## SIEMENS

## Data sheet

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## 6AV6646-1BA18-0NA0

SIMATIC ITC1900 V3, Industrial Thin Client, 19" widescreen TFT display, capacitive touch sensor, Supported protocols: RDP, VNC, SMARTSERVER HTML5 et. al., Neutral Design, panel mount



Product type designation     ITC1900 V3       Display     TTT widescreen display, LED backlighting       Screen diagonal     18.5 in; 19"       Display height     409.8 nm       Display height     230.4 nm       Number of colors     16.777.216       Resolution (pixels)     1366 x 768       • Intage resolution     1366 pixel       • Vortical image resolution     1366 pixel       • Vortical image resolution     768 pixel       • Central features     Vers       • Non-reflective and tempered mineral glass screen     Yes       • Otachable from computer unit     100 m       Backlighting     125 °C)       • ATSP backlighting (at 25 °C)     50 000 h; At 25 °C       • Backlighting     Yes       • Ontrol elements     multi-busch screen       • Obesign as busch screen     Yes; Projective-capacitive       • Obesign as multi-busch screen     Yes;       • Obesign as multi-busch screen     Yes;       • Obesign as multi-busch screen     Yes;       • Origet as multi-busch screen     Yes;       • Design as multi-busch screen     Yes	General information	
Design of display         TFT widescreen display, LED backlighting           Screen diagonal         18.5 in; 19"           Display width         409.8 mm           Display height         230.4 mm           Number of colors         16 777 216           Resolution (pixels)         1 386 x 768           • Image resolution         1 386 pixel           • Vertical image resolution         768 pixel           • Vertical image resolution         768 pixel           • Non-reflective and tempered mineral glass screen         Yes           • Detachable from computer unit         100 m           Backlighting            • Type of backlighting         LED, dimmable           • Veri of elements         multi-fouch screen           Touch operation         Yes           • Design as touch screen         Yes           • Design as touch screen         Yes           • Design as touch screen         Yes           • Design as multi-touch screen         Yes           • Monitor keyboard         Yes           Support arm mounting         Yes           Support arm mounting         Yes           Support arm mounting         Yes           Support arm mounting         Yes           Su	Product type designation	ITC1900 V3
Screen diagonal     18.5 in; 19"       Display width     409.8 mm       Display height     230.4 mm       Number of colors     19 777 216       Resolution (pixels)     1366 x 768       • Horizontal image resolution     1366 pixel       • Vertical image resolution     768 pixel       General features     Yes       • Obtachable from computer unit     100 m       Backlighting     LED, dimmable       • Type of backlighting (at 25 °C)     50 000 h; At 25°C       • Backlight dimmable     Yes       Control elements     multi-touch screen       Touch operation     Yes       • Design as touch screen     Yes       • Design as multi-touch screen     Yes       Installation type/mounting     Yes       Support arm mounting     No       Support arm mounting     No       Built-in unit     Yes       Trype of supply voltage     DC       maximum permitted bookward tilt angle from vertical     35°       maximum permitted bookward tilt angle from vertical     35°       max	Display	
Display width     409.8 mm       Display height     230.4 mm       Number of colors     16 777 216       Resolution (bkels)     1366 x 768 <ul> <li>Image resolution</li> <li>Vertical image resolution</li> <li>Vertical image</li> <li>Vertical image</li></ul>	Design of display	TFT widescreen display, LED backlighting
Display height         230.4 mm           Number of colors         16 777 216           Resolution (pixels)         1386 x 768           • Inage resolution         1386 x 768           • Horizontal image resolution         1386 pixel           • Vertical image resolution         768 pixel           General features         6           • non-reflective and tempered mineral glass screen         Yes           • Detachable from computer unit         100 m           Backlighting         LED, dimmable           • Type of backlighting         LED, dimmable           • MTBF backlighting (at 25 °C)         50 000 h; At 25° C           • Backlight dimmable         Yes           Control elements         multi-touch screen           • Design as butch screen         Yes; Projective-capacitive           • Obsilor keyboard         Yes           Installation type/mounting         Built-In unit           Pesign         Built-In unit           Front mounting         No           Support arm mounting         No           Built-In unit         Yes           Installation type/mounting         No           Built-In unit         Yes           Installation type/mounting         No           <	Screen diagonal	18.5 in; 19"
Number of colors       16 777 216         Resolution (pixels)       1         • Image resolution       1         • Horizontal image resolution       1         • Vertical image resolution       768 pixel         General features       100 m         • Detachable from computer unit       100 m         Backlighting       12D, dimmable         • Type of backlighting (at 25 °C)       50 000 h; At 25°C         • Backlight dimmable       Yes         Control elements       multi-louch screen         Touch operation       Yes         Design as touch screen       Yes         • Design as multi-louch screen       Yes         Installation type/mounting       Yes         Design as multi-louch screen       Yes         Support arm mounting       Yes         Support arm mounting       Yes         Support arm mounting       No         Built-in unit       Yes         maximum permitted forward tilt angle from vertical       35°         maximum permitted forward tilt angle fr	Display width	409.8 mm
Resolution (pixels) <ul> <li>Image resolution</li> <li>1 366 x 768</li> <li>Horizontal image resolution</li> <li>1 366 pixel</li> </ul> <ul> <li>Vertical image resolution</li> <li>768 pixel</li> </ul> General features <ul> <li>non-reflective and tempered mineral glass screen</li> <li>Yes</li> <li>Detachable from computer unit</li> <li>100 m</li> </ul> Backlighting <ul> <li>Type of backlighting (at 25 °C)</li> <li>50 000 h; At 25°C</li> <li>Backlight dimmable</li> <li>Yes</li> </ul> <ul> <li>Other of the memble</li> <li>Yes</li> </ul> Control elements <ul> <li>multi-touch screen</li> <li>Yes; Projective-capacitive</li> <li>Montor keyboard</li> <li>Yes</li> </ul> <ul> <li>Design as multi-touch screen</li> <li>Yes; Projective-capacitive</li> <li>Montor keyboard</li> <li>Yes</li> </ul> <ul> <li>Design as multi-touch screen</li> <li>Yes</li> <li>Support arm mounting</li> <li>Yes</li> <li>Support arm mounting</li> <li>No</li> <li>Suptort arm mounting</li> <li>No</li> <li>Built-in unit</li> <li>Yes</li> <li>maximum permitted forward tilt angle from vertical</li> <li>35°</li> <li< td=""><td>Display height</td><td>230.4 mm</td></li<></ul>	Display height	230.4 mm
• Image resolution       1 366 x 768         • Horizontal image resolution       768 pixel         • Vertical image resolution       768 pixel         General features	Number of colors	16 777 216
• Horizontal image resolution       1 366 pixel         • Vertical image resolution       768 pixel         General features       -         • non-reflective and tempered mineral glass screen       Yes         • Detachable from computer unit       100 m         Backlighting       LED, dimmable         • Type of backlighting (at 25 °C)       50 000 h, At 25°C         • Backlight dimmable       Yes         Control elements       multi-touch screen         Touch operation       -         • Design as buch screen       Yes; Projective-capacitive         • Design as multi-touch screen       Yes; Projective-capacitive         • Design as multi-touch screen       Yes         Installation type/mounting       Yes         Design       Built-in unit         Front mounting       Yes         Support arm mounting       No         Stand mounting       No         Built-in unit       Yes         maximum permitted forward tilt angle from vertical       35°         maximum permitted backward tilt angle from vertical       35°         Support supply voltage       DC         Rated value (DC)       24 V         permissible range, lower limit (DC)       19.2 V	Resolution (pixels)	
• Vertical image resolution       768 pixel         General features       Yes         • non-reflective and tempered mineral glass screen       Yes         • Detachable from computer unit       100 m         Backlighting       LED, dimmable         • Type of backlighting (at 25 °C)       50 000 h; At 25°C         • Backlight dimmable       Yes         Control elements       multi-fouch screen         Touch operation       Yes; Projective-capacitive         • Design as touch screen       Yes;         • Design as nulti-touch screen       Yes;         • Design       Built-in unit         • Front mounting       Yes         Support arm mounting       No         Built-in unit       Yes         maximum permitted forward tilt angle from vertical       35°         maximum permitted backward tilt angle from vertical       35°         maximum permitted backward tilt angle from vertical       35° <td>Image resolution</td> <td>1 366 x 768</td>	Image resolution	1 366 x 768
General features         • non-reflective and tempered mineral glass screen       Yes         • Detachable from computer unit       100 m         Backlighting       IED, dimmable         • Type of backlighting       IED, dimmable         • MTBF backlighting (at 25 °C)       50 000 h, At 25°C         • Backlight dimmable       Yes         Control elements       multi-louch screen         Touch operation       Yes         • Design as touch screen       Yes         Installation type/mounting       Yes         Design as multi-touch screen       Yes         Installation type/mounting       Yes         Support arm mounting       Yes         Support arm mounting       No         Built-in unit       Yes         maximum permitted forward tilt angle from vertical       35°         maximum permitted backward tilt angle from vertical       35°         Support voltage       DC         Rated value (DC)       24 V         permissible range, lower limit (DC)       19.2 V	<ul> <li>Horizontal image resolution</li> </ul>	1 366 pixel
• non-reflective and tempered mineral glass screen       Yes         • Detachable from computer unit       100 m         Backlighting       100 m         • Type of backlighting       LED, dimmable         • MTBF backlighting (at 25 °C)       50 000 h; At 25 °C         • Backlight dimmable       Yes         Control elements       multi-touch screen         Touch operation       Yes         • Design as touch screen       Yes; Projective-capacitive         • Monitor keyboard       Yes         Installation type/mounting       Built-in unit         Pesign       Built-in unit         Front mounting       Yes         Support arm mounting       No         Stand mounting       No         Built-in unit       Yes         maximum permitted forward tilt angle from vertical       35°         maximum permitted backward tilt angle from vertical       35°         Supply voltage       DC         Rated value (DC)       24 V         permissible range, lower limit (DC)       19.2 V	<ul> <li>Vertical image resolution</li> </ul>	768 pixel
• Detachable from computer unit       100 m         Backlighting       IED, dimmable         • Type of backlighting (at 25 °C)       50 000 h; At 25 °C         • Backlight dimmable       Yes         Control elements       multi-touch screen         Touch operation       Yes         • Design as multi-touch screen       Yes; Projective-capacitive         • Design as multi-touch screen       Yes; Projective-capacitive         • Monitor keyboard       Yes         Installation type/mounting       Yes         Built-in unit       Yes         Support arm mounting       Yes         Support arm mounting       No         Built-in unit       Yes         maximum permitted forward tilt angle from vertical       35°         Supply voltage       DC         Type of supply voltage       DC         Rated value (DC)       24 V         permissible range, lower limit (DC)       19.2 V	General features	
Backlighting       LED, dimmable         • Type of backlighting (at 25 °C)       50 000 h; At 25 °C         • Backlight dimmable       Yes         Control elements       multi-touch screen         Touch operation       Yes         • Design as buch screen       Yes         • Design as buch screen       Yes; Projective-capacitive         • Monitor keyboard       Yes         Installation type/mounting       Yes         Design       Built-in unit         Front mounting       Yes         Support arm mounting       No         Stand mounting       No         Built-in unit       Yes         maximum permitted forward tilt angle from vertical       35°         maximum permitted backward tilt angle from vertical       35°         Supply voltage       DC         Type of supply voltage       DC         Rated value (DC)       24 V         permissible range, lower limit (DC)       19.2 V	<ul> <li>non-reflective and tempered mineral glass screen</li> </ul>	Yes
• Type of backlightingLED, dimmable• MTBF backlighting (at 25 °C)50 000 h; At 25 °C• Backlight dimmableYesControl elementsmulti-touch screenTouch operationYes• Design as nuch screenYes; Projective-capacitive• Design as multi-touch screenYes; Projective-capacitive• Monitor keyboardYesInstallation type/mountingYesDesignBuilt-in unitFront mountingYesSupport arm mountingNoStand mountingNoBuilt-in unitYesmaximum permitted forward tilt angle from vertical35°maximum permitted backward tilt angle from vertical35°Supply voltageDCRated value (DC)24 Vpermissible range, lower limit (DC)19.2 V	Detachable from computer unit	100 m
MTBF backlighting (at 25 °C) 50 000 h; At 25 °C     Backlight dimmable Yes      Control elements multi-touch screen      Touch operation          Design as touch screen Yes          Design as multi-touch screen Yes; Projective-capacitive         Monitor keyboard Yes      Installation type/mounting      Design Built-in unit     Front mounting Yes      Support arm mounting No      Stand mounting No      Built-in unit Yes      maximum permitted forward tilt angle from vertical 35°      maximum permitted backward tilt angle from vertical 35°      Supply voltage      Type of supply voltage DC      Rated value (DC) 24 V      permissible range, lower limit (DC)      Stand mounting (DE)      Suport arm permitted (DC)          Suppl voltage No          Supply voltage No	Backlighting	
• Backlight dimmable       Yes         Control elements       multi-touch screen         Touch operation       Yes         • Design as touch screen       Yes         • Design as multi-touch screen       Yes; Projective-capacitive         • Monitor keyboard       Yes         Installation type/mounting       Yes         Design       Built-in unit         Front mounting       Yes         Support arm mounting       No         Stand mounting       No         Built-in unit       Yes         maximum permitted forward tilt angle from vertical       35°         maximum permitted backward tilt angle from vertical       35°         Supply voltage       DC         Type of supply voltage       DC         Rated value (DC)       24 V         permissible range, lower limit (DC)       19.2 V	<ul> <li>Type of backlighting</li> </ul>	LED, dimmable
Control elements       multi-touch screen         Touch operation       Yes         • Design as touch screen       Yes, Projective-capacitive         • Monitor keyboard       Yes         Installation type/mounting       Built-in unit         Design       Built-in unit         Front mounting       Yes         Support arm mounting       No         Stand mounting       No         Built-in unit       Yes         maximum permitted forward tilt angle from vertical       35°         Supply voltage       JC         Type of supply voltage       DC         Rated value (DC)       24 V         permissible range, lower limit (DC)       19.2 V	<ul> <li>MTBF backlighting (at 25 °C)</li> </ul>	50 000 h; At 25°C
Control elements       multi-touch screen         Touch operation       Yes         • Design as touch screen       Yes; Projective-capacitive         • Monitor keyboard       Yes         Installation type/mounting       Built-in unit         Pesign       Built-in unit         Front mounting       Yes         Support arm mounting       No         Stand mounting       No         Built-in unit       Yes         maximum permitted forward tilt angle from vertical       35°         Supply voltage       DC         Type of supply voltage       DC         Rated value (DC)       24 V         permissible range, lower limit (DC)       19.2 V	Backlight dimmable	Yes
Touch operation         • Design as touch screen       Yes         • Design as multi-touch screen       Yes; Projective-capacitive         • Monitor keyboard       Yes         Installation type/mounting       Yes         Design       Built-in unit         Front mounting       Yes         Support arm mounting       No         Stand mounting       No         Built-in unit       Yes         maximum permitted forward tilt angle from vertical       35°         maximum permitted backward tilt angle from vertical       35°         Supply voltage       DC         Type of supply voltage       DC         Rated value (DC)       24 V         permissible range, lower limit (DC)       19.2 V	Control elements	
• Design as touch screen       Yes         • Design as multi-touch screen       Yes; Projective-capacitive         • Monitor keyboard       Yes         Installation type/mounting       Yes         Design       Built-in unit         Front mounting       Yes         Support arm mounting       No         Stand mounting       No         Built-in unit       Yes         maximum permitted forward tilt angle from vertical       35°         maximum permitted backward tilt angle from vertical       35°         Supply voltage       DC         Type of supply voltage       DC         Rated value (DC)       24 V         permissible range, lower limit (DC)       19.2 V	Control elements	multi-touch screen
• Design as multi-touch screen       Yes; Projective-capacitive         • Monitor keyboard       Yes         Installation type/mounting       Installation type/mounting         Design       Built-in unit         Front mounting       Yes         Support arm mounting       No         Stand mounting       No         Built-in unit       Yes         maximum permitted forward tilt angle from vertical       35°         maximum permitted backward tilt angle from vertical       35°         Supply voltage       DC         Rated value (DC)       24 V         permissible range, lower limit (DC)       19.2 V	Touch operation	
• Monitor keyboard       Yes         Installation type/mounting       Built-in unit         Design       Built-in unit         Front mounting       Yes         Support arm mounting       No         Stand mounting       No         Built-in unit       Yes         maximum permitted forward tilt angle from vertical       35°         maximum permitted backward tilt angle from vertical       35°         Supply voltage       DC         Rated value (DC)       24 V         permissible range, lower limit (DC)       19.2 V	<ul> <li>Design as touch screen</li> </ul>	Yes
Installation type/mounting       Built-in unit         Design       Built-in unit         Front mounting       Yes         Support arm mounting       No         Stand mounting       No         Built-in unit       Yes         maximum permitted forward tilt angle from vertical       35°         maximum permitted backward tilt angle from vertical       35°         Supply voltage       DC         Type of supply voltage       DC         Rated value (DC)       24 V         permissible range, lower limit (DC)       19.2 V	<ul> <li>Design as multi-touch screen</li> </ul>	Yes; Projective-capacitive
DesignBuilt-in unitFront mountingYesSupport arm mountingNoStand mountingNoBuilt-in unitYesmaximum permitted forward tilt angle from vertical35°maximum permitted backward tilt angle from vertical35°Supply voltageDCType of supply voltageDCRated value (DC)24 Vpermissible range, lower limit (DC)19.2 V	<ul> <li>Monitor keyboard</li> </ul>	Yes
Front mounting       Yes         Support arm mounting       No         Stand mounting       No         Built-in unit       Yes         maximum permitted forward tilt angle from vertical       35°         maximum permitted backward tilt angle from vertical       35°         Supply voltage       DC         Type of supply voltage       DC         Rated value (DC)       24 V         permissible range, lower limit (DC)       19.2 V	Installation type/mounting	
Support arm mounting       No         Stand mounting       No         Built-in unit       Yes         maximum permitted forward tilt angle from vertical       35°         maximum permitted backward tilt angle from vertical       35°         Supply voltage       DC         Type of supply voltage       DC         Rated value (DC)       24 V         permissible range, lower limit (DC)       19.2 V	Design	Built-in unit
Stand mounting       No         Built-in unit       Yes         maximum permitted forward tilt angle from vertical       35°         maximum permitted backward tilt angle from vertical       35°         Supply voltage       DC         Type of supply voltage       DC         Rated value (DC)       24 V         permissible range, lower limit (DC)       19.2 V	Front mounting	Yes
Built-in unit     Yes       maximum permitted forward tilt angle from vertical     35°       maximum permitted backward tilt angle from vertical     35°       Supply voltage     DC       Type of supply voltage     DC       Rated value (DC)     24 V       permissible range, lower limit (DC)     19.2 V	Support arm mounting	No
maximum permitted forward tilt angle from vertical       35°         maximum permitted backward tilt angle from vertical       35°         Supply voltage       35°         Type of supply voltage       DC         Rated value (DC)       24 V         permissible range, lower limit (DC)       19.2 V	Stand mounting	No
maximum permitted backward tilt angle from vertical     35°       Supply voltage     DC       Type of supply voltage     DC       Rated value (DC)     24 V       permissible range, lower limit (DC)     19.2 V	Built-in unit	Yes
Supply voltage       Type of supply voltage     DC       Rated value (DC)     24 V       permissible range, lower limit (DC)     19.2 V	maximum permitted forward tilt angle from vertical	35°
Type of supply voltage     DC       Rated value (DC)     24 V       permissible range, lower limit (DC)     19.2 V	maximum permitted backward tilt angle from vertical	35°
Rated value (DC)     24 V       permissible range, lower limit (DC)     19.2 V	Supply voltage	
permissible range, lower limit (DC) 19.2 V	Type of supply voltage	DC
	Rated value (DC)	24 V
permissible range, upper limit (DC) 28.8 V	permissible range, lower limit (DC)	19.2 V
	permissible range, upper limit (DC)	28.8 V
Input current		
Current consumption (rated value) 1.4 A	Current consumption (rated value)	1.4 A

Starting current inrush I <sup>2</sup> t	0.5 A <sup>2</sup> ·s
Power	
Active power input, typ.	34 W
Power loss	
Power loss, typ.	34 W
Interfaces	
Number of industrial Ethernet interfaces	2; 2 ports (switch)
Number of USB interfaces	4; on rear
USB on the rear	Yes; 2x onboard
Connection for keyboard/mouse	USB
Industrial Ethernet	
Transmission rate, max.	1 000 Mbit/s
Protocols	
Protocols (Ethernet)	
• TCP/IP	Yes
• DHCP	Yes
• SNMP	Yes
• DCP	Yes
• LLDP	Yes
WEB characteristics	
• HTTP	Yes
• HTML	Yes; HTML5
• XML	Yes
• CSS	Yes
	Yes
JavaScript Protocols (terminal link)	
	Vee
Sm@rtServer	Yes
• RDP	Yes
• VNC viewer	Yes
Citrix	No
• SINUMERIK	No
SINUMERIK Degree and class of protection	No
• SINUMERIK Degree and class of protection IP (at the front)	No IP65
SINUMERIK Degree and class of protection IP (at the front) IP (rear)	No IP65 IP20
SINUMERIK     Degree and class of protection     IP (at the front)     IP (rear)     NEMA (front)	No IP65 IP20 NEMA 4x (when installed)
SINUMERIK      Degree and class of protection      IP (at the front)      IP (rear)      NEMA (front)      Enclosure Type 4 at the front	No IP65 IP20 NEMA 4x (when installed) Yes
SINUMERIK      Degree and class of protection      IP (at the front)      IP (rear)      NEMA (front)      Enclosure Type 4 at the front      Enclosure Type 4x at the front	No IP65 IP20 NEMA 4x (when installed)
SINUMERIK      Degree and class of protection      IP (at the front)      IP (rear)      NEMA (front)      Enclosure Type 4 at the front      Enclosure Type 4x at the front      Enclosure Type 12 at the front	No IP65 IP20 NEMA 4x (when installed) Yes
SINUMERIK      Degree and class of protection      IP (at the front)      IP (rear)      NEMA (front)      Enclosure Type 4 at the front      Enclosure Type 4x at the front	No IP65 IP20 NEMA 4x (when installed) Yes Yes
SINUMERIK      Degree and class of protection      IP (at the front)      IP (rear)      NEMA (front)      Enclosure Type 4 at the front      Enclosure Type 4x at the front      Enclosure Type 12 at the front	No IP65 IP20 NEMA 4x (when installed) Yes Yes
SINUMERIK      Degree and class of protection      IP (at the front)      IP (rear)      NEMA (front)      Enclosure Type 4 at the front      Enclosure Type 4x at the front      Enclosure Type 12 at the front      Standards, approvals, certificates	No IP65 IP20 NEMA 4x (when installed) Yes Yes Yes
SINUMERIK      Degree and class of protection      IP (at the front)      IP (rear)      NEMA (front)      Enclosure Type 4 at the front      Enclosure Type 4x at the front      Enclosure Type 12 at the front      Standards, approvals, certificates      CE mark	No IP65 IP20 NEMA 4x (when installed) Yes Yes Yes
SINUMERIK      Degree and class of protection      IP (at the front)      IP (rear)      NEMA (front)      Enclosure Type 4 at the front      Enclosure Type 4x at the front      Enclosure Type 12 at the front      Standards, approvals, certificates      CE mark      cULus	No IP65 IP20 NEMA 4x (when installed) Yes Yes Yes Yes
SINUMERIK      Degree and class of protection      IP (at the front)      IP (rear)      NEMA (front)      Enclosure Type 4 at the front      Enclosure Type 4x at the front      Enclosure Type 12 at the front      Standards, approvals, certificates      CE mark      cULus      FM approval	No IP65 IP20 NEMA 4x (when installed) Yes Yes Yes Yes Yes Yes
SINUMERIK      Degree and class of protection      IP (at the front)      IP (rear)      NEMA (front)      Enclosure Type 4 at the front      Enclosure Type 4x at the front      Enclosure Type 12 at the front      Standards, approvals, certificates      CE mark      cULus      FM approval      RCM (formerly C-TICK)	No IP65 IP20 NEMA 4x (when installed) Yes Yes Yes Yes Yes Yes Yes Yes
SINUMERIK      Degree and class of protection      IP (at the front)      IP (rear)      NEMA (front)      Enclosure Type 4 at the front      Enclosure Type 4x at the front      Enclosure Type 12 at the front      Standards, approvals, certificates      CE mark      cULus      FM approval      RCM (formerly C-TICK)      KC approval	No IP65 IP20 NEMA 4x (when installed) Yes
SINUMERIK      Degree and class of protection      IP (at the front)      IP (rear)      NEMA (front)      Enclosure Type 4 at the front      Enclosure Type 4x at the front      Enclosure Type 12 at the front      Standards, approvals, certificates      CE mark      cULus      FM approval      RCM (formerly C-TICK)      KC approval      EAC (formerly Gost-R)	No IP65 IP20 NEMA 4x (when installed) Yes
SINUMERIK      Degree and class of protection      IP (at the front)      IP (rear)      NEMA (front)      Enclosure Type 4 at the front      Enclosure Type 4 at the front      Enclosure Type 12 at the front      Standards, approvals, certificates      CE mark      cULus      FM approval      RCM (formerly C-TICK)      KC approval      EAC (formerly Gost-R)      Use in hazardous areas	No         IP65         IP20         NEMA 4x (when installed)         Yes
SINUMERIK      Degree and class of protection      IP (at the front)      IP (rear)      NEMA (front)      Enclosure Type 4 at the front      Enclosure Type 4 at the front      Enclosure Type 12 at the front      Enclosure Type 12 at the front      Standards, approvals, certificates      CE mark      cULus      FM approval      RCM (formerly C-TICK)      KC approval      EAC (formerly Gost-R)      Use in hazardous areas      ATEX Zone 2	No         IP65         IP20         NEMA 4x (when installed)         Yes
SINUMERIK      Degree and class of protection      IP (at the front)      IP (rear)      NEMA (front)      Enclosure Type 4 at the front      Enclosure Type 4 at the front      Enclosure Type 12 at the front      Standards, approvals, certificates      CE mark      cULus      FM approval      RCM (formerly C-TICK)      KC approval      EAC (formerly Gost-R)      Use in hazardous areas      ATEX Zone 2      ATEX Zone 22	No         IP65         IP20         NEMA 4x (when installed)         Yes         Yes <tr td=""> <tr td=""></tr></tr>
<ul> <li>SINUMERIK</li> <li>Degree and class of protection <ul> <li>IP (at the front)</li> <li>IP (rear)</li> <li>NEMA (front)</li> <li>Enclosure Type 4 at the front</li> <li>Enclosure Type 4x at the front</li> <li>Enclosure Type 12 at the front</li> </ul> </li> <li>Standards, approvals, certificates <ul> <li>CE mark</li> <li>CULus</li> <li>FM approval</li> <li>RCM (formerly C-TICK)</li> <li>KC approval</li> <li>EAC (formerly Gost-R)</li> </ul> </li> <li>Use in hazardous areas <ul> <li>ATEX Zone 2</li> <li>IECEx Zone 22</li> <li>IECEx Zone 22</li> </ul> </li> </ul>	No         IP65         IP20         NEMA 4x (when installed)         Yes         Yes <tr td=""> <tr td=""></tr></tr>
<ul> <li>SINUMERIK</li> <li>Degree and class of protection <ul> <li>IP (at the front)</li> <li>IP (rear)</li> <li>NEMA (front)</li> <li>Enclosure Type 4 at the front</li> <li>Enclosure Type 4x at the front</li> <li>Enclosure Type 12 at the front</li> </ul> </li> <li>Standards, approvals, certificates <ul> <li>CE mark</li> <li>cULus</li> <li>FM approval</li> <li>RCM (formerly C-TICK)</li> <li>KC approval</li> <li>EAC (formerly Gost-R)</li> <li>Use in hazardous areas</li> <li>ATEX Zone 2</li> <li>IECEx Zone 22</li> <li>IECEx Zone 22</li> <li>cULus Class I Zone 2, Division 2</li> </ul> </li> </ul>	No         IP65         IP20         NEMA 4x (when installed)         Yes         Yes <tr td=""> <tr td=""></tr></tr>
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Polski Rejestr Statkow (PRS)	No
Chinese Classification Society (CCS)	No
Ambient conditions	
Ambient temperature during operation	
• min.	0 °C
• max.	45 °C
Ambient temperature during storage/transportation	
• min.	-20 °C
• max.	60 °C
Relative humidity	
Operation, max.	90 %; no condensation
Vibrations	
<ul> <li>Vibration load in operation</li> </ul>	10 m/s <sup>2</sup>
<ul> <li>Vibration load during transport/storage</li> </ul>	10 m/s <sup>2</sup>
Shock testing	
<ul> <li>Shock load during operation</li> </ul>	150 m/s²
<ul> <li>shock acceleration during storage/transport</li> </ul>	150 m/s²
Software	
Web browser	Yes; HTML5, CSS
PDF reader	Yes
configuration / header	
Configuration	
• Local	Yes
Remote	Yes; Via web page
Languages	
Online languages	
<ul> <li>Number of online/runtime languages</li> </ul>	2; german / english
Peripherals/Options	
USB memory	Yes; USB storage medium can be connected
Mechanics/material	
Enclosure material (front)	
Aluminum	Yes
Dimensions	
Width of the housing front	464 mm
Height of housing front	294 mm
Mounting cutout, width	448 mm
Mounting cutout, height	278 mm
Overall depth	73 mm
Weights	
Weight (without packaging)	6.1 kg
last modified:	9/10/2023 🖸