



## Variable Auto Transformer ESS Series

### Adjustable Auto Transformers For Building-In

Single-phase auto transformers are used for the low-loss, continuous adjustment of mains-connected alternating voltages. They are designed for the following specifications.

- Optimum adjustment or regulation of currents and voltages at the lowest losses and thus low heat generation.
- The same for three-phase current can be achieved by mechanical couplings of three control transformers.
- The design of the current collector ensures a reliable contact output and by actuation an independent cleaning of the contact track.
- Approximate 320° rotational angle
- Screw or solder connections

### Specifications

Nom. Voltage:	230V or 400V
Current ranges:	Up to 80A
Frequency:	50 – 60 Hz
Opr. Mode:	DB (continuous)
Safety Class:	0
Protection cl.:	IP00
Isolation cl.:	B
Amb. Temp.:	45°C max.
Mounting:	4-Point-Flange-Mounting or Axial/Central Mounting
Test Voltage:	Shaft Against Caring Voltage Parts 4kV
According to:	VDE 0552, EN61558-2-14
Conformity:	CE, RoHS

Type	Output Current A (by 230 V Output Voltage)	Output Current A (by 250 V Output Voltage)
ESS 102	2.5	2
ESS 103	3.5	3.15
ESS 104	4.5	4
ESS 106	7	6.3
ESS 108	9	8
ESS 110	11.5	10
ESS 118	20	18
ESS 120	23	20
ESS 9020	2.5	2
ESS 9032	3.15	3.5
ESS 9040	4.5	4.15
ESS 9063	7	6.3
ESS 9080	9	8
ESS 9100	11.5	10
ESS 9180	20	18
ESS 9200	23	20
ESS 9250	28	25
ESS 9340	37	34
ESS 9380	42	38
ESS 9480	53	48
ESS 9570	62	57
ESS 9720	80	72
ESS 502	2	2
ESS 9010	1	-
ESS 9013	1.25	-

Type	Output Current A by 230 V Output Voltage	Output Current A by 260 V Output Voltage
ESS 3018	2.1	1.8
ESS 302	2.1	1.8
ESS 303	3.6	3.15
ESS 3032	3.6	3.15
ESS 305	5.7	5
ESS 3050	5.7	5
ESS 308	9.1	8
ESS 3080	9.1	8
ESS 318	21	18
ESS 3180	21	18
ESS 3230	26	23
ESS 3340	39	34
ESS 3440	50	44
ESS 3510	58	51
ESS 3660	75	66

Type	Output Current A by 230 V Output Voltage	Output Current A by 270 V Output Voltage
ESS 602	1.86	1.86

Type	Output Current A by 400 V Output Voltage	Output Current A by 430 V Output Voltage
ESS 402	1.8	1.6
ESS 4016	1.8	1.6
ESS 403	2.7	2.5
ESS 4025	2.7	2.5
ESS 405	5.5	5
ESS 4050	5.5	5
ESS 409	10	9
ESS 4090	10	9
ESS 4120	13	12
ESS 4180	20	18
ESS 4230	25	23
ESS 4250	27	25
ESS 4340	37	34

Type	Nominal Input Voltage in V	Output Voltage in V	Continuous Current Carrying Capacity in A
KSS 103	42	<1-42	2.5
KSS 105	60	<1-60	5
ESS 108	250	<1-250	0.8