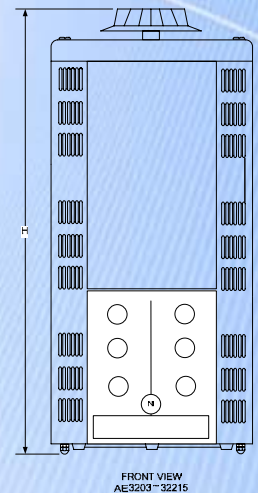
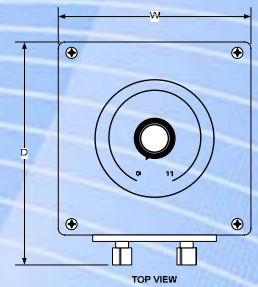
Three Phase 380/415V Model: AE-HB
INPUT: 415V 50/60HZ OUTPUT: 0 ~ 485V
INPUT: 380V 50/60HZ OUTPUT: 0 ~ 445V

Model:	Amps	Kva at max. output volts	Output volts @ 485V	Dimensions (mm) W x H x D	Weight (Kgs)
AE-3203HB	3	2.5	0 ~ 485V	164 x 390 x 194	18
AE-3205HB	5	4.2	0 ~ 485V	164 x 390 x 194	20
AE-3210HB	10	8.4	0 ~ 485V	215 x 390 x 245	30
AE-3215HB	15	12.6	0 ~ 485V	240 x 480 x 270	38
AE-3220HB	20	16.8	0 ~ 485V	300 x 500 x 340	54
AE-3225HB	25	21	0 ~ 485V	300 x 500 x 340	68
AE-3230HB	30	25	0 ~ 485V	300 x 620 x 340	75
AE-3235HB	35	29	0 ~ 485V	300 x 620 x 340	90
AE-3240HB	40	34	0 ~ 485V	300 x 620 x 340	95

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AE 3203 ~ 3215



AE 3220 ~ 3235



AE 3240



Applications
 Test Benches / Lighting Dimmer / High Voltage Test Sets
 Furnace Transformer / D.C. rectifier

Manual Variable Transformers

Technical Specifications

Input Voltage	+ 6% of nominal i.e. 415V models are continuous rated at 439V	Environment	Temperature range 0 to 45 °C. Derate by 2% for each additional °C Up to max 60 °C . Suitable for indoor tropical use 95% RH (non-condensing). Maximum altitude 1000m. Derate by 2.5% for each additional 500m.
Output Voltage	Continuously variable from 0 – 117% of input voltage	Warranty	One Year
Frequency	47 ~ 65Hz	Note:	- Optional Enclosure and accessories available on order - Special voltage configurations available on order
Power Factor	Any	CAUTION:	When using Variable Transformer, installation and connection must be carried out in accordance to safety standards and care must be taken to ensure local regulations are strictly adhered . The above models are intended only for installation as components and must never be used unprotected.
Efficiency	98%		
Surge ratings	10 x max current rating for 1 second 3 x max current rating for 60 seconds 2 x max current rating for 5 minutes		

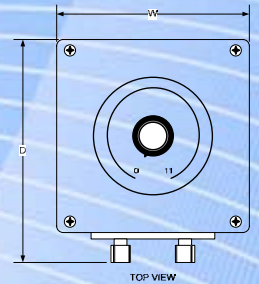
Three Phase 190/208V Model: AE-LB
INPUT: 208V 50/60HZ OUTPUT: 0 ~ 243V
INPUT: 190V 50/60HZ OUTPUT: 0 ~ 222V

Model:	Amps	Kva at max. output volts	Output volts @ 208V	Dimensions (mm) W x H x D	Weight (Kgs)
AE-3103LB	3	1.25	0 ~ 242V	164 x 390 x 194	15.8
AE-3105LB	5	2.1	0 ~ 242V	164 x 390 x 194	16
AE-3110LB	10	4.2	0 ~ 242V	164 x 390 x 194	20
AE-3115LB	15	6.3	0 ~ 242V	215 x 390 x 245	30
AE-3120LB	20	8.4	0 ~ 242V	240 x 480 x 270	37
AE-3125LB	25	11	0 ~ 242V	300 x 500 x 340	41
AE-3130LB	30	13	0 ~ 242V	300 x 500 x 340	68
AE-3135LB	35	15	0 ~ 242V	300 x 620 x 340	72
AE-3140LB	40	17	0 ~ 242V	300 x 620 x 340	78
AE-3150LB	50	21	0 ~ 242V	370 x 560 x 420	120

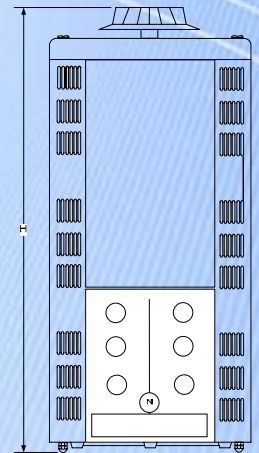
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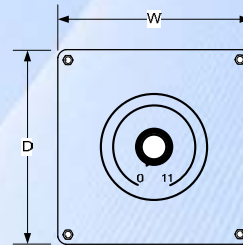
AE 3103 ~ 3120



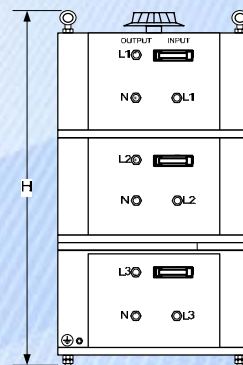
TOP VIEW



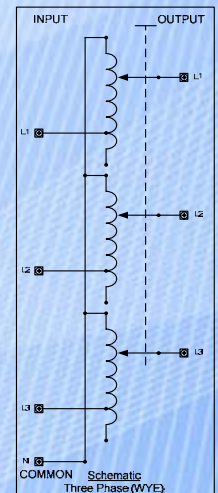
FRONT VIEW
AE3103 ~ 3120



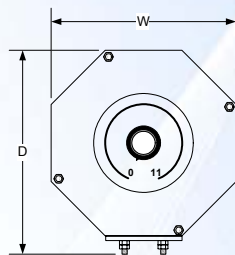
TOP VIEW



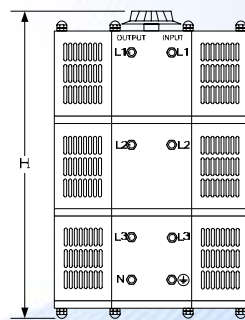
FRONT VIEW
AE3150



AE 3125 ~ 3140



TOP VIEW



FRONT VIEW
AE3125 ~ 3140



Applications
 Test Benches / Lighting Dimmer / High Voltage Test Sets
 Furnace Transformer / D.C. rectifier



Lab-Manual Variable Transformers

Technical Specifications

Input Voltage	+ 6% of nominal i.e. 240V models are continuous rated at 254V	Construction	Enclosures to IP20, BS EN5490 / IEC 60529
Output Voltage	Continuously variable from 0 – 117% of input voltage	Conformance	BS EN50081-1;2 / IEC 61000-4-3;4
Frequency	47 ~ 60Hz	CE Conformity	EN55022, EN50082-2, ENV50140-1
Power Factor	Any	Warranty	One Year
Efficiency	98%	Standard Feature	Input circuit breaker Output Digital Voltmeter Universal Socket
Surge ratings	10 x max current rating for 1 second 3 x max current rating for 60 seconds 2 x max current rating for 5 minutes	Optional Accessories	Digital Ammeter Isolation Transformer Voltage Stabiliser (Input Swing +/-15%)
Surge Suppression	Protect loads against high-energy spikes and transient voltage.	Note: Optional accessories added may affect dimension, subject to confirmation.	
Environment	Temperature range -15 to 45 °C. Derate by 2% for each additional °C Up to max 60 °C. Suitable for indoor tropical use 95% RH (non-condensing). Maximum altitude 1000m. Derate by 2.5% for each additional 500m.		

Single Phase 220/240V Model: LAB-HB-DV INPUT: 240V 50/60HZ OUTPUT: 0 ~ 280V INPUT: 220V 50/60HZ OUTPUT: 0 ~ 257V

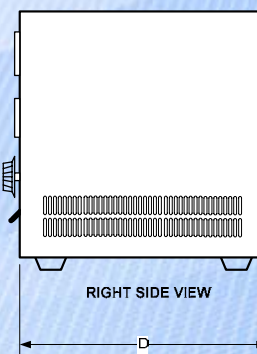
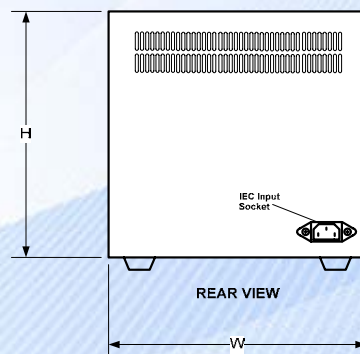
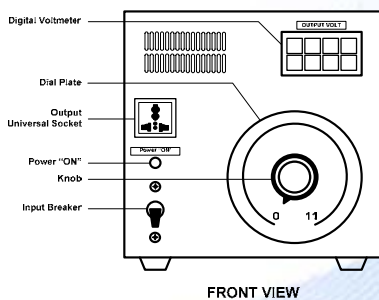
Model:	Amps	Kva at max. output volts	Output volts @ 240V	Dimensions (mm) W x H x D	Weight (Kgs)
LAB-203HB-DV	3	0.84	0 ~ 280V	300 x 290 x 250	7.5
LAB-205HB-DV	5	1.4	0 ~ 280V	300 x 290 x 250	9.5
LAB-210HB-DV	10	2.8	0 ~ 280V	300 x 290 x 250	14
LAB-215HB-DV	15	4.2	0 ~ 280V	300 x 290 x 250	16

Single Phase 110/120V Model: LAB-LB-DV INPUT: 120V 50/60HZ OUTPUT: 0 ~ 140V INPUT: 110V 50/60HZ OUTPUT: 0 ~ 129V

Model:	Amps	Kva at max. output volts	Output volts @ 140V	Dimensions (mm) W x H x D	Weight (Kgs)
LAB-103-LB-DV	3	0.42	0 ~ 140V	300 x 290 x 250	6.8
LAB-105-LB-DV	5	0.7	0 ~ 140V	300 x 290 x 250	7
LAB-110-LB-DV	10	1.4	0 ~ 140V	300 x 290 x 250	10
LAB-115-LB-DV	15	2.1	0 ~ 140V	300 x 290 x 250	13



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Applications:
Test Benches / Lighting Dimmer / High Voltage Test Sets
Furnace Transformer / D.C. rectifier

Motorised Variable Transformers

Technical Specifications

Input Voltage	+ 6% of nominal i.e. 240V models are continuous rated at 254V	Environment	Temperature range -15 to 45 °C. Derate by 2% for each additional °C Up to max 60 °C . Suitable for indoor tropical use 95% RH (non-condensing). Maximum altitude 1000m. Derate by 2.5% for each additional 500m.
Output Voltage	Continuously variable from 0 – 117% of input voltage		
Frequency	47 ~ 60Hz		
Power Factor	Any		
Efficiency	98%		
Surge ratings	10 x max current rating for 1 second 3 x max current rating for 60 seconds 2 x max current rating for 5 minutes	Warranty	One Year
		Note:	- Optional Enclosure and accessories available on order - Special voltage configurations available on order
		CAUTION:	When using Variable Transformer, installation and connection must be carried out in accordance to safety standards and care must be taken to ensure local regulations are strictly adhered . The above models are intended only for installation as components and must never be used unprotected.

Single Phase 220/240V Model: MAE-HO/HB
INPUT: 240V 50/60HZ OUTPUT: 0 ~ 280V
INPUT: 220V 50/60HZ OUTPUT: 0 ~ 257V

Model:	Amps	Kva at max. output volts	Output volts @ 240V	Dimensions (mm) W x H x D	Weight (Kgs)
MAE-203-HO	3	0.84	0 ~ 280V	Dimensions and Weight upon request	
MAE-205-HO	5	1.4	0 ~ 280V		
MAE-210-HO	10	2.8	0 ~ 280V		
MAE-215-HO	15	4.2	0 ~ 280V		
MAE-220-HB	20	5.6	0 ~ 280V		
MAE-225-HB	25	7.0	0 ~ 280V		
MAE-230-HB	30	8.4	0 ~ 280V		
MAE-235-HB	35	9.8	0 ~ 280V		
MAE-240-HB	40	11.2	0 ~ 280V		
MAE-2252-HB	50	14.0	0 ~ 280V		
MAE-2302-HB	60	16.8	0 ~ 280V		
MAE-2402-HB	80	22.4	0 ~ 280V		

Single Phase 110/120V Model: AE-LO/LB
INPUT: 120V 50/60HZ OUTPUT: 0 ~ 140V
INPUT: 110V 50/60HZ OUTPUT: 0 ~ 129V

Model:	Amps	Kva at max. output volts	Output volts @ 140V	Dimensions (mm) W x H x D	Weight (Kgs)
MAE-103-LO	3	0.42	0 ~ 140V	Dimensions and Weight upon request	
MAE-105-LO	5	0.7	0 ~ 140V		
MAE-110-LO	10	1.4	0 ~ 140V		
MAE-115-LO	15	2.1	0 ~ 140V		
MAE-120-LO	20	2.8	0 ~ 140V		
MAE-125-LO	25	3.5	0 ~ 140V		
MAE-130-LB	30	4.2	0 ~ 140V		
MAE-135-LB	35	4.9	0 ~ 140V		
MAE-140-LB	40	5.6	0 ~ 140V		
MAE-150-LB	50	7.0	0 ~ 140V		
MAE-1302-LB	60	8.4	0 ~ 140V		
MAE-1402-LB	80	11.2	0 ~ 140V		

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MAE-203~215-HO



MAE-220~235-HB



MAE-240-HB



MAE-2402-HB



Applications:
 Test Benches / Lighting Dimmer / High Voltage Test Sets
 Furnace Transformer / D.C. rectifier

Motorised Variable Transformers

Technical Specifications

Input Voltage	+ 6% of nominal i.e. 415V models are continuous rated at 439V	Conformance	BS EN50081-1;2 / IEC 61000-4-3;4
Output Voltage	Continuously variable from 0 – 117% of input voltage	CE Conformity	EN55022, EN50082-2, ENV50140-1
Frequency	47 ~ 60Hz	Warranty	One Year
Power Factor	Any	Standard Feature	Input Circuit Breaker Output Terminal Block Indicator Lamp Digital Voltmeter/Ammeter Up/Down Push Button Caster Wheel
Efficiency	98%		Optional Accessories
Surge ratings	10 x max current rating for 1 second 3 x max current rating for 60 seconds 2 x max current rating for 5 minutes	Note: 1) Special voltage configurations available on order 2) Higher KVA rating options available on order	
Environment	Temperature range -15 to 45 °C. Derate by 2% for each additional °C Up to max 60 °C. Suitable for indoor tropical use 95% RH (non-condensing). Maximum altitude 1000m. Derate by 2.5% for each additional 500m.		
Construction	Enclosures to IP20, BS EN5490 / IEC 60529		

Three Phase 380/415V Model: MAE-HB INPUT: 415V 50/60HZ OUTPUT: 0 ~ 485V INPUT: 380V 50/60HZ OUTPUT: 0 ~ 445V

Model:	Amps	Kva at max. output volts	Output volts @ 485V	Dimensions (mm) W x H x D	Weight (Kgs)
MAE-3210HB-DM-CB	10	8.4	0 ~ 485V	Dimensions and Weight upon request	
MAE-3215HB-DM-CB	15	12.6	0 ~ 485V		
MAE-3220HB-DM-CB	20	16.8	0 ~ 485V		
MAE-3225HB-DM-CB	25	21	0 ~ 485V		
MAE-3230HB-DM-CB	30	25	0 ~ 485V		
MAE-3235HB-DM-CB	35	29	0 ~ 485V		
MAE-3240HB-DM-CB	40	34	0 ~ 485V		
MAE-32252HB-DM-CB	50	42	0 ~ 485V		
MAE-32302HB-DM-CB	60	50	0 ~ 485V		
MAE-32352HB-DM-CB	70	59	0 ~ 485V		
MAE-32402HB-DM-CB	80	67	0 ~ 485V		
MAE-32353HB-DM-CB	105	88	0 ~ 485V		
MAE-32403HB-DM-CB	120	100	0 ~ 485V		

Three Phase 190/208V Model: MAE-LB INPUT: 208V 50/60HZ OUTPUT: 0 ~ 243V INPUT: 190V 50/60HZ OUTPUT: 0 ~ 222V

Model:	Amps	Kva at max. output volts	Output volts @ 485V	Dimensions (mm) W x H x D	Weight (Kgs)
MAE-3110LB-DM-CB	10	4	0 ~ 242V	Dimensions and Weight upon request	
MAE-3115LB-DM-CB	15	6	0 ~ 242V		
MAE-3120LB-DM-CB	20	9	0 ~ 242V		
MAE-3125LB-DM-CB	25	11	0 ~ 242V		
MAE-3130LB-DM-CB	30	13	0 ~ 242V		
MAE-3135LB-DM-CB	35	15	0 ~ 242V		
MAE-3140LB-DM-CB	40	17	0 ~ 242V		
MAE-31252LB-DM-CB	50	21	0 ~ 242V		
MAE-31302LB-DM-CB	60	25	0 ~ 242V		
MAE-31352LB-DM-CB	70	29	0 ~ 242V		
MAE-31402LB-DM-CB	80	34	0 ~ 242V		
MAE-31353LB-DM-CB	105	44	0 ~ 242V		
MAE-31403LB-DM-CB	120	50	0 ~ 242V		

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Applications:
Test Benches / Lighting Dimmer / High Voltage Test Sets
Furnace Transformer / D.C. rectifier

