



SEALED TRANSFORMERS

FEATURES:

- VDE, CUL, UL, CE CQC APPROVED
- Vacuum Sealed
- Split Bobbin Design
- Self-Extinguishing Plastics UL94V-0
- Dielectric Strength: 4200Vrms
- Operation Frequency: 50/60Hz
- Inherently Energy Limited
- Resin Class B IEC 85 (20000 h Testing to IEC 216)
- Conforms to EN 61558 EN 60950/UL 1585 UL506
- 100% Production Tested

* To be noted: 2x18V and 2x24V models are not VDE approved, those transformers meet all requirement of EN 61558-2-4.

APPLICATIONS:

- Vending Machines
- Robotics
- Test & Measurement Instruments
- Parking Lot Gate Controls
- Small Power Supplies
- Smoke Detectors
- Carbon Monoxide Detectors
- Electric Power Meters
- When protection from elements is needed
- When space on the PCB is limited



KEY SPECIFICATIONS:

- Input voltage and frequency: 115/230V@50/60 Hz
- Secondary voltage: See "Electrical Table"
- Ambient temperature: 70° C max. allowed
- Insulation resistance:
 - 100M Ohm min.@500VDC PRI. to SEC.
- Hi-Pot:
 - 4200Vrms 1 minute@PRI. to SEC., when the primary input voltage is 230V
 - 2800Vrms 1 minute@PRI. to SEC., when the primary input voltage is 115V
- Approvals:
 - UL506, UL1585 class 2 and class 3, VDE, EN61558, EN60950
- When the primary is 115V input, the transformers are not CQC approved

ORDERING INFORMATION:

Series		ST30	1	S	06	006
ST30						
Input Voltage						
1 = 115V						
2 = 230V						
Number of Outputs						
S = Single Output						
D = Double Outputs						
Secondary Voltage						
06 = 6V	15 = 15V					
09 = 9V	18 = 18V					
12 = 12V	24 = 24V					
Rated Power						
006 = 0.6VA	020 = 2.0 VA					
010 = 1.0 VA	023 = 2.3 VA					
012 = 1.2 VA	024 = 2.4 VA					
015 = 1.5 VA	027 = 2.7 VA					
017 = 1.7 VA	028 = 2.8 VA					
018 = 1.8 VA						



SEALED TRANSFORMERS

ELECTRICAL TABLES FOR ST30 SERIES

RATED POWER 0.6 VA

Part No. (Input: 115V)	Part No. (Input: 230V)	Secondary Voltage (V)		Secondary Current (mA)	No-load Voltage (V)(max)	Ambient Temp. (°C)	Dimension H (mm)
ST301S06006	ST302S06006	6±15%		100	10.5	T 70 B	15.4 MAX
ST301S09006	ST302S09006	9±15%		66	15.5	T 70 B	15.4 MAX
ST301S12006	ST302S12006	12±15%		50	20.5	T 70 B	15.4 MAX
ST301S15006	ST302S15006	15±15%		40	25.4	T 70 B	15.4 MAX
ST301S18006	ST302S18006	18±15%		33	30.4	T 70 B	15.4 MAX
ST301S24006	ST302S24006	24±15%		25	40.4	T 70 B	15.4 MAX
ST301D06006	ST302D06006	6±15%	6±15%	2×50	2×10.5	T 70 B	15.4 MAX
ST301D09006	ST302D09006	9±15%	9±15%	2×33	2×15.5	T 70 B	15.4 MAX
ST301D12006	ST302D12006	12±15%	12±15%	2×25	2×20.5	T 70 B	15.4 MAX
ST301D15006	ST302D15006	15±15%	15±15%	2×20	2×25.0	T 70 B	15.4 MAX
ST301D18006*	ST302D18006*	18±15%	18±15%	2×17	2×30.4	T 70 B	15.4 MAX
ST301D24006*	ST302D24006*	24±15%	24±15%	2×12	2×40.4	T 70 B	15.4 MAX

RATED POWER 1.0 VA

Part No. (Input: 115V)	Part No. (Input: 230V)	Secondary Voltage (V)		Secondary Current (mA)	No-load Voltage (V)(max)	Ambient Temp. (°C)	Dimension H (mm)
ST301S06010	ST302S06010	6±10%		166	9.94	T 70 B	22.3 MAX
ST301S09010	ST302S09010	9±10%		111	14.95	T 70 B	22.3 MAX
ST301S12010	ST302S12010	12±10%		83	19.9	T 70 B	22.3 MAX
ST301S15010	ST302S15010	15±10%		66	24.9	T 70 B	22.3 MAX
ST301S18010	ST302S18010	18±10%		55	29.9	T 70 B	22.3 MAX
ST301S24010	ST302S24010	24±10%		41	39.8	T 70 B	22.3 MAX
ST301D06010	ST302D06010	6±10%	6±15%	2×83	2×9.94	T 70 B	22.3 MAX
ST301D09010	ST302D09010	9±10%	9±15%	2×56	2×14.95	T 70 B	22.3 MAX
ST301D12010	ST302D12010	12±10%	12±15%	2×42	2×19.9	T 70 B	22.3 MAX
ST301D15010	ST302D15010	15±10%	15±15%	2×33	2×24.9	T 70 B	22.3 MAX
ST301D18010 *	ST302D18010 *	18±10%	18±15%	2×28	2×29.9	T 70 B	22.3 MAX
ST301D24010 *	ST302D24010 *	24±10%	24±15%	2×21	2×39.8	T 70 B	22.3 MAX



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ELECTRICAL TABLES FOR ST30 SERIES CONT.

RATED POWER 1.2 VA

Part No. (Input: 115V)	Part No. (Input: 230V)	Secondary Voltage (V)		Secondary Current (mA)	No-load Voltage (V)(max)	Ambient Temp. (°C)	Dimension H (mm)
ST301S06012	ST302S06012	6±10%		200	8.3	T 50 B	22.3 MAX
ST301S09012	ST302S09012	9±10%		133	12.5	T 50 B	22.3 MAX
ST301S12012	ST302S12012	12±10%		100	16.6	T 50 B	22.3 MAX
ST301S15012	ST302S15012	15±10%		80	20.8	T 50 B	22.3 MAX
ST301S18012	ST302S18012	18±10%		67	25.7	T 50 B	22.3 MAX
ST301S24012	ST302S24012	24±10%		50	33.3	T 50 B	22.3 MAX
ST301D06012	ST302D06012	6±10%	6±15%	2×100	2×8.3	T 50 B	22.3 MAX
ST301D09012	ST302D09012	9±10%	9±15%	2×67	2×12.5	T 50 B	22.3 MAX
ST301D12012	ST302D12012	12±10%	12±15%	2×50	2×16.6	T 50 B	22.3 MAX
ST301D15012	ST302D15012	15±10%	15±15%	2×40	2×20.8	T 50 B	22.3 MAX
ST301D18012*	ST302D18012*	18±10%	18±15%	2×33	2×25	T 50 B	22.3 MAX
ST301D24012*	ST302D24012*	24±10%	24±15%	2×25	2×33.3	T 50 B	22.3 MAX

RATED POWER 1.5 VA

Part No. (Input: 115V)	Part No. (Input: 230V)	Secondary Voltage (V)		Secondary Current (mA)	No-load Voltage (V)(max)	Ambient Temp. (°C)	Dimension H (mm)
ST301S06015	ST302S06015	6±10%		250	9.7	T 70 B	24.4 MAX
ST301S09015	ST302S09015	9±10%		167	14.5	T 70 B	24.4 MAX
ST301S12015	ST302S12015	12±10%		125	19.3	T 70 B	24.4 MAX
ST301S15015	ST302S15015	15±10%		100	24.2	T 70 B	24.4 MAX
ST301S18015	ST302S18015	18±10%		83	29.8	T 70 B	24.4 MAX
ST301S24015	ST302S24015	24±10%		63	38.6	T 70 B	24.4 MAX
ST301D06015	ST302D06015	6±10%	6±15%	2×125	2×9.7	T 70 B	24.4 MAX
ST301D09015	ST302D09015	9±10%	9±15%	2×83	2×15.3	T 70 B	24.4 MAX
ST301D12015	ST302D12015	12±10%	12±15%	2×63	2×19.3	T 70 B	24.4 MAX
ST301D15015	ST302D15015	15±10%	15±15%	2×50	2×24.2	T 70 B	24.4 MAX
ST301D18015*	ST302D18015*	18±10%	18±15%	2×42	2×29	T 70 B	24.4 MAX
ST301D24015*	ST302D24015*	24±10%	24±15%	2×31	2×38.6	T 70 B	24.4 MAX



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ELECTRICAL TABLES FOR ST30 SERIES CONT.

RATED POWER 1.7 VA

Part No. (Input: 115V)	Part No. (Input: 230V)	Secondary Voltage (V)		Secondary Current (mA)	No-load Voltage (V)(max)	Ambient Temp. (°C)	Dimension H (mm)
ST301S06017	ST302S06017	6±10%		283	9.8	T 50 B	24.4 MAX
ST301S09017	ST302S09017	9±10%		189	14.8	T 50 B	24.4 MAX
ST301S12017	ST302S12017	12±10%		142	19.7	T 50 B	24.4 MAX
ST301S15017	ST302S15017	15±10%		113	24.6	T 50 B	24.4 MAX
ST301S18017	ST302S18017	18±10%		94	30.3	T 50 B	24.4 MAX
ST301S24017	ST302S24017	24±10%		71	39.3	T 50 B	24.4 MAX
ST301D06017	ST302D06017	6±10%	6±15%	2×142	2×9.8	T 50 B	24.4 MAX
ST301D09017	ST302D09017	9±10%	9±15%	2×94	2×15.2	T 50 B	24.4 MAX
ST301D12017	ST302D12017	12±10%	12±15%	2×71	2×19.7	T 50 B	24.4 MAX
ST301D15017	ST302D15017	15±10%	15±15%	2×57	2×24.6	T 50 B	24.4 MAX
ST301D18017*	ST302D18017*	18±10%	18±15%	2×47	2×29.5	T 50 B	24.4 MAX
ST301D24017*	ST302D24017*	24±10%	24±15%	2×35	2×39.3	T 50 B	24.4 MAX

RATED POWER 1.8 VA

Part No. (Input: 115V)	Part No. (Input: 230V)	Secondary Voltage (V)		Secondary Current (mA)	No-load Voltage (V)(max)	Ambient Temp. (°C)	Dimension H (mm)
ST301S06018	ST302S06018	6±10%		300	9.8	T 40 B	24.4 MAX
ST301S09018	ST302S09018	9±10%		200	14.8	T 40 B	24.4 MAX
ST301S12018	ST302S12018	12±10%		150	19.7	T 40 B	24.4 MAX
ST301S15018	ST302S15018	15±10%		120	24.6	T 40 B	24.4 MAX
ST301S18018	ST302S18018	18±10%		100	30.3	T 40 B	24.4 MAX
ST301S24018	ST302S24018	24±10%		75	39.3	T 40 B	24.4 MAX
ST301D06018	ST302D06018	6±10%	6±15%	2×150	2×9.8	T 40 B	24.4 MAX
ST301D09018	ST302D09018	9±10%	9±15%	2×100	2×15.2	T 40 B	24.4 MAX
ST301D12018	ST302D12018	12±10%	12±15%	2×75	2×19.7	T 40 B	24.4 MAX
ST301D15018	ST302D15018	15±10%	15±15%	2×60	2×24.6	T 40 B	24.4 MAX
ST301D18018*	ST302D18018*	18±10%	18±15%	2×50	2×30.3	T 40 B	24.4 MAX
ST301D24018*	ST302D24018*	24±10%	24±15%	2×37.5	2×39.3	T 40 B	24.4 MAX



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ELECTRICAL TABLES FOR ST30 SERIES CONT.

RATED POWER 2.0 VA

Part No. (Input: 115V)	Part No. (Input: 230V)	Secondary Voltage (V)		Secondary Current (mA)	No-load Voltage (V)(max)	Ambient Temp. (°C)	Dimension H (mm)
ST301S06020	ST302S06020	6±10%		333	10.4	T 70 B	27.4 MAX
ST301S09020	ST302S09020	9±10%		222	15.5	T 70 B	27.4 MAX
ST301S12020	ST302S12020	12±10%		167	20.7	T 70 B	27.4 MAX
ST301S15020	ST302S15020	15±10%		133	25.8	T 70 B	27.4 MAX
ST301S18020	ST302S18020	18±10%		111	30.8	T 70 B	27.4 MAX
ST301S24020	ST302S24020	24±10%		83	41.4	T 70 B	27.4 MAX
ST301D06020	ST302D06020	6±10%	6±15%	2×167	2×10.4	T 70 B	27.4 MAX
ST301D09020	ST302D09020	9±10%	9±15%	2×111	2×15.4	T 70 B	27.4 MAX
ST301D12020	ST302D12020	12±10%	12±15%	2×83	2×20.7	T 70 B	27.4 MAX
ST301D15020	ST302D15020	15±10%	15±15%	2×67	2×25.0	T 70 B	27.4 MAX
ST301D18020*	ST302D18020*	18±10%	18±15%	2×56	2×30.8	T 70 B	27.4 MAX
ST301D24020*	ST302D24020*	24±10%	24±15%	2×42	2×41.4	T 70 B	27.4 MAX

RATED POWER 2.3 VA

Part No. (Input: 115V)	Part No. (Input: 230V)	Secondary Voltage (V)		Secondary Current (mA)	No-load Voltage (V)(max)	Ambient Temp. (°C)	Dimension H (mm)
ST301S06023	ST302S06023	6±10%		383	10.5	T 70 B	29.8 MAX
ST301S09023	ST302S09023	9±10%		256	15.7	T 70 B	29.8 MAX
ST301S12023	ST302S12023	12±10%		192	21	T 70 B	29.8 MAX
ST301S15023	ST302S15023	15±10%		153	25.9	T 70 B	29.8 MAX
ST301S18023	ST302S18023	18±10%		128	31.4	T 70 B	29.8 MAX
ST301S24023	ST302S24023	24±10%		96	41.9	T 70 B	29.8 MAX
ST301D06023	ST302D06023	6±10%	6±15%	2×192	2×10.5	T 70 B	29.8 MAX
ST301D09023	ST302D09023	9±10%	9±15%	2×128	2×15.7	T 70 B	29.8 MAX
ST301D12023	ST302D12023	12±10%	12±15%	2×96	2×21	T 70 B	29.8 MAX
ST301D15023	ST302D15023	15±10%	15±15%	2×77	2×25.9	T 70 B	29.8 MAX
ST301D18023*	ST302D18023*	18±10%	18±15%	2×64	2×31.4	T 70 B	29.8 MAX
ST301D24023*	ST302D24023*	24±10%	24±15%	2×48	2×41.9	T 70 B	29.8 MAX



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ELECTRICAL TABLES FOR ST30 SERIES CONT.

RATED POWER 2.4 VA

Part No. (Input: 115V)	Part No. (Input: 230V)	Secondary Voltage (V)		Secondary Current (mA)	No-load Voltage (V)(max)	Ambient Temp. (°C)	Dimension H (mm)
ST301S06024	ST302S06024	6±10%		400	10.5	T 50 B	27.4 MAX
ST301S09024	ST302S09024	9±10%		267	15.5	T 50 B	27.4 MAX
ST301S12024	ST302S12024	12±10%		200	21	T 50 B	27.4 MAX
ST301S15024	ST302S15024	15±10%		160	25.3	T 50 B	27.4 MAX
ST301S18024	ST302S18024	18±10%		133	31	T 50 B	27.4 MAX
ST301S24024	ST302S24024	24±10%		100	42	T 50 B	27.4 MAX
ST301D06024	ST302D06024	6±10%	6±15%	2×200	2×10.5	T 50 B	27.4 MAX
ST301D09024	ST302D09024	9±10%	9±15%	2×133	2×15.5	T 50 B	27.4 MAX
ST301D12024	ST302D12024	12±10%	12±15%	2×100	2×21	T 50 B	27.4 MAX
ST301D15024	ST302D15024	15±10%	15±15%	2×80	2×25.3	T 50 B	27.4 MAX
ST301D18024*	ST302D18024*	18±10%	18±15%	2×67	2×21	T 50 B	27.4 MAX
ST301D24024*	ST302D24024*	24±10%	24±15%	2×50	2×42	T 50 B	27.4 MAX

RATED POWER 2.7 VA

Part No. (Input: 115V)	Part No. (Input: 230V)	Secondary Voltage (V)		Secondary Current (mA)	No-load Voltage (V)(max)	Ambient Temp. (°C)	Dimension H (mm)
ST301S06027	ST302S06027	6±10%		450	10.5	T 50 B	29.8 MAX
ST301S09027	ST302S09027	9±10%		300	15.4	T 50 B	29.8 MAX
ST301S12027	ST302S12027	12±10%		225	21.1	T 50 B	29.8 MAX
ST301S15027	ST302S15027	15±10%		180	26.3	T 50 B	29.8 MAX
ST301S18027	ST302S18027	18±10%		150	30.9	T 50 B	29.8 MAX
ST301S24027	ST302S24027	24±10%		113	42	T 50 B	29.8 MAX
ST301D06027	ST302D06027	6±10%	6±15%	2×225	2X10.5	T 50 B	29.8 MAX
ST301D09027	ST302D09027	9±10%	9±15%	2×150	2X15.4	T 50 B	29.8 MAX
ST301D12027	ST302D12027	12±10%	12±15%	2×113	2X21.1	T 50 B	29.8 MAX
ST301D15027	ST302D15027	15±10%	15±15%	2×90	2X25	T 50 B	29.8 MAX
ST301D18027*	ST302D18027*	18±10%	18±15%	2×75	2X31.5	T 50 B	29.8 MAX
ST301D24027*	ST302D24027*	24±10%	24±15%	2×56	2X42.1	T 50 B	29.8 MAX



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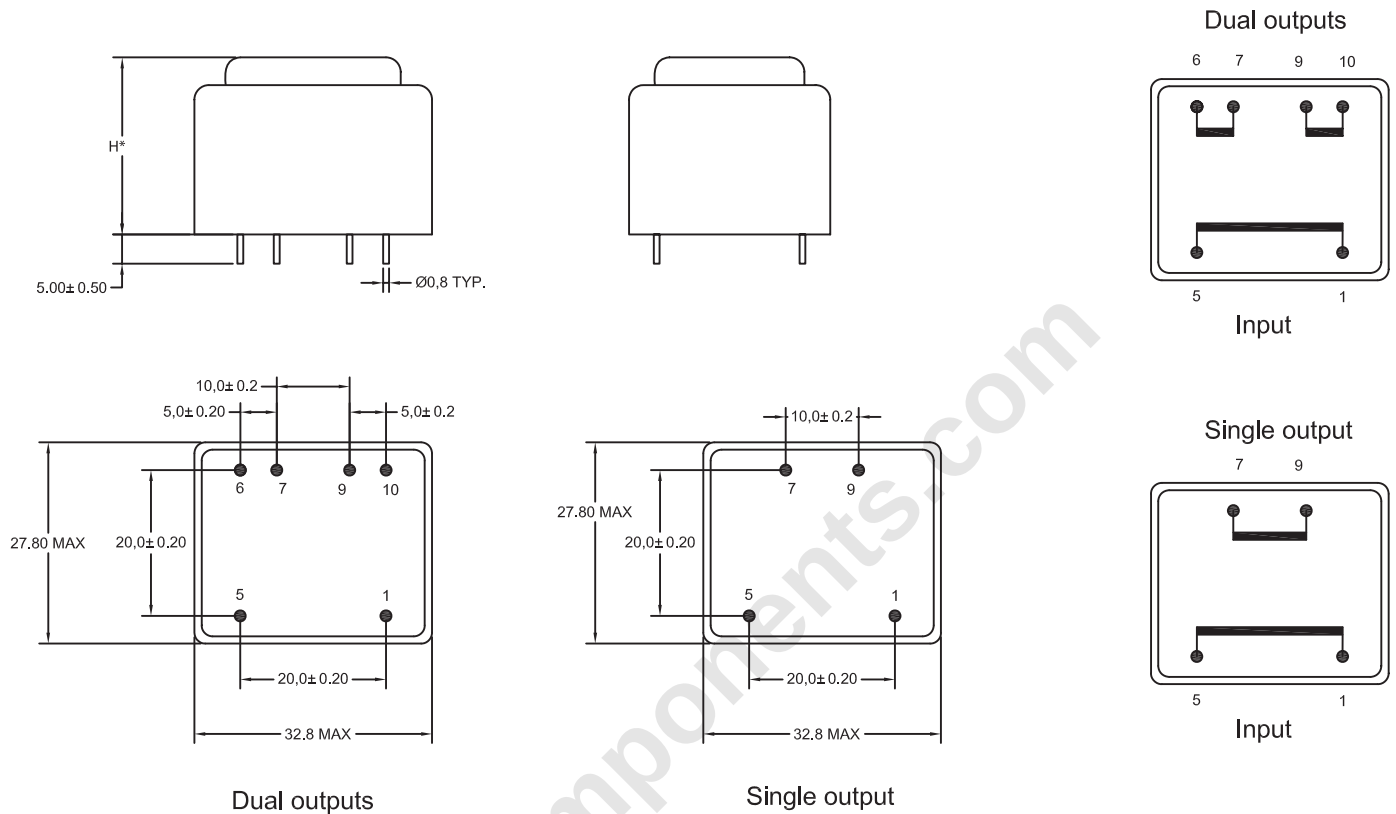
ELECTRICAL TABLES FOR ST30 SERIES CONT.

RATED POWER 2.8 VA

Part No. (Input: 115V)	Part No. (Input: 230V)	Secondary Voltage (V)		Secondary Current (mA)	No-load Voltage (V)(max)	Ambient Temp. (°C)	Dimension H (mm)
ST301S06028	ST302S06028	6±10%		467	10.5	T 40 B	29.8 MAX
ST301S09028	ST302S09028	9±10%		311	15.4	T 40 B	29.8 MAX
ST301S12028	ST302S12028	12±10%		233	21.1	T 40 B	29.8 MAX
ST301S15028	ST302S15028	15±10%		187	26.3	T 40 B	29.8 MAX
ST301S18028	ST302S18028	18±10%		156	30.9	T 40 B	29.8 MAX
ST301S24028	ST302S24028	24±10%		117	42.1	T 40 B	29.8 MAX
ST301D06028	ST302D06028	6±10%	6±15%	2x233	2X10.5	T 40 B	29.8 MAX
ST301D09028	ST302D09028	9±10%	9±15%	2x156	2X15.4	T 40 B	29.8 MAX
ST301D12028	ST302D12028	12±10%	12±15%	2x117	2X21.1	T 40 B	29.8 MAX
ST301D15028	ST302D15028	15±10%	15±15%	2x93	2X25	T 40 B	29.8 MAX
ST301D18028*	ST302D18028*	18±10%	18±15%	2x70	2X31.5	T 40 B	29.8 MAX
ST301D24028*	ST302D24028*	24±10%	24±15%	2x58	2X42.1	T 40 B	29.8 MAX

* To be noted: * marked transformers are not VDE approved. Those transformers meet all requirements of EN61558-2-4

ST30 SERIES MECHANICAL SPECIFICATIONS:



*H: Please reference electrical table for heights

ST30 SERIES SCHEMATIC DIAGRAM:

