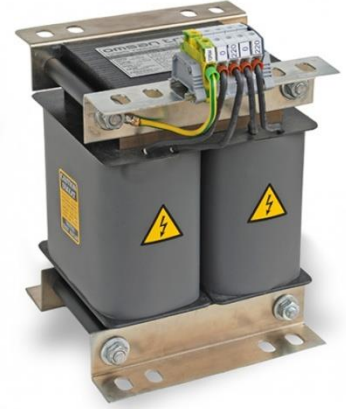


# SINGLE PHASE TRANSFORMERS

## SECURITY ISOLATION TRANSFORMERS

Single or double phase transformers are used on energy systems either as security - isolation type transformer or step up -down transformer, in some cases step-up and step down transformers can be produces as auto transformer for reducing the price.

- Nominal Power
- Isolation type or auto type
- Input-output voltage and current values according to duty factor
- Galvanic isolation
- Input - Output voltage steps
- Input-output connection materials
- Isolation class
- Metal enclosure and ventilation
- Mounting type ( horizontal - vertical ) ... Etc



GUVEN-IS determines these technical specifications by communicating directly to the customer before designing process in order to avoid any problem. When every detail is clear a sample transformer is produced and tested by GUVEN-IS and submitted to the customer for the final approving before the ordering.

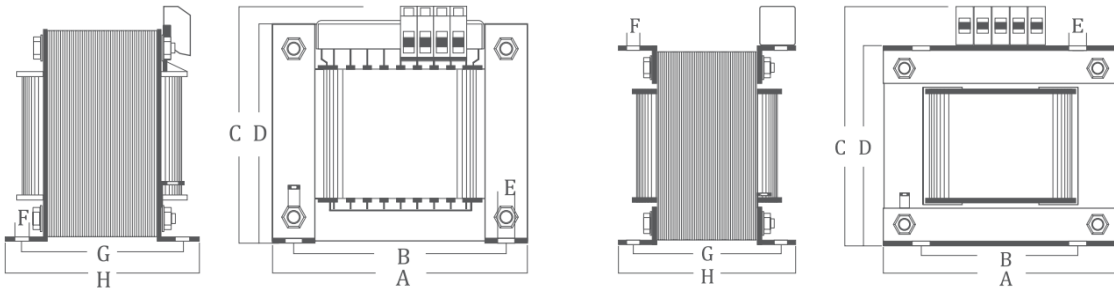
### GENERAL THECHNICAL SPECIFICATIONS

STANDARDS	EN 61558-1, EN 61558 2-4, EN 61558 2-6 , CE certified
DESIGN	Security isolation type single phase transformer
NOMINAL POWER	E-I lamination :10 VA ... 15 kVA / U-I lamination : 500 VA - 50 kVA
NOMINAL INPUT VOLTAGE	< 1000 V AC
NOMINAL OUTPUT VOLTAGE	< 1000 V AC
NOMINAL FREQUENCY	< 500 Hz
MAGNETIC CIRCUIT	1,8 W/kg power loss 0,50 mm lamination (0,35mm is optional)
WINDINGS	Electrolytic copper or aluminum
CONNECTIONS	Transformer terminal blocks, rail terminals, copper cable lugs, copper bar
PROTECTION ( electricity, optional)	Thermistor 90 °C 1 NK contact
PROTECTION CLASS	IP 00 ( It may also within metal enclosure according to desired IP class )
ISOLATION CLASS	1. class, upon request; B 120 °C, F 155 °C or H 180 °C
OPERATING TEMPERATURE	Ta 40 °C / B, Ta 55 °C / F or Ta 60 °C / H
IMPREGNATION	According to insulation class, protection against moisture, lesser sound level
COOLING	Natural or air forced ventilation upon request
HUMIDITY	%90 non-condensing ( DIN 40040 )
OPERATING ALTITUDE	0 - 2000 m
AMBIENT TEMPERATURE	- 20 °C ..... + 55 °C (Ta 60 °C / H)
STORING TEMPERATURE	- 20 °C ..... + 70 °C
SPECIAL DESIGN	Special design is possible according to voltage, current and power values, with or without metal enclosure and ventilation in desired IP standard.



# SINGLE PHASE TRANSFORMERS

## SECURITY ISOLATION TRANSFORMERS



### SECURITY ISOLATION TYPE TRANSFORMER (E-I LAMINATION)

#### HORIZONTAL MOUNTING TYPE DIMENSIONS

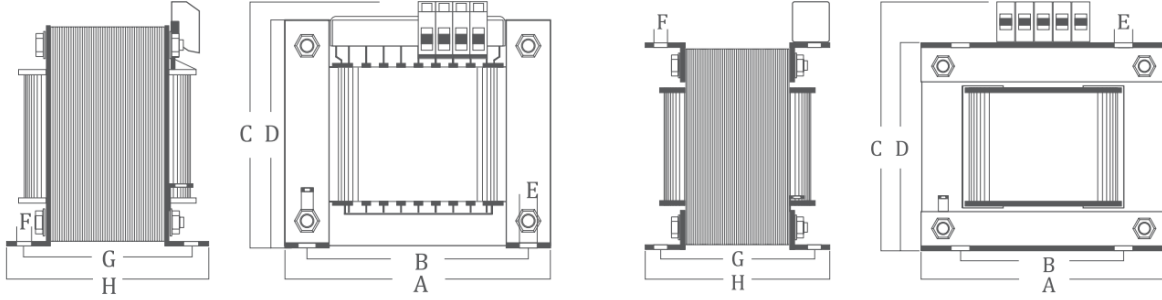
PRODUCT CODE	POWER(VA)	MODEL	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	WEIGHT (kg)
GVN İTR EI Y 10	10	A	60	50	69	51	5	9	39	51	0,52
GVN İTR EI Y 15	15	A	60	50	69	51	5	9	41	53	0,56
GVN İTR EI Y 20	20	A	60	50	69	51	5	9	47	59	0,66
GVN İTR EI Y 25	25	A	60	50	69	51	5	9	52	64	0,77
GVN İTR EI Y 30	30	A	66	56	74	55	4,5	6	42	54	0,91
GVN İTR EI Y 35	35	A	76	65	82	65	5	9	42	58	0,98
GVN İTR EI Y 40	40	A	76	65	82	65	5	9	51	67	1,31
GVN İTR EI Y 50	50	A	84	71	88	72	4,5	10	49	65	1,37
GVN İTR EI Y 65	65	A	84	71	88	72	4,5	10	53	69	1,7
GVN İTR EI Y 75	75	A	84	71	88	72	4,5	10	63	79	2,1
GVN İTR EI Y 90	90	A	84	71	88	72	4,5	10	74	90	2,35
GVN İTR EI Y 100	100	A	96	81	98	80	5	11	70	86	2,8
GVN İTR EI Y 125	125	A	96	81	98	80	5	11	80	96	3,1
GVN İTR EI Y 150	150	A-B	108	78	112	92	5	7,5	67	83	3,3
GVN İTR EI Y 175	175	A-B	108	78	112	92	5	7,5	77	93	3,45
GVN İTR EI Y 200	200	A-B-C-D	120	85	122	102	7	10	81	95	4,4
GVN İTR EI Y 250	250	A-B-C-D	120	85	122	102	7	10	89,5	103,5	5,5
GVN İTR EI Y 300	300	B-C-D	133	112	135	113	7	11	86	106	6,8
GVN İTR EI Y 350	350	B-C-D	133	112	135	113	7	11	93	113	7,2
GVN İTR EI Y 400	400	B-C-D	150	104	147	127	9	13	85	105	7,35
GVN İTR EI Y 500	500	B-C-D	150	104	147	127	9	13	100	120	9,2
GVN İTR EI Y 750	750	B-C-D	171	142	165	145	9	13	98	128	11,5
GVN İTR EI Y 1000	1000	B-C-D	171	142	165	145	9	13	113	143	14
GVN İTR EI Y 1250	1250	C-D	192	140	183	163	9	16	123	149	18
GVN İTR EI Y 1500	1500	C-D	192	140	183	163	9	16	133	159	19,5
GVN İTR EI Y 1750	1750	C-D	192	140	183	163	9	16	143	170	21,5
GVN İTR EI Y 2000	2000	C-D	192	140	183	163	9	16	163	190	25,6
GVN İTR EI Y 2500	2500	C-D	192	140	183	163	9	16	183	210	30
GVN İTR EI Y 3000	3000	C-D	250	180	231	211	11	22	148	178	35
GVN İTR EI Y 3500	3500	C-D	250	180	231	211	11	22	148	178	36,5
GVN İTR EI Y 4000	4000	C-D	250	180	231	211	11	22	168	198	43,5
GVN İTR EI Y 5000	5000	C-D	250	180	231	211	11	22	188	213	56,5
GVN İTR EI Y 6000	6000	C-D	250	180	231	211	11	22	208	238	61,5
GVN İTR EI Y 7500	7500	D-E-F	300	193	273	253	13	20	164	210	63,5
GVN İTR EI Y 9000	9000	D-E-F	300	193	273	253	13	20	184	230	72
GVN İTR EI Y 10000	10000	D-E-F	300	193	273	253	13	20	184	230	80
GVN İTR EI Y 12500	12500	D-E-F	300	193	273	253	13	20	214	260	98
GVN İTR EI Y 15000	15000	D-E-F	300	193	273	253	13	20	234	280	108

\*\* DIMENSIONS OF TRANSFORMERS MANUFACTURED UPON REQUEST MAY BE DIFFERENT THAN WRITTEN IN THIS TABLE.



# SINGLE PHASE TRANSFORMERS

## SECURITY ISOLATION TRANSFORMERS



SECURITY ISOLATION TYPE TRANSFORMER (E-I LAMINATION)

VERTICAL MOUNTING TYPE DIMENSIONS

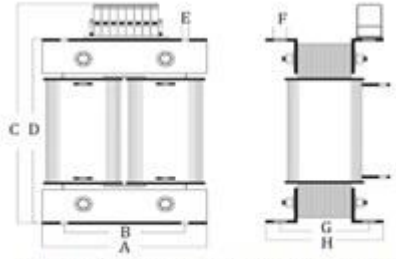
PRODUCT CODE	POWER (VA)	MODEL	A (mm)	B (mm)	C (mm)	D (mm)	E(mm)	F (mm)	G (mm)	H (mm)	WEIGHT (kg)
GVN İTR EI D 10	10	B	50	41	70	61	4,2	6,5	38	46	0,52
GVN İTR EI D 15	15	B	50	41	70	61	4,2	6,5	40	48	0,56
GVN İTR EI D 20	20	B	50	41	70	61	4,2	6,5	46	54	0,66
GVN İTR EI D 25	25	B	50	41	70	61	4,2	6,5	51	59	0,77
GVN İTR EI D 30	30	B	54	44	76	67	4,7	5,8	42	52	0,91
GVN İTR EI D 35	35	B	63	52	86	77	4,5	6,5	42	56	0,98
GVN İTR EI D 40	40	B	63	52	86	77	4,5	6,5	51	64	1,31
GVN İTR EI D 50	50	B	70	56	95	85	6	8,5	47	61	1,37
GVN İTR EI D 65	65	B	70	56	95	85	6	8,5	50	64	1,7
GVN İTR EI D 75	75	B	70	56	95	85	6	8,5	60	74	2,1
GVN İTR EI D 90	90	B	70	56	95	85	6	8,5	69	83	2,35
GVN İTR EI D 100	100	B	81	64	106	98	6	10	66	81	2,8
GVN İTR EI D 125	125	B	81	64	106	98	6	10	76	91	3,1
GVN İTR EI D 150	150	A-B	90	73	120	110	6,3	11	67	84	3,3
GVN İTR EI D 175	175	A-B	90	73	120	110	6,3	11	77	94	3,45
GVN İTR EI D 200	200	A-B	100	80	132	122	6	10	81	98	4,4
GVN İTR EI D 250	250	A-B	100	80	132	122	6	10	89,5	107	5,5
GVN İTR EI D 300	300	A	110	88	145	135	7	11	86	108	6,8
GVN İTR EI D 350	350	A	110	88	145	135	7	11	93	115	7,2
GVN İTR EI D 400	400	A-C	125	100	170	153	9	15,8	91	117	7,35
GVN İTR EI D 500	500	A-C	125	100	170	153	9	15,8	106	132	9,2
GVN İTR EI D 750	750	A-C	144	117	190	183	9	17	109	130	11,5
GVN İTR EI D 1000	1000	A-C	144	117	190	183	9	17	124	155	14
GVN İTR EI D 1250	1250	A-C	160	129	212	195	9	17	118	153	18
GVN İTR EI D 1500	1500	A-C	160	129	212	195	9	17	128	163	19,5
GVN İTR EI D 1750	1750	A-C	160	129	212	195	9	17	138	173	21,5
GVN İTR EI D 2000	2000	A-C	160	129	212	195	9	17	158	193	25,6
GVN İTR EI D 2500	2500	A-C	160	129	212	195	9	17	178	213	30
GVN İTR EI D 3000	3000	A-C	209	166	270	254	12,7	20	148	189	35
GVN İTR EI D 3500	3500	A-C	209	166	315	254	12,7	20	148	189	36,5
GVN İTR EI D 4000	4000	A-C	209	166	315	254	12,7	20	168	209	43,5
GVN İTR EI D 5000	5000	A-C	209	166	315	254	12,7	20	188	229	56,5
GVN İTR EI D 6000	6000	A-C	209	166	315	254	12,7	20	208	249	61,5
GVN İTR EI D 7500	7500	C-E-F	250	200	365	304	12,7	19	160	206	63,5
GVN İTR EI D 9000	9000	C-E-F	250	200	365	304	12,7	19	180	226	72
GVN İTR EI D 10000	10000	C-E-F	250	200	365	304	12,7	19	200	246	80
GVN İTR EI D 12500	12500	C-E-F	250	200	365	304	12,7	19	230	276	98
GVN İTR EI D 15000	15000	C-E-F	250	200	365	304	12,7	19	250	296	108



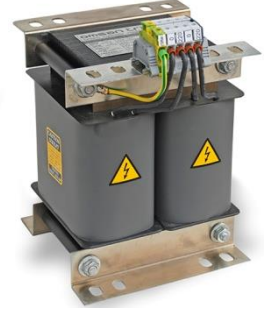
\*\* DIMENSIONS OF TRANSFORMERS MANUFACTURED UPON REQUEST MAY BE DIFFERENT THAN WRITTEN IN THIS TABLE.

# SINGLE PHASE TRANSFORMERS

## SECURITY ISOLATION TRANSFORMERS



UI TRANSFORMERS TYPE VERTICAL MOUNTING DIMENSIONS



### SECURITY ISOLATION TYPE TRANSFORMER (U-I LAMINATION)

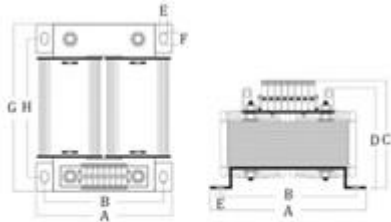
#### VERTICAL MOUNTING TYPE DIMENSIONS

PRODUCT	CODE	POWER (VA)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	WEIGHT (kg)
GVN İTR UI D 0,5		0,5	160	120	225	204	17	9	78	100	6,7
GVN İTR UI D 0,6		0,6	160	120	225	204	17	9	78	100	7
GVN İTR UI D 0,75		0,75	160	120	225	204	17	9	88	110	8,4
GVN İTR UI D 0,8		0,8	160	120	225	204	17	9	88	110	8,75
GVN İTR UI D 0,9		0,9	160	120	225	204	17	9	98	120	9,8
GVN İTR UI D 1		1	160	120	225	204	17	9	98	120	10,5
GVN İTR UI D 1,25		1,25	160	120	225	204	17	9	113	135	13,2
GVN İTR UI D 1,5		1,5	200	150	275	255	17	9	106	134	16,5
GVN İTR UI D 1,75		1,75	200	150	275	255	17	9	116	144	19,2
GVN İTR UI D 2		2	200	150	275	255	17	9	126	154	22
GVN İTR UI D 2,5		2,5	200	150	275	255	17	9	136	164	24,5
GVN İTR UI D 3		3	200	150	315	255	17	9	146	174	27,5
GVN İTR UI D 4		4	200	150	315	255	17	9	166	194	33
GVN İTR UI D 5		5	240	180	365	305	17	9	162	196	41
GVN İTR UI D 6		6	240	180	365	305	17	9	172	206	44,6
GVN İTR UI D 7		7	280	210	420	360	20	13	146	186	45
GVN İTR UI D 8		8	280	210	420	360	20	13	156	196	50,9
GVN İTR UI D 9		9	280	210	420	360	20	13	166	206	56,5
GVN İTR UI D 10		10	280	210	420	360	20	13	181	221	65
GVN İTR UI D 12,5		12,5	320	240	470	410	20	13	162	208	70,5
GVN İTR UI D 15		15	320	240	470	410	20	13	182	228	86
GVN İTR UI D 20		20	320	240	470	410	20	13	212	258	109
GVN İTR UI D 25		25	320	240	470	410	20	13	132	278	125
GVN İTR UI D 30		30	400	300	570	510	20	13	202	258	130
GVN İTR UI D 35		35	400	300	570	510	20	13	222	278	154
GVN İTR UI D 40		40	400	300	570	510	20	13	242	298	177
GVN İTR UI D 50		50	400	300	570	510	20	13	272	328	212

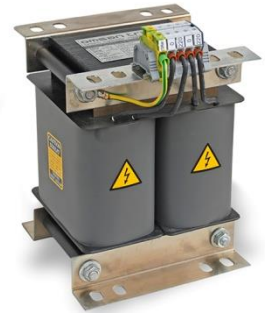
\*\* DIMENSIONS OF TRANSFORMERS MANUFACTURED UPON REQUEST MAY BE DIFFERENT THAN WRITTEN IN THIS TABLE.

# SINGLE PHASE TRANSFORMERS

## SECURITY ISOLATION TRANSFORMERS



UI TRANSFORMERS TYPE  
HORIZONTAL MOUNTING DIMENSIONS



### SECURITY ISOLATION TYPE TRANSFORMER (U-I LAMINATION)

#### HORIZONTAL MOUNTING TYPE DIMENSIONS

PRODUCT CODE	POWER (VA)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	WEIGHT (kg)
GVN İTR UI Y 0,5	0,5	160	140	142	142	17	9	200	160	6,7
GVN İTR UI Y 0,6	0,6	160	140	142	142	17	9	200	160	7
GVN İTR UI Y 0,75	0,75	160	140	152	152	17	9	200	160	8,4
GVN İTR UI Y 0,8	0,8	160	140	152	152	17	9	200	160	8,75
GVN İTR UI Y 0,9	0,9	160	140	162	162	17	9	200	160	9,8
GVN İTR UI Y 1	1	160	140	162	162	17	9	200	160	10,5
GVN İTR UI Y 1,25	1,25	160	140	177	177	17	9	200	160	13,2
GVN İTR UI Y 1,5	1,5	200	180	167	167	17	9	250	200	16,5
GVN İTR UI Y 1,75	1,75	200	180	177	177	17	9	250	200	19,2
GVN İTR UI Y 2	2	200	180	187	187	17	9	250	200	22
GVN İTR UI Y 2,5	2,5	200	180	197	197	17	9	250	200	24,5
GVN İTR UI Y 3	3	200	180	207	207	17	9	250	200	27,5
GVN İTR UI Y 4	4	200	180	227	227	17	9	250	200	33
GVN İTR UI Y 5	5	240	220	214	214	17	9	300	240	41
GVN İTR UI Y 6	6	240	220	224	224	17	9	300	240	44,6
GVN İTR UI Y 7	7	280	245	200	360	20	13	350	280	45
GVN İTR UI Y 8	8	280	245	210	360	20	13	350	280	50,9
GVN İTR UI Y 9	9	280	245	220	360	20	13	350	280	56,5
GVN İTR UI Y 10	10	280	245	235	360	20	13	350	280	65
GVN İTR UI Y 12,5	12,5	320	295	250	250	20	13	400	320	70,5
GVN İTR UI Y 15	15	320	295	270	270	20	13	400	320	86
GVN İTR UI Y 20	20	320	295	300	300	20	13	400	320	109
GVN İTR UI Y 25	25	320	295	320	320	20	13	400	320	125
GVN İTR UI Y 30	30	400	370	300	300	20	13	500	400	130
GVN İTR UI Y 35	35	400	370	330	330	20	13	500	400	154
GVN İTR UI Y 40	40	400	370	350	350	20	13	500	400	177
GVN İTR UI Y 50	50	400	370	380	380	20	13	500	400	212

\*\* DIMENSIONS OF TRANSFORMERS MANUFACTURED UPON REQUEST MAY BE DIFFERENT THAN WRITTEN IN THIS TABLE.