

Single-Phase Transformers

4AM, 4AT Safety, Isolating, Control and Mains Transformers

4AM, 4AT transformers
with selectable voltages

Overview

- 4AM and 4AT transformers configured as isolating, control and mains transformers according to EN 61558-2-4, -2-2, -2-1 or as safety, control and mains transformers according to EN 61558-2-6, -2-2, -2-1, or as autotransformers according to EN 61558-2-13 with selectable input and output voltages in the power range from 0.025 kVA to 16 kVA (for autotransformers = type rating) and additional options

• CE, c^{UL}us¹⁾

• 4AM: $t_a = 40^\circ\text{C/B}$, 4AT: $t_a = 55^\circ\text{C/H}$

• Standard vector group: I₀O, for autotransformer: I_aO



4AM (figure on the left) and 4AT30 3 to 4AT43 2 (figure on the right)

⊕, ⊖, △, ⊕, ⊖, δ

¹⁾ The enclosures for the 4AM23 4 to 4AT43 2 transformers are c^{UL}us-approved.

Selection and ordering data

CE, c^{UL}us, ⊕, ⊖, △, ⊕, ⊖, δ

Rated power ¹⁾ P_n with degree of protection			Selectable rated voltages U_{1N}, U_{2N}	DT ²⁾	Order No. stem	Basic price per PU	Additional price for standard options				Cu weight per PU approx.	Transformer weight per PU approx.	Total weight incl. enclosure per PU approx.
IP00	IP23	IP54					Two tappings in the range $\pm 5\%$ of the rated input or output voltage for constant power	One tapping on the input or output side for falling power	One additional separate winding on the input or output side	Shield winding (connection routed to terminal), Not possible for autotransformers	Standard rail mounting ³⁾		
kVA	kVA	kVA	kVA								kg	kg	kg
0.025	0.023	0.02	--	12 ... 690 V, with c ^{UL} us	B 4AM23 4	x	x	x	x	x	0.110	0.600	1.900
0.04	0.036	0.03	--		B 4AM26 4	x	x	x	x	x	0.150	0.800	2.100
0.063	0.057	0.05	0.19	max. 600 V	B 4AM32 4	x	x	x	x	without	0.240	1.400	2.700
0.1	0.09	0.08	0.31	(including tappings)	B 4AM34 4	x	x	x	x	without	0.260	2.000	3.300
0.16	0.145	0.128	0.49		B 4AM38 4	x	x	x	x	without	0.320	2.700	5.600
0.25	0.225	0.2	0.85		B 4AM40 4	x	x	x	x	without	0.590	3.700	6.600
0.315	0.268	0.236	1.12		B 4AM43 4	x	x	x	x	x	0.670	4.500	7.400
0.4	0.34	0.3	1.44		B 4AM46 4	x	x	x	x	x	1.100	5.400	8.300
0.5	0.425	0.375	2		B 4AM48 4	x	x	x	x	x	1.100	7.000	9.900
0.63	0.535	0.475	2.35		B 4AM52 4	x	x	x	x	--	1.700	7.900	10.800
0.8	0.68	0.6	3.4		B 4AM55 4	x	x	x	x	--	1.900	11.000	13.900
1	0.85	0.75	5		B 4AM57 4	x	x	x	x	--	2.000	14.000	16.900
1.6	1.36	1.2	7.3		B 4AM61 4	x	x	x	x	--	4.100	19.000	27.000
2	1.7	1.5	9.7		B 4AM64 4	x	x	x	x	--	4.700	23.000	31.000
2.5	2.13	1.88	13.3		B 4AM65 4	x	x	x	x	--	6.400	29.000	37.000
4AM transformers													
4	3.6	3.15	17.8	24 ... 690 V, with c ^{UL} us	B 4AT30 3	x	x	x	x	--	6.600	27.000	35.000
5	4.5	4	19		B 4AT36 1	x	x	x	x	--	5.200	32.000	40.000
6.3	5.6	5	24.5	max. 600 V	B 4AT36 3	x	x	x	x	--	8.700	37.000	45.000
8	7.1	6.3	31.1		B 4AT39 1	x	x	x	x	--	9.900	45.000	59.000
10	9	8	36.4	(including tappings)	B 4AT39 3	x	x	x	x	--	17.000	52.000	66.000
11.2	10	--	48.3		B 4AT43 0	x	x	x	x	--	12.000	62.000	76.000
12.5	11.2	--	53.8		B 4AT43 1	x	x	x	x	--	15.000	65.200	79.200
14	12.5	--	58.7		B 4AT43 2	x	x	x	x	--	19.000	69.300	83.300
16	14	--	81.2		D 4AT45 0	x	x	x	x	--	16.000	83.200	107.000

x = additional price

-- = not available

¹⁾ For autotransformers = type rating.

²⁾ The delivery time class B depends on the quantity.

³⁾ Types 4AM32 4 to 4AM40 4 have integrated standard rail mounting.

Additional prices for degree of protection IP00, IP23 and IP54 see page 10/48.

Before ordering, please ask for the complete Order No. (see page 10/4 for the inquiry/order address).

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4AM, 4AT transformers with selectable voltages

Options for the enclosures of single-phase transformers
 ≤ 16 kVA in degree of protection IP00, IP23 or IP54

€, c^Wus¹⁾, Ⓛ, Ⓜ, Ⓝ, Ⓞ, Ⓟ, Ⓠ, Ⓡ

Order No. stem	Rated power with degree of protection ²⁾			Short-time rating $P_{\text{short.}}$ kVA	Additional price for the options			PU (UNIT, SET, M)	PS*	PG
	IP00, standard version P_n kVA	IP23 P_n kVA	IP54 P_n kVA		Degree of protection IP00, standard version	Degree of protection IP23	Degree of protection IP54			
4AM transformers										
4AM23 4	0.025	0.023	0.02	--	without	x	x	1	1 unit	104
4AM26 4	0.04	0.036	0.032	--	without	x	x	1	1 unit	104
4AM32 4	0.063	0.057	0.05	0.19	without	x	x	1	1 unit	104
4AM34 4	0.1	0.09	0.08	0.31	without	x	x	1	1 unit	104
4AM38 4	0.16	0.145	0.128	0.49	without	x	x	1	1 unit	104
4AM40 4	0.25	0.225	0.2	0.85	without	x	x	1	1 unit	104
4AM43 4	0.315	0.268	0.236	1.12	without	x	x	1	1 unit	104
4AM46 4	0.4	0.34	0.3	1.44	without	x	x	1	1 unit	104
4AM48 4	0.5	0.425	0.375	2	without	x	x	1	1 unit	104
4AM52 4	0.63	0.535	0.475	2.35	without	x	x	1	1 unit	104
4AM55 4	0.8	0.68	0.6	3.4	without	x	x	1	1 unit	104
4AM57 4	1	0.85	0.75	5	without	x	x	1	1 unit	104
4AM61 4	1.6	1.36	1.2	7.3	without	x	x	1	1 unit	104
4AM64 4	2	1.7	1.5	9.7	without	x	x	1	1 unit	104
4AM65 4	2.5	2.13	1.875	13.3	without	x	x	1	1 unit	104
4AT transformers										
4AT30 3	4	3.6	3.15	17.8	without	x	x	1	1 unit	104
4AT36 1	5	4.5	4	19	without	x	x	1	1 unit	104
4AT36 3	6.3	5.6	5	24.5	without	x	x	1	1 unit	104
4AT39 1	8	7.1	6.3	31.1	without	x	x	1	1 unit	104
4AT39 3	10	9	8	36.4	without	x	x	1	1 unit	104
4AT43 0	11.2	10	--	48.3	without	x	--	1	1 unit	104
4AT43 1	12.5	11.2	--	53.8	without	x	--	1	1 unit	104
4AT43 2	14	12.5	--	58.7	without	x	--	1	1 unit	104
4AT45 0	16	14	--	81.2	without	x	--	1	1 unit	104

x = additional price

-- = not available

¹⁾ Exception: The enclosure for the 4AT45 0 transformers is not c^Wus approved.

²⁾ For autotransformers = type rating.

Options

- Cage Clamp terminal; up to 24 V, without additional price
- Fuse terminals
 Device protection fuses for secondary-side short-circuit and overload protection with rated currents ≤ 6.3 A and a rated voltage of max. 440 V AC can be mounted on the 4AM transformers; screw or Cage Clamp terminals possible.

Additional price on request.

- Rating plates made of metal
 One separately packed rating plate made of metal can be supplied per 4AM and 4AT transformer.
 Additional price on request.
- Deviations from the standard vector groups II0 or IA0 for autotransformers must be specified when ordering.