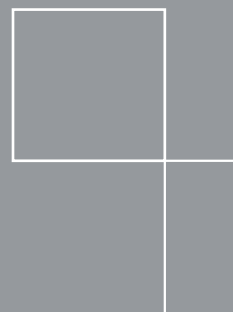
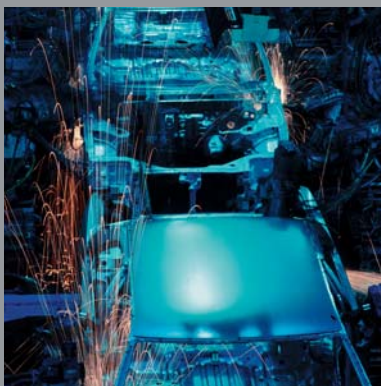


## Program Overview



# sirius

## TRANSFORMERS



**SIEMENS**

# More Benefits – Reduced Costs

## Transformers by Siemens

### Our concept for your efficient power supply:

**Dynamic capacity:** Control transformers with high short-time rating for contactor actuation.

**Thermal load capacity:** Full nominal power at high ambient temperatures.

**Optimum protection:** Primary-side protection against short circuits and overloads for fuseless assemblies with standard circuit breakers.

**Worldwide acceptance:** Consistently from 0.025 to 400 kVA – almost all designs feature the cULus approval for Canada and the USA.

**Environmental protection:** Application of certified environmental management system.

### Mounting friendliness:

- Freely accessible mounting holes
- Optional easy snap-on mounting to 35 mm DIN rail: single-phase transformers from 25 to 500 VA
- Finger-safe SIGUT connection terminals, doing away with end sleeves
- Spring-loaded terminal connection system for currents  $\leq 24$  A

### Practice-oriented delivery periods:

A comprehensive standard portfolio is immediately available ex stock

- For IEC standard voltage 230/400 V
- For globally used mains voltages
- For nominal voltages used in plant and control production
- In finely graded performance classes

### Quality management:

- Certified management system in acc. with DIN EN ISO 9001:2000
- Recognition by leading original equipment manufacturers
- Environmental management system certified in acc. with DIN ISO 14001:2004

### Engineering support:

You need not make endless telephone calls to obtain the data important for configuration. Everything you need is listed in the catalog, e. g.:

- Technical data
- Dimension drawings with permissible installation positions
- Derating with higher degrees of protection
- Permissible loads with different ambient temperatures and installation altitudes
- Assignment of the primary-side protective equipment with all rating classes  $\leq 16$  kVA and all further mains voltages  $\leq 600$  V
- Short-time rating of the control transformers over the complete power factor range of the load from  $\cos 0.2$  to 1

### In addition:

- Fast product selection in the online catalog with configurator or technical selection help



### Customized equipment transformers

- For installation in large-batch equipment, e. g. in entertainment electronics, communication, data and lighting technology
- Adjusted to the respective constructional electrical requirements
- Dimensioned in accordance with the relevant national and international regulations as prerequisite for your equipment's global application

Consult us in due time: A transformer matched to the equipment-specific particularities as early as during the development phase in coordination with the customer offers the optimum solution in terms of technology and efficiency.

### Other products

#### Customized transformers and transformers for special applications:

- Toroidal-core transformers
- Equipment transformers
- Medium-frequency transformers
- Transformers for converters / power converter operation
- Special transformers for rail vehicles
- Special transformers for ships and portainers  
Option: vibration-proof, low-noise version (only available in enclosure)
- Special transformers in acc. with DIN EN 60601-1 (VDE 0750) for medical engineering
- High-reactance transformers
- Toroidal-core and pillar-type variable-ratio transformers 4CH, 4CP, 4CI and 4CQ (see interactive catalog CA01 and A&D Mall)
- Transformers for noise-sensitive environments

#### AC voltage regulators:

- Magnetic voltage regulators, single-phase
- Transformer-type voltage regulators, single- and three-phase

#### DC power supplies:

- Rectifier units, non-stabilized, unfiltered
- Rectifier units with 24 V DC for the power supply of electronic controls, filtered
- Stabilized DC power supplies
- Multi-output power supply

#### Reactors:

- For variable-speed drives
  - Mains reactors
  - Commutating reactors
  - Smoothing reactors
  - Output filter reactors
- Air-core and iron-core reactors

#### Filters:

- For variable-speed drives
  - Radio interference suppression filters
  - dv/dt filters
  - Sine-wave filters

**For detailed ordering information, please refer to the catalogs LV1, section 10 and 11, LV60, LV65 or the interactive catalog and the A&D Mall.**

**[www.siemens.com/lowvoltage/mall](http://www.siemens.com/lowvoltage/mall)**

# SIRIUS Transformers

## Selection and ordering data

Transformers in accordance with DIN EN 60204 T.1 (VDE 0113 T.1) for universal applications, multi-voltage versions for adjustment to mains voltages worldwide.

SIRIUS transformers designed as control and safety transformers in accordance with EN 61558-2-2, -2-6 or as mains, control and isolation transformers in accordance with EN 61588-2-1, -2-2, -2-4, AC 50/60 Hz, degree of protection IP00.

4AM:  $t_a$  40 °C/B, 4AT:  $t_a$  55 °C/H      

Single-phase			with input voltage										
PRI			230 V ± 5%					400 V ± 5%					
SEC	24 V	42 V	110 V	2x115 V	230 V	24 V	42 V	110 V	230 V				
$P_n$	Short-time rating <sup>1)</sup>		Order number supplement										
$P_{shortt}$	$P_{shortt}$												
kVA	kVA	kVA <sup>2)</sup>											
0.025			4AM2342-	4TN00 - 0EAO	4TV00 - 0EAO	4TJ10 - 0FAO	4TD40 - 0FAO	4TT10 - 0FAO	5AN00 - 0EAO	5AV00 - 0EAO	5AJ10 - 0FAO	5AT10 - 0FAO	
0.04			4AM2346-	4TN00 - 0EAO	4TV00 - 0EAO	4TJ10 - 0FAO	4TD40 - 0FAO	4TT10 - 0FAO	5AN00 - 0EAO	5AV00 - 0EAO	5AJ10 - 0FAO	5AT10 - 0FAO	
0.063	0.19		4AM3242-	4TN00 - 0EAO	4TV00 - 0EAO	4TJ10 - 0FAO	4TD40 - 0FAO	4TT10 - 0FAO	5AN00 - 0EAO	5AV00 - 0EAO	5AJ10 - 0FAO	5AT10 - 0FAO	
0.1	0.31		4AM3442-	4TN00 - 0EAO	4TV00 - 0EAO	4TJ10 - 0FAO	4TD40 - 0FAO	4TT10 - 0FAO	5AN00 - 0EAO	5AV00 - 0EAO	5AJ10 - 0FAO	5AT10 - 0FAO	
0.16	0.49		4AM3842-	4TN00 - 0EAO	4TV00 - 0EAO	4TJ10 - 0FAO	4TD40 - 0FAO	4TT10 - 0FAO	5AN00 - 0EAO	5AV00 - 0EAO	5AJ10 - 0FAO	5AT10 - 0FAO	
0.25	0.85		4AM4042-	4TN00 - 0EAO	4TV00 - 0EAO	4TJ10 - 0FAO	4TD40 - 0FAO	4TT10 - 0FAO	5AN00 - 0EAO	5AV00 - 0EAO	5AJ10 - 0FAO	5AT10 - 0FAO	
0.315	1.12		4AM4342-	4TN00 - 0EAO	4TV00 - 0EAO	4TJ10 - 0FAO	4TD40 - 0FAO	4TT10 - 0FAO	5AN00 - 0EAO	5AV00 - 0EAO	5AJ10 - 0FAO	5AT10 - 0FAO	
0.4	1.44		4AM4642-	4TN00 - 0EAO	4TV00 - 0EAO	4TJ10 - 0FAO	4TD40 - 0FAO	4TT10 - 0FAO	5AN00 - 0EAO	5AV00 - 0EAO	5AJ10 - 0FAO	5AT10 - 0FAO	
0.5	2		4AM4842-	4TN00 - 0EAO	4TV00 - 0EAO	4TJ10 - 0FAO	4TD40 - 0FAO	4TT10 - 0FAO	5AN00 - 0EAO	5AV00 - 0EAO	5AJ10 - 0FAO	5AT10 - 0FAO	
0.63	2.35		4AM5242-	4TN00 - 0EAO	4TV00 - 0EAO	4TJ10 - 0FAO	4TD40 - 0FAO	4TT10 - 0FAO	5AN00 - 0EAO	5AV00 - 0EAO	5AJ10 - 0FAO	5AT10 - 0FAO	
0.8	3.4		4AM5542-	4TN00 - 0EAO	4TV00 - 0EAO	4TJ10 - 0FAO	4TD40 - 0FAO	4TT10 - 0FAO	5AN00 - 0EAO	5AV00 - 0EAO	5AJ10 - 0FAO	5AT10 - 0FAO	
1	5		4AM5742-	4TN00 - 0EAO	4TV00 - 0EAO	4TJ10 - 0FAO	4TD40 - 0FAO	4TT10 - 0FAO	5AN00 - 0EAO	5AV00 - 0EAO	5AJ10 - 0FAO	5AT10 - 0FAO	
1.6	7.3		4AM6142-	-	-	4TJ10 - 0FAO	4TD40 - 0FAO	4TT10 - 0FAO	-	-	5AJ10 - 0FAO	5AT10 - 0FAO	
2	9.7		4AM6442-	-	-	4TJ10 - 0FAO	4TD40 - 0FAO	4TT10 - 0FAO	-	-	5AJ10 - 0FAO	5AT10 - 0FAO	
2.5	13.3		4AM6542-	-	-	4TJ10 - 0FAO	4TD40 - 0FAO	4TT10 - 0FAO	-	-	5AJ10 - 0FAO	5AT10 - 0FAO	
4	17.8	16	4AT3032-	-	-	4TJ10 - 0FAO	4TD40 - 0FAO	4TT10 - 0FAO <sup>2)</sup>	-	-	5AJ10 - 0FAO	5AT10 - 0FAO <sup>2)</sup>	
5	19	18.5	4AT3612-	-	-	4TJ10 - 0FAO	4TD40 - 0FAO	4TT10 - 0FAO	-	-	5AJ10 - 0FAO	5AT10 - 0FAO <sup>2)</sup>	
6.3	24.5	22.5	4AT3632-	-	-	4TJ10 - 0FAO	4TD40 - 0FAO	4TT10 - 0FAO	-	-	5AJ10 - 0FAO	5AT10 - 0FAO <sup>2)</sup>	
8	31.1	28.5	4AT3912-	-	-	4TJ10 - 0FAO	4TD40 - 0FAO	4TT10 - 0FAO	-	-	5AJ10 - 0FAO	5AT10 - 0FAO <sup>2)</sup>	
10	36.4	30	4AT3932-	-	-	4TJ10 - 0FAO	4TD40 - 0FAO	4TT10 - 0FAO	-	-	5AJ10 - 0FAO	5AT10 - 0FAO <sup>2)</sup>	

<sup>1)</sup> With  $\cos \varphi = 0.5$  and  $U_2 = 0.95 \times U_{2N}$

<sup>2)</sup> Short-time ratings only apply to the marked products

For further products with other power and voltage values and degrees of protection, please refer to the LV1 catalog, section 10, or the interactive catalog CA01 and the A&D Mall: [www.siemens.com/lowvoltage/mall](http://www.siemens.com/lowvoltage/mall)



**4AM**  
with spring-loaded terminals



**4AT**  
horizontal variant

In the selection tables, the “24-hour service” delivery period is marked by a colored background.

24-hour service with degree of protection IP00, i.e. the devices are available ex stock, are shipped within 24 hours and delivered to the shipping address on the following day.

Single-phase			with input voltage				in Euro-voltage design			in multi-voltage design			
PRI			440 V ± 5%		500 V ± 5%		400/230 V ± 15 V			550-525-500-480-460-440-415-400-380-230-208 V		600-575-550-525-500-480-460-440-415-400-240-230 V	
SEC			24 V	230 V	24 V	230 V	24 V	2 x 115 V	24 V	2 x 115 V	24 V	2 x 115 V	
P <sub>n</sub>	Short-time rating <sup>1)</sup>	Basic type	Order number supplement										
kVA	kVA	kVA <sup>2)</sup>											
0.025		4AM2342-	5CN00-0EAO	-	5FN00-0EAO	5FT10 - 0FA0	-	-	-	-	-	-	
0.04		4AM2346-	5CN00-0EAO	-	5FN00-0EAO	5FT10 - 0FA0	-	-	-	-	-	-	
0.063	0.19	4AM3242-	5CN00-0EAO	5CT10 - 0FA0	5FN00-0EAO	5FT10 - 0FA0	8JN00 - 0EAO	8JD40 - 0FA0	8DN00 - 0EAO	8DD40 - 0FA0	8EN00 - 0EAO	8ED40 - 0FA0	
0.1	0.31	4AM3442-	5CN00-0EAO	5CT10 - 0FA0	5FN00-0EAO	5FT10 - 0FA0	8JN00 - 0EAO	8JD40 - 0FA0	8DN00 - 0EAO	8DD40 - 0FA0	8EN00 - 0EAO	8ED40 - 0FA0	
0.16	0.49	4AM3842-	5CN00-0EAO	5CT10 - 0FA0	5FN00-0EAO	5FT10 - 0FA0	8JN00 - 0EAO	8JD40 - 0FA0	8DN00 - 0EAO	8DD40 - 0FA0	8EN00 - 0EAO	8ED40 - 0FA0	
0.25	0.85	4AM4042-	5CN00-0EAO	5CT10 - 0FA0	5FN00-0EAO	5FT10 - 0FA0	8JN00 - 0EAO	8JD40 - 0FA0	8DN00 - 0EAO	8DD40 - 0FA0	8EN00 - 0EAO	8ED40 - 0FA0	
0.315	1.12	4AM4342-	5CN00-0EAO	5CT10 - 0FA0	5FN00-0EAO	5FT10 - 0FA0	8JN00 - 0EAO	8JD40 - 0FA0	8DN00 - 0EAO	8DD40 - 0FA0	8EN00 - 0EAO	8ED40 - 0FA0	
0.4	1.44	4AM4642-	5CN00-0EAO	5CT10 - 0FA0	5FN00-0EAO	5FT10 - 0FA0	8JN00 - 0EAO	8JD40 - 0FA0	8DN00 - 0EAO	8DD40 - 0FA0	8EN00 - 0EAO	8ED40 - 0FA0	
0.5	2	4AM4842-	5CN00-0EAO	5CT10 - 0FA0	5FN00-0EAO	5FT10 - 0FA0	8JN00 - 0EAO	8JD40 - 0FA0	8DN00 - 0EAO	8DD40 - 0FA0	8EN00 - 0EAO	8ED40 - 0FA0	
0.63	2.35	4AM5242-	5CN00-0EAO	5CT10 - 0FA0	5FN00-0EAO	5FT10 - 0FA0	8JN00 - 0EAO	8JD40 - 0FA0	8DN00 - 0EAO	8DD40 - 0FA0	8EN00 - 0EAO	8ED40 - 0FA0	
0.8	3.4	4AM5542-	5CN00-0EAO	5CT10 - 0FA0	5FN00-0EAO	5FT10 - 0FA0	8JN00 - 0EAO	8JD40 - 0FA0	8DN00 - 0EAO	8DD40 - 0FA0	8EN00 - 0EAO	8ED40 - 0FA0	
1	5	4AM5742-	5CN00-0EAO	5CT10 - 0FA0	5FN00-0EAO	5FT10 - 0FA0	8JN00 - 0EAO	8JD40 - 0FA0	8DN00 - 0EAO	8DD40 - 0FA0	8EN00 - 0EAO	8ED40 - 0FA0	
1.6	7.3	4AM6142-	-	5CT10 - 0FA0	-	5FT10 - 0FA0	-	8JD40 - 0FA0	-	8DD40 - 0FA0	-	8ED40 - 0FA0	
2	9.7	4AM6442-	-	5CT10 - 0FA0	-	5FT10 - 0FA0	-	8JD40 - 0FA0	-	8DD40 - 0FA0	-	8ED40 - 0FA0	
2.5	13.3	4AM6542-	-	5CT10 - 0FA0	-	5FT10 - 0FA0	-	8JD40 - 0FA0	-	8DD40 - 0FA0	-	8ED40 - 0FA0	
4	17.8	16	4AT3032-	-	5CT10 - 0FA0 <sup>2)</sup>	-	5FT10 - 0FA0 <sup>2)</sup>	-	8JD40 - 0FA0	-	8DD40 - 0FA0	-	8ED40 - 0FA0
5	19	18.5	4AT3612-	-	5CT10 - 0FA0	-	5FT10 - 0FA0	-	8JD40 - 0FA0	-	8DD40 - 0FA0	-	8ED40 - 0FA0
6.3	24.5	22.5	4AT3632-	-	5CT10 - 0FA0	-	5FT10 - 0FA0	-	8JD40 - 0FA0	-	8DD40 - 0FA0	-	8ED40 - 0FA0
8	31.1	28.5	4AT3912-	-	5CT10 - 0FA0	-	5FT10 - 0FA0	-	8JD40 - 0FA0	-	8DD40 - 0FA0	-	8ED40 - 0FA0
10	36.4	30	4AT3932-	-	5CT10 - 0FA0	-	5FT10 - 0FA0	-	8JD40 - 0FA0	-	8DD40 - 0FA0	-	8ED40 - 0FA0

<sup>1)</sup> With  $\cos \varphi = 0.5$  and  $U_2 = 0.95 \times U_{2N}$

<sup>2)</sup> Short-time ratings only apply to the marked products



**4AM**  
with screw-type /  
plug-type terminal



**4AM**  
with snap-on connection  
for 35 mm DIN rail

# Transformers for the Supply of Medical Premises

## Selection and ordering data

In accordance with EN 61558-2-15

- Protection class I
- With static shield between the primary and secondary winding with isolated connection
- With thermistor transformer protection for warning in case of thermal overload (3RN trip units for PTC temperature sensors must be ordered separately)
- With center tap for isolation monitoring
- Short-circuit voltage  $u_z \leq 3\%$ , no-load current  $i_0 \leq 3\%$
- Inrush current max.  $8 \times I_{1N}$

$t_a$  55 °C/H



# Transformers in Multi-Voltage Design

## Selection and ordering data

Transformers in multi-voltage design for adjustment to various mains voltages. Designed as mains, control and isolating transformers in accordance with EN 61558-2-1, -2-2, -2-4 or as isolating and mains transformers in accordance with EN 61558-2-1, -2-4.

AC 50/60 Hz, degree of protection IP00

4AP:  $t_a$  40 °C/B

4AU:  $t_a$  55 °C/H



		Single-phase	
PRI		230 V	
SEC		230-115 V	
$P_n$	Voltage rise with no-load operation $U_A$	Basic type	Order number supplement
kVA	%		
2.5	3.6	4AT3012-	1TA71 - 3MA0
3.15	3.6	4AT3602-	1TA71 - 3MA0
4	3.6	4AT3612-	1TA71 - 3MA0
5	3.6	4AT3902-	1TA71 - 3MA0
6.3	3.6	4AT3912-	1TA71 - 3MA0
8	3.7	4AT4302-	1TA71 - 3MA0

		Three-phase		
PRI		3 AC Y 500-400 V D 289-230 V	3 AC Y 520-500-480-460-440-420-400-380-360 V D 300-289-277-266-254-240-230-220-208 V	
SEC		3 AC Y 400 V/D 230 V	3 AC Y 400 V/D 230 V	
$P_n$	Short-time rating <sup>1)</sup> $P_{shortt}$	Basic type	Order number supplement	
kVA	kVA			
0.16		4AP1742-	8BC40 - OHA0	-
0.25		4AP1842-	8BC40 - OHA0	-
0.4		4AP1942-	8BC40 - OHA0	-
0.63	1.8	4AP2042-	8BC40 - OHA0	8CC40 - OHA0
1	3.5	4AP2142-	8BC40 - OHA0	8CC40 - OHA0
1.6	6.9	4AP2542-	8BC40 - OHA0	8CC40 - OHA0
2.5	11	4AP2742-	8BC40 - OHA0	8CC40 - OHA0
4	20	4AP3042-	8BC40 - OHA0	8CC40 - OHA0
6.3	28	4AU3032-	8BC40 - OHA0	8CC40 - OHA0
8	32	4AU3612-	8BC40 - OHA0	8CC40 - OHA0
10	39	4AU3632-	8BC40 - OHA0	8CC40 - OHA0
12.5	49	4AU3912-	8BC40 - OHA0	8CC40 - OHA0
16	55	4AU3932-	8BC40 - OHA0	8CC40 - OHA0

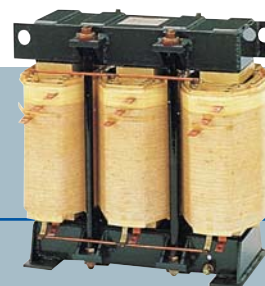
<sup>1)</sup> With  $\cos \varphi = 0.5$  and  $U_2 = 0.95 \times U_{2N}$



**4AT**  
for the supply of  
medical premises



**4AP**



**4AU**

# Transformers

## with Selectable Voltages

Transformers from 0.025 kVA to 400 kVA, in accordance with EN 61558/VDE 0532-6 with selectable primary and secondary voltages and additional options.

4AM and 4AP:  $t_a$  40 °C / B

4AT and 4AU:  $t_a$  55 °C / H

4BT:  $t_a$  55 °C / H

4BU:  $t_a$  40/55 °C / H

CE cULus 

Single-phase		Three-phase	
Power range kVA	Voltage range PRI and SEC	Power range kVA	Voltage range PRI and SEC
0.025...2.5 <sup>1)</sup>	4AM 12...690 V, with cULus max. 600 V	0.16...5	4AP 12...690 V, with cULus max. 600 V
4...16	4AT 24...690 V, with cULus max. 600 V	6.3...16	4AU 24...690 V, with cULus max. 600 V
18...250	4BT 100...1000 V, with cULus max. 600 V (up to 3.6 kV upon request)	18...400 <sup>2)</sup> (2000 kVA upon request)	4BU 100...1000 V, with cULus max. 600 V (up to 3.6 kV upon request)

<sup>1)</sup> Optional: from 0.025 to 0.5 kVA also with snap-on connection for 35 mm DIN rail

<sup>2)</sup> Approvals cULus: 18 to 400 kVA

Further products with degrees of protection IP20, IP23 and IP54 are available in the interactive catalog CA01 and at the A&D Mall.

Further designs with higher ratings (up to 2000 kVA) and voltages (up to 3.6 kV) are available upon request addressed to: MD\_Anfrage.aud@siemens.com



4BT



4BU

Do you require further information?

Please contact:

[MD\\_Anfrage.aud@siemens.com](mailto:MD_Anfrage.aud@siemens.com)

or send a fax to:

+49 4 21/5 12 53 33

## Siemens AG

Automation and Drives

Low-Voltage Controls and Distribution

P.O. Box 48 48, 90327 NUREMBERG

GERMANY

[www.siemens.com/sirius](http://www.siemens.com/sirius)

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