



1

7KM PAC3120

7KM PAC3220

7KM PAC4200

7KM PAC5200

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–	–	–	–
–	–	–	–
–	–	–	–
7KM3120-0BA01-1DA0	–	–	–
–	7KM3220-0BA01-1DA0	7KM4212-0BA00-3AA0	7KM5412-6BA00-1EA2
–	–	–	7KM5412-6CA00-1EA8
–	7KM3220-1BA01-1EA0	7KM4211-1BA00-3AA0	–
7KM3120-1BA01-1EA0	–	–	–
–	–	7KM4212-0BA00-2AA0	–
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–

7KM3220-0..

7KM3220-1..

7KM4212-..

7KM4211-..

7KM5412-

Front mounting

Front mounting/standard mounting rail

–
96 × 96 mm100 ... 250 V
±10%

–

95 ... 240 V
±10%

–

110 ... 230 V
±10%100 ... 250 V
±10%24 ... 60 V
±20%110 ... 340 V
±10%22 ... 65 V
±10%24 ... 250 V
±10%

x/1 A or x/5 A

690/400 V

500/289 V





690/400 V

–






7KM PAC measuring devices

Accessories

1

	7KM PAC1020	7KM PAC3120 7KM PAC3220 7KM PAC4200
7KM PAC TMP2 standard mounting rail adapter  <ul style="list-style-type: none"> Two-tier adapter for mounting a measuring device on a standard mounting rail Front display For manual intervention 		
		7KM9900-0XA00-0AA0
7KM PAC TMP mounting plate  <ul style="list-style-type: none"> 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  <ul style="list-style-type: none"> 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 for 7KM PAC  <ul style="list-style-type: none"> Spare parts comprising: <ul style="list-style-type: none"> 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 PAC3220 7KM PAC4200	COM100/800 (3VA)
7KM Switched Ethernet PROFINET communication module		
 <ul style="list-style-type: none"> • 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 		
		7KM9300-0AE02-0AA0
7KM PROFIBUS DP communication module		
		
		7KM9300-0AB01-0AA0
7KM RS485 communication module		
		
		7KM9300-0AM00-0AA0 ¹⁾
7KM PAC 4DI/2DO expansion module		
		
	7KM9200-0AB00-0AA0	–
7KM PAC I(N), I(Diff), analog expansion module		
 <ul style="list-style-type: none"> • To add the following functions to the measuring inputs: <ul style="list-style-type: none"> – 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 		
	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 from page 11/1 onwards](#)

7KT PAC measuring devices

PAC1600 basic unit



1

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

PAC1200 multichannel current measuring system







1

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

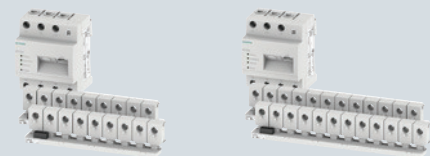
Data manager with 7KT1260, sensor bars

	Number of connections	Article No.
	3	7KT1233
	6	7KT1236
	9	7KT1238
	12	7KT1242

Data manager with 7KT1260, 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

1




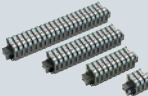




Connections	Version	Power supply	Display	Interface	MID	
Transformer measurement						
Screw terminals	3-phase	Self-powered	Without	Modbus TCP RS485 Modbus RTU	Without	US2:SEM3CONTROLLER

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			
	<ul style="list-style-type: none"> 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			
	<ul style="list-style-type: none"> 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	US2:SEM3CAB36INCH	
Standard current transformers			
	<ul style="list-style-type: none"> 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			
	<ul style="list-style-type: none"> 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			
	<ul style="list-style-type: none"> 5 adapters for snapping onto standard mounting rail 1 adapter each for data manager and for meter racks with 3, 9, 15 and 21 metering modules Adapters are screwed onto the data manager or the meter racks 		
		Article No.	
		US2:SEM3DINKIT	

SEM3T multichannel temperature measuring system **new**

Data manager for thermal monitoring in electrical systems



1

Connections	Version	Power supply	Display	Interface	
Plug-in connectors	Temperature measurement	24 V DC	Without	Modbus TCP	7KT1281-0AA00
Plug-in connectors	Temperature measurement	24 V DC	Without	Modbus TCP/Wi-Fi	7KT1281-0AA10

Further technical specifications

SEM3T

Basic data	
Installation	Standard rail mounting
Measuring inputs	
Temperature sensors	0 to 130°C

Accessories

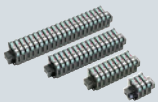
Metering module



- For recording measured values
- No configuration necessary for modules
- Connection of a temperature sensor
- Metering module is plugged into meter rack

Article No.
7KT1281-1AA00

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	US2:SEM3CAB36INCH

Temperature sensors

- Standard connection cable, brown and yellow, 3 m long
- Can be extended up to 15 m while still maintaining accuracy
- Configuration is carried out in the data manager



Version	Size	Article No.
Sensors with ring terminal lugs	Sensor 1/4"	7KT1281-2SA00
	Sensor 5/16"	7KT1281-2SA01
	Sensor 3/8"	7KT1281-2SA02
	Sensor 1/2"	7KT1281-2SA03



Cylindrical sensor	7KT1281-2CA00
--------------------	---------------

Time and pulse counters

Mechanical counting mechanisms

1



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	–	–	7KT5814

Further technical specifications

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

Accessories

	7KT55..	7KT56..	7KT58..
Cover			
Size	Article No.	Article No.	Article No.
55 × 55 mm	7KT9020	–	–
Sealing ring for cover			
Degree of protection	Scope of supply	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



1

Display	Resetting	Rated frequency	Rated control supply voltage 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

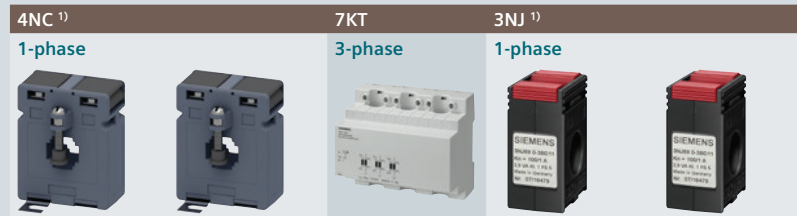
7KT58..

Basic data	
Installation	Standard mounting rail
Modular width	2 MW
Display	LCD display

Current transformers

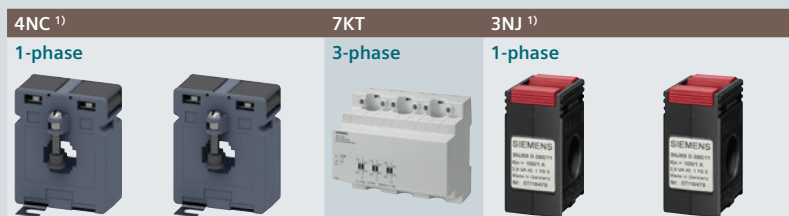
For measuring purposes

1



Size	Insulation level U_m	Rated primary current I_{pr}	Rated power P_n	4NC ¹⁾ 1-phase		7KT 3-phase	3NJ ¹⁾ 1-phase	
				$I_{sr} = 5 A$	$I_{sr} = 1 A$	$I_{sr} = 5 A$	$I_{sr} = 5 A$	$I_{sr} = 1 A$
Accuracy class 0.2s								
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	–	–	–	–
5	720 V	500 A	5 VA	4NC5126-2FE21	–	–	–	–
		600 A	5 VA	4NC5227-2FE21	–	–	–	–
		700 A	5 VA	4NC5228-2FE21	–	–	–	–
	720 V	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	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	–	–	–
4	720 V	800 A	5 VA	4NC5331-2DE21	–	–	–	–
		1000 A	10 VA	4NC5431-2DH21	4NC5431-0DH21	–	–	–
		1200 A	10 VA	4NC5432-2DH21	4NC5432-0DH21	–	–	–
		1500 A	10 VA	4NC5433-2DH21	4NC5433-0DH21	–	–	–
		1600 A	15 VA	4NC5435-2DH21	4NC5435-0DH21	–	–	–
		2000 A	20 VA	4NC5436-2DK21	–	–	–	–
		2500 A	25 VA	4NC5438-2DL21	–	–	–	–
3000 A	30 VA	4NC5440-2DM21	–	–	–	–		
				4NC5441-2DN21	–	–	–	–
Accuracy class 0.5 calibrated								
–	720 V	100 A	1.5 VA	–	–	–	3NJ6920-3BD23	3NJ6920-3BD13
		150 A	2.5 VA	–	–	–	3NJ6920-3BE23	3NJ6920-3BE13
		300 A	5 VA	–	–	–	3NJ6940-3BH23	3NJ6940-3BH13
		400 A	5 VA	–	–	–	3NJ6940-3BJ23	3NJ6940-3BJ13
		500 A	5 VA	–	–	–	3NJ6940-3BK23	3NJ6940-3BK13
		600 A	5 VA	–	–	–	3NJ6940-3BL23	3NJ6940-3BL13

¹⁾ Overcurrent limiting factor FS5



Size	Insulation level U_m	Rated primary current I_{pr}	Rated power P_n	$I_{sr} = 5 A$	$I_{sr} = 1 A$	$I_{sr} = 5 A$	$I_{sr} = 5 A$	$I_{sr} = 1 A$
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

Standard rail mounting



For transformer size	Article No.	Article No.	Article No.	Article No.	Article No.
1 and 5	4NC5923-5LT21	4NC5923-5LT21	–	–	–
2	4NC5925-5LT21	4NC5925-5LT21	–	–	–
3	4NC5930-5LT21	4NC5930-5LT21	–	–	–
4	4NC5940-5LT21	4NC5940-5LT21	–	–	–