

Consistent, safe and intelligent low-voltage power distribution and electrical installation technology

Whether in industry, infrastructure or buildings: Each environment depends on a reliable power supply.

Which is why products and systems featuring maximum safety and optimum efficiency are in demand. This comprehensive portfolio for low-voltage power distribution and electrical installation technology covers every requirement – from the switchboard to the socket outlet.



Your personal contact can be found at www.siemens.com/lowvoltage/contact

Catalog LV 14 · 11/2019

THE CHIEF

You will find the latest edition and all future editions in the Siemens Industry Online Support at www.siemens.com/lowvoltage/catalogs

Refer to the Industry Mall for current prices www.siemens.com/industrymall

The products and systems listed in this catalog are developed and manufactured using a certified quality management system in accordance with DIN EN ISO 9001:2008.

Technical data

The technical specifications are for general information purposes only. Always heed the operating instructions and notices on individual products during assembly, operation and maintenance.

All illustrations are not binding.

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Power Monitoring Made Simple

Appendix __

Introduction _______ I/2

Measuring Devices, Power Monitoring and Digitalization Solutions ______ 1/1

Clickable Article Numbers

Measuring and Monitoring

Direct forwarding to the individual products in the Industry Mall by clicking on the Article No. in the catalog or by entering this web address incl. Article No.

www.siemens.com/product?Article No.

new Search Function

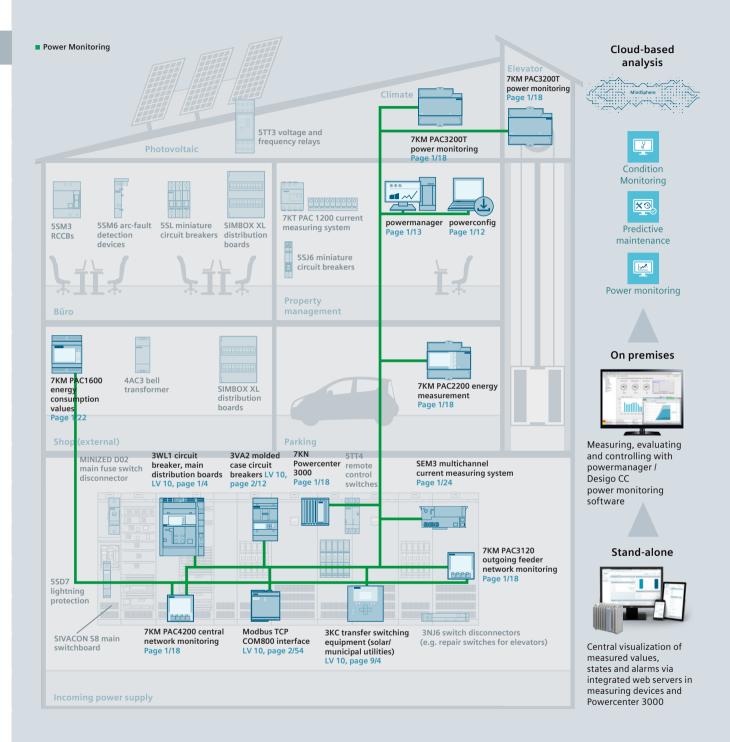
Search for new products by entering new in the text field of the search function



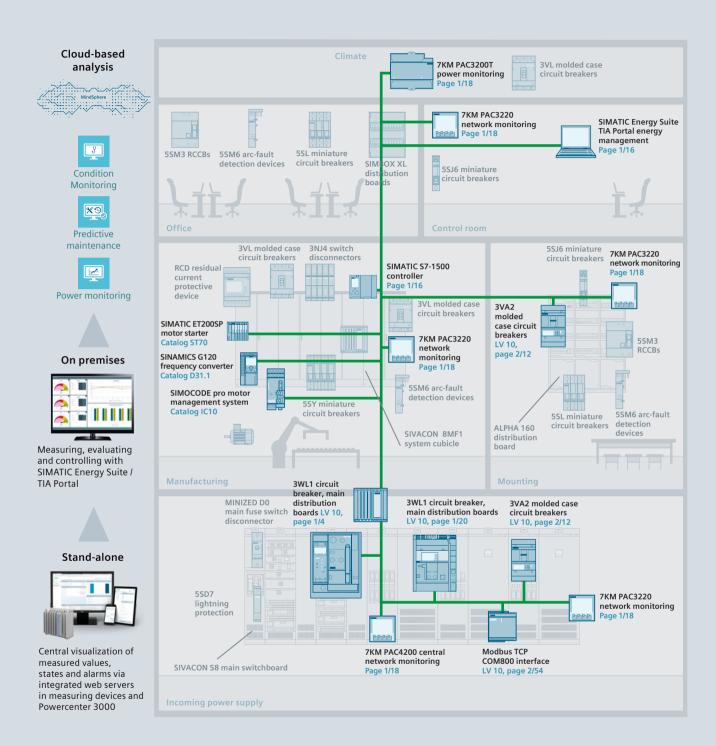
Catalog LV 10 · 10/2019

You can find the entire product spectrum for low-voltage power distribution and electrical installation technology in catalog LV 10 · 10/2019 at www.siemens.com/lowvoltage/catalogs

Examples of digitalization in infrastructure



Examples of digitalization in industry



Introduction to the topic of digitalization and Industry 4.0

In industrial automation, the demand for communication capability, data transparency and flexibility is growing constantly. To enable industrial switchgear technology to meet this demand, the use of bus systems and intelligent switching devices is unavoidable.

Digitalization

Switching, protection and measuring devices in power distribution systems can display important information on local visualization via integrated communication, e.g. in powercenter, or transmit it to energy data management systems (EDMS), e.g. powermanager, as well as to cloud systems and applications.

- Diagnostics management
- Fault management SMS alarm
- Maintenance management predictive maintenance
- Cost center management MID

1. Visualization and plant transparency (HMI)



- Greater operational reliability thanks to remote access to the plant.
- Plant visualization for central and simple access to all device information.

2. Digital documentation



- Uniform access to digital data and documentation.
- Provision of extensive CAx data for systems and components during planning and operation.
- Support in planning and process creation using SIMARIS planning tools, product and system configurators.

3. Power monitoring



• Fulfilling the ISO 50001 by detecting and transparently presenting the energy flows within energy distribution.

4. Optimization and retrofit



- Retrofitting solutions such as SEM3 offer a simple option for integrating energy monitoring into existing systems.
- Energy monitoring and plant transparency help you efficiently plan plant expansion.

5. Maintenance management



 Maintenance support, even remotely, by transparently presenting the status of a switchgear and controlgear assembly.

6. Emergency management

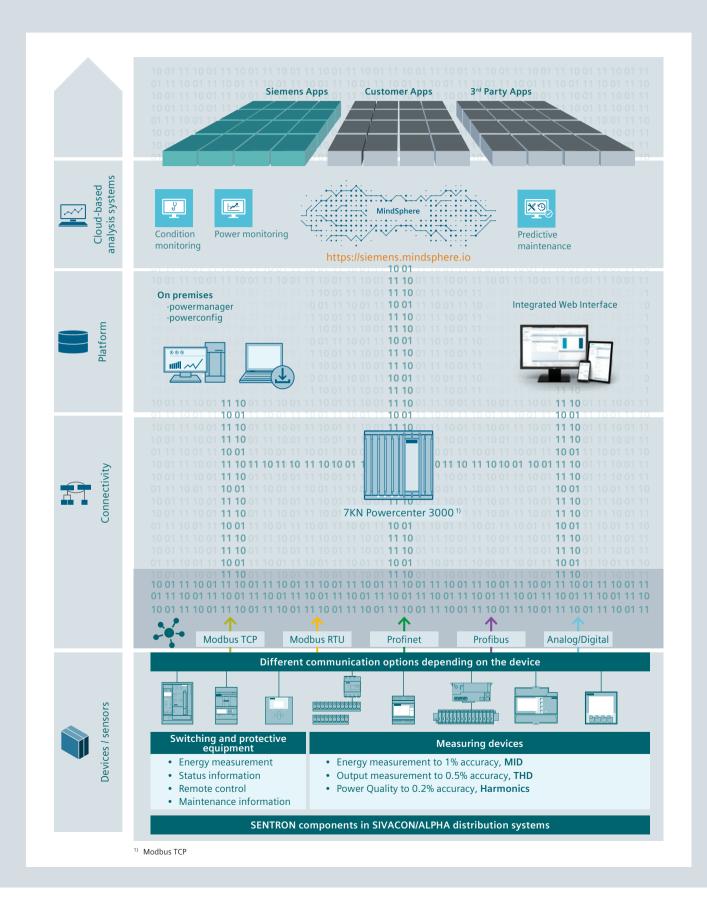


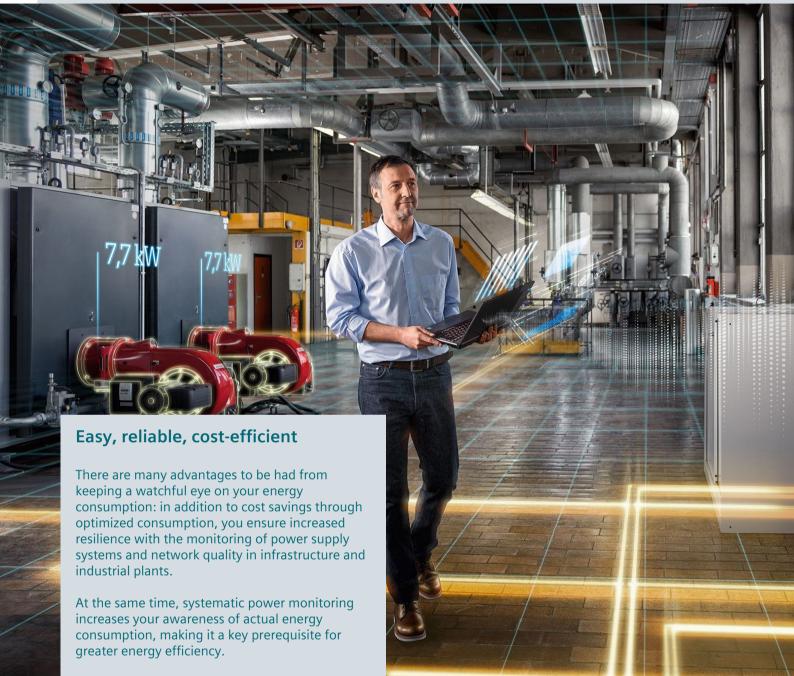
• Quick error localization which therefore leads to a minimization of outage times.

7. Security



Protection from unauthorized access and manipulation to switchgear and controlgear assemblies and devices
ensures integrity, availability and confidentiality.





Integration into open IoT operating systems such as MindSphere results in even greater optimization potential.

What is more, with a power monitoring system you lay the foundation for regular energy audits and a corporate energy management system according to ISO 50001 and ISO 50003.

Measuring Devices, Power Monitoring and Digitalization Solutions



A multitude of additional information ...

Information + ordering



(i) All the important things at a glance

Information to get you started

For information about measuring devices, power monitoring and digitalization solutions, please visit our websites www.siemens.com/powermonitoring

www.siemens.com/lowvoltage/digitalization



Contact persons in your region

We are there when you need us

You can find your local contacts at www.siemens.com/lowvoltage/contact



Your product in detail

The Siemens Industry Online Support portal provides comprehensive information

www.siemens.com/lowvoltage/product-support

- Technical basic information SENTRON power monitoring and digital solutions (109769851)
- Brochure Reliable, sustainable, and efficient -TÜV-certified power monitoring system in accordance with ISO 50001 (109744679)
- Brochure SENTRON portfolio for power monitoring (109744725)

The relevant tender specifications can be found at www.siemens.com/lowvoltage/tenderspecifications



Siemens YouTube channel

Our video range

• Power monitoring (general) bit.ly/2IZ9QqC



Everything you need for your order

Refer to the Industry Mall for an overview of your products

- Measuring devices and power monitoring sie.ag/2kTH9Lz
- Digitalization solutions sie.ag/2olliNi
- Library for SIMATIC sie.ag/2kpbwcs
- powermanager / powerconfig sie.ag/2kTJjuF

Direct forwarding to the individual products in the Industry Mall by clicking on the Article No. in the catalog or by entering this web address incl. Article No. www.siemens.com/product?Article No.

... can be found in our online services

Commissioning + operation



Configuration software

powerconfig

The combined commissioning and service tool for communication-capable measuring devices and circuit breakers from the SENTRON family. www.siemens.com/powerconfig



Your product in detail

The Siemens Industry Online Support portal provides detailed technical information

www.siemens.com/lowvoltage/product-support

- Operating instructions
- Certificates

Engineering data for CAD or CAE systems are available in the CAx Download Manager at www.siemens.com/lowvoltage/cax



The fast track to the experts

Competent expert advice on technical questions with a wide range of demand-optimized services for all our products and systems.

Assistance with technical queries is provided at www.siemens.com/lowvoltage/support-request

We offer a comprehensive portfolio of services. You can find your local contacts at www.siemens.com/lowvoltage/contact

You can find further information on services at www.siemens.com/service-catalog

Manuals

Manuals are available for downloading in Siemens Industry Online Support at

www.siemens.com/lowvoltage/manuals

- Configuration manual measuring devices and power monitoring (45315973)
- Equipment manual 7KT PAC1600 energy meter (109759827)
- Equipment manual 7KT PAC1600 multimeter (109760293)
- System manual 7KT multichannel current measuring system (109483442)
- Equipment manual PAC2200 measuring device (109746835)
- Equipment manual SENTRON PAC3200 power monitoring device (26504150)
- Equipment manual PAC3200T measuring device (109746833)
- System manual SENTRON PAC4200 power monitoring devices (34261595)
- Equipment manual PAC3100 measuring device (37881976)
- Equipment manual SENTRON PAC5100/5200 7KM5212/5412 (109477872)
- Equipment manual 7KM PAC3120 and 7KM PAC3220 (109767307)
- Communication manual SENTRON PAC5100/5200 7KM5212/5412 (109477870)
- System manual 3VA communication IEC/UL (98746267)
- SEM3[™] Embedded Micro Metering Module[™] (109748928)

Training and tutorials

Our training courses can be found at www.siemens.com/sitrain-lowvoltage

- Power monitoring with SENTRON (WT-LVAEM)
- Energy management Basic training (LV-EMSENTB)
- Energy management Training for experts (LV-EMSENTE)
- Communication with SENTRON components (LV-COM)



Technical overview of measuring devices, power monitoring and digitalization solutions



The fast way to get you to our online services

This page provides you with comprehensive information and links on measuring devices, power monitoring and digitalization solutions

www.siemens.com/lowvoltage/product-support (109764480)

Power monitoring

Software

Local monitoring systems Web **PC-based** App INTERNET Web interface **7KT PAC1200** powerconfig powerconfig powermanager integrated App App

Functions for power monitoring

Configuring / commissioning / parameterizing	-	-	•		_
Displaying current data	•	•	•	•	•
Displaying / evaluating current / historical values	•	•	•	•	•
Prepared reports	_	_	_	_	•
Customized reporting	_	_	_	-	•
Data analysis in the cloud					•

Additionally for energy management

Switching loads on and off

IoT data platform

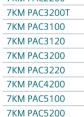
7KN Powercenter 3000

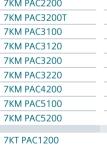
Measuring devices and circuit breakers

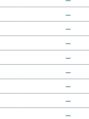
Measuring devices for industrial 7KM PAC2200

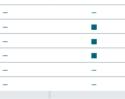
applications	

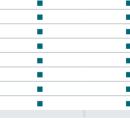
























Circuit breakers						
	II G					





3WL
3WL10 / 3VA2
3VA ETU8

7KT PAC1600 SEM3

- □ Available with limited functionality ■ Function available
- Function not available



Hardware components

Industry

			S52 (c) northfree (c) (c) (498)	231.6	238 y	231.6,	
		- 1	150 150 150 150 150 150 150 150 150 150	231.6 231.6 231.6	238 y 238 y	231.6 _v 231.6 _v	
	7KM PAC2200	7KM PAC3200T	7KM PAC3100	7KM PAC3120	7KM PAC3200	7KM PAC3220	
Installation type							
Front mounting Standard mounting rail	- = -	- = -	■ - -	■ - -	■ - -	■ - -	
Screw mounting Withdrawable Fixed-mounted	1	1	1	1	1	-1-	
	- -	- -	- -	- -	- -	- -	
Measuring connection Direct measurement	_	_	-		-		
	-			_			
Transformer measurement	•	•	•	•	•	•	
Multichannel measuring system	-	-	_	-	-	-	
Suitable transformers Window-type current transformers	_	_	_		_		
Folding transformer			- :	-	-		
Integrated transformer	-	-	-	-	-	-	
Commissioning							
MID version	_		_	_	_	_	
Max. input voltage L-L/L-N	480 V/277 V	480 V/277 V	480 V/276 V	690 V/400 V	690 V/400 V ¹⁾	690 V/400 V	
Transformer connection version	x/1 A or x/5 A	x/1 A or x/5 A	x/5 A	x/1 A or x/5 A	x/1 A or x/5 A	x/1 A or x/5 A	
Direct connection version	65 A	_	_	_	_	-	
DC power supply unit with	_	_	_	22 65 V DC	22 65 V DC	22 65 V DC	
extra-low voltage version							
Single-phase counter version		-	-	-	-	-	
Electrically isolated voltage inputs	-	-	-	-	-	-	
Version without display (for web interface)	-		-	-	-	-	
Evaluation							
Measured quantities							
Average value of measured values		•	-	•	-		
Voltage, current, frequency		•	•	•	•		
Power, power factor							
Energy measurement							
Daily energy storage	60 days	60 days		60 days		60 days	
Apparent Active Reactive energy cos φ			- -	■ = = -		■ ■ ■ -	
Distortion factor THD (voltage, current)	-	•	-	•	■ (THD indication)	•	
Harmonics (voltage, current)	-	-	-	-	-	-	
Phase angle/phase chart	-	-	-	-	-	-	
Load profile recording	_	-	_	_	-	-	
Flicker acc. to IEC 61000-4-15		_				_	
Monitoring functions Operating hours counter	_	_		_	_	_	
Limit monitoring		- :	_	- :		- :	
Logic functions	_	-	_		- :	-	
Event log		_	_	_	-	-	
Gateway function	_	_	_		_	_	
Reporting acc. to EN 50160	_	_	_	_	_	-	
Integrated fault recorder	_	_	_	_	_	-	
Integrated communication interfaces							
Digital inputs/digital outputs	1/1	1/1	2/2	2/2	1/1	2/2	
SO-Interface		.,.		■		■	
M-Bus		_	_	-	_	-	
RS485 (Modbus RTU)		_			-	-	
Ethernet with Modbus TCP			-	-			
BACnet	-	-	_	-	-	-	
More information							
	See page 1/18	See page 1/18	See page 1/18	See page 1/18	See page 1/18	See page 1/18	

¹⁾ For devices with AC/DC wide-voltage power supply unit



Accessories

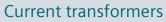
Communication modules

1111111

1111111

		0 (6 183)	· a	4
		7KM Switched Ethernet PROFINET / Modbus TCP	7KM PROFIBUS DP	7KM RS485 Modbus RTU
Industry				
	7KM PAC2200	-	-	-
	7KM PAC3200T	-	-	-
498 465. 158.	7KM PAC3100	-	-	-
231.6. 231.6. 231.6.	7KM PAC3120 new	-	-	-
230 230 230	7KM PAC3200			
231.6. 231.6. 231.6.	7KM PAC3220 new	•		•
lidida	7KM PAC4200	•		•
	7KM PAC5100	-	-	-
	7KM PAC5200	-	-	-
Buildings and ir	nfrastructure			
	7KT PAC1200	-	-	-
no and B	7KT PAC1600	-	-	-
	SEM3	-	-	-
Circuit breakers	;			
	3WL	-	-	-
	3WL10 / 3VA27	-	-	-
100	3VA ETU8	•		•

Expansion modules











7KM PAC 4DI/2DO	7KM PAC I(N), I(Diff), analog	4NC Current transformers	7KT Current transformers
-	-		
-	-		
-	-	•	•
-	-	•	•
-	•	•	•
•	•	•	•
•	•	•	
-	-	•	
-	-	•	
-	-	•	•
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-	-	-	-

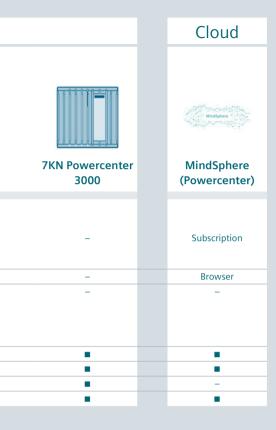
Software

	Web INTERNET Web interface integrated	SIEMENS 7KT PAC1200 App	CON SIEMENS powerconfig App	PC-b powerconfig	powermanager
Operating environment					
Free use	•	•	•		Trial license for up to 10 devices, max. 60 days
System requirements	Browser	Android, iOS	Android	win x64	win x64
Download	(pre-installed)	play.google.com itunes.apple.com	play.google.com	http://support. automation.siemens. com/WW/view/ en/63452759	Trial license: . http://support. automation.siemens. com/WW/view/ en/64850998
Suitable according to ISO 50001	_	-	_	_	■ (TÜV)
Connection of non-Siemens devices					
Connection of non-siemens devices		_	_		
Local operation without cloud	-	-	-	-	•

Local monitoring systems

[□] Available with limited functionality

Function not available



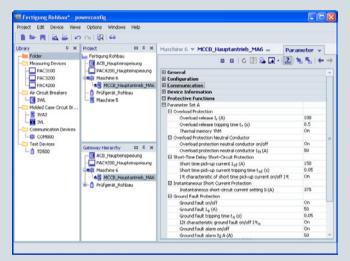
powerconfig

PC-based software for commissioning and maintenance

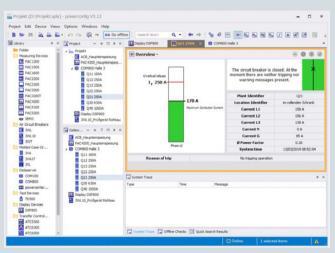
powerconfig is available free of charge at www.siemens.com/powerconfig

You can find more information on the Internet at www.siemens.com/sentron

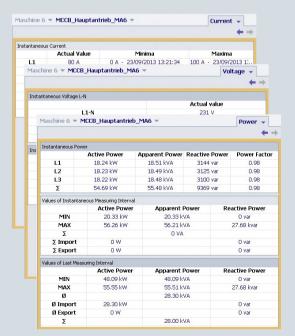
- PC-based software tool for the efficient commissioning and diagnostics of communication-capable SENTRON components
- Supports all PAC measuring devices incl. expansion modules, 3WL/3VA circuit breakers and further communication-capable components, e.g. ATC6300
- Service functions:
 - Firmware updates
 - Switching of language packs for 7KM PAC measuring devices
- General range of functions:
 - Facilitates the parameterization of the devices
 - Saving and printing of device settings
 - Monitoring, saving and printing of instantaneous measured quantities
 - Execution of specific device functions, such as resetting of devices and setting of energy counters
- Additional functional scope with 7KM PAC4200 and 3VA:
 - Readout of data stored in the device (events, load profile history, daily energy counters)
 - Saving in csv format



Setting of parameter values



Display of the circuit breaker state



Display of actual measured quantities

powermanager V3

PC-based power monitoring software

New in powermanager 3.5

- Optimized devices support for:
 - PAC1600
 - PAC4200 with firmware V2.1
 - SEM3 support Modbus RTU
- Extension of the scope of service:
 - Integrated MindSphere interface tuned to SENTRON MindApps
 - OPC UA Server support (fee-based option)

Version	Description	Article No.
powermanager V3.5		
Basic Package	Full product license for up to 10 devices, installation for client/server, web access	3ZS2711-0CC30-0YA0
Trial license	Full product license limited to 60 days for up to 10 devices,	
	incl. "Expert" and "Web" option packs	
	Available free of charge at https://support.industry.siemens.com/cs/ww/en/view/64850998	
V3.x device expansions		
Device Pack (20)	Device expansion license for up to 20 devices	3ZS2711-0CC30-0YD0
Device Pack (50)	Device expansion license for up to 50 devices	3ZS2712-0CC30-0YD0
Device Pack (100)	Device expansion license for up to 100 devices	3ZS2713-0CC30-0YD0
Device Pack (200)	Device expansion license for up to 200 devices	3ZS2714-0CC30-0YD0
Device Pack (500)	Device expansion license for up to 500 devices	3ZS2715-0CC30-0YD0
Device Pack (1000)	Device expansion license for up to 1000 devices	3ZS2716-0CC30-0YD0
Option packs		
"Expert" option pack	Option for creating/presenting any number of freely configured images	3ZS2710-2CC20-0YH0
"Client (5)" option pack	Expansion for up to 5 clients	3ZS2710-3CC00-0YD0
"Distributed Systems (2)"	Option for the connection of 2 autonomous powermanager systems	3ZS2718-1CC00-0YH0
option pack	for the exchange of measured values and alarms	
"Distributed Systems (5)"	Option for the connection of 5 autonomous powermanager systems	3ZS2718-2CC00-0YH0
option pack	for the exchange of measured values and alarms	
"Distributed Systems (10)"	Option for the connection of 10 autonomous powermanager systems	3ZS2718-3CC00-0YH0
option pack	for the exchange of measured values and alarms	
Update powermanager V2.0 t	to V3.0	
Update license	From V2.0 Lean to V3.x (10)	3ZS2711-0CC30-0YE0
Update license	From V2.0 Standard to V3.x (50)	3ZS2712-0CC30-0YE0
Update license	From V2.0 Maximum to V3.x (100)	3ZS2713-0CC30-0YE0
Update license	From V2.0 Maximum to V3.x (200)	3ZS2714-0CC30-0YE0
System packages		
System 1	Package comprising	3ZS2812-5CC20-0AY0
	1× powermanager Basic Package	
	1× PAC4200 (+ RS485 module) and	
	1× PAC3100	
System 3	Package comprising	3ZS2813-2CC20-0YA0
	1× powermanager Basic Package 3× PAC 3200	
System 4	Package comprising	3ZS2812-7CC20-0YA0
System 4	1× powermanager Basic Package	3232012-7CC20-01A0
	1× PAC4200	
	4× PAC1600	
	1× RS485 module	
System 5	Package comprising	3ZS2812-8CC20-0YA0
	1× powermanager Basic Package	
	5× PAC2200 Modbus TCP	

powermanager V4 new

PC-based power monitoring software

SENTRON powermanager V4.1

SENTRON powermanager V4.1 is based on a new platform with advanced graphical capabilities and a standard SQL database. The workflows for setting up the system, creating devices, graphically displaying the device data and processing it in reports have been fundamentally revised. The same devices as in V3.5 are supported, with the exception of the obsolete PAC1500 and SICAM P850/855.

The migration of existing powermanager V3.x projects will be supported as of a future powermanager version.

You can find more information on the Internet at www.siemens.com/powermanager

You can find training courses on the Internet at www.siemens.com/sitrain-lowvoltage

Version	Description	Article No.
powermanager V4.1		
Extended Package	Full product license for up to 10 devices, installation for client/server, web access	7KN2710-2CE40-0YC0
Trial license	powermanager V4.1	
	Full product license limited to 60 days for up to 10 devices,	
	incl. "Graphics Editor" option pack Available free of charge at https://support.industry.siemens.com	
Device expansions	Available free of charge at https://support.industry.siemens.com	
Device Pack (20)	Device expansion license for up to 20 devices	7KN2711-1CE40-0YC0
Device Pack (50)	Device expansion license for up to 50 devices	7KN2711-1CE40-01C0
Device Pack (100)	Device expansion license for up to 100 devices	7KN2711-2CE40-01C0
Device Pack (200)	Device expansion license for up to 700 devices Device expansion license for up to 200 devices	7KN2711-4CE40-0YC0
Device Pack (500)	Device expansion license for up to 500 devices	7KN2711-4CE40-01C0
Device Pack (1000)	Device expansion license for up to 1000 devices	7KN2711-5CE40-01C0
Option packs	Device expansion license for up to 1000 devices	7KN2711-0CE40-01C0
"Graphics Editor" option pack	Option for creating/presenting any number of freely configured images	7KN2712-0CE40-0YC0
"Client (2)" option pack	Expansion for up to 2 clients	
	Expansion for up to 5 clients	7KN2712-1CE40-0YC0
"Client (5)" option pack		7KN2712-2CE40-0YC0 7KN2712-3CE40-0YC0
"OPC UA/DA Server" option pack	Option for using OPC UA/DA Server	
	k Additionally, powermanager server license for distributed systems without devices, web, etc.	7KN2712-4CE40-0YC0
Upgrade powermanager V3.x to		7//12712 26540 0760
Upgrade license	From powermanager V3.x to V4.x	7KN2713-2CE40-0YC0
System packages		71/10745 46540 01/60
System 1	Package comprising	7KN2715-1CE40-0YC0
	1× powermanager Extended 1× PAC4200	
	1× PAC3120	
	1× RS485 modules	
System 3	Package comprising	7KN2715-3CE40-0YC0
	1× powermanager Extended	
	3× PAC3220	
System 4	Package comprising	7KN2715-4CE40-0YC0
	1× powermanager Extended	
	1× PAC4200	
	4× PAC1600	
6	1× RS485 module	71010745 5
System 5	Package comprising	7KN2715-5CE40-0YC0
	1× powermanager Extended 5× PAC2200 Modbus TCP	
	3× PACZZOU MOUDUS TCP	

7KN Powercenter new

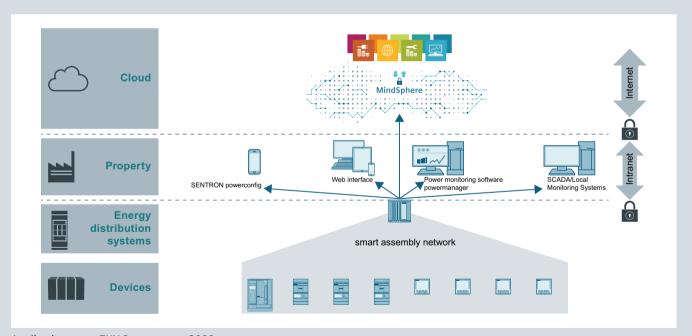
Edge/IoT-based data acquisition and visualization for low-voltage power distribution

7KN Powercenter 3000

- Offers a range of interfaces for the digitalization of low-voltage power distribution
 - One web interface for a clear overview of all connected devices
 - Low-voltage power distribution data interface to MindSphere, the IoT operating system from Siemens
- Communication interface via Modbus TCP for diverse applications, e.g. powermanager
- Provision of the 15 min energy values for the connected devices as a basis for energy management according to ISO 50001
- Flexible IT security features for protection against unauthorized access
- Easy commissioning using powerconfig
- Compact design, 24 V DC supply

You can find more information on the Internet at www.siemens.com/powermonitoring

MountingInterfacesProtocolsArticle No.Standard rail mounting2× EthernetModbus TCP, http, MindSphere7KN1310-0MC00-0AA8



Application areas 7KN Powercenter 3000

SIMATIC Energy Suite

for integrated energy management

Highlights

- · Simple and intuitive configuration instead of programming
- Automatic generation of the PLC energy program
- · Convenient integration of measuring components from the Siemens portfolio and from other manufacturers
- Integrated into the TIA Portal and the automation system
- Archiving in WinCC Professional or PLC
- Seamless interfacing to Energy Manager PRO and Energy
- Analytics

Additional information on the SIMATIC Energy Suite:

www.siemens.com/energysuite

SIMATIC Modbus/TCP SENTRON PAC

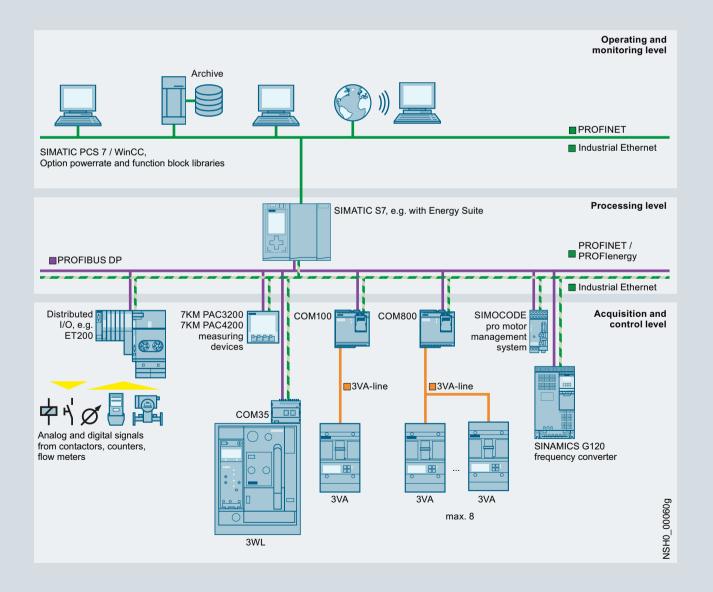
for 7KM PAC3200/4200 measuring devices

Use and version	Valid for	Туре	Article No.
Communication via the integrated	1 CPU and up to 20 SENTRON PACs	Modbus/TCP 20 SENTRON PAC	6AV6676-6MA30-0AX0
PN interface for reading values out	1 CPU and up to 100 SENTRON PACs	Modbus/TCP 100 SENTRON PAC	6AV6676-6MA30-1AX0
of PAC 3200 and PAC PAC 4200 devices, single license	1 CPU and up to 512 SENTRON PACs	Modbus/TCP 512 SENTRON PAC	6AV6676-6MA30-2AX0

PAC/3WL/3VA SIMATIC PCS 7 library

for 7KM PAC3200/4200 measuring devices and 3WL/3VA/3VL circuit breakers

Application	Version	Type of delivery	Article No.
PAC/3WL/3VA SIMATIC PCS 7 library			
 AS blocks and faceplates for integrating the 3WL/3VA/3VL circuit breakers into SIMATIC PCS 7, V8.x or V9.0 SP1 For each SIMATIC PCS 7 Operator Station of the single station/server version, a license containing the following is required: Engineering license for one SIMATIC PCS 7 Operator Station of the single station/server version Runtime license for one automation system (1 required per automation system, further AS runtime licenses can be ordered separately) 	Engineering and runtime software, software class A, 2-language (English, German), single license for one installation	Software and electronic documentation on DVD, engineering and runtime license as Certificate of License	3ZS2787-1CC30-0YG0
AS runtime license for PAC/3WL/3VA library for SIMATION	C PCS 7		
License for one automation system in each case	Runtime software, software class A, 2-language (English, German), single license for one installation	Runtime license as Certificate of License without software and documentation	3ZS2787-1CC30-6YH0



7KM PAC measuring devices

Basic units









Connec- tions	Power supply	Display	Inter- face	MID	7KM PAC2200	7KM PAC3200T	7KM PAC3100	7KM PAC3120 new
Transform	ner measureme	nt						
Screw	Self-powered	With	M-Bus	With	7KM2200-2EA30-1GA1	-	-	-
terminals				Without	7KM2200-2EA30-1CA1	-	-	-
			Modbus	With	7KM2200-2EA30-1HA1	-	-	-
			RTU	Without	7KM2200-2EA30-1DA1	-	-	-
			Modbus	With	7KM2200-2EA30-1JA1	-	-	-
			TCP	Without	7KM2200-2EA30-1EA1	_	_	-
	AC/DC wide- voltage power	With	Modbus RTU	Without	-	-	7KM3133-0BA00-3AA0	7KM3120-0BA01-1DA0
	supply unit		Modbus TCP	Without	-	-	-	-
		Without	Modbus TCP	Without	-	7KM3200-0CA01-1AA0	-	-
	DC power supply unit with extra- low voltage	With	Modbus TCP	Without	-	-	-	-
			Modbus RTU	Without	-	-	-	7KM3120-1BA01-1EA0
Ring cable lug con- nection	AC/DC wide- voltage power supply unit	With	Modbus TCP	Without	-	-	-	-
Direct me	asurement							
Screw	Self-powered	With	M-Bus	With	7KM2200-2EA40-1GA1	-	-	-
terminals				Without	7KM2200-2EA40-1CA1	-	-	-
			Modbus	With	7KM2200-2EA40-1HA1	-	-	-
			RTU	Without	7KM2200-2EA40-1DA1	-	_	-
			Modbus	With	7KM2200-2EA40-1JA1	-	-	-
			TCP	Without	7KM2200-2EA40-1EA1	-	_	-

Further technic	cal specifications	7KM2200	7KM3200	7KM3133	7KM3120-0	7KM3120-1
Basic data						
Installation		Standard mounting rail	Standard mounting rail	Front mounting	Front mounting	
Mounting width		6 MW	6 MW	-	_	
Control panel instrument		-	-	96 × 96 mm	96 × 96 mm	
External auxiliary voltage	50/60 Hz AC	-	90 276 V	100 240 V ±10%	100 250 V ±10%	-
	DC	-	110 275 V	110 250 V ±10%	100 250 V ±10%	24 60 V ±20%
Measuring inputs						
Transformer connection	Secondary input current I _e	x/1 A or x/5 A	x/1 A or x/5 A	x/5 A	x/1 A or x/5 A	
Direct connection	Input voltage U _e 3 AC 50/60 Hz	480/277 V	480/277 V	480/277 V	690/400 V	690/400 V
	Rated current I _n	65 A	-	-	_	















7KM2112-0BA00-3AA0 7KM3220-0BA01-1DA0 7KM4212-0BA00-3AA0 7KM5212-6BA00-1EA2 7KM541	12-6BA00-1EA2
- 7KM5212-6CA00-1EA8 7KM541	12-6CA00-1EA8
7KM2111-1BA00-3AA0 7KM3220-1BA01-1EA0 7KM4211-1BA00-3AA0 – – –	
7KM2112-0BA00-2AA0 – 7KM4212-0BA00-2AA0 – –	

7KM2112	7KM2111	7KM3220-0	7KM3220-1	7KM4212	7KM4211	7KM5212-	7KM5412
Front mounting		Front mounting		Front mounting		Front mounting/ standard mounting rail	Front mounting/ standard mounting rail
-		-		-		-	-
96 × 96 mm		96 × 96 mm		96 × 96 mm		96 × 96 mm	96 × 96 mm
95 240 V ±10%	-	100 250 V ±10%	-	95 240 V ±10%	-	110 230 V ±10%	110 230 V ±10%
110 340 V ±10%	22 65 V ±10%	100 250 V ±10%	24 60 V ±20%	110 340 V ±10%	22 65 V ±10%	24 250 V ±10%	24 250 V ±10%
x/1 A or x/5 A		x/1 A or x/5 A		x/1 A or x/5 A		x/1 A or x/5 A	x/1 A or x/5 A
690/400 V	400/230 V	690/400 V	690/400 V	690/400 V	500/289 V	690/400 V	690/400 V
-		-		-		-	-

7KM PAC measuring devices

Accessories

7KM PAC3100 7KM PAC3120 7KM PAC3200 7KM PAC3220 7KM PAC4200

7KM PAC TMP2 standard mounting rail adapter



- Two-tier adapter for mounting a measuring device on a standard mounting rail
- Front displa
- For manual intervention

7KM9900-0XA00-0AA0

7KM PAC TMP mounting plate



- Adapter for mounting a measuring device on standard mounting rail
- Display faces backwards towards standard mounting rail
- Readout and evaluation of measurements solely via mains operation

7KM9900-0YA00-0AA0

Compact holder



- Device holder for 7KM PAC3100 /3120/3200/3220/4200
- 10 holders for 5 PAC devices
- For seamless side-by-side mounting of the devices (without spaces)

7KM9900-0GA00-0AA0

Spare parts 7KM PAC



- · Spare parts comprising:
- Device holders for panel mounting (2X)
- Screw terminal for connection of voltage inputs
- Screw terminal for connection of current inputs
- Terminal block inputs/outputs for 7KM PAC3100/4200
- Terminal block inputs/outputs for 7KM PAC3200
- RS485 terminal blocks for 7KM PAC3100

7KM9900-0SA00-0AA0

Expansion and communication modules

		7KM PAC3200	7KM PAC3220 7KM PAC4200	COM100/800 (3VA)
7KM Switched I	Ethernet PROFINET communication module			
Line Control of the C	 Latest PROFINET switching properties S2 system redundancy for operation in H systems CiR Configuration in Run Firmware update via the modules for PAC4200 and PAC3220 			
PPPPPPPP			7KM9300-0AE02-0AA0	
7KM PROFIBUS	DP communication module			
(t			7KM9300-0AB01-0AA0	
7KM RS485 con	nmunication module			
······			7KM9300-0AM00-0AA0 ¹⁾	
7KM PAC 4DI/2	DO expansion module			
2			7KM9200-0AB00-0AA0	
7KM PAC I(N), I	(Diff), analog expansion module			
STEEL OF THE STEEL	To add the following functions to the measuring inputs: N conductor measurement Two analog inputs, also for measuring non-electrical quantities such as temperature, water or air pressure Residual current measurement via type A or type B summation current transformers			
333333				
		7KM9200-0AD00-0AA0	7KM9200-0AD00-0AA0	

¹⁾ Suitable for 7KM PAC4200 (especially for the Modbus TCP/RTU Gateway)

Residual-current transformers for 7KM PAC I(N), I(Diff), analog expansion module see LV 10, page 11/1

7KT PAC measuring devices

Basic unit PAC1600



Connections	Version	Power supply	Display	Interface	MID	7KT PAC1600
Transformer meas	surement					
Screw terminals	3-phase	Self-powered	With	Modbus RTU	Without	7KT1661
					With	7KT1662
				M-Bus	Without	7KT1663
					With	7KT1664
				S0-Interface	Without	7KT1672
					With	7KT1673
	3-phase, universal	Auxiliary power:	With	-	Without	7KT1681
		100 240 V AC, 110 250 V DC 50/60Hz		Modbus RTU	Without	7KT1682
Direct measureme	ent					
Screw terminals	1-phase	Self-powered	With	Modbus RTU	Without	7KT1651
					With	7KT1652
				M-Bus	Without	7KT1653
					With	7KT1654
				S0-Interface	Without	7KT1655
					With	7KT1656
	3-phase	Self-powered	With	Modbus RTU	Without	7KT1665
					With	7KT1666
				M-Bus	Without	7KT1667
					With	7KT1668
				S0-Interface	Without	7KT1670
					With	7KT1671

PAC1200 multichannel current measuring system



Connections	Version	Power supply	Display	Interface	MID	7KT PAC1200		
Direct measurement								
Screw terminals	3-phase	Self-powered	Without	Modbus TCP	Without	7KT1260		

PAC1200		7KT PAC1200					
Data manager with 7KT1260, sensor bars							
	Number of connections	Article No.					
Ta ₁	3	7KT1233					
a aaaa	6	7KT1236					
· · · · · · · · · · · · · · · · · · ·	9	7KT1238					
	12	7KT1242					
Data manager with 7	KT1260, sensors						
	Current I _e	Article No.					
	40 A	7KT1254					
*	63 A	7KT1255					

PAC1200 Bundles



Data manager	Sensor bars	Sensors	18 bundle	24 bundle
1× data manager 7KT1260	2× 9-sensor bar 7KT1238	18× sensors 40 A 7KT1254	7KT1222	-
1× data manager 7KT1260	2× 12-sensor bar 7KT1242	24× sensors 40 A 7KT1254	_	7KT1223

SEM3 multichannel current measuring system

Data manager



Connections	Version	Power supply	Display	Interface	MID	
Transformer meas	urement					
Screw terminals	3-phase	Self-powered	Without	Modbus TCP RS485 Modbus RTU	Without	US2:SEM3CONTROLLER

Further technical specifications	SEM3
Basic data	
Installation	Screw mounting
Measuring inputs	
Max. input voltage 50/60 Hz AC	480 V/277 V
Standard current transformers	50 1200 A/0.1 A
Folding transformer	50 2000 A/0.1 A

Accessories

Metering modules



- For recording measured values
- Accuracy of 0.2% or 1% for the entire measurement including current transformer
- Simple setting of phase configuration by means of slide switch
- Connection of a current transformer for measuring a phase
- Metering module is plugged into meter rack

Measuring accuracy	Article No.
0.2%	US2:SEM3PHAMETER
1%	US2:SEM3PLAMETER

Meter racks



	Version	Article No.
	For 3 metering modules	US2:SEM3RACK3
	For 9 metering modules	US2:SEM3RACK9
	For 15 metering modules	US2:SEM3RACK15
	For 21 metering modules	US2:SEM3RACK21

Connecting cables



• 600 V insulated special cable for connecting meter racks to the data manager

Length	Article No.
0.3 m	US2:SEM3CAB12INCH
0.6 m	US2:SEM3CAB24INCH
0.9 m	LIS2-SEM3CAR36INCH

Standard current transformers



- Standard power cable brown and yellow, 1.82 m long
- Can be extended up to 100 m while still maintaining accuracy
 Transformer configuration is carried out in the data manager

Output signal	Transformer transmission ratio	Article No.
100 mA	50:0.1	US2:SEM3SCCT50
	125 : 0.1	US2:SEM3SCCT125
	250:0.1	US2:SEM3SCCT250
	400:0.1	US2:SEM3SCCT400
	600 : 0.1	US2:SEM3SCCT600
	800 : 0.1	US2:SEM3SCCT800
	1200 : 0.1	US2:SEM3SCCT1200

Folding transformers new



- Standard power cable brown and yellow, 1.82 m long
- Can be extended up to 100 m while still maintaining accuracy
- Transformer configuration is carried out in the data manager

Output signal	Transformer transmission ratio	Article No.
100 mA	50:0.1	7KT1280-5MA00
	125:0.1	7KT1280-5MA01
	250:0.1	7KT1280-5MA02
	400:0.1	7KT1280-5MA03
	600:0.1	7KT1280-5MA04
	800:0.1	7KT1280-5MA05
	1200:0.1	7KT1280-5MA06
	1600:0.1	7KT1280-5MA07
	2000:0.1	7KT1280-5MA08

DIN rail adapters new



Article No.

US2:SEM3DINKIT

Time and pulse counters

Mechanical counting mechanisms







Display	Resetting	Rated frequency	Rated control supply voltage U _c	48 × 48 mm	72 × 72 mm	-
Time counter						
00000.00 h	Without	-	10 80 V DC	7KT5500	_	-
			10 50 V DC	_	7KT5600	-
			12 24 V DC	-	-	7KT5801
		50 Hz	24 V AC	7KT5505	-	7KT5802
			115 V AC	7KT5501	7KT5601	7KT5803
			230 V AC	7KT5502	7KT5602	7KT5804
		60 Hz	115 V AC	7KT5503	7KT5603	7KT5806
			230 V AC	7KT5504	7KT5604	7KT5807
Pulse counter						
0000000	Without	-	12 24 V DC	_	_	7KT5811
		50/60 Hz	24 V AC	-	-	7KT5812
		230 V AC	230 V AC	_	_	7KT5814

Further technical specifications	7KT55	7KT56	7KT58
Basic data			
Installation	Front mounting	Front mounting	Standard mounting rail
Mounting width	-	-	2 MW
Front frame	48 × 48 mm	72 × 72 mm	-
Display	Drum-type register	Drum-type register	Drum-type register
Version	-	With narrow frame according to DIN 43700	-

Accessories	ccessories			7KT56	7KT58
Cover					
	Size	Article No.	Article No.	Article No.	
	55 × 55 mm	7KT9020	-	-	
Sealing ring for co	Sealing ring for cover				
	Degree of protection Scope of supply		Article No.	Article No.	Article No.
	IP43 (in switchboards with smooth surfaces) 1 set = 5 units		7KT9000	-	-
Terminal cover					
	Degree of protection		Article No.	Article No.	Article No.
	IP20 (with connected conductors)		_	7KT9021	-

Electronic counting mechanisms



Display	Resetting	Rated frequency	Rated control supply voltage U _c	age U _c	
Time counter					
000000.0 h	Without	50/60 Hz	24 240 V AC, 12 150 V DC	7KT5821	
	Electrical	50/60 Hz	24 240 V AC, 12 150 V DC	7KT5822	
	Electrical and mechanical	50/60 Hz	24 240 V AC, 12 150 V DC	7KT5823	
Pulse counter					
0000000	Electrical and mechanical	50/60 Hz	24 240 V AC, 12 150 V DC	7KT5833	

Further technical specifications Basic data Installation Mounting width Display 7KT58.. 7KT58.. 2 MW LCD display

Current transformers

for measuring purposes

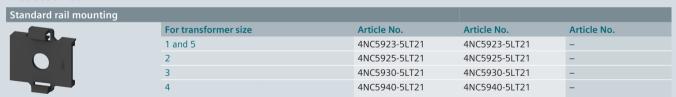


				2				
Size	Rated operational voltage U _e	Rated primary current I _{pr}	Rated power P _n	I _{sr} = 5 A	I _{sr} = 1 A	I _{sr} = 5 A		
Accuracy class 0.2								
1	1 720 V	150 A	1 VA	4NC5121-2FA21	-	-		
		200 A	2.5 VA	4NC5122-2FC21	-	-		
		250 A	2.5 VA	4NC5123-2FC21	-	-		
		300 A	5 VA	4NC5124-2FE21	-	-		
		400 A	5 VA	4NC5125-2FE21	-	-		
		500 A	5 VA	4NC5126-2FE21	-	-		
5	720 V	600 A	5 VA	4NC5227-2FE21	-	-		
		700 A	5 VA	4NC5228-2FE21	_	-		
		800 A	5 VA	4NC5231-2FE21	_			
		1000 A	5 VA	4NC5232-2FE21	-	-		
Accuracy	class 0.5							
1	720 V	100 A	1 VA	4NC5117-2DA21	4NC5117-0DA21	-		
		150 A	2.5 VA	4NC5121-2DC21	4NC5121-0DC21	-		
		200 A	5 VA	4NC5122-2DE21	4NC5122-0DE21	-		
		250 A	5 VA	4NC5123-2DE21	4NC5123-0DE21	-		
2	2 720 V	200 A	5 VA	4NC5222-2DE21	4NC5222-0DE21	-		
		250 A	5 VA	4NC5223-2DE21	4NC5223-0DE21	-		
		300 A	5 VA	4NC5224-2DE21	4NC5224-0DE21	-		
		400 A	5 VA	4NC5225-2DE21	4NC5225-0DE21	-		
3	720 V	400 A	5 VA	4NC5325-2DE21	4NC5325-0DE21	-		
		500 A	5 VA	4NC5326-2DE21	4NC5326-0DE21	-		
		600 A	5 VA	4NC5327-2DE21	4NC5327-0DE21	-		
		750 A	5 VA	4NC5330-2DE21	4NC5330-0DE21	-		
		800 A	5 VA	4NC5331-2DE21	_	-		
4	720 V	800 A	10 VA	4NC5431-2DH21	4NC5431-0DH21	-		
		1000 A	10 VA	4NC5432-2DH21	4NC5432-0DH21	-		
		1200 A	10 VA	4NC5433-2DH21	4NC5433-0DH21	-		
		1500 A	10 VA	4NC5435-2DH21	4NC5435-0DH21	-		
		1600 A	15 VA	4NC5436-2DK21	-	-		
		2000 A	20 VA	4NC5438-2DL21	-	-		
		2500 A	25 VA	4NC5440-2DM21	-	-		
		3000 A	30 VA	4NC5441-2DN21	-	-		



				_		
Size	Rated operational voltage U _e	Rated primary current I _{pr}	Rated power P _n	I _{sr} = 5 A	I _{sr} = 1 A	I _{sr} = 5 A
Accuracy class 1.0						
1	720 V	50 A	1.2 VA	4NC5112-2CB21	4NC5112-0CB21	-
		60 A	1.2 VA	4NC5113-2CB21	4NC5113-0CB21	-
			1.25 VA	-	-	7KT1200
		75 A	2.5 VA	4NC5115-2CC21	4NC5115-0CC21	-
		100 A	2.5 VA	4NC5117-2CC21	4NC5117-0CC21	7KT1201
		150 A	2.5 VA	4NC5121-2CC21	4NC5121-0CC21	-
			3.75 VA	-	_	7KT1202
		200 A	5 VA	4NC5122-2CE21	4NC5122-0CE21	-
		250 A	5 VA	4NC5123-2CE21	4NC5123-0CE21	-
2	720 V	200 A	5 VA	4NC5222-2CE21	4NC5222-0CE21	-
		250 A	5 VA	4NC5223-2CE21	4NC5223-0CE21	-
		300 A	5 VA	4NC5224-2CE21	4NC5224-0CE21	-
		400 A	5 VA	4NC5225-2CE21	4NC5225-0CE21	-
3	720 V	400 A	5 VA	4NC5325-2CE21	4NC5325-0CE21	-
		500 A	5 VA	4NC5326-2CE21	4NC5326-0CE21	-
		600 A	5 VA	4NC5327-2CE21	4NC5327-0CE21	-
		750 A	5 VA	4NC5330-2CE21	4NC5330-0CE21	-
4	720 V	800 A	10 VA	4NC5431-2CH21	4NC5431-0CH21	-
		1000 A	10 VA	4NC5432-2CH21	4NC5432-0CH21	-
		1250 A	10 VA	4NC5434-2CH21	4NC5434-0CH21	-
		1500 A	10 VA	4NC5435-2CH21	4NC5435-0CH21	-
		2000 A	12.5 VA	4NC5438-2CJ21	4NC5438-0CJ21	-
		2500 A	12.5 VA	4NC5440-2CJ21	4NC5440-0CJ21	-
		3000 A	30 VA	4NC5441-2CN21	-	-

Accessories



Appendix © Siemens 2019



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Appendix



Link directory

Catalog LV 14

General information

Information on low-voltage power distribution and electrical installation technology	www.siemens.com/lowvoltage
Specification texts	www.siemens.com/lowvoltage/tenderspecifications
Conversion tool	www.siemens.com/conversion-tool
Image database	www.siemens.com/lowvoltage/picturedb
CAx Download Manager	www.siemens.com/lowvoltage/cax
Newsletter system	www.siemens.com/lowvoltage/newsletter
Siemens YouTube channel	www.youtube.com/Siemens
Brochures / catalogs	www.siemens.com/lowvoltage/catalogs
Operating instructions / manuals	www.siemens.com/lowvoltage/manuals
Siemens Industry Online Support	www.siemens.com/lowvoltage/product-support
Siemens Industry Online Support app	www.siemens.com/support-app
My Documentation Manager (MDM)	www.siemens.com/lowvoltage/mdm
Configurators	www.siemens.com/lowvoltage/configurators
Siemens Industry Mall – product catalog and	www.siemens.com/industrymall
online ordering system	
Direct forwarding to the Industry Mall	www.siemens.com/product? <u>Article No.</u>
Interactive Product Catalog CA 01	www.siemens.com/automation/ca01
Training	www.siemens.com/sitrain-lowvoltage
Local contacts	www.siemens.com/lowvoltage/contact
Technical Support	www.siemens.com/lowvoltage/support-request
Information on services	www.siemens.com/service-catalog
Application consulting for control panel construction, machine manufacture, and plant building	www.siemens.com/applicationconsulting
Manual for the generation, transmission and distribution of electrical energy	www.siemens.com/power-engineering-guide
Control panels for the North American market	www.siemens.com/northamerican-standards
Control panel building	www.siemens.com/controlpanel
Energy savings and amortization	www.automation.siemens.com/sinasave
Energy Suite	www.siemens.com/energysuite
SITOP power supplies	www.siemens.com/sitop
Efficiency class IE3	www.siemens.com/IE3ready
Power distribution with Totally Integrated Power	www.siemens.com/tip

Information + ordering

Technical overviews	
Measuring devices, power monitoring and digitalization solutions	www.siemens.com/lowvoltage/product-support (109764480)
All the important things at a glance	
Measuring devices, power monitoring and digitalization solutions	www.siemens.com/powermonitoring www.siemens.com/lowvoltage/digitalization
Your product in detail	
Technical basic information – SENTRON power monitoring and digital solutions	www.siemens.com/lowvoltage/product-support (109769851)
Brochure – Reliable, sustainable, and efficient – TÜV-certified power monitoring system in accordance with ISO 50001	www.siemens.com/lowvoltage/product-support (109744679)
Brochure – SENTRON portfolio for power monitoring	www.siemens.com/lowvoltage/product-support (109744725)
Siemens YouTube channel	
Power monitoring (general)	bit.ly/2lZ9QqC
Everything you need for your order	
Measuring devices and power monitoring	sie.ag/2kTH9Lz
Digitalization solutions	sie.ag/2olliNi
Library for SIMATIC	sie.ag/2kpbwcs
powermanager / powerconfig	sie.ag/2kTJjuF

Commissioning + operation

Configuration software	
powerconfig configuration software	www.siemens.com/powerconfig
Manuals	
Configuration manual measuring devices and power monitoring	www.siemens.com/lowvoltage/manuals (45315973)
Equipment manual 7KT PAC1600 energy meter	www.siemens.com/lowvoltage/manuals (109759827)
Equipment manual 7KT PAC1600 multimeter	www.siemens.com/lowvoltage/manuals (109760293)
System manual 7KT multichannel current measuring system	www.siemens.com/lowvoltage/manuals (109483442)
Equipment manual PAC2200 measuring device	www.siemens.com/lowvoltage/manuals (109746835)
Equipment manual SENTRON PAC3200 power monitoring device	www.siemens.com/lowvoltage/manuals (26504150)
Equipment manual PAC3200T measuring device	www.siemens.com/lowvoltage/manuals (109746833)
System manual SENTRON PAC4200 power monitoring devices	www.siemens.com/lowvoltage/manuals (34261595)
Equipment manual PAC3100 measuring device	www.siemens.com/lowvoltage/manuals (37881976)
Device manual SENTRON PAC5100/5200 7KM5212/5412	www.siemens.com/lowvoltage/manuals (109477872)
Equipment manual 7KM PAC3120 and 7KM PAC3220	www.siemens.com/lowvoltage/manuals (109767307)
Equipment manual SENTRON PAC5100/5200 7KM5212/5412	www.siemens.com/lowvoltage/manuals (109477870)
System manual – 3VA communication IEC / UL	www.siemens.com/lowvoltage/manuals (98746267)
SEM3™ – Embedded Micro Metering Module™	www.siemens.com/lowvoltage/manuals (109748928)
Training and tutorials	
Power monitoring with SENTRON	www.siemens.com/sitrain-lowvoltage (WT-LVAEM)
Energy management – Basic training	www.siemens.com/sitrain-lowvoltage (LV-EMSENTB)
Energy management – Training for experts	www.siemens.com/sitrain-lowvoltage (LV-EMSENTE)
Communication with SENTRON components	www.siemens.com/sitrain-lowvoltage (LV-COM)

Conditions of sale and delivery

1. General standards

By using this catalog you can acquire hardware and software products described therein from Siemens AG subject to these conditions of sale and delivery (hereinafter: CSD). Please note: the scope, the quality and the conditions for supplies and services, including software products, by any Siemens group or Regional Company having a registered office outside of Germany, shall be subject exclusively to the General Terms and Conditions of the respective Siemens entity. These CSD apply exclusively for orders placed with Siemens AG, Germany.

1.1 For customers with a seat or registered office in Germany

For customers with a seat or registered office in Germany, the following shall be subordinate to these CSD

- for installation, the "Standard Terms and Conditions for Installation Germany" and
- for Plant Analytics Services the "Standard Terms and Conditions for Plant Analytics Services for Customers in Germany" ¹⁾ and
- for standalone software products and software products that are part of another product or project, the "General License Conditions for Software Products for Automation and Drives for Customers with a Seat or Registered Office in Germany" 1) and
- for other supplies and services, the "General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry" 1).
 - In the event that such other supplies and services include open-source software, the conditions of which override the "General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry" 1), the product will be supplied with a notice detailing the special conditions that apply for the relevant open-source software. This applies accordingly in the case of a reference to other third-party software components.

1.2 For customers with a seat or registered office outside of Germany

For customers with a seat or registered office outside of Germany, the following shall be subordinate to these CSD

- for Plant Analytics Services the "Standard Terms and Conditions for Plant Analytics Services" ¹⁾ (only available in English) and
- for services, the "International Terms & Conditions for Services" 1) supplemented by the "Software Licensing Conditions" 1) and
- for the supply of other hardware and software the "International Terms & Conditions for Products" 1) supplemented by the "Software Licensing Conditions" 1).

1.3 For customers with framework agreements

To the extent that our products and services are covered by an existing framework agreement, the conditions there apply instead of this CSD.

2. Additional terms and conditions

All dimensions are in mm. In Germany, according to the German law on units in metrology, data in inches only apply to devices for export.

Illustrations are not binding.

Insofar as there are no remarks on the corresponding pages of this catalog – especially with regard to data, dimensions and weights given – these are subject to change without prior notice.

3. Export regulations

We shall not be obligated to fulfill this agreement if such fulfillment is prevented by any impediments arising out of national or international foreign trade or customs requirements or any embargoes or other sanctions.

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¹⁾ You can download the text of the Siemens AG terms and conditions of trade at www.siemens.com/automation/salesmaterial-as/catalog/en/terms_of_trade_en.pdf

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The products listed in this catalog may be subject to European/ German and/or US export regulations. Therefore, any export requiring a license is subject to approval by the competent authorities.

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