

SECTION 10

AUTOTRANSFORMERS

600 Volt Class, Three Phase

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GENERAL PURPOSE AUTOTRANSFORMERS

HPS three phase autotransformers are available for applications where small voltage corrections are necessary in a distribution system. They are frequently used as an economical alternative to general purpose distribution isolation transformers to adjust the supply voltage to match specific load requirements when load isolation from the supply line is not required Autotransformers can be used as either a step-up or step-down transformer.

THREE PHASE STANDARD SPECIFICATIONS

3 TO (15)(30)(45) KVA



(30)(45)(75) TO 500 KVA



	3 kVA to (15)(30)(45) kVA	(30)(45)(75) to 500 kVA		
UL Listed	File: E258346 (UL1604, Class I, Division 2)	File: E112313		
CSA Certified	File: LR3902	File: LR3902		
ABS Type Approval	Certificate No.: 04-HS435190/1-PDA	Optional		
Frequency	60 Hz	60 Hz		
Insulation System	130°C (80°C rise) standard on all units 180°C (115°C rise) standard on all encapsulated units	200°C (130°C rise) or 220°C (150°C rise) available.		
Encapsulation	Select units are encapsulated with electrical grade silica sand and resin compounds.	Not Applicable (ventilated core and coil)		
Enclosure Type	Heavy duty type 3R Optional type 4, 4X (Stainless steel) and 12.	Heavy duty type 3R Optional type 4, 4X (Stainless steel) and 12.		
Termination	Top accessible separate high and low voltage lead wires or copper tabs.	Front accessible compartment with high and low voltage terminals; connectors suitable for copper provided where indicated.		
Conduit Knock-Outs	Standard side and rear knock-outs on all units (no knock-outs on Stainless Steel enclosures).	Standard side knock-outs on all units (no knock- outs on Stainless Steel enclosures).		
Impedance	Less than 3%.	Less than 3%.		
Mounting	Refer to tables on the next page.	Refer to tables on next page.		
Sound Level	Meets NEMA ST-20 standards. (Optional low noise available on request)	Meets NEMA ST-20 standards. (Optional low noise available on request)		

Other voltages not listed in this section are available upon request. Please contact customer service for details, price and availability.

Note: Autotransformers incorporate a single winding design without isolation in a Wye configuration.



THREE PHASE, NEMA 3R STYLE ENCLOSURE

60 Hz

50/60 Hz**

600Y - 480Y Volts

480Y - 380Y Volts** (Alternate Rating)

kVA		Catalog	Case	Approx. Dimensions (Inches)			Approx. Weight	Mtg Type	Wiring
60 Hz	50/60 Hz	Number	(Pages 226 - 234)	Width	Depth	Height	(Lbs.)	F - Floor (Pages	(Pages 243 - 258)
3	2.4	Y003PKCB	NQT2	9.38	4.94	8.63	19	W	SCD 24
6	4.8	Y006PKCB	NQT2	9.38	4.94	8.63	26	W	SCD 24
9	7.2	Y009PKCB	NQT3	12.38	5.44	11.13	50	W	SCD 24
15	12	Y015PKCB	NQT3	12.38	5.44	11.13	60	W	SCD 24
30	24	Y030PKCF	NQT4	15.19	6.94	16.39	135	W	SCD 24
45	36	Y045PKCN	NH5	19.40	20.20	21.50	130	F or W*	SCD 24
75	60	Y075PKCN	NH5	19.40	20.20	21.50	170	F or W*	SCD 24
112.5	90	Y112PKC	NH6	23.90	25.00	28.75	245	F or W*	SCD 24
150	120	Y150PKC	NH6	23.90	25.00	28.75	285	F or W*	SCD 24
225	180	Y225PKC	NH6	23.90	25.00	28.75	360	F or W*	SCD 24
300	240	Y300PKC	NH3	26.00	21.00	38.00	500	F or W*	SCD 24
500	400	Y500PKC	NH3	26.00	21.00	38.00	650	F or W*	SCD 24
**Note: The kVA rating must be reduced for operation at the Alternative Rating 480Y, 380Y (50/60 Hz). Please refer to the 50/60 Hz column under kVA in the above table. 50/60 Hz only available at 480-380Y rating.							*WAL	l mounting kit and/of Refer to pages 2	DRIP PLATE KIT REQUIRED.

**Note: The kVA rating must be reduced for operation at the Alternative Rating 480Y, 380Y (50/60 Hz). Please refer to the 50/60 Hz column under kVA in the above table. 50/60 Hz only available at 480-380Y rating. Above units from 3 kVA to 30 kVA are encapsulated. OPTIONAL NEUTRAL AVAILABLE UPON REQUEST.

600Y, 480Y - 400Y, 240Y 208Y Volts

kVA	Catalog	Case Style	Approx. Dimensions (Inches)			Approx. Weight	Mtg Type W - Wall	Wiring Diagram
	Number	(Pages 226 - 234)	Width	Depth	Height	(Lbs.)	F - Floor	(Pages 243 - 258)
3	Y003QTCB	NQT3	12.38	5.44	11.13	49	W	SCD 14
6	Y006QTCB	NQT3	12.38	5.44	11.13	69	W	SCD 14
9	Y009QTCF	NQT4	15.19	6.94	16.39	138	W	SCD 14
15	Y015QTCF	NQT4	15.19	6.94	16.39	170	W	SCD 14
30	Y030QTCN	NH5	19.40	20.20	21.50	210	F or W*	SCD 14
45	Y045QTC	NH6	23.90	25.00	28.75	305	F or W*	SCD 14
75	Y075QTC	NH6	23.90	25.00	28.75	400	F or W*	SCD 14
112.5	Y112QTC	NH3	26.00	21.00	38.00	585	F or W*	SCD 14
150	Y150QTC	NH3	26.00	21.00	38.00	685	F or W*	SCD 14
225	Y225QTC	NH4	32.00	29.50	41.00	980	F	SCD 14

Above units from 3 kVA to 15 kVA are encapsulated. **O**PTIONAL NEUTRAL AVAILABLE UPON REQUEST.

*Wall mounting kit and/or drip plate kit required. Refer to pages 238 to 239 for details.

240Y, 216Y - 208Y

kVΔ	Catalog	Approx. Dimensions Case (Inches)				Approx. Weight	Mtg Type W - Wall	Wiring Diagram
	Number	(Pages 226 - 234)	Width	Depth	Height	(Lbs.)	F - Floor	(Pages 243 - 258)
3	Y003CECB	NQT2	9.38	4.94	8.63	19	W	SCD 15
6	Y006CECB	NQT2	9.38	4.94	8.63	28	W	SCD 15
9	Y009CECB	NQT3	12.38	5.44	11.13	49	W	SCD 15
15	Y015CECB	NQT3	12.38	5.44	11.13	58	W	SCD 15
30	Y030CECF	NQT4	15.19	6.94	16.39	115	W	SCD 15
45	Y045CECF	NQT4	15.19	6.94	16.39	130	W	SCD 15
75	Y075CECN	NH5	19.40	20.20	21.50	170	F or W*	SCD 15

Above units from 3 kVA to 45 kVA are encapsulated. **O**PTIONAL NEUTRAL AVAILABLE UPON REQUEST.

*Wall mounting kit and/or drip plate kit required. Refer to pages 238 to 239 for details.

Products listed on this page are available as 'CE Mark' products. Please consult our sales office.



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For accessories see pages 238 to 241

60 Hz

60 Hz

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If the application needs a neutral (including 3 phase 4 wire systems), the autotransformer must be ordered with the optional neutral terminals.

This option will provide the customer with a common (H0/X0) neutral connection point that is connected by the factory to the middle point of the Y winding configuration.

When selecting this option, both the Line and Load side neutral cables must be connected to the respective neutral terminals in order to ensure the proper operation of the autotransformer.

Please refer to the local electrical code requirements for grounding and the short circuit protection of a three phase autotransformer.



