## 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         ITC 1900 V3           Display         TET widescreen display, LED backlighting           Screen diagonal         18.5 in; 19"           Display width         490.8 mm           Display width         204.4 mm           Number of colors         19.772 16           Resolution (pixels)         -           • Inage resolution         1.366 x 788           • Inage resolution         768 pixel           • Vertical image resolution         768 pixel           • Inage resolution         768 pixel           • Obtachable from computer unit         100 m           Backlighting         -           • Type of backlighting (d 25 °C)         50 000 h; At 26°C           • Backlight diamable         Yes           Control elements         -           Control elements         -           Control elements         Yes           • Design as nulti-touch screen         Yes; Projective-capacitive           • Montor keyboard         Yes           Installation type/mounting         Yes           Support am mounting         Yes           Support am mounting         Yes           Support am mounting         Yes           Support am mounting         Yes <th>General information</th> <th></th>	General information	
Design of display         TFT widescreen display, LED backlighting           Screen disgonal         18.5 in; 19"           Display width         409.8 mm           Display width         230.4 mm           Number of colors         18 777 216           Resolution (pixels)         1366 x 763                image resolution             1 366 pixel                vertical image resolution             1 366 pixel                vertical image resolution         1366 pixel                vertical image resolution         100 m           Backlighting                  vipe of backlighting (at 25 °C)         50 0000 h; At 25°C                eackighting (at 25 °C)         50 0000 h; At 25°C                eackighting (at 25 °C)                besign as multi-touch screen                ves (Projective-capacitive                besign as multi-touch screen <td>Product type designation</td> <td>ITC1900 V3</td>	Product type designation	ITC1900 V3
Screen diagonal     18.5 in; 19"       Display height     409.8 mm       Display height     230.4 mm       Number of colors     16 777 216       Resolution (pixels)     1       • Image resolution     1 366 x 768       • Horizontal image resolution     1 366 k 768       • Indiage resolution     768 pixel       • Concer and tempered mineral glass screen     Yes       • Indiage resolution     708 pixel       • Control elements     Yes       • Instell dimmable     Yes       • Outrol elements     multi-buch screen       • Outrol elements     Yes       • Outrol elements     multi-buch screen       • Outrol elements     Yes       • Outrol elements     Yes       • Design as buch screen     Yes       • Design as buch screen     Yes       • Design as multi-buch screen     Yes       • Support arm mounting     No	Display	
Display width     409.8 mm       Display height     230.4 mm       Number of colors     16 777 216       Resolution (pixels)     1366 x768       • Horizontal image resolution     1366 pixel       • Vertical image resolution     1366 pixel       • Vertical image resolution     788 pixel       Ceneral features     Yes       • Introductable 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 multi-touch screen     Yes       • Design as multi-touch screen     Yes       Installation type/mounting     Yes       Design     Built-in unit       Front mounting     Yes       Support arm mounting     No       Stand mounting     No       Stand mounting     Sa*       Support voltage     DC       Rated value (DC)     24 V       permissible range, lower limit (DC)     19.2 V       permissible range, lower limit (DC)     28.8 V	Design of display	TFT widescreen display, LED backlighting
Display height     230.4 mm       Number of colors     16 777 216       Resolution (pixels)     1366 x 768       • Image resolution     1366 x 768       • Horizontal image resolution     1366 pixel       • Vertical image resolution     788 pixel       General features     •       • non-reflective and tempered mineral glass screen     Yes       • Detachable from computer unit     100 m       Backlighting     •       • Type of backlighting (at 25 °C)     50 000 h; At 25°C       • Backlight dimmable     Yes       Control elements     multi-fouch screen       • Design as buch screen     Yes       • Design as multi-fouch screen     Yes       Support arm mounting     No       Support arm mounting     No       Suith-in unit     Yes       maximum permitted forward tilt angle from vertical     35°       Support arm mounting     No       Support arm mounting     No       Support arm mounting     Se <td>Screen diagonal</td> <td>18.5 in; 19"</td>	Screen diagonal	18.5 in; 19"
Number of colors       16 777 216         Resolution (pixels)       1 366 x 768         • Image resolution       1 366 x 768         • Horizontal image resolution       1 366 pixel         • Vertical image resolution       768 pixel         General features       768 pixel         • onon-reflective and tempered mineral glass screen       Yes         • Detachable from computer unit       100 m         Backlighting       LED, dimmable         • Type of backlighting       S00 0h; At 25°C         • Backlight dimmable       Yes         Control elements       multi-fouch screen         Touch operation       Yes         • Obesign as multi-touch screen       Yes         • Design as multi-touch screen       Yes         • Monitor keyboard       Yes         Support arm mounting       Yes         Support arm mounting       No         Stard mounting       No         Support arm mounting       Se's         Type of supply voltage       DC         Rated value (DC)       24 V         permissible range, lower limit (DC)       19 2 V         permissible range, lower limit (DC)       28.8 V         Input current       Se.8 V	Display width	409.8 mm
Resolution (pixels)       1 366 x 768         • Horizontal image resolution       1 366 pixel         • Verical image resolution       768 pixel         General features       768 pixel         • non-reflective and tempered mineral glass screen       Yes         • Detachable from computer unit       100 m         Backlighting       EED, 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 nuclti-touch screen       Yes; Projective-capacitive         • Monitor keyboard       Yes         Installation type/mounting       Yes         Design       Built-in unit         Front mounting       Yes         Stand mounting       No         Built-in unit       Yes         maximum permitted backward tilt angle from vertical       35°         maximum permitted backward t	Display height	230.4 mm
• Image resolution       1 366 x 768         • Horizontal image resolution       1 366 pixel         • Vertical image resolution       768 pixel         Ceneral 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       -         Control elements       -         • Design as touch screen       Yes         • Design as touch screen       Yes         • Design as multi-touch screen       Yes         Installation type/nounting       Yes         Design       Built-in unit         Front mounting       Yes         Support arm mounting       No         Stand mounting       No         Built-in unit       Yes         maximum permitted backward tilt angle from vertical       35°         Supply voltage       DC         Rated value (DC)       24 V         permissible range, lower limit (DC)       28 V         Input current       24 V	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       •         • 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 nulti-touch screen       Yes         • Design as touch screen       Yes         • Design as touch screen       Yes         • Design as nulti-touch screen       Yes         • Design as multi-touch screen       Yes         • Design as multi-touch screen       Yes         • Design multi-touch screen       Yes         • Design       Built-in unit         Front mounting       Yes         Support arm mounting       No         Stand mounting       No         Built-in unit       Yes         maximum permitted backward tilt angle from vertical       35°         Supply voltage       DC         Rated value (DC)       24 V         permissible range, low	Resolution (pixels)	
• 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       Yes         Obtion of the screen       Yes         Installation type/mounting       Yes         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°         Supply voltage       DC         Rated value (DC)       24 V         permissible range, lower limit (DC)       24 V         permissible range, uover limit (DC)       24 V         permissible range, uover limit (DC)       24 V         permissible range, uo	Image resolution	1 366 x 768
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 touch screen       Yes         • Design as multi-touch screen       Yes         Installation type/nounting       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°         Supply voltage       DC         Rated value (DC)       24 V         permissible range, uoper limit (DC)       28 V         Input current       28 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     •       • Design as touch screen     Yes       • Design as multi-touch screen     Yes       Installation type/mounting     Yes       Design     Built-in unit       Front mounting     Yes       Support arm mounting     No       Built-in unit     Yes       maximum permitted forward tilt angle from vertical     35°       Supply voltage     DC       Rated value (DC)     24 V       permissible range, lower limit (DC)     19.2 V       permissible range, lower limit (DC)     28.8 V	Vertical image resolution	768 pixel
• Detachable from computer unit     100 m       Backlighting     Image: Control elements       • MTBF 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       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°       Suppty voltage     DC       Rated value (DC)     24 V       permissible range, lower limit (DC)     19.2 V       permissible range, upper limit (DC)     28.8 V	General features	
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         Touch operation       Yes         • Design as touch screen       Yes         • Design as multi-touch screen       Yes         • Monitor keyboard       Yes         Installation type/mounting       Design         Built-in unit       Yes         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°         Supply voltage       DC         Type of supply voltage       DC         Rated value (DC)       24 V         permissible range, lower limit (DC)       28.8 V         Input current       Input current	<ul> <li>non-reflective and tempered mineral glass screen</li> </ul>	Yes
• 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          • Design as touch screen       Yes         • Design as multi-touch screen       Yes; Projective-capacitive         • Monitor keyboard       Yes         Installation type/mounting       Yes         Design amulti-touch screen       Yes         Installation type/mounting       Yes         Support arm mounting       Yes         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         permissible range, upper limit (DC)       28.8 V         Input current       28.8 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       Yes         • Design as touch screen       Yes; Projective-capacitive         • Monitor keyboard       Yes         • 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 borward tilt angle from vertical       35°         Supply voltage       DC         Rated value (DC)       24 V         permissible range, lower limit (DC)       19.2 V         permissible range, upper limit (DC)       28.8 V	Backlighting	
• Backlight dimmable       Yes         Control elements       multi-touch screen         Touch operation          • Design as buch 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°         Supply voltage       DC         Type of supply voltage       DC         Rated value (DC)       24 V         permissible range, lower limit (DC)       19.2 V         permissible range, upper limit (DC)       28.8 V	<ul> <li>Type of backlighting</li> </ul>	LED, dimmable
Control elements       multi-touch screen         Touch operation <ul> <li>Design as touch screen</li> <li>Yes</li> <li>Projective-capacitive</li> <li>Monitor keyboard</li> <li>Yes</li> <li>Installation type/mounting</li> <li>Design</li> <li>Built-in unit</li> <li>Front mounting</li> <li>Yes</li> <li>Support arm mounting</li> <li>No</li> <li>Stand 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>Supply voltage</li> <li>DC</li> <li>Rated value (DC)</li> <li>24 V</li> <li>permissible range, lower limit (DC)</li> <li>19.2 V</li> <li>permissible range, upper limit (DC)</li> <li>28.8 V</li> <li>Input current</li> <li>I</li></ul>	<ul> <li>MTBF backlighting (at 25 °C)</li> </ul>	50 000 h; At 25°C
Control elements       multi-touch screen         Touch operation       Yes <ul> <li>Design as touch screen</li> <li>Yes; Projective-capacitive</li> <li>Monitor keyboard</li> <li>Yes</li> </ul> Installation type/mounting       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°         Supply voltage       DC         Rated value (DC)       24 V         permissible range, lower limit (DC)       19.2 V         permissible range, upper limit (DC)       28.8 V         Input current       Input current	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         Rated value (DC)       24 V         permissible range, lower limit (DC)       19.2 V         permissible range, upper limit (DC)       28.8 V         Input current       Input current	Control elements	
• Design as touch screen       Yes         • Design as multi-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         Type of supply voltage       DC         Rated value (DC)       24 V         permissible range, lower limit (DC)       19.2 V         permissible range, upper limit (DC)       28.8 V         Input current       Input current	Control elements	multi-touch screen
Design as multi-touch screen     Monitor keyboard     Yes      Yes      Installation type/mounting      Design     Design     Built-in unit     Front mounting     Yes      Support arm mounting     No     Stand 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)     19.2 V     permissible range, upper limit (DC)     28.8 V      Input current	Touch operation	
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) 19.2 V      permissible range, upper limit (DC) 28.8 V      Input current	<ul> <li>Design as touch screen</li> </ul>	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       DC         Rated value (DC)       24 V         permissible range, lower limit (DC)       19.2 V         permissible range, upper limit (DC)       28.8 V         Input current       Input current	<ul> <li>Design as multi-touch screen</li> </ul>	Yes; Projective-capacitive
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         permissible range, upper limit (DC)       28.8 V         Input current       Input current	Monitor keyboard	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         Rated value (DC)       24 V         permissible range, lower limit (DC)       19.2 V         permissible range, upper limit (DC)       28.8 V         Input current       Input current	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         permissible range, upper limit (DC)       28.8 V         Input current       Input current	Design	Built-in unit
Stand mountingNoBuilt-in unitYesmaximum permitted forward tilt angle from vertical35°maximum permitted backward tilt angle from vertical35°Supply voltageType of supply voltageRated value (DC)24 Vpermissible range, lower limit (DC)19.2 Vpermissible range, upper limit (DC)28.8 VInput current	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         permissible range, upper limit (DC)       28.8 V         Input current       Input current	Support arm mounting	No
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         permissible range, upper limit (DC)       28.8 V         Input current       Input current	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         permissible range, upper limit (DC)       28.8 V         Input current	Built-in unit	Yes
Supply voltage     DC       Type of supply voltage     DC       Rated value (DC)     24 V       permissible range, lower limit (DC)     19.2 V       permissible range, upper limit (DC)     28.8 V       Input current     1000000000000000000000000000000000000	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       permissible range, upper limit (DC)     28.8 V	maximum permitted backward tilt angle from vertical	35°
Rated value (DC)     24 V       permissible range, lower limit (DC)     19.2 V       permissible range, upper limit (DC)     28.8 V       Input current     28.8 V	Supply voltage	
permissible range, lower limit (DC)     19.2 V       permissible range, upper limit (DC)     28.8 V       Input current     19.2 V	Type of supply voltage	DC
permissible range, upper limit (DC) 28.8 V Input current	Rated value (DC)	24 V
Input current	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

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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	
<ul> <li>Transmission rate, max.</li> </ul>	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
<ul> <li>JavaScript</li> </ul>	Yes
Protocols (terminal link)	
Sm@rtServer	Yes
• RDP	Yes
VNC viewer	Yes
• Citrix	No
• SINUMERIK	No
	NO NO
Degree and class of protection	INU
	IP65
Degree and class of protection IP (at the front)	
Degree and class of protection IP (at the front) IP (rear)	IP65 IP20
Degree and class of protection         IP (at the front)         IP (rear)         NEMA (front)	IP65 IP20 NEMA 4x (when installed)
Degree and class of protection         IP (at the front)         IP (rear)         NEMA (front)         • Enclosure Type 4 at the front	IP65 IP20 NEMA 4x (when installed) Yes
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	IP65 IP20 NEMA 4x (when installed) Yes Yes
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	IP65 IP20 NEMA 4x (when installed) Yes
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         • Enclosure Type 12, at the front         • Standards, approvals, certificates	IP65 IP20 NEMA 4x (when installed) Yes Yes Yes
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	IP65 IP20 NEMA 4x (when installed) Yes Yes Yes
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	IP65 IP20 NEMA 4x (when installed) Yes Yes Yes Yes
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	IP65 IP20 NEMA 4x (when installed) Yes Yes Yes Yes
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)	IP65 IP20 NEMA 4x (when installed) Yes Yes Yes Yes Yes Yes Yes
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	IP65 IP20 NEMA 4x (when installed) Yes Yes Yes Yes Yes Yes Yes Yes Yes
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)	IP65 IP20 NEMA 4x (when installed) Yes Yes Yes Yes Yes Yes Yes
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)         Use in hazardous areas	IP65 IP20 NEMA 4x (when installed) Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes
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)         Use in hazardous areas         • ATEX Zone 2	IP65 IP20 NEMA 4x (when installed) Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes
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)         Use in hazardous areas         • ATEX Zone 2         • ATEX Zone 22	IP65 IP20 NEMA 4x (when installed) Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes
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)         Use in hazardous areas         • ATEX Zone 2         • IECEx Zone 2	IP65 IP20 NEMA 4x (when installed) Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes
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)         Use in hazardous areas         • ATEX Zone 2         • IECEx Zone 2         • IECEx Zone 22	IP65   IP20   NEMA 4x (when installed)   Yes
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)         Use in hazardous areas         • ATEX Zone 2         • IECEx Zone 22         • IECEx Zone 22         • cULus Class I Zone 2, Division 2	IP65         IP20         NEMA 4x (when installed)         Yes         Yes
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)         Use in hazardous areas         • ATEX Zone 2         • IECEx Zone 22         • IECEx Zone 22         • CULus Class I Zone 2, Division 2	IP65   IP20   NEMA 4x (when installed)   Yes
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)         Use in hazardous areas         • ATEX Zone 2         • IECEx Zone 2         • IECEx Zone 22         • CLus Class I Zone 2, Division 2         • FM Class I Division 2	IP65 IP20 NEMA 4x (when installed) Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes
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)         Use in hazardous areas         • ATEX Zone 2         • IECEx Zone 2         • IECEx Zone 22         • CULus Class I Zone 2, Division 2         • FM Class I Division 2         Marine approval	IP65   IP20   NEMA 4x (when installed)   Yes
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)         Use in hazardous areas         • ATEX Zone 2         • IECEx Zone 2         • IECEx Zone 2         • CULus Class I Zone 2, Division 2         • FM Class I Division 2         Marine approval         • Germanischer Lloyd (GL)         • American Bureau of Shipping (ABS)	IP65         IP20         NEMA 4x (when installed)         Yes         No; Available soon
Degree and class of protection         IP (at the front)         IP (rear)         NEMA (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         • IECEx Zone 22         • IECEx Zone 22         • CULus Class I Zone 2, Division 2         • FM Class I Division 2         Marine approval         • Germanischer Lloyd (GL)         • American Bureau of Shipping (ABS)         • Bureau Veritas (BV)	IP65         IP20         NEMA 4x (when installed)         Yes         No; Available soon         No; Available soon
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)         Use in hazardous areas         • ATEX Zone 2         • IECEx Zone 22         • IECEx Zone 22         • CULus Class I Zone 2, Division 2         • FM Class I Division 2         Marine approval         • Germanischer Lloyd (GL)         • American Bureau of Shipping (ABS)         • Bureau Veritas (BV)         • Det Norske Veritas (DNV)	IP65         IP20         NEMA 4x (when installed)         Yes         No; Available soon         No; Available soon         No; Available soon         No; Available soon
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)         Use in hazardous areas         • ATEX Zone 2         • IECEx Zone 22         • IECEx Zone 22         • CULus Class I Zone 2, Division 2         • FM Class I Division 2         Marine approval         • Germanischer Lloyd (GL)         • American Bureau of Shipping (ABS)         • Bureau Veritas (BV)         • Det Norske Veritas (DNV)         • Korean Register of Shipping (KRS)	IP65         IP20         NEMA 4x (when installed)         Yes         No; Available soon         No
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)         Use in hazardous areas         • ATEX Zone 2         • IECEx Zone 22         • IECEx Zone 22         • CULus Class I Zone 2, Division 2         • FM Class I Division 2         Marine approval         • Germanischer Lloyd (GL)         • American Bureau of Shipping (ABS)         • Bureau Veritas (BV)         • Det Norske Veritas (DNV)	IP65         IP20         NEMA 4x (when installed)         Yes         No; Available soon         No; Available soon         No; Available soon

Polski Rejestr Statkow (PRS)	No
Chinese Classification Society (CCS)	No
Ambient conditions	NO
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/s²
<ul> <li>Vibration load during transport/storage</li> </ul>	10 m/s²
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
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