

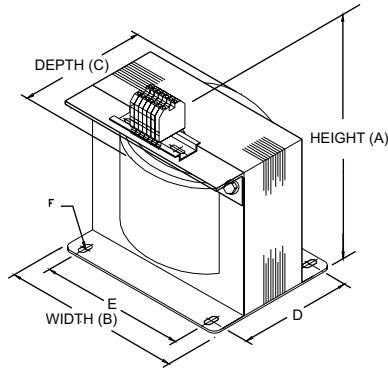
Features



- All Copper Windings
- IEC type finger safe terminals
- 220°C Insulation Systems
- 50/60 Hz
- Electrostatic Shield, (earth metal screen)
- Color coded protective earth (PE) terminal
- Nonstandard designs are available by consulting the factory or your Dongan® Representative

ES Series Voltage Combinations		
Suffix	Primary	Secondary
.326	380/400/416/440/460/480/575	110/115/120
.366	380/416/480	120/24 (24 Volt load is limited to 20% of rated kVA maximum)
.376	380/400/416	110/220 115/230 120/240
.386	220/380/400/416	95/115/120

VA	Catalog Number	Catalog Number	Catalog Number	Catalog Number	Dimensions (Inches/mm)			Mounting Dimensions (Inches/mm)			Weight
					Height A	Width B	Depth C	D	E	F	
150	ES-10100.326	ES-10100.366	ES-10100.376	ES-10100.386	5.31/135	4.50/114	4.00/102	2.75/70	3.75/95	.203x.375 (5.2 x 9.5)	8
250	ES-10130.326	ES-10130.366	ES-10130.376	ES-10130.386	6.31/160	4.50/114	5.25/133	3.25/83	3.75/95	.312 x .625(7.9 x 15.9)	10
375	ES-10150.326	ES-10150.366	ES-10150.376	ES-10150.386	6.31/160	4.50/114	6.00/152	4.50/114	3.75/95	.312 x .625(7.9 x 15.9)	13
500	ES-10170.326	ES-10170.366	ES-10170.376	ES-10170.386	6.88/175	5.25/133	5.25/133	3.25/83	4.38/111	.312 x .625(7.9 x 15.9)	15
750	ES-10190.326	ES-10190.366	ES-10190.376	ES-10190.386	7.81/198	6.38/162	6.00/152	4.00/102	5.31/135	.312 x .625(7.9 x 15.9)	26
1000	ES-10200.326	ES-10200.366	ES-10200.376	ES-10200.386	7.81/198	6.38/162	6.50/165	4.50/114	5.31/135	.312 x .625(7.9 x 15.9)	30
1500	ES-10210.326	ES-10210.366	ES-10210.376	ES-10210.386	8.81/224	7.50/191	6.00/152	4.00/102	6.00/152	.312 x .625(7.9 x 15.9)	36
2000	ES-10230.326	ES-10230.366	ES-10230.376	ES-10230.386	8.81/224	7.50/191	7.00/178	5.00/127	6.00/152	.312 x .625(7.9 x 15.9)	50
3000	ES-10250.326		ES-10250.376	ES-10250.386	8.88/226	7.50/191	8.00/203	6.00/152	6.00/152	.312 x .625(7.9 x 15.9)	60
5000	ES-10300.326		ES-10300.376	ES-10300.386	10.31/262	9.00/229	9.00/229	6.50/165	6.50/165	.312 x .625(7.9 x 15.9)	90



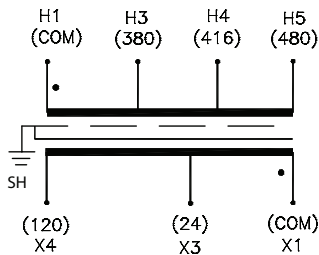
Series ES
Style of terminals may vary depending on availability.

A Certificate of Compliance is available by contacting your Dongan® Representative or the factory Customer Service Department.

Dimensions and weights may change. Consult factory for Certified Drawings.

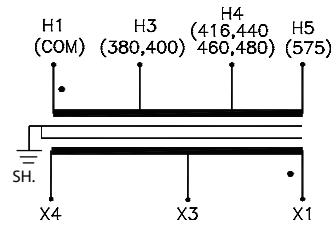
ES Series

Suffix - .366			
Primary		Secondary	
Voltage	Connect Incoming Lines To	Secondary Voltage	Connect Load To
380	H1 & H3	24*	X1 & X3
416	H1 & H4	120	X1 & X4
480	H1 & H5		

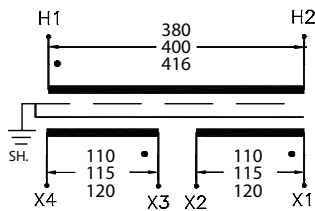


*Maximum permissible load on the 24 volt secondary is limited to 20% of the transformer's kVA. When 24 and 120 volts are used simultaneously, the total of both loads must not exceed the total transformer kVA.

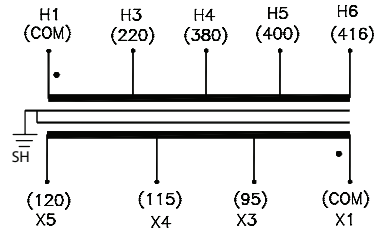
Suffix - .326			
Primary		Secondary	
Voltage	Connect Incoming Lines To	Secondary Voltage	Connect Load To
380	H1 & H3	110	X1 & X3
400	H1 & H3	115	X1 & X3
416	H1 & H4	115	X1 & X4
440	H1 & H4	120	X1 & X4
460	H1 & H4	115	X1 & X3
480	H1 & H4	120	X1 & X3
575	H1 & H5	120	X1 & X4



Suffix - .376				
Primary		Secondary		
Voltage	Connect Incoming Lines To	Secondary Voltage	Interconnect	Connect Load To
380	H1 & H2	110	X1 to X3	X1 & X4
400	H1 & H2	115	&	X1 & X4
416	H1 & H2	120	X2 to X4	X1 & X4
380	H1 & H2	220		X1 & X4
400	H1 & H2	230	X2 to X3	X1 & X4
416	H1 & H2	240		X1 & X4
416	H1 & H2	120/240	X2 to X3	X1 & X2/X3 & X4



Suffix - .386			
Primary		Secondary	
Voltage	Connect Incoming Lines To	Secondary Voltage	Connect Load To
220	H1 & H3	95	X1 & X3
380	H1 & H4	115	X1 & X4
400	H1 & H5	120	X1 & X5
416	H1 & H6		



European Series CE Marked ES-11 Single Phase Transformers

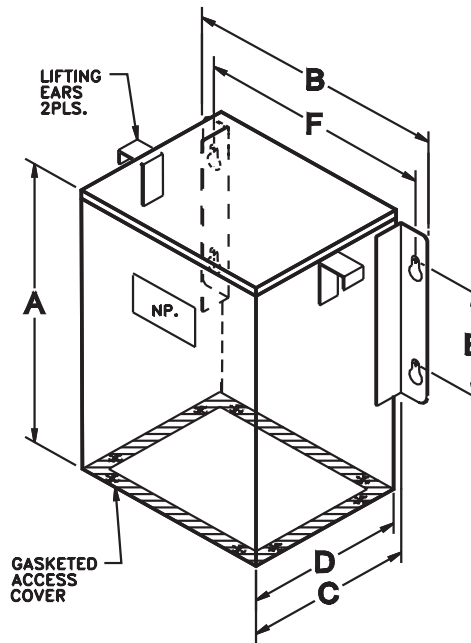
Series ES Single Phase Encapsulated Transformers are designed to comply with Domestic, North American, and European Union electrical and testing standards. Series ES are UL and Canadian UL Listed by Underwriters Labs. In addition, Series ES are CE Marked, and licensed by the German testing agency TÜV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

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.

Dongan® provides finger safe terminals on all transformers.

The voltage combinations offered represent some of the most universally used. However, any combination of primary and secondary incorporating voltages of 600 volts and below is available on a short lead time, special order basis.

NEMA Type 3R- IP23 available



Series ES-11
Wall Mount - Encapsulated - NEMA Type 12 - IP54

General Information									
Pri. Volts	380/400/416/440 460/480/575	220/380/400/416	Dimensions (inches)						Weight (lbs)
Sec. Volts	110/115/120	120/240	A	B	C	Mounting			
kVA Cap.	Catalog Number	Catalog Number	A	B	C	D	E	F	Weight (lbs)
.250	ES-11130.326	ES-11130.359	10.50	10.00	6.62	6.12	4.00	8.50	35
.500	ES-11170.326	ES-11170.359	10.50	10.00	6.62	6.12	4.00	8.50	45
.750	ES-11190.326	ES-11190.359	10.50	10.00	6.62	6.12	4.00	8.50	55
1.0	ES-11200.326	ES-11200.359	12.00	10.81	7.19	6.69	6.00	9.13	75
1.5	ES-11210.326	ES-11210.359	14.00	14.00	9.25	8.75	8.00	12.00	90
2.0	ES-11230.326	ES-11230.359	14.00	14.00	9.25	8.75	8.00	12.00	110
3.0	ES-11250.326	ES-11250.359	14.00	14.00	9.25	8.75	8.00	12.00	120
5.0	ES-11300.326	ES-11300.359	14.00	14.38	10.00	9.50	8.00	12.38	150
7.5	ES-11330.326	ES-11330.359	15.00	18.00	12.50	12.00	8.00	16.00	165
10.0	ES-11360.326	ES-11360.359	15.00	18.00	12.50	12.00	8.00	16.00	190
15.0	ES-11380.326	ES-11380.359	15.00	18.00	12.50	12.00	8.00	16.00	270
25.0	ES-11410.326	ES-11410.359	18.00	21.00	15.00	14.50	8.00	19.00	350

Single Phase Transformers

Features

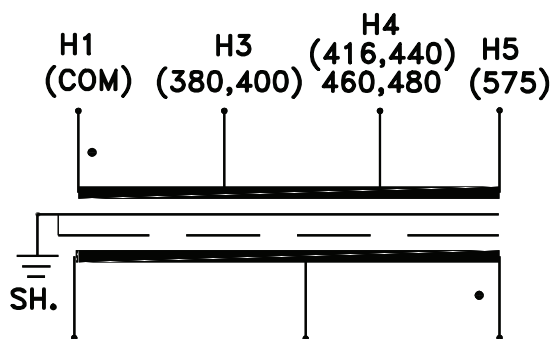
Agency Compliance



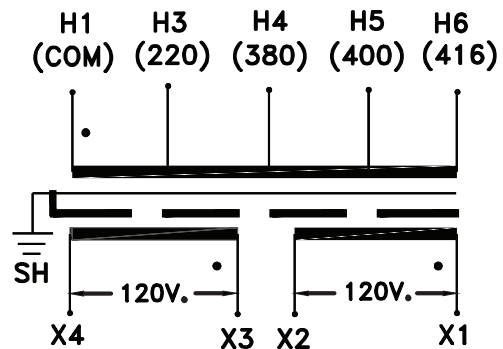
- NEMA Type 12, IP54 enclosure.
- IEC type finger safe terminals.
- 220°C (H) Insulation System.
- 50/60 Hertz.
- ES provided with an electrostatic shield.
- ES provided with protective earth (PE) terminal.



Suffix .326				
Primary Connections		Secondary Connections		
Pri. Voltage	Connect Incoming Lines To:	Sec. Voltage	Connect Load Lines To:	
380	H1 & H3	110	X1 & X3	
400	H1 & H3	115	X1 & X3	
416	H1 & H4	115	X1 & X4	
440	H1 & H4	120	X1 & X4	
460	H1 & H4	115	X1 & X3	
480	H1 & H4	120	X1 & X3	
575	H1 & H5	120	X1 & X4	



Suffix .359				
Primary Connections		Secondary Connections		
Pri. Voltage	Connect Incoming Lines To:	Sec. Voltage	Interconnect	Connect Load Lines To:
220	H1 & H3	120	X1 to X3 X2 to X4	X1 & X4
380	H1 & H4	240	X2 to X3	X1 & X4
400	H1 & H5	120/240	X2 to X3	X1 & X2X3 & X4
416	H1 & H6			



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.

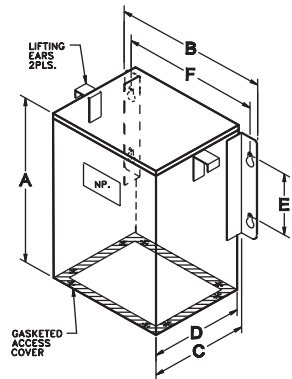
Agency Compliance



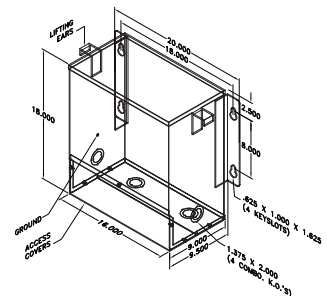
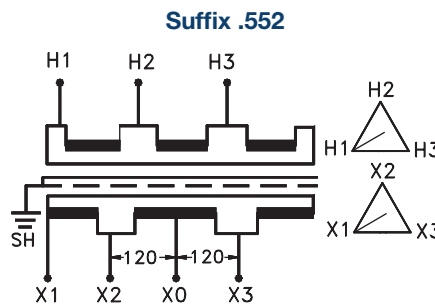
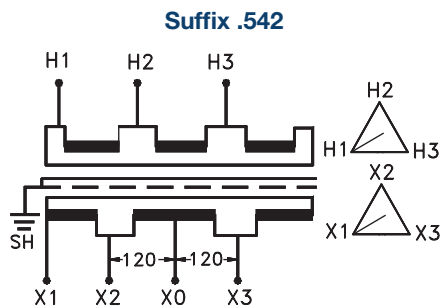
Features

- 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				D	E	F	
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