## 7KM3120-0BA01-1DA0





SENTRON PAC3120 LCD 96X96 mm Power Monitoring Device Controll panel instrument for electrical values protocol: Modbus RTU with graphics display U rated input: 690/400V 45-65Hz IE rated input: X/1A oder X/5A AC Power supply: 100 ... 250 V +-10 % AC/DC screw connections

Model			
product brand name	SENTRON		
product designation	7KM PAC3120		
design of the product	basic		
product type designation	Measuring instrument		
Measurements			
measuring procedure			
<ul> <li>for voltage measurement</li> </ul>	TRMS		
for current measurement	TRMS		
type of measured value detection	complete		
voltage curve	Sinusoidal or distorted		
measurable line frequency			
• initial value	45 Hz		
full-scale value	65 Hz		
operating mode for measured value detection automatic line frequency detection	Yes		
operating mode for measured value detection			
• set at 50 Hz	No		
• set to 60 Hz	No		
Supply voltage			
design of the power supply	Wide-range power supply		
type of voltage of the supply voltage	AC/DC		
Degree of protection protection class			
protection class IP on the front	IP65		
Suitability			
suitability for operation	Installation in stationary control panels in closed rooms		
Product Functions			
product function			
<ul> <li>voltage measurement</li> </ul>	Yes		
<ul> <li>current measurement</li> </ul>	Yes		
<ul> <li>active power measurement</li> </ul>	Yes		
<ul> <li>reactive power measurement</li> </ul>	Yes		
<ul> <li>frequency measurement</li> </ul>	Yes		
Display and operation			
design of the display	LCD		
height of the display	54 mm		
width of the display	72 mm		

color of the background of the display illuminance of display backlight adjustable time-controlled reduction of the illuminance of display backlight possible display controlled reduction of the illuminance of display backlight possible display controlst adjustable national language on the display screen is supported number of keys  Fault limits reference condition for metering accuracy formula for relative total measurement inaccuracy • for measured variable voltage • for measured variable current • for measured variable current • for measured variable current • for measured variable output factor • for measured variable output factor • for measured variable active power • for measured variable active energy • for measured variable active energy • for measured variable output factor • for measured variable scative energy • for digital inputs  2 Class 2 according to IEC61557-12 and/or IEC62053-23  Inputs Outputs  unumber of digital inputs  2 2  type of electrical connection at the digital inputs • initial value for signal<1>-recognition  7 mA  number of digital input at DC maximum input current at digital input at DC maximum permissible  ype of electrical connection at the digital output • initial value for signal<1>-recognition  7 mA  130 mA  130 mA  according to IEC62053-31  pulse during the initial value • full-scale value  adjustable time period minimum  witching frequency at digital output maximum  internal resistance at the digital output maximum  internal resistance at the digital output maximum  10 ms  witching frequency at digital output maximum  17 Hz  measurable supply voltage between (PE)N and L at AC  Measuring inputs  measurable supply voltage between (PE)N and L at AC  Measuring inputs  measurable supply voltage between (PE)N and L at AC  Mouv				
time-controlled reduction of the illuminance of display backlight possible display contrast adjustable national language on the display screen is supported number of keys  Fault limits reference condition for metering accuracy formula for relative total measurement inaccuracy • for measured variable voltage • for measured variable current • for measured variable reactive power • for measured variable reactive power • for measured variable reactive power • for measured variable active power • for measured variable reactive power • for measured variable active energy • for measured variable reactive energy • for measured variable reactive energy • for measured variable reactive energy • for measured variable subjust tactor • for measured variable active energy • for measured variable reactive energy • for measured variable reactive energy • for measured variable reactive energy  * for measured variable subjusts  * for measured variable reactive energy  * for measured variable gable reactive energy  * for measured variable output at DC maximum  poperating voltage at digital inputs  * at the digital output subjust external voltage  * supply  * for measured variable to the digital outputs  * at the digital output subjust external voltage  * supply  * for measured variable  *	color of the background of the display	white		
backlight possible display contrast adjustable national language on the display screen is supported de, en, fr, spa, ita, por, tur, chi, pol number of keys  Fault limits reference condition for metering accuracy formula for relative total measurement inaccuracy • for measured variable current • for measured variable cactive power • for measured variable reactive energy • for measured variable reactive energy • for measured variable reactive energy  • for measured variable creative energy  • for measured variable reactive energy  • for measured variable seative energy  • for measured variable reactive energy  • for measured variable part energy  • for measured variable output factor • for measured variable seative energy  • for measured variable seative energy  • for measured variable output factor • for measured variable output factor • for measured variable output factor • for measured variable state energy  • for measured variable output seat energy  • for measured variable outputs  1				
national language on the display screen is supported number of keys     de, en, fr, spa, ita, por, tur, chi, pol       Fault limits     In accordance with IEC61557-12, IEC62053-22 and IEC62053-23       formula for relative total measurement inaccuracy     In accordance with IEC61557-12, IEC62053-22 and IEC62053-23       of for measured variable voltage     +/- 0,2 %       of or measured variable active power     +/- 0,5 %       of or measured variable reactive power     +/- 0,5 %       of or measured variable active energy     Cl. 0.5 acc. to IEC62053-22       of or measured variable reactive energy     Cl. 0.5 acc. to IEC62053-22       Inputs Outputs     2       number of digital inputs     2       type of electrical connection at the digital inputs operaling conditions for digital inputs acternal voltage supply     2       input voltage at digital input at DC maximum input current at digital input active of digital digital value for signal     7 mA       number of digital output version operating voltage as output voltage at DC maximum permissible     30 V       type of electrical connection at the digital outputs output function     30 V       digital output version     switching or pulse output function       operating voltage as output voltage at DC maximum permissible     30 V       internal resistance at the digital outputs     55 Ω       standard for pulse emitter     accoording to IEC62053-31       pulse duration     initi		Yes		
Fault limits   Fau	display contrast adjustable	Yes		
Fault limits         In accordance with IEC61557-12, IEC62053-22 and IEC62053-23           formula for relative total measurement inaccuracy         • for measured variable voltage         +/- 0,2 %           • for measured variable current         +/- 0,2 %           • for measured variable cative power         +/- 0,5 %           • for measured variable reactive power         +/- 0,5 %           • for measured variable eactive power         +/- 0,5 %           • for measured variable eactive energy         Cl. 5 acc. to IEC62053-22           • for measured variable reactive energy         Cl. 5 acc. to IEC62053-22           • for measured variable reactive energy         Class 2 according to IEC61557-12 and/or IEC62053-23           Inputs Outputs         2           number of digital inputs         2           type of electrical connection at the digital inputs         2           operating conditions for digital inputs external voltage supply         30 V           input voltage at digital input at DC maximum         30 V           input current at digital outputs         2           type of eswitching output         bidirectional           digital output version         switching or pulse output function           operating voltage as output voltage at DC maximum         screw-type terminals           output current         • at the digital o	national language on the display screen is supported	de, en, fr, spa, ita, por, tur, chi, pol		
reference condition for metering accuracy formula for relative total measurement inaccuracy • for measured variable voltage • for measured variable current • for measured variable current • for measured variable active power • for measured variable active power • for measured variable active power • for measured variable output factor • for measured variable active energy • for measured variable active energy • for measured variable active energy • for measured variable reactive energy  number of digital inputs • operating conditions for digital inputs external voltage supply input voltage at digital input at DC maximum input current at digital input at DC maximum • initial value for signal-1>-recognition operating voltage as output voltage at DC maximum permissible type of electrical connection at the digital outputs sortew-type terminals  7 mA  130 V  input voltage at digital output • initial value for signal-1>-recognition • internal resistance at the digital outputs output current • at the digital outputs at DC limited to 100 ms maximum  internal resistance at the digital outputs  sorew-type terminals  30 V  sorew-type terminals  30 V  sorew-type terminals  30 V  sorew-type terminals  30 V  sorew-type terminals  130 mA  30 mA  30 mS  screw-type terminals  100 mS  standard for pulse emitter according to IEC62053-31  pulse duration • initial value • foll-scale value adjustable time period minimum 10 ms  switching frequency at digital output maximum 17 Hz  property of the output short-circuit proof  Measuring inputs  Internal resistance at digital output maximum 17 Hz  measurable supply voltage between (PE)N and L at AC  400 V	number of keys	4		
formula for relative total measurement inaccuracy  • for measured variable voltage  • for measured variable current  • for measured variable active power  • for measured variable active power  • for measured variable output factor  • for measured variable current  • for measured variable output factor  • for measured variable active energy  • for measured variable active energy  • for measured variable active energy  • for measured variable reactive energy  • for measured variable variable reactive energy  • for measured variable variable reactive power  • for measured variable variable variable variable variable variable variable variable variable energy  • for measured variable va	Fault limits			
<ul> <li>• for measured variable voltage</li> <li>• for measured variable current</li> <li>• for measured variable current</li> <li>• for measured variable reactive power</li> <li>• for measured variable reactive power</li> <li>• for measured variable reactive power</li> <li>• for measured variable output factor</li> <li>• for measured variable active energy</li> <li>• for measured variable reactive energy</li> <li>• for measured variable reactive energy</li> <li>• for measured variable reactive energy</li> <li>• Cl. 0.5 acc. to IEC62053-22</li> <li>Class 2 according to IEC61557-12 and/or IEC62053-23</li> </ul> Inputs Outputs <ul> <li>number of digital inputs</li> <li>operating conditions for digital inputs external voltage supply</li> <li>input voltage at digital input at DC maximum</li> <li>input voltage at digital input</li> <li>• initial value for signal</li> <li>input voltage at digital input</li> <li>input voltage at digital output</li> <li>bidirectional</li> <li>digital output version</li> <li>operating voltage as output voltage at DC maximum permissible</li> <li>type of electrical connection at the digital outputs</li> <li>output current</li> <li>• at the digital outputs at DC limited to 100 ms maximum</li> <li>internal resistance at the digital outputs</li> <li>output current</li> <li>• at the digital outputs at DC limited to 100 ms maximum</li> <li>internal resistance at the digital outputs</li> <li>of pulse emitter</li> <li>according to IEC62053-31</li> <li>pulse duration</li> <li>• initial value</li> <li>• full-scale value</li> <li>adjustable time period minimum</li> <li>son ms</li> <li>switching frequency at digital output maximum</li> <li>17 Hz</li> <li>yes</li> </ul> Measuring inputs measurable supply voltage between (PE)N and L at AC <ul> <li>400 V</li> </ul>	reference condition for metering accuracy	In accordance with IEC61557-12, IEC62053-22 and IEC62053-23		
• for measured variable current • for measured variable active power • for measured variable active power • for measured variable output factor • for measured variable output factor • for measured variable active energy • for measured variable active energy • for measured variable reactive energy  inputs Outputs  number of digital inputs  2 type of electrical connection at the digital inputs operating conditions for digital inputs external voltage supply  input voltage at digital input at DC maximum input current at digital input • initial value for signal 7 mA  number of digital outputs 2 type of switching output digital output version operating voltage as output voltage at DC maximum permissible type of electrical connection at the digital outputs output current • at the digital outputs at DC limited to 100 ms maximum internal resistance at the digital outputs  55 Ω standard for pulse emitter pulse duration • initial value • full-scale value adjustable time period minimum switching frequency at digital output maximum 10 ms switching frequency at digital output maximum 17 Hz property of the output short-circuit proof  Yes  Measuring Inputs  measurable supply voltage between (PE)N and L at AC  400 V	formula for relative total measurement inaccuracy			
• for measured variable active power • for measured variable reactive power • for measured variable catcive power • for measured variable active energy • for measured variable active energy • for measured variable reactive energy • for measured variable reactive energy  Cl. 0.5 acc. to IEC62053-22 • for measured variable reactive energy  Inputs Outputs  number of digital inputs  type of electrical connection at the digital inputs operating conditions for digital inputs external voltage supply input voltage at digital input at DC maximum input current at digital input • initial value for signal<1>-recognition 7 mA  number of digital outputs 2 type of switching output digital output version operating voltage as output voltage at DC maximum permissible type of electrical connection at the digital outputs output current • at the digital outputs at DC limited to 100 ms maximum internal resistance at the digital outputs  • full-scale value adjustable time period minimum switching frequency at digital output maximum property of the output short-circuit proof Wessuring inputs measurable supply voltage between (PE)N and L at ACC  1 400 V	<ul> <li>for measured variable voltage</li> </ul>	+/- 0,2 %		
<ul> <li>for measured variable reactive power</li> <li>for measured variable output factor</li> <li>for measured variable active energy</li> <li>for measured variable reactive energy</li> <li>Cl. 0.5 acc. to IEC62053-22</li> <li>Cl. 0.5 acc. to IEC62053-23</li> <li>Inputs Outputs</li> <li>number of digital inputs</li> <li>type of electrical connection at the digital inputs operating conditions for digital input at DC maximum</li> <li>input current at digital input at DC maximum</li> <li>initial value for signal&lt;1&gt;-recognition</li> <li>operating output digital input</li> <li>initial value for signal&lt;1&gt;-recognition</li> <li>operating voltage as output voltage at DC maximum permissible</li> <li>type of electrical connection at the digital outputs</li> <li>output current</li> <li>at the digital outputs at DC limited to 100 ms maximum</li> <li>internal resistance at the digital outputs</li> <li>full-scale value</li> <li>full-scale value</li> <li>full-scale value</li> <li>full-scale value</li> <li>full-scale value to digital output maximum</li> <li>reporty of the output short-circuit proof</li> <li>Yes</li> <li>measurable supply voltage between (PE)N and L at AC</li> <li>400 V</li> </ul>	<ul> <li>for measured variable current</li> </ul>	+/- 0,2 %		
<ul> <li>• for measured variable output factor</li> <li>• for measured variable active energy</li> <li>• for measured variable reactive energy</li> <li>• for measured variable reactive energy</li> <li>Cl. 0.5 acc. to IEC62053-22</li> <li>Class 2 according to IEC61557-12 and/or IEC62053-23</li> <li>Inputs Outputs</li> <li>number of digital inputs</li> <li>2 type of electrical connection at the digital inputs</li> <li>operating conditions for digital inputs external voltage supply</li> <li>input voltage at digital input at DC maximum</li> <li>input current at digital input</li> <li>• initial value for signal&lt;1&gt;-recognition</li> <li>operating voltage as output voltage at DC maximum</li> <li>digital output version</li> <li>operating voltage as output voltage at DC maximum permissible</li> <li>type of electrical connection at the digital outputs</li> <li>output current</li> <li>• at the digital outputs at DC limited to 100 ms maximum</li> <li>internal resistance at the digital outputs</li> <li>of place duration</li> <li>• initial value</li> <li>• full-scale value</li> <li>adjustable time period minimum</li> <li>switching frequency at digital output maximum</li> <li>10 ms</li> <li>switching frequency at digital output maximum</li> <li>17 Hz</li> <li>property of the output short-circuit proof</li> <li>Yes</li> <li>measurable supply voltage between (PE)N and L at AC</li> <li>400 V</li> </ul>	<ul> <li>for measured variable active power</li> </ul>	+/- 0.5 %		
• for measured variable active energy • for measured variable reactive energy Inputs Outputs number of digital inputs 2 type of electrical connection at the digital inputs supply input voltage at digital input at DC maximum input current at digital input • initial value for signal<1>-recognition operating voltage as output voltage at DC maximum digital output version operating voltage as output voltage at DC maximum sufficient as output current outpu	<ul> <li>for measured variable reactive power</li> </ul>	+/- 1 %		
● for measured variable reactive energy         Class 2 according to IEC61557-12 and/or IEC62053-23           Inputs Outputs         2           type of electrical connection at the digital inputs operating conditions for digital inputs external voltage supply         2           input voltage at digital input at DC maximum         30 V           input current at digital input         7 mA           number of digital outputs         2           type of switching output         bidirectional           digital output version         switching or pulse output function           operating voltage as output voltage at DC maximum permissible         30 V           type of electrical connection at the digital outputs         screw-type terminals           output current         • at the digital outputs at DC limited to 100 ms maximum         130 mA           internal resistance at the digital outputs         55 Ω           standard for pulse emitter         according to IEC62053-31           pulse duration         • initial value         30 ms           • full-scale value         500 ms           adjustable time period minimum         10 ms           switching frequency at digital output maximum         17 Hz           property of the output short-circuit proof         Yes           measurable supply voltage between (PE)N and L at AC         400 V </td <td><ul> <li>for measured variable output factor</li> </ul></td> <td>+/- 0,5 %</td>	<ul> <li>for measured variable output factor</li> </ul>	+/- 0,5 %		
Inputs Outputs         number of digital inputs       2         type of electrical connection at the digital inputs       screw-type terminals         operating conditions for digital inputs external voltage supply       Yes         input voltage at digital input at DC maximum       30 V         input current at digital input       7 mA         • initial value for signal<1>-recognition       7 mA         number of digital outputs       2         type of switching output       bidirectional         digital output version       switching or pulse output function         operating voltage as output voltage at DC maximum permissible       30 V         type of electrical connection at the digital outputs       screw-type terminals         output current       • at the digital outputs at DC limited to 100 ms maximum       130 mA         internal resistance at the digital outputs       55 Ω         standard for pulse emitter       according to IEC62053-31         pulse duration       • initial value       30 ms         • full-scale value       500 ms         adjustable time period minimum       10 ms         switching frequency at digital output maximum       17 Hz         property of the output short-circuit proof       Yes         Measuring inputs         measura	<ul> <li>for measured variable active energy</li> </ul>	Cl. 0.5 acc. to IEC62053-22		
type of electrical connection at the digital inputs operating conditions for digital inputs external voltage supply input voltage at digital input at DC maximum input current at digital input  initial value for signal<1>-recognition operating voltage as output voltage at DC maximum operating voltage as output voltage at DC maximum operating voltage as output voltage at DC maximum permissible type of electrical connection at the digital outputs sortew-type terminals  at the digital output sat DC limited to 100 ms maximum internal resistance at the digital outputs output duration internal resistance at the digital outputs standard for pulse emitter pulse duration initial value of tull-scale value adjustable time period minimum switching frequency at digital output maximum 17 Hz property of the output short-circuit proof  Measuring inputs measurable supply voltage between (PE)N and L at AC  yes  screw-type terminals  2  2  2  2  2  2  3  3  3  4  30  7  3	for measured variable reactive energy	Class 2 according to IEC61557-12 and/or IEC62053-23		
type of electrical connection at the digital inputs operating conditions for digital inputs external voltage supply input voltage at digital input at DC maximum input current at digital input  • initial value for signal<1>-recognition 7 mA  number of digital outputs type of switching output digital output version operating voltage as output voltage at DC maximum permissible type of electrical connection at the digital outputs output current  • at the digital outputs at DC limited to 100 ms maximum internal resistance at the digital outputs standard for pulse emitter pulse duration • initial value • full-scale value adjustable time period minimum switching frequency at digital output maximum property of the output short-circuit proof  Measuring inputs  measurable supply voltage between (PE)N and L at AC  you  30 V  7 mA 7 m	Inputs Outputs			
operating conditions for digital inputs external voltage supply  input voltage at digital input at DC maximum  input current at digital input  • initial value for signal<1>-recognition  number of digital outputs  type of switching output  digital output version  operating voltage as output voltage at DC maximum permissible  type of electrical connection at the digital outputs  output current  • at the digital outputs at DC limited to 100 ms maximum internal resistance at the digital outputs  standard for pulse emitter  pulse duration  • initial value  • full-scale value  adjustable time period minimum  switching frequency at digital output maximum  property of the output short-circuit proof  Measuring inputs  measurable supply voltage between (PE)N and L at AC   7 mA  7 mA  7 mA  130 V  2  bidirectional  switching or pulse output function  30 V  serw-type terminals  30 V  31 mA  130 mA  32 ms  33 ms  34 ms  35 ms  36 ms  37 ms  38 ms  39 ms  40 ms		2		
input voltage at digital input at DC maximum input current at digital input • initial value for signal<1>-recognition 7 mA number of digital outputs 2 type of switching output bidirectional switching or pulse output function operating voltage as output voltage at DC maximum permissible type of electrical connection at the digital outputs screw-type terminals output current • at the digital outputs at DC limited to 100 ms maximum internal resistance at the digital outputs standard for pulse emitter pulse duration • initial value • full-scale value adjustable time period minimum switching frequency at digital output maximum 10 ms switching frequency at digital output maximum 7 Thz property of the output short-circuit proof Measuring inputs measurable supply voltage between (PE)N and L at AC 400 V	type of electrical connection at the digital inputs	screw-type terminals		
input current at digital input  • initial value for signal<1>-recognition 7 mA  number of digital outputs 2 type of switching output digital output version operating voltage as output voltage at DC maximum permissible type of electrical connection at the digital outputs output current • at the digital outputs at DC limited to 100 ms maximum internal resistance at the digital outputs standard for pulse emitter pulse duration • initial value • full-scale value adjustable time period minimum switching frequency at digital output maximum 17 Hz property of the output short-circuit proof Measuring inputs measurable supply voltage between (PE)N and L at AC  7 mA 7 m		Yes		
<ul> <li>initial value for signal&lt;1&gt;-recognition</li> <li>number of digital outputs</li> <li>type of switching output</li> <li>digital output version</li> <li>operating voltage as output voltage at DC maximum permissible</li> <li>type of electrical connection at the digital outputs</li> <li>output current</li> <li>• at the digital outputs at DC limited to 100 ms maximum</li> <li>internal resistance at the digital outputs</li> <li>standard for pulse emitter</li> <li>pulse duration</li> <li>• initial value</li> <li>• full-scale value</li> <li>adjustable time period minimum</li> <li>switching frequency at digital output maximum</li> <li>property of the output short-circuit proof</li> <li>Measuring inputs</li> <li>measurable supply voltage between (PE)N and L at AC</li> <li>400 V</li> </ul>	input voltage at digital input at DC maximum	30 V		
type of switching output  digital output version  operating voltage as output voltage at DC maximum permissible  type of electrical connection at the digital outputs  output current  • at the digital outputs at DC limited to 100 ms maximum  internal resistance at the digital outputs  standard for pulse emitter  pulse duration  • initial value  • full-scale value  adjustable time period minimum  switching frequency at digital output maximum  property of the output short-circuit proof  Measuring inputs  bidirectional  switching or pulse output function  30 V  screw-type terminals  130 mA  130 mA  according to IEC62053-31  pulse duration  10 ms  switching frequency at digital output maximum  10 ms  switching frequency at digital output maximum  17 Hz  property of the output short-circuit proof  Measuring inputs  measurable supply voltage between (PE)N and L at AC  400 V	input current at digital input			
type of switching output  digital output version  operating voltage as output voltage at DC maximum permissible  type of electrical connection at the digital outputs  output current  • at the digital outputs at DC limited to 100 ms maximum  internal resistance at the digital outputs  standard for pulse emitter  pulse duration • initial value • full-scale value  adjustable time period minimum switching frequency at digital output maximum  17 Hz property of the output short-circuit proof  Measuring inputs  measurable supply voltage between (PE)N and L at AC  Measurable supply voltage between (PE)N and L at AC  Measuring inputs	initial value for signal<1>-recognition	7 mA		
digital output version operating voltage as output voltage at DC maximum permissible  type of electrical connection at the digital outputs output current  • at the digital outputs at DC limited to 100 ms maximum  internal resistance at the digital outputs  standard for pulse emitter pulse duration • initial value • full-scale value adjustable time period minimum switching frequency at digital output maximum  17 Hz property of the output short-circuit proof  Measuring inputs  serew-type terminals  screw-type terminals  according to IEC62053-31  130 mA  30 mS  30 ms  55 Ω  30 ms  500 ms  400 V	number of digital outputs	2		
operating voltage as output voltage at DC maximum permissible  type of electrical connection at the digital outputs screw-type terminals  output current  • at the digital outputs at DC limited to 100 ms maximum  internal resistance at the digital outputs  standard for pulse emitter  pulse duration  • initial value  • full-scale value  adjustable time period minimum  switching frequency at digital output maximum  17 Hz  property of the output short-circuit proof  Measuring inputs  measurable supply voltage between (PE)N and L at AC  400 V	type of switching output	bidirectional		
type of electrical connection at the digital outputs screw-type terminals  output current  • at the digital outputs at DC limited to 100 ms maximum  internal resistance at the digital outputs 55 Ω  standard for pulse emitter according to IEC62053-31  pulse duration  • initial value 30 ms  • full-scale value 500 ms  adjustable time period minimum 10 ms  switching frequency at digital output maximum 17 Hz  property of the output short-circuit proof Yes  Measuring inputs  measurable supply voltage between (PE)N and L at AC 400 V	digital output version	switching or pulse output function		
output current  • at the digital outputs at DC limited to 100 ms maximum  internal resistance at the digital outputs  55 Ω  standard for pulse emitter  pulse duration  • initial value  • full-scale value  adjustable time period minimum  switching frequency at digital output maximum  property of the output short-circuit proof  Measuring inputs  measurable supply voltage between (PE)N and L at AC  400 V		30 V		
<ul> <li>at the digital outputs at DC limited to 100 ms maximum</li> <li>internal resistance at the digital outputs</li> <li>55 Ω</li> <li>standard for pulse emitter</li> <li>pulse duration</li> <li>initial value</li> <li>full-scale value</li> <li>adjustable time period minimum</li> <li>switching frequency at digital output maximum</li> <li>property of the output short-circuit proof</li> <li>Measuring inputs</li> <li>measurable supply voltage between (PE)N and L at AC</li> <li>400 V</li> </ul>	type of electrical connection at the digital outputs	screw-type terminals		
internal resistance at the digital outputs  standard for pulse emitter  pulse duration  • initial value  • full-scale value  adjustable time period minimum  switching frequency at digital output maximum  property of the output short-circuit proof  Measuring inputs  measurable supply voltage between (PE)N and L at AC  55 Ω  according to IEC62053-31  30 ms  500 ms  10 ms  Yes  Measuring inputs  Measuring inputs	at the digital outputs at DC limited to 100 ms	130 mA		
standard for pulse emitter  pulse duration  initial value  full-scale value  adjustable time period minimum  switching frequency at digital output maximum  property of the output short-circuit proof  Measuring inputs  measurable supply voltage between (PE)N and L at AC  according to IEC62053-31		55 Ω		
pulse duration  • initial value  • full-scale value  adjustable time period minimum  switching frequency at digital output maximum  property of the output short-circuit proof  Measuring inputs  measurable supply voltage between (PE)N and L at AC  400 V		according to IEC62053-31		
● full-scale value 500 ms  adjustable time period minimum 10 ms  switching frequency at digital output maximum 17 Hz  property of the output short-circuit proof Yes  Measuring inputs  measurable supply voltage between (PE)N and L at AC 400 V		, and the second		
adjustable time period minimum  switching frequency at digital output maximum  17 Hz  property of the output short-circuit proof  Measuring inputs  measurable supply voltage between (PE)N and L at AC  400 V	• initial value	30 ms		
switching frequency at digital output maximum  17 Hz  property of the output short-circuit proof  Measuring inputs  measurable supply voltage between (PE)N and L at AC  400 V	• full-scale value	500 ms		
property of the output short-circuit proof  Measuring inputs  measurable supply voltage between (PE)N and L at AC  400 V	adjustable time period minimum	10 ms		
Measuring inputs measurable supply voltage between (PE)N and L at AC 400 V	switching frequency at digital output maximum	17 Hz		
measurable supply voltage between (PE)N and L at AC 400 V	property of the output short-circuit proof	Yes		
measurable supply voltage between (PE)N and L at AC 400 V	Measuring inputs			
		400 V		
measurable supply voltage between (PE)N and L at AC	measurable supply voltage between (PE)N and L at AC			
• minimum 11.5 V		11.5 V		
• maximum 480 V	maximum	480 V		
measurable supply voltage between the line conductors at AC maximum rated value 690 V	113	690 V		
voltage measuring range extension with external voltage transformers		yes		
line conductors and neutral conductors internal resistance for voltage measurement $1.5 \ \text{M}\Omega$		1.5 ΜΩ		
measuring category for voltage measurement CATIII	measuring category for voltage measurement	CATIII		
measurable current	measurable current			
• 1 at AC rated value 1 A	• 1 at AC rated value	1 A		
• 2 at AC rated value 5 A	• 2 at AC rated value	5 A		
relative measurable current at AC	relative measurable current at AC			
• minimum 1 %	• minimum	1 %		

• maximum	100 9	100 %					
current measuring range extension with external current transformers	yes						
zero point suppression for current measurement	0 10 %						
measuring category for current measurement	CATIII						
Connections							
type of electrical connection							
<ul> <li>at the measurement inputs for voltage</li> </ul>	screw-type terminals						
<ul> <li>at the measurement inputs for current</li> </ul>	screw-type terminals						
Mechanical Design							
fastening method standard rail mounting	No						
size of Power Monitoring Device	size 96						
height	96 mm						
width	96 mm						
depth	56 mm						
installation depth	51 mm						
net weight	325 g						
mounting position	vertical						
Environmental conditions							
ambient temperature during operation							
• minimum	-25 °C						
• maximum	55 °C						
ambient temperature during storage							
• minimum	-25 °C						
• maximum	70 °C						
relative humidity at 25 °C without condensation during operation maximum	75 %						
installation altitude at height above sea level maximum	2 000 m						
degree of pollution	2						
Certificates							
certificate of suitability as EC Declaration of Conformity	yes	yes					
General Product Approval		EMC	Declaration of Conformity	other			



<u>KC</u>





CE EG-Konf. Miscellaneous

## **Further information**

Information- and Downloadcenter (catalogues, leaflets,...)

http://www.siemens.com/energy-automation

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=7KM3120-0BA01-1DA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/ww/en/ps/7KM3120-0BA01-1DA0

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=7KM3120-0BA01-1DA0

CAx-Online-Generator

http://www.siemens.com/cax

**Tender specifications** 

http://www.siemens.com/specifications