

Vanguard - Three Phase - General Purpose

Three Phase: 3 kVA - 9 kVA Epoxy Encapsulated Series 76 ISO-Shield

Features



- Electrostatic shield between primary and secondary windings provides cleaner output voltage and helps to reduce spikes and transients.
- Epoxy-silica encapsulated core
- UL Class 220°C insulation system
- NEMA Type 3R, wall mount enclosure
- Multiple knockouts provide convenient conduit entry and exit locations through the front and bottom access wiring compartment covers.
- Ground studs provided
- Nonstandard designs are available by consulting the factory or your Dongan® representative.



3 - 9 kVA

Three Phase: 15 kVA - 150 kVA Ventilated Series 63 & 73 ISO-Shield

Features



- Electrostatic shield between primary and secondary windings provides cleaner output voltage and helps to reduce spikes and transients.
- Aluminum windings connect to bus bar style terminations equipped with NEMA standard holes for compression style or ring terminals.
- UL Class 220°C insulation system
- NEMA Type 3R, ventilated, cabinet style, floor mount enclosure
- Vibration dampening pads provide quiet operation.
- Wall Mounting brackets are available in sizes up to 75 kVA.
- Ground studs provided
- Nonstandard designs are available by consulting the factory or your Dongan® representative.



15 - 225 kVA

Vanguard - Three Phase - General Purpose

73 Series DOE 2016 Compliant

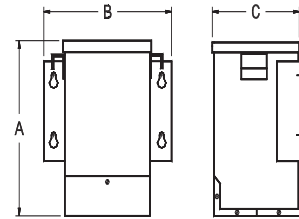
**Primary Volts 480 Delta,
Secondary Volts 240 Delta, 60 Hz**
May be used on a 480Y / 277 Volt Supply

General Information			Winding Specifications				Dimensions			
kVA* Cap.	Catalog Number	Wgt. Lbs	Taps	Maximum Amps		Conn Dia. Pg. 28	Height A	Width B	Depth C	Outline Dwg.
				Pri.	Sec.					
3.0	76-0203SH	140	0	3.6	7.2	2	14.00	16.00	7.75	1
6.0	76-0206SH	212	0	7.2	14.4	2	18.00	20.00	9.50	1
9.0	76-0209SH	265	0	10.8	21.6	2	18.00	20.00	9.50	1
DOE 2016 Compliant										
15.0	73-6215SH*	230	6	18	36	6	23.50	18.88	18.50	2
30.0	73-6230SH*	326	6	36	72	6	29.00	24.25	20.88	2
45.0	73-6245SH*	460	6	54	108	6	29.00	24.25	20.88	2
75.0	73-6275SH*	722	6	90	180	6	32.00	27.25	26.25	2
112.5	73-62112SH*	1001	6	135	270	6	41.00	34.25	26.75	2
150.0	73-62150SH*	1255	6	180	361	6	41.00	34.25	26.75	2

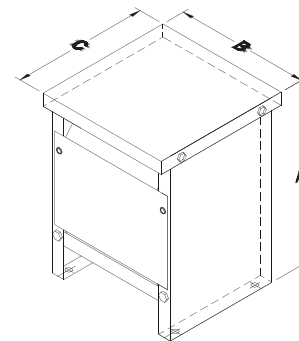
*Transformers 15 kVA through 150 kVA are equipped with a 120 volt lighting tap. Lighting tap capacity is limited to 5% of nameplate rating distributed equally on either side of XO.

**Primary Volts 480 Delta,
Secondary Volts 208Y / 120, 60 Hz**
May be used on a 480Y / 277 Volt Supply

General Information			Winding Specifications				Dimensions			
kVA Cap.	Catalog Number	Wgt. Lbs	Taps	Maximum Amps		Conn Dia. Pg. 28	Height A	Width B	Depth C	Outline Dwg.
				Pri.	Sec.					
3.0	76-0303SH	140	0	3.6	8.3	5	14.00	16.00	7.75	1
6.0	76-0306SH	212	0	7.2	16.6	5	18.00	20.00	9.50	1
9.0	76-0309SH	265	0	10.8	25	5	18.00	20.00	9.50	1
DOE 2016 Compliant										
15.0	73-6315SH	230	6	18	41	3	23.50	18.88	18.50	2
30.0	73-6330SH	326	6	36	83	3	29.00	24.25	20.88	2
45.0	73-6345SH	460	6	54	125	3	29.00	24.25	20.88	2
75.0	73-6375SH	722	6	90	208	3	32.00	27.25	26.25	2
112.5	73-63112SH	1001	6	135	312	3	41.00	34.25	26.75	2
150.0	73-63150SH	1255	6	180	416	3	41.00	34.25	26.75	2



Drawing 1
3 - 9 kVA
Wall Mount - Encapsulated - NEMA Type 3R



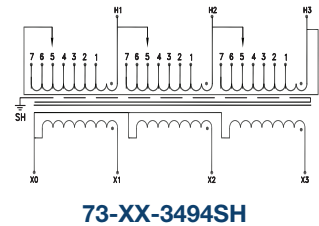
Drawing 2
15 - 150 kVA
Floor Mount - Ventilated - NEMA Type 3R

Vanguard - Three Phase - General Purpose

73 Series DOE 2016 Compliant

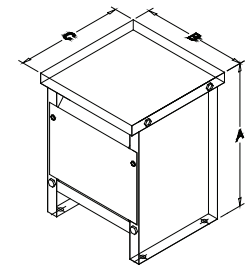
480 DELTA TO 400Y/230 60HZ

General Information				Winding Specifications				Dimensions			
kVA Cap.	Catalog Number	Hz.	Wgt. Lbs	Taps	Maximum Amps		Conn Dia.	Height A	Width B	Depth C	Outline Dwg.
					Pri.	Sec.					
3	76-3-2601SH	60	140	0	2.9	4.3	See Dia. at Right	6.37	3.75	3.37	1
6	76-6-2601SH	60	212	0	5.8	8.7		7.00	4.00	3.63	2
9	76-9-2601SH	60	265	0	8.7	13		12	4.87	5.25	3
DOE2016 Compliant											
15	73-15-3494SH	60	230	6	36	21.7	See Dia. at Right	23.5	18.88	18.5	2
30	73-30-3494SH	60	326	6	72	43.3		29	24.25	20.88	2
45	73-45-3494SH	60	460	6	108.2	65		29	24.25	20.88	2
75	73-75-3494SH	60	722	6	180.4	108.2	32	27.25	26.25	2	
112.5	73-112-3494SH	60	1001	6	270.1	162.4	41	34.25	26.75	2	
150	73-150-3494SH	60	1255	6	360.8	216.5	41	34.25	26.75	2	
225	73-225-3494SH	60	1500	6	541.2	324.8	44	46	29.75	2	



480 Volt Delta Primary, 480Y/277 Volt Secondary, 60Hz

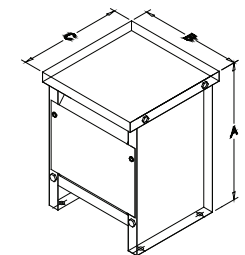
kVA	Catalog Number	Taps	Mtg. Type W = Wall F = Floor	Conn. Dia.	Height A	Width B	Depth C	Est. Ship Weight (Lbs.)	Wall Brackets (Optional)
15	73-15-512SH	2 - 2 1/2% FCAN 4 - 2 1/2% FCBN	W or F	Consult Factory	23.5	18.8	18.5	260	BR-890
30	73-30-512SH	2 - 2 1/2% FCAN 4 - 2 1/2% FCBN	W or F		29.0	24.3	20.9	420	BR-890
45	73-45-512SH	2 - 2 1/2% FCAN 4 - 2 1/2% FCBN	W or F		29.0	24.3	20.9	480	BR-890
75	73-75-512SH	2 - 2 1/2% FCAN 4 - 2 1/2% FCBN	W or F	32.0	27.3	26.3	690	BR-892	
112.5	73-112-512SH	2 - 2 1/2% FCAN 4 - 2 1/2% FCBN	F	41.0	34.3	26.8	960	N.A.	
150	73-150-512SH	2 - 2 1/2% FCAN 4 - 2 1/2% FCBN	F	41.0	34.3	26.8	1240	N.A.	



Enclosure Drawing

208 Volt Delta Primary, 480Y/277 Volt Secondary, 60 Hz

kVA	Catalog Number	Taps	Mtg. Type W = Wall F = Floor	Conn. Dia.	Height A	Width B	Depth C	Est. Ship Weight (Lbs.)	Wall Brackets (Optional)
15	73-15-565SH	2 - 2 1/2% FCAN 4 - 2 1/2% FCBN	W or F	Consult Factory	23.5	18.8	18.5	260	BR-890
30	73-30-565SH	2 - 2 1/2% FCAN 4 - 2 1/2% FCBN	W or F		29.0	24.3	20.9	420	BR-890
45	73-45-565SH	2 - 2 1/2% FCAN 4 - 2 1/2% FCBN	W or F		29.0	24.3	20.9	480	BR-890
75	73-75-565SH	2 - 2 1/2% FCAN 4 - 2 1/2% FCBN	W or F	32.0	27.3	26.3	690	BR-892	
112.5	73-112-565SH	2 - 2 1/2% FCAN 4 - 2 1/2% FCBN	F	41.0	34.3	26.8	960	N.A.	
150	73-150-565SH	2 - 2 1/2% FCAN 4 - 2 1/2% FCBN	F	41.0	34.3	26.8	1240	N.A.	



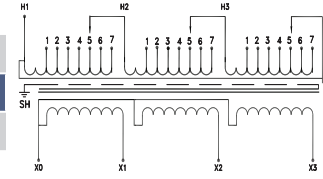
Enclosure Drawing

Vanguard - Three Phase - General Purpose

73 Series DOE 2016 Compliant

240 DELTA TO 400Y/230

General Information				Winding Specifications				Dimensions			
kVA Cap.	Catalog Number	Hz.	Wgt. Lbs	Taps	Maximum Amps		Conn Dia.	Height A	Width B	Depth C	Outline Dwg.
					Pri.	Sec.					
3	76-3-3723SH	60	140	0	7.2	4.3	See Dia. at Right	14	16	7.75	1
6	76-6-3723SH	60	212	0	14.4	8.7		18	20	9.5	1
9	76-9-3723SH	60	265	0	21.7	13		18	20	9.5	1
DOE2016 Compliant											
15	73-15-3934SH	60	230	6	36	21.7	See Dia. at Right	23.5	18.88	18.5	2
30	73-30-3934SH	60	326	6	72	43.3		29	24.25	20.88	2
45	73-45-3934SH	60	460	6	108.2	65		29	24.25	20.88	2
75	73-75-3934SH	60	722	6	180.4	108.2		32	27.25	26.25	2
112.5	73-112-3934SH	60	1001	6	270.1	162.4		41	34.25	26.75	2
150	73-150-3934SH	60	1255	6	360.8	216.5		41	34.25	26.75	2
225	73-225-3934SH	60	1500	6	541.2	324.8	44	46	29.75	2	



73-XX-3943SH

Primary 240 Delta, Secondary 208Y / 120, 60 Hz

General Information			Winding Specifications				Dimensions			
kVA Cap.	Catalog Number	Wgt. Lbs	Taps	Maximum Amps		Conn Dia.	Height A	Width B	Depth C	Outline Dwg.
				Pri.	Sec.					
3.0	76-0603SH	140	0	7.2	8.3	7	14.00	16.00	7.75	1
6.0	76-0606SH	212	0	14.4	16.6	7	18.00	20.00	9.50	1
9.0	76-0609SH	265	0	21.6	25	7	18.00	20.00	9.50	1
DOE 2016 Compliant										
15	73-6615SH	230	6	36.1	41	8	23.50	18.88	18.5	2
30	73-6630SH	326	6	72	83	8	29.00	24.25	20.88	2
45	73-6645SH	460	6	108	125	8	29.00	24.25	20.88	2
75	73-6675SH	790	6	188.4	208	8	32	27.25	26.25	2

240 Volt Delta Primary, 480Y/277 Volt Secondary, 60 H

kVA	Catalog Number	Taps	Mtg. Type W = Wall F = Floor	Conn. Dia.	Height A	Width B	Depth C	Est. Ship Weight (Lbs.)	Wall Bracketvs (Optional)
15	73-15-2698SH	2 - 2 1/2% FCAN 4 - 2 1/2% FCBN	W or F	Consult Factory	23.5	18.8	18.5	260	BR-890
30	73-30-2698SH	2 - 2 1/2% FCAN 4 - 2 1/2% FCBN	W or F		29.0	24.3	20.9	420	BR-890
45	73-45-2698SH	2 - 2 1/2% FCAN 4 - 2 1/2% FCBN	W or F		29.0	24.3	20.9	480	BR-890
75	73-75-2698SH	2 - 2 1/2% FCAN 4 - 2 1/2% FCBN	W or F		32.0	27.3	26.3	690	BR-892
112.5	73-112-2698SH	2 - 2 1/2% FCAN 4 - 2 1/2% FCBN	F		41.0	34.3	26.8	960	N.A.
150	73-150-2698SH	2 - 2 1/2% FCAN 4 - 2 1/2% FCBN	F	41.0	34.3	26.8	1240	N.A.	

Three Phase - General Purpose

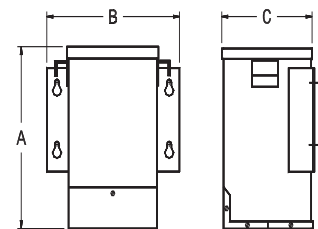
Primary 600 Delta, Secondary 240 Delta, 60 Hz

General Information			Winding Specifications				Dimensions			
kVA* Cap.	Catalog Number	Wgt. Lbs	Taps	Maximum Amps		Conn Dia. Pg. 29	Height A	Width B	Depth C	Outline Dwg.
				Pri.	Sec.					
3.0	76-01003SH	140	0	2.8	7.2	9	14.00	16.00	7.75	1
6.0	76-01006SH	212	0	5.7	14.4	9	18.00	20.00	9.50	1
9.0	76-01009SH	265	0	8.6	21.6	9	18.00	20.00	9.50	1
DOE 2016 Compliant										
15	73-61015SH*	230	6	14.4	36.1	10	23.50	18.88	18.50	2
30	73-61030SH*	326	6	28.9	72	10	29.00	24.25	20.88	2
45	73-61045SH*	460	6	43.3	108	10	29.00	24.25	20.88	2
75	73-61075SH*	722	6	72	180	10	32.00	27.25	26.25	2
112.5	73-610112SH*	1001	6	108	270	10	41.00	34.25	26.75	2
150	73-610150SH*	1255	6	144	361	10	41.00	34.25	26.75	2

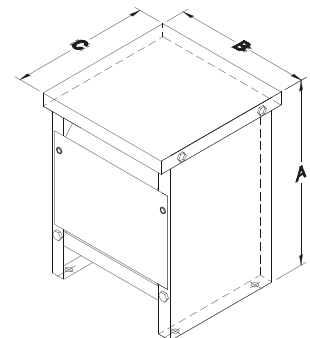
*Transformers 15 kVA through 150 kVA are equipped with a 120 volt lighting tap. Lighting tap capacity is limited to 5% of nameplate rating distributed equally on either side of XO.

Primary 600 Delta, Secondary 208Y / 120, 60 Hz

General Information			Winding Specifications				Dimensions			
kVA Cap.	Catalog Number	Wgt. Lbs	Taps	Maximum Amps		Conn Dia. Pg. 29	Height A	Width B	Depth C	Outline No.
				Pri.	Sec.					
3.0	76-0003SH	140	0	2.8	8.3	11	14.00	16.00	7.75	1
6.0	76-0006SH	212	0	5.7	16.6	11	18.00	20.00	9.50	1
9.0	76-0009SH	265	0	8.6	25	11	18.00	20.00	9.50	1
DOE 2016 Compliant										
15	73-6015SH	230	6	14.4	41.6	12	23.50	18.88	18.50	2
30	73-6030SH	326	6	28.9	83	12	29.00	24.25	20.88	2
45	73-6045SH	460	6	43.3	125	12	29.00	24.25	20.88	2
75	73-6075SH	722	6	72	208	12	32.00	27.25	26.25	2
112.5	73-60112SH	1001	6	108	312	12	41.00	34.25	26.75	2
150	73-60150SH	1255	6	144	416	12	41.00	34.25	26.75	2



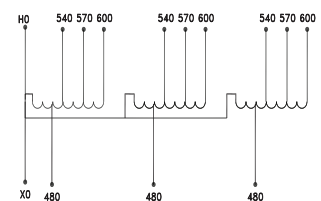
Drawing 1
3 - 9 kVA
Wall Mount - Encapsulated - NEMA
Type 3R



Drawing 2
15 - 150 kVA
Floor Mount - Ventilated - NEMA Type 3R

600 TO 480 60HZ, 480 TO 380 50/60HZ

General Information			Winding Specifications				Dimensions				
kVA Cap.	Catalog Number	Hz.	Wgt. Lbs	Taps	Maximum Amps		Conn Dia.	Height A	Width B	Depth C	Outline Dwg.
					Pri.	Sec.					
15	84-1500-4173E	50/60	104	0	14.4/18	18/22.8	See Dia. at Right	14	12.125	7.75	1
30	84-3000-4173E	50/60	152	0	28.9/36	36/45.6		18	16.125	9.5	1
45	84-4500-4173E	50/60	156	0	43.3/54	54/68.4		18	16.125	9.5	1
75	64-7500-4173	50/60	300	0	72/90.2	90.2/114		23.5	16.875	16	2
112.5	64-11250-4173	50/60	325	0	108.2/135.3	135.3/170.5		29	22.25	18.375	2
150	64-15000-4173	50/60	350	0	144.3/180.4	180.4/228		29	22.25	18.375	2
225	64-22500-4173	50/60	600	0	216.5/270	270/341.9		29	22.25	18.375	2
300	64-30000-4173	50/60	650	0	288.7/360.8	360.8/455.8		29	22.25	18.375	2
375	64-37500-4173	50/60	700	0	360.8/451	451/569.8		29	22.25	18.375	2
500	64-50000-4173	50/60	790	0	481/601	601/759.7		29	22.25	18.375	2



84-XXXX-4173E

Three Phase - General Purpose

Series 76 - Large capacity encapsulated transformers

Series 76 Three Phase Isolation Transformers offer all the advantages of encapsulated transformers - in larger kVA sizes. These transformers are particularly well suited to harsher environments where airborne contaminants may adversely effect ventilated, dry type transformers.

Available in 600 and 480 volt primaries, these transformers feature a 115°C temperature rise, 200°C insulation system, electrostatic shields, and copper windings.

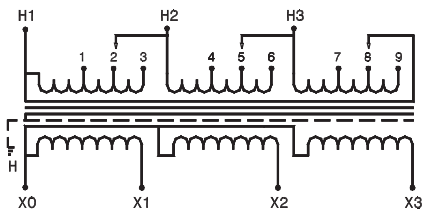
Features



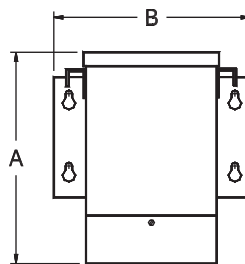
- NEMA Type 3R, indoor / outdoor enclosure.
- Copper wound, 115°C temperature rise.
- Epoxy-silica encapsulated construction.
- NEMA 4X stainless steel available, 304 standard, 316 optional

General Information				Winding Specifications				Dimensions				
kVA Cap.	Pri. 480 Δ	Pri. 480 Δ	Hz.	Taps	Maximum Amps			Wall Mount (WM) Floor Mount (FM)	Height A	Width B	Depth C	Wgt. (lbs)
	Sec. 240	Sec. 208Y/120			Pri. 600 D	Pri. 480 D	Sec. 208Y/120					
	Catalog No.	Catalog No.										
15	76-2215SH	76-2315SH	60	2	14.4	18.0	41.6	WM	18.00	20.00	9.50	220
30	76-2230SH	76-2330SH	60	2	28.9	36.1	83.0	FM	27.50	20.75	19.50	425
45	76-2245SH	76-2345SH	60	2	43.3	54.0	125.0	FM	27.50	20.75	19.50	550
75	76-2275SH*	76-2375SH	60	2	72.0	90.0	208	FM	34.75	34.00	23.00	950

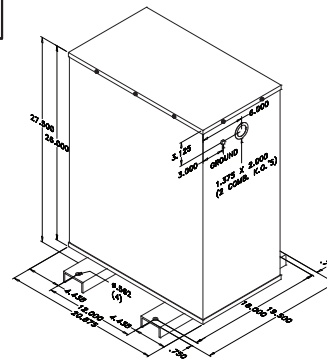
*75 kVA is not UL Listed.



Wiring Diagram - 76 Series



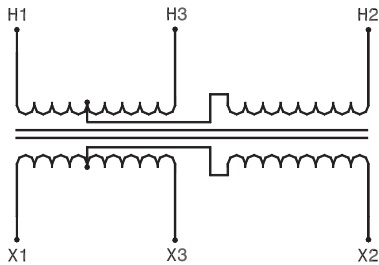
15 kVA
Wall Mount -
Encapsulated - NEMA Type 3R



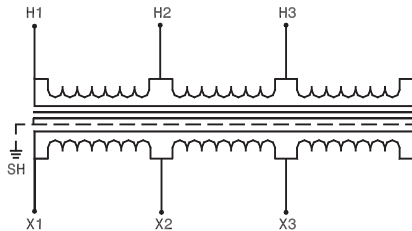
25 - 75 kVA
Floor Mount - Encapsulated - NEMA Type 3R

Three Phase Connection Diagrams

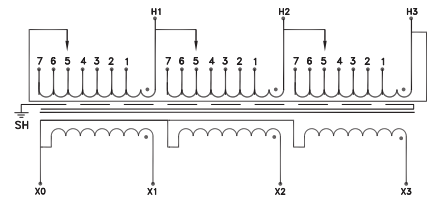
Dia. 1		Catalog Series 63-02XX		
Tap Arrangement		No Taps		
% High Voltage	High Voltage	Inter-Connect	Connect High Voltage Lines To	
100	480		H1 & H2 & H3	
% Low Voltage	Low Voltage	Inter-Connect	Connect Low Voltage Lines To	
100	240		X1 & X2 & X3	



Dia. 2		Catalog Series 76-02XXSH		
Tap Arrangement		No Taps		
% High Voltage	High Voltage	Inter-Connect	Connect High Voltage Lines To	
100	480		H1 & H2 & H3	
% Low Voltage	Low Voltage	Inter-Connect	Connect Low Voltage Lines To	
100	240		X1 & X2 & X3	

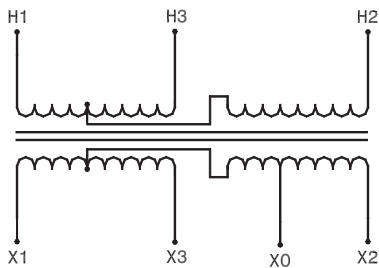


Dia. 3		Catalog Series 73-63XXSH		
Tap Arrangement		2 - 2½ FCAN (Full Capacity Above Normal) 4 - 2½ FCBN (Full Capacity Below Normal)		
% High Voltage	High Voltage	Inter-Connect	Connect High Voltage Lines To	
90	432	1		
92.5	444	2		
95	456	3		
97.5	468	4	H1-H2-H3	
100	480	5		
102.5	492	6		
105	504	7		
% Low Voltage	Low Voltage	Inter-Connect	Connect Low Voltage Lines To	
100	240		X1 & X2 & X3	
100	120*		X2 to X0 or X3 to X0	

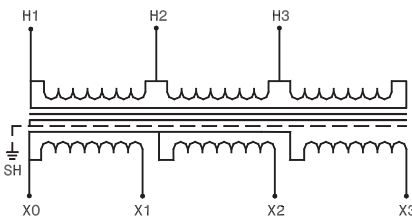


*Lighting tap capacity is limited to 5% of nameplate rating distributed equally on either side of X0.

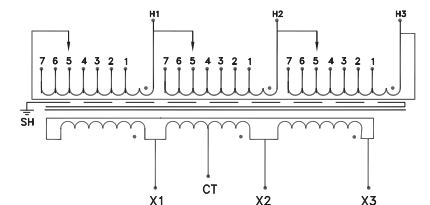
Dia. 4		Catalog Series 63-03XX		
Tap Arrangement		No Taps		
% High Voltage	High Voltage	Inter-Connect	Connect High Voltage Lines To	
100	480		H1 & H2 & H3	
% Low Voltage	Low Voltage	Inter-Connect	Connect Low Voltage Lines To	
100	208Y / 120		X1 & X2 & X3	
100	120		X1 to X0 X2 to X0 X3 to X0	



Dia. 5		Catalog Series 76-03XXSH		
Tap Arrangement		No Taps		
% High Voltage	High Voltage	Inter-Connect	Connect High Voltage Lines To	
100	480		H1 & H2 & H3	
% Low Voltage	Low Voltage	Inter-Connect	Connect Low Voltage Lines To	
100	208Y / 120		X1 & X2 & X3	
100	120		X1 to X0 X2 to X0 X3 to X0	



Dia. 6		Catalog Series 73-62XXSH		
Tap Arrangement		2 - 2½ FCAN (Full Capacity Above Normal) 4 - 2½ FCBN (Full Capacity Below Normal)		
% High Voltage	High Voltage	Inter-Connect	Connect High Voltage Lines To	
90	432	1		
92.5	444	2		
95	456	3		
97.5	468	4	H1-H2-H3	
100	480	5		
102.5	492	6		
105	504	7		
% Low Voltage	Low Voltage	Inter-Connect	Connect Low Voltage Lines To	
100	208		X1 & X2 & X3	
100	120		X1 to X0 X2 to X0 X3 to X0	



Three Phase Connection Diagrams

Dia. 7		Catalog Series 76-06XXSH	
Tap Arrangement		No Taps	
% High Voltage	High Voltage	Inter-Connect	Connect High Voltage Lines To
100	240		H1 & H2 & H3
% Low Voltage	Low Voltage	Inter-Connect	Connect Low Voltage Lines To
100	208		X1 & X2 & X3
100	120		X1 to X0 X2 to X0 X3 to X0

Dia. 8		Catalog Series 73-66XXSH	
Tap Arrangement		2 - 2½ FCAN (Full Capacity Above Normal) 4 - 2½ FCBN (Full Capacity Below Normal)	
% High Voltage	High Voltage	Inter-Connect	Connect High Voltage Lines To
90	216	1	
92.5	222	2	
95	228	3	
97.5	234	4	H1-H2-H3
100	240	5	
102.5	246	6	
105	252	7	
% Low Voltage	Low Voltage	Inter-Connect	Connect Low Voltage Lines To
100	208		X1 & X2 & X3
100	120		X1 to X0 X2 to X0 X3 to X0

Dia. 9		Catalog Series 76-01XXSH	
Tap Arrangement		No Taps	
% High Voltage	High Voltage	Inter-Connect	Connect High Voltage Lines To
100	600	--	H1 & H2 & H3
% Low Voltage	Low Voltage	Inter-Connect	Connect Low Voltage Lines To
100	240		X1 & X2 & X3

Dia. 10		Catalog Series 73-61XXSH	
Tap Arrangement		2 - 2½ FCAN (Full Capacity Above Normal) 4 - 2½ FCBN (Full Capacity Below Normal)	
% High Voltage	High Voltage	Inter-Connect	Connect High Voltage Lines To
90	540	1	
92.5	555	2	
95	570	3	
97.5	585	4	H1-H2-H3
100	600	5	
102.5	615	6	
105	630	7	
% Low Voltage	Low Voltage	Inter-Connect	Connect Low Voltage Lines To
100	240		X1 & X2 & X3
100	120*		X2, X0 or X3, X0

Dia. 11		Catalog Series 76-00XXSH	
Tap Arrangement		No Taps	
% High Voltage	High Voltage	Inter-Connect	Connect High Voltage Lines To
100	600		H1 & H2 & H3
% Low Voltage	Low Voltage	Inter-Connect	Connect Low Voltage Lines To
100	208		X1 & X2 & X3
100	120		X1 to X0 X2 to X0 X3 to X0

Dia. 12		Catalog Series 73-60XXSH	
Tap Arrangement		2 - 2½ FCAN (Full Capacity Above Normal) 4 - 2½ FCBN (Full Capacity Below Normal)	
% High Voltage	High Voltage	Inter-Connect	Connect High Voltage Lines To
90	540	1	
92.5	555	2	
95	570	3	
97.5	585	4	H1-H2-H3
100	600	5	
102.5	615	6	
105	630	7	
% Low Voltage	Low Voltage	Inter-Connect	Connect Low Voltage Lines To
100	208		X1 & X2 & X3
100	120		X1 to X0 X2 to X0 X3 to X0

*Lighting tap capacity is limited to 5% of nameplate rating distributed equally on either side of X0.

Three Phase Transformers

Series ES-31 CE Marked

Series ES Three Phase Encapsulated Transformers are designed to comply with Domestic, North American, and European Union electrical and testing standards. Series ES are UL and Canadian UL Listed by Underwriters Labs. In addition, Series ES are CE Marked, and licensed by the German testing agency TÜV Rheinland.

Series ES transformers are the answer to your export needs. With the voltage combinations listed below, and built in approvals, the ES Series provide no-nonsense solutions for equipment destined for the European Community of nations.

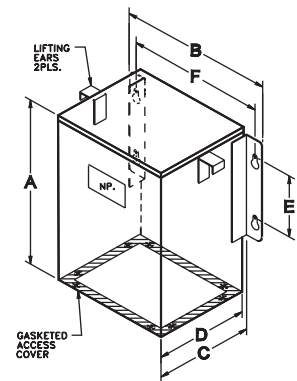
Agency Compliance



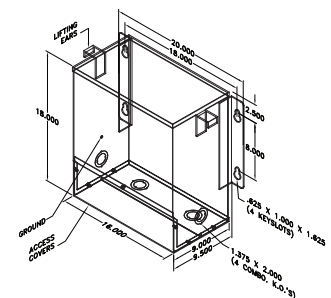
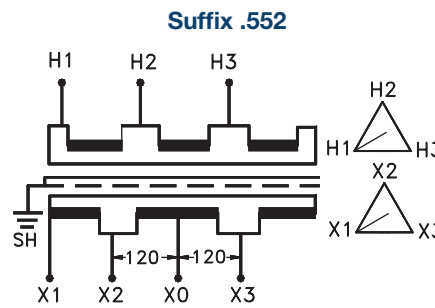
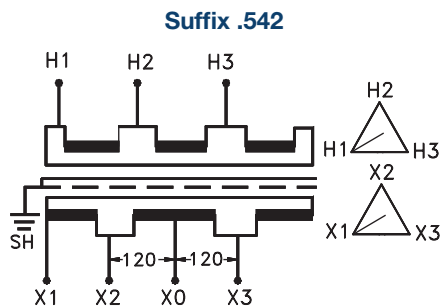
Features

- NEMA Type 12, IP54 enclosure.
- IP23 also available
- Epoxy Encapsulated.
- IEC type finger safe terminals.
- 220°C Insulation System.
- 50/60 Hz.
- All Series ES are provided with an electrostatic shield.
- All Series ES are provided with a color coded protective earth (PE) terminal.
- NEMA 3R available

General Information									
Pri. Volts	380 Delta	416 Delta	Dimensions (inches)						Weight (lbs)
Sec. Volts	240 / 120 Delta Center - Tapped	240 / 120 Delta Center - Tapped	A	B	C	Mounting			
kVA Cap.	Catalog Number	Catalog Number	A	B	C	D	E	F	Weight (lbs)
1	ES-31200.542	ES-31200.552	15.00	18.00	12.50	12.00	8.00	16.00	170
3	ES-31250.542	ES-31250.552	15.00	18.00	12.50	12.00	8.00	16.00	180
6	ES-31310.542	ES-31310.552	15.00	18.00	12.50	12.00	8.00	16.00	200
10	ES-31360.542	ES-31360.552	18.00	21.00	10.50	10.00	8.00	19.00	295
15	ES-31380.542	ES-31380.552	18.00	21.00	10.50	10.00	8.00	19.00	315
20	ES-31390.542	ES-31390.552	27.50	24.75	12.25	12.00	5.00	23.25	430
25	ES-31410.542	ES-31410.552	27.50	24.75	12.25	12.00	5.00	23.25	450
30	ES-31420.542	ES-31420.552	27.50	24.75	12.25	12.00	5.00	23.25	500
40	ES-31450.542	ES-31450.552	27.50	24.75	16.25	16.00	9.00	23.25	535



1 - 15 kVA
Wall Mount - Encapsulated -
NEMA Type 12 - IP54



20 - 40 kVA
Floor Mount - Encapsulated -
NEMA Type 12 - IP54

Primary Connections		Secondary Connections	
Pri. Voltage	Connect Incoming Lines To:	Sec. Voltage	Connect Load Lines To:
380 Delta, 3 Phase	H1, H2, H3	240 Delta, 3 Phase	X1, X2, X3
		120 1 Phase*	X0 & X2 X0 & X3

Primary Connections		Secondary Connections	
Pri. Voltage	Connect Incoming Lines To:	Sec. Voltage	Connect Load Lines To:
416 Delta, 3 Phase	H1, H2, H3	240 Delta, 3 Phase	X1, X2, X3
		120 1 Phase*	X0 & X2 X0 & X3