

Limitless possibilities:
A new dimension of industrial controls.



sirius

SUPPLYING

SIEMENS



**SIRIUS functions –
an overview**

Switching

Protecting

Starting

Monitoring and controlling

Detecting

Commanding and signaling

Supplying

Engineering

SIRIUS and more

4/5

Simply everything that your plant needs.

Supplying with SIRIUS.

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First choice for the optimum voltage.

SIRIUS transformers.

8/9

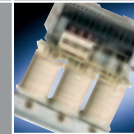
Perfect products for all applications.

SIRIUS power supplies.

10/11

At a glance.

Technical data.



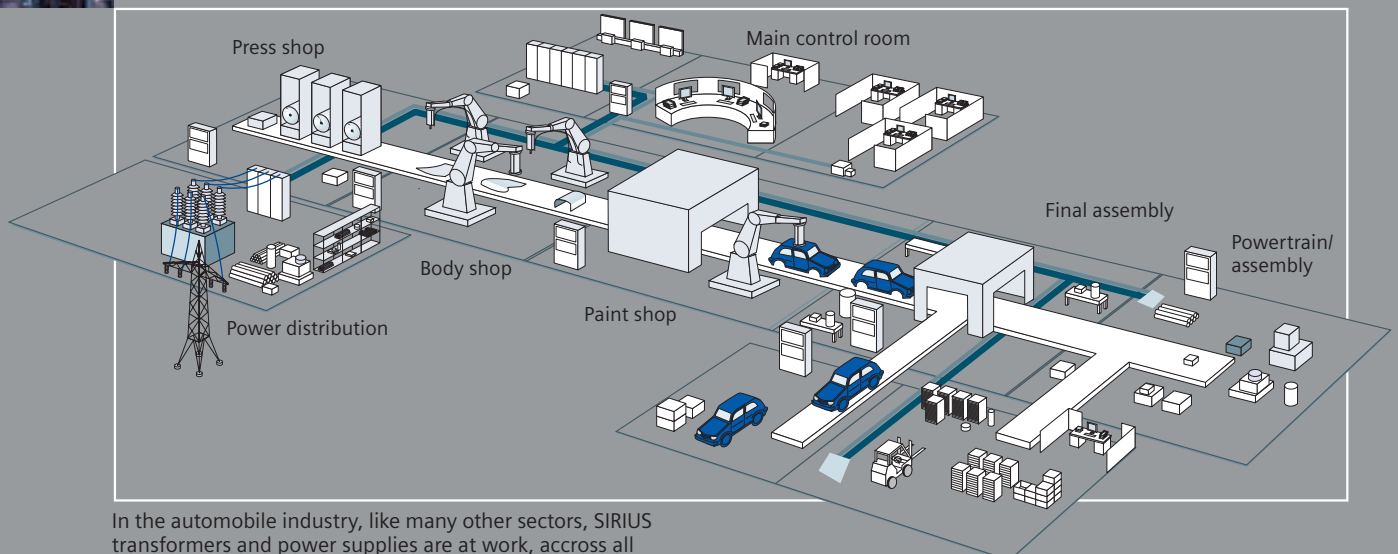
Everything. Quite simple. Using SIRIUS industrial controls.

We have been developing and manufacturing industrial control products for more than 110 years now. We have always followed the philosophy of making things simpler for you using innovative industrial controls – whether in the electrical cabinet, in the field or directly at the machine. This is why today we combine our complete industrial controls under one star. SIRIUS®.

And this makes everything easier. If you require industrial controls for load feeders, components for power distribution, commanding, signaling and protection devices or complete cabinet systems – SIRIUS industrial controls offers you the complete range. With SIRIUS, industrial controls reach a new dimension when it comes to simplicity.

For instance, we ensure that our products can be simply and quickly mounted and installed by using innovative connection systems – and we are continuously reducing the sizes of our devices. Things also run smoothly in operation, due to consequential standardization, we can offer you reliable products that have an especially long lifetime.

Our portfolio can be combined to create optimized systems using higher-level, integrated, seamless concepts such as Totally Integrated Automation®, Safety Integrated or ECOFAST®. And if a problem does happen to occur, then we can resolve this with extremely fast logistics and global support. This means that with SIRIUS industrial controls in your plant, you can relax and be confident about the future.



In the automobile industry, like many other sectors, SIRIUS transformers and power supplies are at work, across all levels, with demanded reliability.

Simply everything your plant needs.
Supplying with SIRIUS.

Electrical boards and modules must always be supplied with the correct voltage – especially when it comes to special requirements. With our SIRIUS industrial controls portfolio, we offer ideal products for all of your applications: SIRIUS transformers and power supplies.

All of our products have one thing in common – they are in compliance with international Standards and approvals. This means that you have the security of knowledge that you can reliably equip and operate your plants and systems – worldwide.



Voltage guaranteed: SIRIUS transformers

To have the right voltage in every situation, you need to ensure you have the appropriate transformers. SIRIUS transformers are the professionals for every application: They operate reliably and safely accross the globe.

Constant line supply voltage: SIRIUS power supplies

SIRIUS power supplies are extremely reliable due to their rugged design. They are extremely stable against the influence of external line supply disturbances and dampen cable-borne EMC.



First choice for
the optimum voltage.



SIRIUS transformers.

Only with the correct transformer will you have the right voltage in every situation. The solution: SIRIUS. Our transformers master every task – reliably and safely – across the globe.

The series of single- and three-phase SIRIUS transformers combine all of the features and properties of safety, isolating, control and line transformers. This means that you can handle each and every application with supreme confidence.

Our single- and three-phase SIRIUS power transformers with selectable input and output voltages can be used as line supply matching transformers, autotransformers or converter transformers in compliance with DIN VDE 0532-6.

SIRIUS transformers fulfill the highest demands – and the toughest required levels of safety. SIRIUS transformers always offer the optimum level of protection in the widest range of applications. This is to the high permissible ambient temperatures up to 55 °C, their fuseless design and the integrated safety Standard according to EN 61558. Not only that but, our control transformers distinguish themselves due to their high short-time power rating.



4AM single-phase control transformers



4AP three-phase isolating transformers



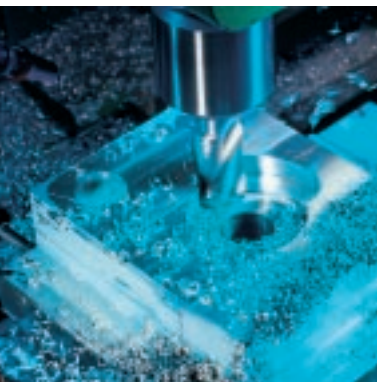
4AU matching transformer



4BU power transformer



4BU power transformer in degree of protection IP23



Perfect products for
all applications.



SIRIUS power supplies.

Our SIRIUS power supplies offers you a complete range of first-class products.

The complete series ensures uniform voltages and minimum failure times. In

addition, they cover all of the important worldwide input voltages. The devices

are available with cURus for the US  and Canada  so that they can be used

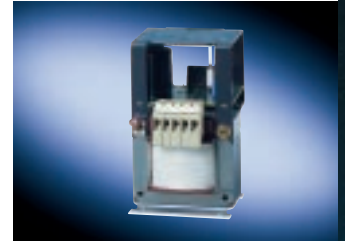
internationally.

The single- and three-phase SIRIUS 4AV power supplies fulfill the requirements according to EN 61131-2, independent of the load (no-load operation up to the rated current) and independent of fluctuations in the line supply voltage (+6% to -10% according to IEC 60038). The electronic control is reliably supplied with the necessary output voltage as the SIRIUS transformers used here were strictly dimensioned. They can be connected to public and industrial line supplies in compliance with EN 61000-3-2 and EN 61000-3-3.

The safety transformers used are designed in compliance with Standard EN 61558-2-6 and allow protective separation between safety extra-low-voltage and functional extra-low-voltage circuits (SELV and FELV) to other circuits. Higher-current requirements can be covered by connecting several of the same 4AV units in parallel.



4AV single-phase, unregulated power supply for rail mounting



4AV2 single-phase, unregulated power supply



4AV3 three-phase, unregulated power supply



SIRIUS transformers			
Single-phase transformers			
Version	Rated power kVA	Rated input voltage AC V	Rated output voltage V AC
4AM, 4AT safety, isolating, control and line transformers			
4AM safety (line transformers) and control transformers			
4AM with one input voltage	0.063 ... 1.0	230 ±5%; 400 ±5%; 440 ±5%; 500 ±5%	24; 42
4AM in a Euro-voltage version	0.063 ... 1.0	400/230 ±15 V	24; 42
4AM in a multi-voltage version	0.063 ... 1.0	550 ... 208; 600 ... 230	24; 42
4 AM safety transformers (line transformers)			
4AM with one input voltage	0.025 ... 0.04	230 ±5%; 400 ±5%; 440 ±5%; 500 ±5%	24; 42
4AM, 4AT isolating, control and line transformers			
4AM and 4AT with one input voltage	4AM: 0.063 ... 2.5; 4AT: 4 ... 10	230 ±5%; 400 ±5%; 440 ±5%; 500 ±5%	110; 2 x 115; 230
4AM and 4AT with one input voltage, without cURus	4AM: 0.063 ... 2.5; 4AT: 4 ... 10	660 ±5%; 690 ±5%	230
4AM in a Euro-voltage version	0.063 ... 2.5	400/230 ±15 V	2 x 115
4AM and 4AT in a multi-voltage version	4AM: 0.063 ... 2.5; 4AT: 4 ... 10	550 ... 208; 600 ... 230	2 x 115
4AM isolating and line transformers			
4AM with one input voltage	0.025 ... 0.04	230 ±5%; 400 ±5%; 440 ±5%; 500 ±5%	110; 230
4AM and 4AT with one input voltage, without cURus	0.025 ... 0.04	660 ±5%; 690 ±5%	230
4AM, 4AT transformers with selectable voltages			
4AM and 4AT safety, isolating, control, line and autotransformers	4AM: 0.025 ... 2.5; 4AT: 4 ... 16	Selectable; 4AM: 12 ... 690 ¹⁾ ; 4AT: 24 ... 690 ¹⁾	Selectable; 4AM: 12 ... 690 ¹⁾ ; 4AT: 24 ... 690 ¹⁾
4BT power transformers			
4BT transformers with selectable voltages			
4BT line matching transformers, autotransformers or converter transformers	18 ... 250	Selectable; 100 ... 1000 ¹⁾	Selectable; 100 ... 1000 ¹⁾
4AT isolating transformers to supply rooms used for medical purposes			
4AT isolating transformers to supply rooms used for medical purposes	2.5 ... 8	230; 400	230 ... 115
Three-phase transformers			
4AP, 4AU safety, isolating, control and line transformers			
4AP, 4AU isolating, control and line transformers			
4AP and 4AU in a 2-voltage version	0.063 ... 16	Y 500 ... 400/Δ 289 ... 230	Y 400/Δ 230
4AP and 4AU in a multi-voltage version	0.063 ... 16	Y 520 ... 360/Δ 300 ... 208	Y 400/Δ 230
4AP isolating and line transformers			
4AP and 4AU in a 2-voltage version	0.16 ... 0.4	Y 500 ... 400/Δ 289 ... 230	Y 400/Δ 230
4AP, 4AU transformers with selectable voltages			
4AP and 4AU safety, isolating, control, line and autotransformers	4AP: 0.16 ... 5; 4AU: 6.3 ... 16	Selectable; 4AP: 12 ... 690 ³⁾ ; 4AU: 24 ... 690 ³⁾	Selectable; 4AP: 12 ... 690 ³⁾ ; 4AU: 24 ... 690 ³⁾
4BU power transformers			
4 BU line matching transformers			
with one input voltage 4BU; vector groups Dyn5 and Yyn0	18 ... 400	480; 440; 400 480 ±5%; 440 ±5%; 400 ±5%	400; 208
4BU line matching transformers with cURus-certification			
with one input voltage 4BU; vector groups Dyn5 and Yyn0	18 ... 400	480; 440; 400 480 ±5%; 440 ±5%; 400 ±5%	400; 208
4BU transformers with selectable voltages			
4BU line adaptation, auto or converter transformers	18 ... 400	Selectable 100 ... 1000 ³⁾	Selectable; 100 ... 1000 ³⁾
4BU line adaptation, auto or converter transformers with cURus certification	18 ... 400	Selectable 100 ... 1000 ³⁾	Selectable; 100 ... 1000 ³⁾
Autotransformers			
for line supply adaptation according to EN 61558-2-13	4AP: 5 ... 22.5; 4AU: 12.5 ... 50	4AP, 4AU: 480 ... 380; 4AP, 4AU: 480 ... 400 (380) ²⁾	4AP, 4AU: 400; 4AP, 4AU: 230 (220) ²⁾

1) c_{RU}s max. 600 V.
 2) When 3-ph. 380 V AC is connected to the input terminals, an output voltage of 3-ph. 220 V AC is obtained.
 3) c_{RU}s max. 600 V.

At a glance: Technical data.

SIRIUS power supplies								
Unregulated power supplies								
Version	Ripple	Phases	Rated input voltage	Rated output voltage acc. to EN 61131-2 suitable for SIMATIC systems	Rated output current/ rated power	Terminals	Montage	cURus-certification
			V AC	V DC	A/W			
Filtered								
4AV21/23	< 5%	1	115 ... 415	24	1 ... 3,5 A	Screw/flat terminals	Rail mounting	Yes
4AV20/22/24/26	< 5%	1	115 ... 415	24	2.5 ... 15 A	Screw/flat terminals or Cage-Clamp terminals	Screw and/or rail mounting	No
4AV4	< 5%	1	230 ... 415	24	1.5 ... 10 A	Screw/flat terminals or Cage-Clamp terminals	Screw and/or rail mounting	Partially
4AV3	< 5%	3	200 ... 600	24	15 ... 150 A	Screw/flat terminals	Screw mounting	No
4AV5	< 5%	3	400 ... 415	24	25, 35 A	Screw/flat terminals	Screw mounting	
Unfiltered								
4AV98	48.3%	1	230 or 400	24	50 ... 500 W	Screw/flat terminals	Screw mounting	No
4AV96	< 5%	3	400	30-27-24	4 ... 25 A	Screw/flat terminals	Screw mounting	

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SIRIUS



SIRIUS Industrial Controls

SWITCHING



SIRIUS Switching

SIRIUS SC Solid-state switching devices

PROTECTING



SIRIUS Protecting

STARTING



SIRIUS Starting
 SIRIUS Soft starters

SIRIUS Product Overview

SIRIUS Feed-in system

SIRIUS Engineering load feeders

MONITORING AND CONTROLLING



SIRIUS Relays for every application

SIMOCODE

Program Overview Safety Relays

DETECTING



SIRIUS Detecting

Position switches Program Overview

COMMANDING AND SIGNALING



SIRIUS Commanding and Signaling

Pushbuttons and Light Indicators Program Overview

SUPPLYING



SIRIUS Supplying

ENGINEERING



Switch ES motor starter
The engineering tool for the high feature motor starters

SIRIUS AND MORE



SIRIUS Cage-Clamp systems

ECOFAST

SIRIUS Safety Integrated AS-Interface

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