



Rotavolt – Variable Transformer

Data Sheet

Watford Control Rotavolts are designed and built in compliance with the Low Voltage and Electromagnetic Compatibility European Directives regarding CE marking requirements. The products are built with suitable quality components and the manufacturing process is constantly verified in accordance with the Quality Control Plans which the Company applies in compliance with the ISO 9001:2008 Standards. In order to obtain better performance, the products described in the present document can be altered by the Company at any date and without prior notice. *Technical data and descriptions do hold therefore any contractual value.*

Rotavolt Variable Auto-Transformers provide a continuous linear regulation of AC voltage, with high efficiency and negligible waveform distortion. They offer a precise and effective method of controlling current, light, heat, motor speed and any parameter with a voltage factor.

Single and three phase models come in 9 frame sizes and rating up to 60kVA.

The present range incorporates many advanced design features based on the unique expertise we have gained from years of experience in our specialist sphere of voltage stabilisation

Our entire development programme has been in-house, every technological advance from our own design department, every product from our own production lines in our factory in Corby, Northamptonshire in the United Kingdom.

Key Features:

9 frame sizes and ratings up to 60kVA.	
Ideal for high-speed servo applications.	
Single and three phase models.	
Motorised versions available for remote or automatic operation	
Rugged construction for safe portable use and to eliminate transit damage	
Frequency	47-400Hz
Maximum input voltage	+6% of nominal, i.e. 240V models are continuously rated at 254V.
Output Voltage	Continuously variable from 0 - 115% of input voltage.
Maximum Current.	The rated current may be exceeded by 20% on parts of the transformer track. Maximum rating curves are available on request.
Surge Rating	Units rated up to 2.5A, 6 x for 1 sec, 3 x up to a min, 2 x up to 5 mins. All larger models, 10 x up to 1 sec, 3 x up to 1 min, 2 x up to 5 mins.
Load Power Factor	Any
Waveform distortion	Negligible.
Enclosure	All models supplied in open form, ventilated covers to IP20 BS60529 can be provided if required.
Mounting	All models can be surface or panel mounted.
Fixing:	Three fixing points equally spaced by 120 deg. Alternate fixings provided on some models.
Low torque operation	Ideal for multi ganged units.
Colour	RAL 7035
Protection degree	IP21 (Other ratings available)
Installation	IP21 Suitable for indoor use only.
Audible Noise Level	Less than 40dB at 1metre distance
Environment.	-15°C to +45°C. For higher temperatures, the output current must be derated by these factors 50°C-0.93, 60°C-0.77, 70°C-0.59

Rotavolt Rating Table:

Single Phase 220/240 V 47 - 400 Hz

Model Code	Current Amperes	kVA @ Max Output Volts	Output Voltage @ 240 v Input	Height Less Knob	Fixing					Alternate Fixing			Weight kgs
					Base Diameter	Shaft Diameter	No of Holes	Diam. or Thread	Position mm	No of Holes	Diam. or Thread	Position mm	
C01 H	1	0.28	0 - 275	75	120	10	3	M5	39 PCR				1.8
C02 H	2.5	0.69	0 - 275	102	120	10	3	M5	39 PCR				2.9
C03 H	3	0.83	0 - 275	125	120	10	3	M5	39 PCR				4.2
C04 H	4	1.10	0 - 275	125	120	10	3	M5	39 PCR				4.2
E06 H	6	1.66	0 - 275	118	192	10	3	M8	86 PCR	3	176	76 PCR	7.8
E08 H	8	2.21	0 - 275	118	192	10	3	M8	86 PCR	3	176	76 PCR	7.8
E11 H	11	3.04	0 - 275	135	192	10	3	M8	86 PCR	3	176	76 PCR	10.9
E15 H	15	4.14	0 - 275	135	192	10	3	M8	86 PCR	3	176	76 PCR	10.9
U18 H	18	4.97	0 - 275	125	246 X 281	10	3	13	130 PCR	4	10	210 X 240	17
K25 H	25	6.90	0 - 275	155	342 X 342	16	4	14	273 X 273				22
2E15P H	30	8.28	0 - 275	350	200 X 230	16	4	M8	175 X 175				36
2K25P H	50	13.80	0 - 275	510	400 X 350	16	4	10	320 X 273				46
3K25P H	75	20.63	0 - 275	694	400 X 350	16	4	10	320 X 273				69

Single Phase 110/120 V 47 - 400 Hz

Model Code	Current Amperes	kVA @ Max Output Volts	Output Voltage @ 240 v Input	Height Less Knob	Fixing					Alternate Fixing			Weight kgs
					Base Diameter	Shaft Diameter	No of Holes	Diam. or Thread	Position mm	No of Holes	Diam. or Thread	Position mm	
C01 L	2.25	0.28	0 - 138	75	120	10	3	M5	39 PCR				1.8
C02 L	5	0.62	0 - 138	102	120	10	3	M5	39 PCR				2.9
C03 L	7	0.87	0 - 138	125	120	10	3	M5	39 PCR				4.2
E06 L	12	1.49	0 - 138	118	192	10	3	M8	86 PCR	3	176	76 PCR	7.8
E08 L	16	1.98	0 - 138	118	192	10	3	M8	86 PCR	3	176	76 PCR	7.8
U18 L	18	2.23	0 - 138	125	246 X 281	10	3	13	130 PCR	4	10	210 X 240	17
K25 L	50	6.20	0 - 138	155	342 X 342	16	4	14	273 X 273				22
2K25P L	100	12.40	0 - 138	510	400 X 350	16	4	10	320 X 273				46
3K25P L	150	18.60	0 - 138	694	400 X 350	16	4	10	320 X 273				69

Single Phase 380/415 V 47 - 400 Hz

Model Code	Current Amperes	kVA @ Max Output Volts	Output Voltage @ 240 v Input	Height Less Knob	Fixing					Alternate Fixing			Weight kgs
					Base Diameter	Shaft Diameter	No of Holes	Diam. or Thread	Position mm	No of Holes	Diam. or Thread	Position mm	
C02 V	0.8	0.34	0 - 477	102	120	10	3	M5	39 PCR				2.9
C04 V	1.6	0.69	0 - 477	125	120	10	3	M5	39 PCR				4.2
E08 V	3	1.29	0 - 477	118	192	10	3	M8	86 PCR	3	M6	76 PCR	7.8
E15 V	6	2.57	0 - 477	135	192	10	3	M8	86 PCR	3	M6	76 PCR	10.9
K25 V	10	4.29	0 - 477	155	342 X 342	16	4	14	273 X 273	4	178	152 X 152	22
2K25P V	20	8.58	0 - 477	510	400 X 350	16	4	10	320 X 273				46
3K25P V	30	12.87	0 - 477	694	400 X 350	16	4	10	320 X 273				69

Three Phase Star 380/415 V 47 - 400 Hz

Model Code	Current Amperes	kVA @ Max Output Volts	Output Voltage @ 240 v Input	Height Less Knob	Fixing					Alternate Fixing			Weight kgs
					Base Diameter	Shaft Diameter	No of Holes	Diam. or Thread	Position mm	No of Holes	Diam. or Thread	Position mm	
3C01T H	1	0.82	0 - 477	339	128 x 128	10	4	M8	100 X 100				5.7
3C02T H	2.5	2.04	0 - 477	410	128 x 128	10	4	M8	100 X 100				9.3
3C03T H	3	2.45	0 - 477	475	128 x 128	10	4	M8	100 X 100				13.5
3C04T H	4	3.26	0 - 477	475	128 x 128	10	4	M8	100 X 100				13.5
3E06T H	6	4.90	0 - 477	325	205 x 205	10	4	M8	175 X 175				25
3E08T H	8	6.53	0 - 477	325	205 x 205	10	4	M8	175 X 175				25
3E11T H	11	8.98	0 - 477	465	205 x 205	10	4	M8	175 X 175				35
3E15T H	15	12.24	0 - 477	465	205 x 205	10	4	M8	175 X 175				35
3U18T H	18	14.69	0 - 477	500	246 X 281	10	4	M10	210 x 240				55
3K25T H	25	20.40	0 - 477	620	400 x 350	16	4	M10	320 X 273				70
6K25TP4 H	50	40.80	0 - 477	Request Drawings		16							140

