



SECTION 10

AUTOTRANSFORMERS

600 Volt Class, Three Phase

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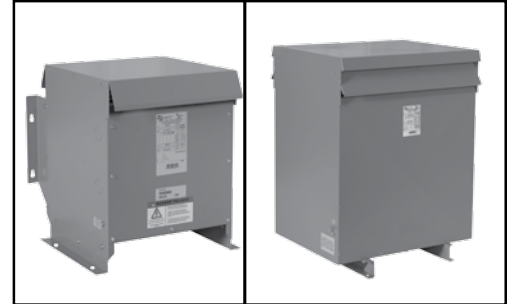
GENERAL PURPOSE AUTOTRANSFORMERS

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 cables 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



600Y - 480Y Volts
480Y - 380Y Volts** (Alternate Rating)

60 Hz
50/60 Hz**

kVA		Catalog Number	Case Style (Pages 226 - 234)	Approx. Dimensions (Inches)			Approx. Weight (Lbs.)	Mtg Type W - Wall F - Floor	Wiring Diagram (Pages 243 - 258)
60 Hz	50/60 Hz			Width	Depth	Height			
3	2.4	Y003PKCB3LOU	NQT2	9.38	4.94	8.63	19	W	SCD 24
6	4.8	Y006PKCB3LOU	NQT2	9.38	4.94	8.63	26	W	SCD 24
9	7.2	Y009PKCB3LOU	NQT3	12.38	5.44	11.13	50	W	SCD 24
15	12	Y015PKCB3LOU	NQT3	12.38	5.44	11.13	60	W	SCD 24
30	24	Y030PKCF3LOU	NQT4	15.19	6.94	16.39	135	W	SCD 24
45	36	Y045PKCN3LOU	NH5	19.40	20.20	21.50	130	F or W*	SCD 24
75	60	Y075PKCN3LOU	NH5	19.40	20.20	21.50	170	F or W*	SCD 24
112.5	90	Y112PKCH3LOU	NH6	23.90	25.00	28.75	245	F or W*	SCD 24
150	120	Y150PKCH3LOU	NH6	23.90	25.00	28.75	285	F or W*	SCD 24
225	180	Y225PKCH3LOU	NH6	23.90	25.00	28.75	360	F or W*	SCD 24
300	240	Y300PKCH3LOU	NH3	26.00	21.00	38.00	500	F or W*	SCD 24
500	400	Y500PKCH3LOU	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. Above units from 3 kVA to 30 kVA are encapsulated.

*WALL MOUNTING KIT AND/OR DRIP PLATE KIT REQUIRED. REFER TO PAGES 238 TO 239 FOR DETAILS.

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

60 Hz

kVA		Catalog Number	Case Style (Pages 226 - 234)	Approx. Dimensions (Inches)			Approx. Weight (Lbs.)	Mtg Type W - Wall F - Floor	Wiring Diagram (Pages 243 - 258)
60 Hz	50/60 Hz			Width	Depth	Height			
3		Y003QTCB3LOU	NQT3	12.38	5.44	11.13	49	W	SCD 14
6		Y006QTCB3LOU	NQT3	12.38	5.44	11.13	69	W	SCD 14
9		Y009QTCF3LOU	NQT4	15.19	6.94	16.39	138	W	SCD 14
15		Y015QTCF3LOU	NQT4	15.19	6.94	16.39	170	W	SCD 14
30		Y030QTCN3LOU	NH5	19.40	20.20	21.50	210	F or W*	SCD 14
45		Y045QTCH3LOU	NH6	23.90	25.00	28.75	305	F or W*	SCD 14
75		Y075QTCH3LOU	NH6	23.90	25.00	28.75	400	F or W*	SCD 14
112.5		Y112QTCH3LOU	NH3	26.00	21.00	38.00	585	F or W*	SCD 14
150		Y150QTCH3LOU	NH3	26.00	21.00	38.00	685	F or W*	SCD 14
225		Y225QTCH3LOU	NH4	32.00	29.50	41.00	980	F	SCD 14

Above units from 3 kVA to 15 kVA are encapsulated.

*WALL MOUNTING KIT AND/OR DRIP PLATE KIT REQUIRED. REFER TO PAGES 238 TO 239 FOR DETAILS.

240Y, 216Y - 208Y

60 Hz

kVA		Catalog Number	Case Style (Pages 226 - 234)	Approx. Dimensions (Inches)			Approx. Weight (Lbs.)	Mtg Type W - Wall F - Floor	Wiring Diagram (Pages 243 - 258)
60 Hz	50/60 Hz			Width	Depth	Height			
3		Y003CECB3LOU	NQT2	9.38	4.94	8.63	19	W	SCD 15
6		Y006CECB3LOU	NQT2	9.38	4.94	8.63	28	W	SCD 15
9		Y009CECB3LOU	NQT3	12.38	5.44	11.13	49	W	SCD 15
15		Y015CECB3LOU	NQT3	12.38	5.44	11.13	58	W	SCD 15
30		Y030CECF3LOU	NQT4	15.19	6.94	16.39	115	W	SCD 15
45		Y045CECF3LOU	NQT4	15.19	6.94	16.39	130	W	SCD 15
75		Y075CECN3LOU	NH5	19.40	20.20	21.50	170	F or W*	SCD 15

Above units from 3 kVA to 45 kVA are encapsulated.

*WALL MOUNTING KIT AND/OR DRIP PLATE KIT REQUIRED. REFER TO PAGES 238 TO 239 FOR DETAILS.

Units provided with neutral terminals. Autotransformers without Neutrals are available. Please contact your HPS Sales Representative.

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



The part numbers listed in this section are provided with neutral terminals. Autotransformers without neutral terminals are available as a special order. Please consult your HPS Sales Representative.

Autotransformers with neutrals 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 neutral terminals in order to ensure the proper operation of the autotransformer.

When installing the autotransformer special attention should be given to the neutral and grounding connections to comply with the above and also avoid possible multiple grounding situations. Please follow all applicable codes and standards and refer to the local electrical code requirements for grounding and short circuit protection of a three phase autotransformer. When necessary please review your specific application with the local inspection agency.

For more information, please visit our FAQ section of our website.

