## SIEMENS

## Data sheet

## 6AV7863-6MA00-2NA0

SIMATIC IFP1900 V2, 19" multi-touch display (16:9) with 1920x1080 pixel resolution, built-in unit, for 24 V DC, display port/DVI interface, including DP/USB cable 1.8 m, on the rear USB, neutral design



Figuresimilar

General information	
Product type designation	IFP1900 V2
Short designation	SIMATIC IFP1900 V2
Display	
Design of display	TFT widescreen display, LED backlighting
Screen diagonal	18.5 in; 19"
Screen diagonal [cm]	47 cm
Display width	408.96 mm
Display height	230.04 mm
On Screen Display (OSD) configuration	No; Adjustable by means of software
Number of colors	16 777 216; 24 bit
Viewing angle	178° x 178°
Resolution (pixels)	
Image resolution	1 920 x 1 080
Horizontal image resolution	1 920 pixel
Vertical image resolution	1 080 pixel
Pixel size, horizontal	0.213 mm
Pixel size, vertical	0.213 mm
General features	
<ul> <li>Brightness/contrast</li> </ul>	350 cd/m² / 1 000:1
<ul> <li>non-reflective and tempered mineral glass screen</li> </ul>	Yes
<ul> <li>Detachable from computer unit</li> </ul>	5 m
Luminance	350 cd/m <sup>2</sup>
Backlighting	
<ul> <li>Type of backlighting</li> </ul>	LED
<ul> <li>MTBF backlighting (at 25 °C)</li> </ul>	50 000 h; At 25°C
Backlight dimmable	Yes; 0-100 %
Control elements	
Control elements	multi-touch screen
Input device	
<ul> <li>Integrated mouse cursor control</li> </ul>	Yes; Also externally via USB
Touch operation	
<ul> <li>Design as touch screen</li> </ul>	Yes; Projective-capacitive
<ul> <li>Design as multi-touch screen</li> </ul>	Yes; Projective-capacitive
Monitor keyboard	Yes; If supported by operating system
Installation type/mounting	
	Built-in unit
Design	Built-in unit

VESA mounting         Yes         Yes           Mounting in portrat format possible         Yes           Multing in landscape form up casable         Yes           Statilitin unit         Yes           Mainting in landscape form vertical         35°           maximum permitted forward tilt angle from vertical         35°           Supply voltage         DO           Pred stappy voltage         DO           Stating current insuch P         DS A*a           Current consumption, max.         15.A           Stating current insuch P         DS A*a           Power loss, typ.         20 W           Power loss, typ.         20 W           Power loss, typ.         20 W           Power loss, typ.         Stapp stamm insuch P	VESA mounting	Voe: VESA 100 x 100 into restant		
Meaning in landscape formal possible         Yes           Built-In unit         Yes           maximum permitted forwardical         35°           Supply voltage         DC           Type of supply voltage         DC           Read value (DC)         24 V, PELV / SELV floating           permissible range, lower Imit (DC)         12 A           Current consumption (rated value)         1 2 A           Current consumption (rated value)         1 5 A           Current consumption (rated value)         1 2 A           Current consumption (rated value)         1 2 A           Current consumption (rated value)         1 2 A           Power loss, max.         15 A           Starting corrent neash PL         9 A           Power loss, max.         3 SW           Interfaces         10 B A           Video interfaces         10 B B A           Video interfaces         10 B B A           Video interfaces         Yes           • UV-D         Yes           • USB Up/Port         Yes           • Digula port V1.2         Toxin interfaces           • USB Up/Port         Yes           • USB Up/Port         Yes           Disigulap/Port         Yes	VESA mounting	Yes; VESA 100 x 100 integrated		
Built- unit         Yes: Portrait mode possible           maximum permitted borward bit angle from vertical         351           Stupply voltage         DC           Ratic value (DC)         24 V: PELV / SELV floating           permissible range, tower limit (DC)         192 V           permissible range, tower limit (DC)         28 a V           Imput current         Current consumption (rated value)           Ourrent consumption (rated value)         12 A           Current consumption (rated value)         12 A           Ourrent consumption (rated value)         12 A           Current consumption (rated value)         12 A           Ourrent consumption (rated value)         12 A           Current consumption (rated value)         12 A           Ourrent consumption (rated value)         12 A           Ourrent consumption (rated value)         12 A           Ourrent consumption (rated value)         20 W           Power loss: Max.         35 W           Instruct consumption (rated value)         20 W <t< td=""><td></td><td></td></t<>				
maximu permitted backward tilt angle from vertical         35 <sup>4</sup> Supply voltage         DC           Type of supply voltage         DC           Rated value (DC)         24 V; PELV / SELV floating           permissible range, upper limit (DC)         19.2 V           permissible range, upper limit (DC)         28.8 V           Current comsumption (rated value)         1.2 A           Corrent comsumption (rated value)         1.2 A           Object is max.         35 W           Itel is				
maximum permitted backward til angle from vertical         35°           Supply voltage         DC           Pripe of augle (VC)         24 V, PELV / SELV floating           permissible range, lower limit (DC)         19.2 V           permissible range, lower limit (DC)         28.8 V           Pout current         12.A           Current consumption (mode value)         12.A           Current consumption, max.         15.A           Starting current invash fr         0.5 A*s           Power loss, typ.         20 W           Power loss, the rear         Yes, 2x onbaard           UBB on the rear         Yes, 2x onbaard           Obt-D         Yes Neg to per A           USB on the rear         Yes Yes Neg to pot V1.2           Totach interfaces         -           • UVB-D         Yes Yes Negret and to protection           IP (ref the front)         IP65           IP (ref the front)         IP20           IP (ref the front)         Yes           Enclosue Type 4 at the front         Yes           Enclosue Type 4 at the front         Yes <t< td=""><td></td><td></td></t<>				
Supply voltage         DC           Type of supply voltage         DC           Rade Value (DC)         24 V; PELV / SELV floating           permissible range, upper limit (DC)         19.2 V           permissible range, upper limit (DC)         28.8 V           Current consumption (ride value)         12.A           Current consumption (ride value)         0.5 A*s           Current consumption (ride value)         0.5 A*s           Power loss, max.         35 W           Power loss, max.         35 W           Instraces         2:USB 2.0 type A           USB on the rear         Yes, X x nobard           Outroet of VSB Interfaces         2:USB 2.0 type A           USB on the rear         Yes, X x nobard           Outroet on twyboardmouse         USB           Vice interfaces         Yes           • USB putter         Yes           Degree and class of protection         IP 21 the front)           IP 21 the front)         IP52           IP (rear)         IP22           NEMA (tront)         Fedosure Type 4 at the front           Yes         Standards, approvals, certificates           Certificate of suitability         hesardous zone 2/2; shipbuilding           CE mark         Yes <td></td> <td></td>				
Type of supply voltage         DC           Rated value (DC)         24 V; PELV / SELV floating           permissible range, lower limit (DC)         28.8 V           permissible range, lower limit (DC)         28.8 V           Current consumption (rated value)         1.2 A           Current consumption, max.         1.5 A           Starting current insub Pt         0.5 A* s           Power loss, typ.         29 W           Power loss, the rear         Yes; Zx onboard           Connection for keyboard/mouse         USB           Video Interfaces         2; USB 2.0 type A           USB on the rear         Yes; Zx onboard           Connection for keyboard/mouse         USB           Video Interfaces         •           • UV-D         Yes           DegloayPort         Yes           DegloayDort         Yes           DegloayDort         Yes           DegloayDort         Yes           DegloayDort         Yes           DegloayDort         Yes           Option         IP6		35		
Raised value (DC)       24 V; PELV / SELV floating         permissible range, Lower limit (DC)       19.2 V         permissible range, Lower limit (DC)       28.8 V         Input current       12.A         Current consumption (rated value)       1.2 A         Current consumption (rated value)       1.5 A         Starting current innush IP       0.5 A*s         Power toss       29 W         Power toss, typ.       29 W         Power toss, max.       35 W         Interfaces       20 W         Power toss, max.       35 W         Interfaces       20 W         Vieso interfaces       20 W         • USB on the rear       Yes; 2x onboard         USB on the rear       Yes; Display port V1.2         Touch interfaces       -         • USB D       Yes         • USB D       Yes         DisplayPort       Yes         • USB D       Yes         Degree and class of protection       1P20         IP (ran)       IP20         NEMA (front)       +         • Endosure Type 4 at the front       Yes         • Endosure Type 4 at the front       Yes         • Endosure Type 4 at the front       Yes </td <td></td> <td></td>				
permissible range, town limit (DC)         19.2 V           permissible range, upper limit (DC)         28.8 V           Dupit current         12.4           Current consumption, max.         15.5 A           Stating current mush Pt         0.5 A*s           Power loss.         9.0           Obtoor for keyboardimouse         USB           Video interfaces         9.00				
permissible range, upper limit (DC) Input current Current consumption (rated value) I.2 A Current consumption, max. I.5 A Starting current innuch P 0.5 A*s Power loss, typ. Power loss, typ. Power loss, max. So W Interfaces Power loss, max. USB on the rear USB on the rear Content of USB interfaces USB on the rear Content of USB interfaces USB on the rear ONU-D Ves, Zx ontboard Connection for keyboard/mouse USB Ves Doylo, D Ves, Display port V1.2 Touch interfaces USB Ves Degroe and class of protection IP (at the front) Enclosure Type 4 at the front Enclosure Type 4 at at the front US attendards, approvals, contificates Certificate of subability Ves Istandards, approvals, Certificates Certificate of subability Ves EAC (Cret, EN 55011, EN 61000-64, EN 61000-64 ENG EAC (CE, EN 55011, EN 61000-64, EN 61000-64 ENG EAC (CE, EN 55011, EN 61000-64, EN 61000-64 ENG EAC (CE, EN 55011, EN 61000-64, EN 61000-64 ENG EAC (CE, EN 55011, EN 61000-64 ENG EAC (CE, EN 550		-		
Input current         Current consumption (rated value)       1.2 A         Current consumption, max.       1.5 A         Starting current inrush IP       0.5 A*s         Power loss, typ.       28 W         Power loss, max.       35 W         Interfaces       21 USB 2.0 type A         USB on the rear       Yes: 2x onboard         Connection for keyboard/mouse       USB         USB on the rear       Yes: 2x onboard         Connection for keyboard/mouse       USB         USB on the rear       Yes: 2x onboard         Connection for keyboard/mouse       USB         USB on the rear       Yes: Display port V1.2         Touch interfaces       -         • UVI-D       Yes         DisplayPort       Yes         Dagree and class of protection       IP20         NEMA (ront)       IP20         • Enclosure Type 4 x at the front       Yes         • Enclosure Type 4 x at the front       Yes         • Enclosure Type 4 x at the front       Yes         • Enclosure Type 4 x at the front       Yes         • Enclosure Type 4 x at the front       Yes         • Enclosure Type 4 x at the front       Yes         • Enclosure Type 4 x at the front       <				
Current consumption (rated value)       12 A         Current consumption, max.       15 A         Starting current timush IP       0.5 A*a         Power loss, max.       35 W         Power loss, max.       35 W         Interfaces       29 W         Number of USB interfaces       2: USB 2.0 type A         USB on the rear       Yes; 2x onboard         Connection for keyboardmouse       USB         Video interfaces       Ves; Display port V1.2         Touch interfaces       Ves         • USB       Yes         Degree and class of protection       IP65         IP (at the front)       IP65         IP (at the front)       Yes         • Enclosure Type 4 at the front       Yes		28.8 V		
Current consumption, max.       1.5 A         Starting current mush Pt       0.5 A*s         Power loss, typ.       20 W         Power loss, typ.       20 W         Power loss, max.       35 W         Interfaces       2: USB 2.0 type A         USB on the rear       Yes; 2x onboard         Connection for keyboard/mouse       USB         Video interfaces       uSB         • UV-D       Yes; Display port V1.2         Touch interfaces       uSB         • USB       Yes         Degree and class of protection       IP65         IP (atthe front)       IP20         NEMA (front)       Ves         • Enclosure Type 4 at the front       Yes         • Enclosure Type 4 at the front <td< td=""><td>Input current</td><td></td></td<>	Input current			
Starting current inrush Pi     0.5 A*s       Power loss, typ.     29 W       Power loss, typ.     29 W       Power loss, max.     35 W       Interfaces     2: USB 2.0 type A       USB on the rear     Yes: Xonboard       Connection for keyboard/mouse     USB       Vide interfaces     2: USB 2.0 type A       USB on the rear     Yes: Xonboard       Connection for keyboard/mouse     USB       Vide interfaces     Yes: Display port V1.2       Touch interfaces     Yes: Display port V1.2       Touch interfaces     1P20       USB     Yes: Display port V1.2       Touch interfaces     1P20       Vide interfaces     1P20       Vide interfaces     Yes       Standards, approvals, conflictors     1P20       Certificate of suitability     hazardous zone 2/22, shipbuilding       CE mark     Yes       Us proval     Yes, Clus, cUL       cUlus     Yes       EAC (formerly Gost-R)     Yes       EAC (formerly Gost-R)     Yes, Available soon       + ATEX Zone 2     Yes, Available soon       + ATEX Zone 2     Yes, Available soon       + IECE Zone 2     Yes, Available soon       + IECE Zone 2     Yes, Available soon       + IECE Zone 2     Yes, Available soon<	Current consumption (rated value)	1.2 A		
Power loss, typ.         29 W           Power loss, typ.         29 W           Power loss, max.         35 W           Interfaces         2, USB 2, 0 type A           USB on the rear         Yes; 2x onboard           Connection for keyboard/mouse         USB           Video interfaces         USB           • DVI-D         Yes; 2x onboard           • DVI-D         Yes           • Degree and class of protection         IP           IP (at the front)         IP65           IP (at the front)         IP20           NEMA (fron)         Yes           • Enclosure Type 4 at the front         Yes           • Enclosure Type 4 at the front         Yes           Cortificate of suitability         hazardous zone 2/22; shipbuilding           CET mark         Yes           UL approval         Yes; Class I Div. 2           RCM (formery C-TICK)         Yes           EAC (formery Gost-R)         Yes	Current consumption, max.	1.5 A		
Power loss, typ.     29 W       Power loss, max.     36 W       Interfaces     35 W       Number of USB interfaces     2: USB 2.0 type A       USB on the rear     Yes; 2x onboard       Connection for keyboard/mouse     USB       Video interfaces     USB       • DVI-D     Yes       • DisplayPort     Yes       • USB     Yes       Degree and class of protection     IP65       IP (at the front)     IP65       IP (at the front)     IP20       • Enclosure Type 4 at the front     Yes       • Enclosure Type 12 at the front     Yes       UL approval     Yes; Culsus, culL       Culus     Yes       Etandards, approvals, certificates     Yes; Culus, culL       Culus     Yes       FM Approval     Yes; Available soon       • ATEX Zone 2     Yes; Available soon       • ATEX Zone 2     Yes; Available soon       • IECEx Zone 22     Yes; Available soon       •	Starting current inrush I <sup>2</sup> t	0.5 A <sup>2</sup> ·s		
Power loss, max.     35 W       Interfaces     2: USB 2.0 type A       USB on the rear     Yes; 2x onboard       Connection for keyboard/mouse     USB       • DVI-D     Yes; 2x onboard       • DVI-D     Yes; Display port V1.2       • Touch interfaces     -       • USB     Yes       • DyBapPort     Yes; Display port V1.2       • Touch interfaces     -       • USB     Yes       Degree and class of protection     IP65       IP (at the front)     Yes       • Enclosure Type 4 at the front     Yes       • Enclosure Type 12 at the front     Yes       • UL approval     Yes; Clus, cUL       Culus     Yes       Certificate of suitability     hazardous zone 2/22; shipbuilding       CE mark     Yes       UL approval     Yes; Clus, cUL       cUlus     Yes       EAC (formerly C-TICK)     Yes       EAC (formerly C-SLR)     Yes       EMM     CE; EN 55011, EN 61000-6-2    <	Power loss			
Interfaces         2, USB 2.0 type A           USB on the rear         Yes; 2x onboard           Connection for keyboard/mouse         USB           • DVI-D         Yes; Display port V1.2           • DVI-D         Yes; Display port V1.2           Touch interfaces         Yes;           • USB         Yes           • USB         Yes           Degree and class of protection         IP20           IP (rear)         IP20           NEMA (front)         Yes           • Enclosure Type 4 at the front         Yes           • Enclosure Type 12 at the front         Yes           • Enclosure Type 12 at the front         Yes           UL approval         Yes; Culus; culL           cullus         Yes           Certificate of suitability         hazardous zone 2/22; shipbuilding           CE mark         Yes; Clus; culL           cullus         Yes           EAC (formerly Cost-R)         Yes           EAC (formerly Gost-R)         Yes           Ves; Available soon         • ATEX Zone 2	Power loss, typ.	29 W		
Number of USB interfaces       2; USB 2.0 type A         UBB on the rear       Yes; 2x onboard         Connection for keyboard/mouse       USB         Video interfaces       Yes         • UVI-D       Yes         • USB       Yes         Degroe and class of protection       IP         IP (at the front)       IP66         IP (rear)       IP20         NEMA (front)       Yes         • Enclosure Type 4 at the front       Yes	Power loss, max.	35 W		
Number of USB interfaces       2; USB 2.0 type A         USB on the rear       Yes; 2x onboard         Connection for keyboard/mouse       USB         Video interfaces       Yes         • UVI-D       Yes         • USB       Yes         • Degroe and class of protection       IP         IP (rear)       IP20         NEMA (front)       IP20         • Enclosure Type 4 at the front       Yes	Interfaces			
USB       Yes; 2x onboard         Connection for keyboard/mouse       USB         Video interfaces       USB         • DisplayPort       Yes;         • DisplayPort       Yes;         Touch interfaces       Yes;         • USB       Yes;         Degree and class of protection       IP65         IP (at the fron)       IP20         NEMA (front)       IP20         • Enclosure Type 4 at the front       Yes;         UL approvals, cortificates       Certificate of suitability         Cetter of suitability       hazardous zone 2/22, shipbuilding         CE mark       Yes;         UL approval       Yes; Class I Div. 2         RCM (formerly C-TICK)       Yes;         EAC (formerly C-TICK)       Yes;         Ves; Available soon          • ATEX Zone 2       Yes; Available soon         • ATEX Zone 2       Yes; Available soon         • ECEX Zone 2       Yes; Available soon         • IECEX Zone 2       Yes; Available soon </td <td></td> <td>2; USB 2.0 type A</td>		2; USB 2.0 type A		
Connection for keyboard/mouse     USB       Video interfaces     •       • UVI-D     Yes       • DisplayPort     Yes       • USB     Yes <b>Degree and class of protection</b> IP65       IP (at the front)     IP65       IP (at the front)     IP20       NEMA (front)     IP20       • Lossure Type 4 at the front     Yes       • Enclosure Type 12 at the front     Yes       • Enclosure Type 12 at the front     Yes       • Log at the front     Yes       • Lug approval     Yes       • UL approval     Yes       • UL approval     Yes       • ENC     Yes       • ATEX Zone 2     Yes       • ATEX Zone 2     Yes       • ECEX Zone 2     Yes	USB on the rear			
Video Interfaces       Yes         • DisplayPort       Yes, Display port V1.2         Touch interfaces       Yes         • USB       Yes         Degree and class of protection       IP (at the front)         IP (at the front)       IP65         IP (errar)       IP20         NEMA (front)       Percount         • Enclosure Type 4 at the front       Yes         • Enclosure Type 4 at the front       Yes         Standards, approvals, certificates       Certificate of suitability         Certificate of suitability       hazardous zone 2/22; shipbuilding         CE mark       Yes         UL approval       Yes; culcus, culL         culcus       Yes         FM approval       Yes; culcus, culL         culcus       Yes         EAC (formerly C-TICK)       Yes         EAC (formerly Cost-R)       Yes         Use in hazardous areas       Yes; Available soon         • ATEX Zone 2       Yes; Available soon         • ATEX Zone 2       Yes; Available soon         • ECEC Xone 2       Yes; Available soon         • ECEX Zone 2       Yes; Available soon         • ECEX Zone 2       Yes; Available soon         • ECEX Zone 2       Yes; Ava				
• DVI-D       Yes         • DisplayPort       Yes         Touch interfaces       •         • USB       Yes         Degree and class of protection       IP65         IP (at the front)       IP65         IP (rear)       IP20         NEMA (front)       IP20         • Enclosure Type 4 at the front       Yes         • Enclosure Type 4.x the front       Yes         • Enclosure Type 12 at the front       Yes         • Certificate of suitability       Chazardous zone 2/22; shipbuilding         • CEmperative       Yes (Clus, cUL         cULus       Yes         FM approval       Yes         EAC (formerly C-TICK)       Yes         EMC       Cect EN 56011, EN 61000-6-2         Use in hazardous areas       Yes, Available soon<				
• DisplayPort         Yes: Display port V1.2          Touch interfaces             • USB             Perce and class of protection             IP (at the front)             IP (at the front)             IP (at the front)             IP (at the front)             Enclosure Type 4 at the front             Enclosure Type 12 at the front            Enclosure Type 12 at the front             Enclosure Type 12 at the front             Enclosure Type 12 at the front             Enclosure Type 12 at the front             Enclosure Type 12 at the front             Enclosure Type 12 at the front             Enclosure Type 12 at the front             Enclosure Type 12 at the front             Elclosure 1             Cetmark             Llapproval <tr< td=""><td>• DVI-D</td><td>Yes</td></tr<>	• DVI-D	Yes		
Touch interfaces     Yes       Oegree and class of protection     IP (at the front)       IP (at the front)     IP65       IP (rear)     IP20       NKAA (front)     IP20       • Enclosure Type 4 at the front     Yes       • Enclosure Type 12 at the front     Yes       • Enclosure Type 12 at the front     Yes       Certificate of suitability     hazardous zone 2/22; shipbuilding       CE mark     Yes       UL approvals, cortificates     Yes       Certificate of suitability     Yes; Clus, cUL       cUlus     Yes       FM approval     Yes; Clus, cUL       cUlus     Yes       EAC (formerly Gost-R)     Yes       EAC (formerly Gost-R)     Yes; Available soon       • ATEX Zone 2     Yes; Available soon       • ATEX Zone 2     Yes; Available soon       • EICEX Zone 2     Yes; Available soon       •		Yes: Display port V1.2		
• USB       Yes         Degree and class of protection         IP (at the front)       IP65         IP (at the front)       IP20         NEMA (front)       IP20         • Enclosure Type 4 at the front       Yes         • Enclosure Type 4x at the front       Yes         • Enclosure Type 4x at the front       Yes         • Enclosure Type 4x at the front       Yes         Standards, approvals, cortificates       Certificate of suitability         Certificate of suitability       hazardous zone 2/22; shipbuilding         CE mark       Yes         UL approval       Yes; cULus, cUL         cUlus       Yes         FM approval       Yes; Class I Div. 2         RCM (formerly C-TICK)       Yes         EMC       CE, EN 55011, EN 61000-6-4, EN 61000-6-2         Use in hazardous areas       Yes; Available soon         • ATEX Zone 2       Yes; Available soon         • ATEX Zone 2       Yes; Available soon         • IECEx Zone 2       Yes; Available soon         • IECEx Zone 2       Yes; Available soon         • IECEx Zone 2       Yes; Available soon         • FM Class I Division 2       Yes; Available soon         • Bureau Veritas (BV)       Yes; Available soon				
Degree and class of protection           IP (at the front)         IP65           IP (rear)         IP20           NEMA (front)         IP20           • Enclosure Type 4 at the front         Yes           • Enclosure Type 4x at the front         Yes           • Large Contribution         Yes           • UL approval         Yes           • UL approval         Yes           • EAC (formerly C-TICK)         Yes           EMC         CE, EN 55011, EN 61000-6-4, EN 61000-6-2           Use in hazardous areas         •           • ATEX Zone 2         Yes; Available soon           • ATEX Zone 2         Yes; Available soon           • IECEx Zon		Yes		
IP (at the front)       IP65         IP (rear)       IP20         NEMA (front)       IP20         • Enclosure Type 4 at the front       Yes         • Enclosure Type 12 at the front       Yes         • Enclosure Type 12 at the front       Yes         Standards, approvals, certificates       Azaardous zone 2/22; shipbuilding         Certificate of suitability       hazardous zone 2/22; shipbuilding         CE mark       Yes         UL approval       Yes; cULus, cUL         cULus       Yes         FM approval       Yes; Class I Div. 2         RCM (formerly C-TICK)       Yes         EAC (formerly Gost-R)       Yes         EMC       CE, EN 55011, EN 61000-6-4, EN 61000-6-2         Use in hazardous areas       •         • ATEX Zone 2       Yes; Available soon         • ATEX Zone 2       Yes; Available soon         • IECEx Zone 2       Yes; Available soon         • IECEx Zone 2       Yes; Available soon         • ERM class I Division 2       Yes; Available soon         • American Bureau of Shipping (ABS)       Yes; Available soon         • Bureau Veritas (BV)       Yes; Available soon         • Bureau Veritas (BV)       Yes; Available soon         • Det Norske Ver				
IP (rear)       IP20         NEMA (front)       Enclosure Type 4 at the front       Yes         • Enclosure Type 4 x at the front       Yes         • Enclosure Type 4 x at the front       Yes         • Enclosure Type 12 at the front       Yes         • Enclosure Type 12 at the front       Yes         • Certificate of suitability       hazardous zone 2/22; shipbuilding         CE mark       Yes;         UL approval       Yes; Clus, cUL         cULus       Yes;         UL approval       Yes; Class I Div. 2         RCM (formerly C-TICK)       Yes         EAC (formerly Cost-R)       Yes         EMC       CE, EN 55011, EN 61000-6-4, EN 61000-6-2         Use in hazardous areas       Yes; Available soon         • ATEX Zone 2       Yes; Available soon         • ATEX Zone 2       Yes; Available soon         • IECE x Zone 2       Yes; Available soon         • IECE x Zone 2       Yes; Available soon         • FM Class I Division 2       Yes; Available soon         • Germanischer Lloyd (GL)       Yes; Available soon         • American Bureau of Shipping (ABS)       Yes; Available soon         • Bureau Veritas (BV)       Yes; Available soon         • Det Norske Veritas (DNV)       Yes;		IP65		
NEMA (front) <ul> <li>Enclosure Type 4 at the front</li> <li>Yes</li> <li>Enclosure Type 4x at the front</li> <li>Yes</li> <li>Standards, approvals, certificates</li> <li>Certificate of suitability</li> <li>hazardous zone 2/22; shipbuilding</li> <li>CE mark</li> <li>Yes</li> <li>UL approval</li> <li>Yes, CULus, cUL</li> <li>cULus</li> <li>Yes</li> <li>FM approval</li> <li>Yes; Class I Div. 2</li> <li>RCM (formerly C-TICK)</li> <li>Yes</li> <li>EAC (formerly C-StrCK)</li> <li>Yes</li> <li>CE (as have a construction of the form of the formerly C-TICK)</li> <li>Yes</li> <li>CE (formerly C-StrCK)</li> <li>Yes</li> <li>CE (formerly C-StrCK)</li> <li>Yes</li> <li>CE (formerly C-StrCK)</li> <li>Yes</li> <li>CE (formerly C-StrCK)</li> <li>Yes</li> <li>Yes</li> <li>CE (formerly C-StrCK)</li> <li>Yes</li> <li>Yes</li> <li>Yes (formerly C-StrCK)</li> <li>Yes</li> <li>Yes</li> <li>ATEX Zone 2</li> <li>Yes; Available soon</li> <li>ATEX Zone 22</li> <li>Yes; Available soon</li> <li>IECEX Zone 22</li> <li>Yes; Available soon</li> <li>IECEX Zone 22</li> <li>Yes; Available soon</li> <li>FM Class I Division 2</li> <li>Yes; Available soon</li> <li>FM class I Division 2</li> <li>Yes; Available soon</li> <li>Bureau Veritas (BV)</li> <li>Yes; Available soon</li> <li>Bureau Veritas (BV)</li> <li>Yes; Available soon</li> <li>Set Available soon</li> <li>Bureau Veritas (DNV)</li> <li>Yes; Available soon</li> <li>Ultyds Register of Shipping (LRS)</li> <li>Yes; Available soon</li> <li>Nippon Kaiji Kyokai (Class NK)</li> <li< td=""><td></td><td></td></li<></ul>				
• Enclosure Type 4 at the front       Yes         • Enclosure Type 4x at the front       Yes         • Enclosure Type 12 at the front       Yes         Standards, approvals, certificates       Certificate of suitability         Certificate of suitability       hazardous zone 2/22; shipbuilding         CE mark       Yes         UL approval       Yes; cULus, cUL         cULus       Yes         FM approval       Yes; Class I Div. 2         RCM (formerly C-TICK)       Yes         EAC (formerly Gost-R)       Yes         EMC       CE, EN 55011, EN 61000-6-4, EN 61000-6-2         Use in hazardous areas       Yes; Available soon         • ATEX Zone 2       Yes; Available soon         • IECEx Zone 2       Yes; Available soon         • IECEX Zone 22       Yes; Available soon         • FM Class I Division 2       Yes; Available soon         • Germanischer Lloyd (GL)       Yes; Available soon         • American Bureau of Shipping (ABS)       Yes; Available soon         • Bureau Veritas (BV)       Yes; Available soon         • Lloyds Register of Shipping (LRS)       Yes; Available soon         • Lloyds Register of Shipping (LRS)       Yes; Available soon         • Lloyds Register of Shipping (LRS)       Yes; Available soon				
• Enclosure Type 4x at the front       Yes         • Enclosure Type 12 at the front       Yes         Standards, approvals, certificates		Yes		
• Enclosure Type 12 at the front       Yes         Standards, approvals, certificates         Certificate of suitability       hazardous zone 2/22; shipbuilding         CE mark       Yes         UL approval       Yes; cULus, cUL         dULus       Yes;         FM approval       Yes; Class I Div. 2         RCM (formerly C-TICK)       Yes         EAC (formerly Gost-R)       Yes         EMC       CE N 55011, EN 61000-6-4, EN 61000-6-2         Use in hazardous areas				
Standards, approvals, certificates         Certificate of suitability       hazardous zone 2/22; shipbuilding         CE mark       Yes         UL approval       Yes; cULus, cUL         CULus       Yes         FM approval       Yes; cULus, cUL         CULus       Yes         FM approval       Yes; class I Div. 2         RCM (formerly C-TICK)       Yes         EAC (formerly Gost-R)       Yes         EMC       CE, EN 55011, EN 61000-6-4, EN 61000-6-2         Use in hazardous areas       Yes; Available soon         • ATEX Zone 2       Yes; Available soon         • ATEX Zone 2       Yes; Available soon         • IECEx Zone 2       Yes; Available soon         • IECEx Zone 2       Yes; Available soon         • FM Class I Division 2       Yes; Available soon         • FM Class I Division 2       Yes; Available soon         • FM Class I Division 2       Yes; Available soon         • Germanischer Lloyd (GL)       Yes; Available soon         • American Bureau of Shipping (ABS)       Yes; Available soon         • Bureau Veritas (BV)       Yes; Available soon         • Det Norske Veritas (DNV)       Yes; Available soon         • Lloyds Register of Shipping (LRS)       Yes; Available soon				
Certificate of suitability       hazardous zone 2/22; shipbuilding         CE mark       Yes         UL approval       Yes; cULus, cUL         cULus       Yes; cULus, cUL         cULus       Yes; Class I Div. 2         FM approval       Yes; Class I Div. 2         RCM (formerly C-TICK)       Yes         EAC (formerly Gost-R)       Yes         EMC       CE, EN 55011, EN 61000-6-4, EN 61000-6-2         Use in hazardous areas       CE, EN 55011, EN 61000-6-4, EN 61000-6-2         Is in hazardous areas       Yes; Available soon         • ATEX Zone 2       Yes; Available soon         • ATEX Zone 2       Yes; Available soon         • IECEx Zone 22       Yes; Available soon         • IECEx Zone 22       Yes; Available soon         • FM Class I Division 2       Yes; Available soon         Marine approval       Yes; Available soon         • Germanischer Lloyd (GL)       Yes; Available soon         • Bureau Veritas (BV)       Yes; Available soon         • Det Norske Veritas (DNV)       Yes; Available soon         • Det Norske Veritas (DNV)       Yes; Available soon         • Lloyds Register of Shipping (LRS)       Yes; Available soon         • Nippon Kaiji Kyokai (Class NK)       Yes; Available soon				
CE mark       Yes         UL approval       Yes; cULus, cUL         dULus       Yes         FM approval       Yes; Class I Div. 2         RCM (formerly C-TICK)       Yes         EAC (formerly Gost-R)       Yes         EMC       CE, EN 55011, EN 61000-6-4, EN 61000-6-2         Use in hazardous areas		hazardaya zana 2/22: ahinhuilding		
UL approvalYes; cULus, cULcULusYesFM approvalYes; Class I Div. 2RCM (formerly C-TICK)YesEAC (formerly Gost-R)YesEAC (formerly Gost-R)YesEMCCE, EN 55011, EN 61000-6-4, EN 61000-6-2Use in hazardous areas• ATEX Zone 2Yes; Available soon• ATEX Zone 22Yes; Available soon• IECEx Zone 2Yes; Available soon• IECEx Zone 2Yes; Available soon• IECEx I Division 2Yes; Available soon• Germanischer Lloyd (GL)Yes; Available soon• Armerican Bureau of Shipping (ABS)Yes; Available soon• Bureau Veritas (BV)Yes; Available soon• Det Norske Veritas (DNV)Yes; Available soon• Lloyds Register of Shipping (LRS)Yes; Available soon• Nippon Kaiji Kyokai (Class NK)Yes; Available soonAmbient temperature during operationYes; Available soon	· · · · ·			
cULusYesFM approvalYes; Class I Div. 2RCM (formerly C-TICK)YesEAC (formerly Gost-R)YesEMCCE, EN 55011, EN 61000-6-4, EN 61000-6-2Use in hazardous areas• ATEX Zone 2Yes; Available soon• ATEX Zone 2Yes; Available soon• IECEx Zone 2Yes; Available soon• Germanischer Lloyd (GL)Yes; Available soon• American Bureau of Shipping (ABS)Yes; Available soon• Bureau Veritas (BV)Yes; Available soon• Det Norske Veritas (DNV)Yes; Available soon• Lloyds Register of Shipping (LRS)Yes; Available soon• Nippon Kaiji Kyokai (Class NK)Yes; Available soonAmbient temperature during operationYes; Available soon				
FM approvalYes; Class I Div. 2RCM (formerly C-TICK)YesEAC (formerly Gost-R)YesEMCCE, EN 55011, EN 61000-6-4, EN 61000-6-2Use in hazardous areas• ATEX Zone 2Yes; Available soon• ATEX Zone 2Yes; Available soon• IECEx Zone 2Yes; Available soon• FM Class I Division 2Yes; Available soon• Germanischer Lloyd (GL)Yes; Available soon• American Bureau of Shipping (ABS)Yes; Available soon• Bureau Veritas (BV)Yes; Available soon• Lloyds Register of Shipping (LRS)Yes; Available soon• Nippon Kaiji Kyokai (Class NK)Yes; Available soonAmbient temperature during operation				
RCM (formerly C-TICK)       Yes         EAC (formerly Gost-R)       Yes         EMC       CE, EN 55011, EN 61000-6-4, EN 61000-6-2         Use in hazardous areas          • ATEX Zone 2       Yes; Available soon         • ATEX Zone 22       Yes; Available soon         • IECEx Zone 2       Yes; Available soon         • IECEx Zone 2       Yes; Available soon         • IECEx Zone 22       Yes; Available soon         • IECEx Zone 22       Yes; Available soon         • FM Class I Division 2       Yes; Available soon         Marine approval          • Germanischer Lloyd (GL)       Yes; Available soon         • American Bureau of Shipping (ABS)       Yes; Available soon         • Bureau Veritas (BV)       Yes; Available soon         • Det Norske Veritas (DNV)       Yes; Available soon         • Lloyds Register of Shipping (LRS)       Yes; Available soon         • Nippon Kaiji Kyokai (Class NK)       Yes; Available soon         • Nippon Kaiji Kyokai (Class NK)       Yes; Available soon				
EAC (formerly Gost-R)       Yes         EMC       CE, EN 55011, EN 61000-6-4, EN 61000-6-2         Use in hazardous areas       • ATEX Zone 2         • ATEX Zone 2       Yes; Available soon         • ATEX Zone 22       Yes; Available soon         • IECEx Zone 2       Yes; Available soon         • IECEx Zone 2       Yes; Available soon         • IECEx Zone 22       Yes; Available soon         • IECEx Zone 22       Yes; Available soon         • FM Class I Division 2       Yes; Available soon         Marine approval       • Germanischer Lloyd (GL)         • American Bureau of Shipping (ABS)       Yes; Available soon         • Bureau Veritas (BV)       Yes; Available soon         • Det Norske Veritas (DNV)       Yes; Available soon         • Lloyds Register of Shipping (LRS)       Yes; Available soon         • Nippon Kaiji Kyokai (Class NK)       Yes; Available soon         Ambient conditions       Ambient temperature during operation				
EMC       CE, EN 55011, EN 61000-6-4, EN 61000-6-2         Use in hazardous areas <ul> <li>ATEX Zone 2</li> <li>Yes; Available soon</li> <li>IECEx Zone 22</li> <li>Yes; Available soon</li> <li>Yes; Available soon</li> </ul> <li>Germanischer Lloyd (GL)</li> <li>Yes; Available soon</li> <li>Germanischer Lloyd (GL)</li> <li>Yes; Available soon</li> <li>Bureau Veritas (BV)</li> <li>Yes; Available soon</li> <li>Det Norske Veritas (DNV)</li> <li>Yes; Available soon</li> <li>Lloyds Register of Shipping (LRS)</li> <li>Yes; Available soon</li> <li>Nippon Kaiji Kyokai (Class NK)</li> <li>Yes; Available soon</li> <li>Ambient temperature during operation</li>				
Use in hazardous areas       Yes; Available soon         • ATEX Zone 2       Yes; Available soon         • ATEX Zone 22       Yes; Available soon         • IECEx Zone 2       Yes; Available soon         • IECEx Zone 22       Yes; Available soon         • FM Class I Division 2       Yes; Available soon         • Germanischer Lloyd (GL)       Yes; Available soon         • American Bureau of Shipping (ABS)       Yes; Available soon         • Bureau Veritas (BV)       Yes; Available soon         • Det Norske Veritas (DNV)       Yes; Available soon         • Lloyds Register of Shipping (LRS)       Yes; Available soon         • Nippon Kaiji Kyokai (Class NK)       Yes; Available soon         Ambient temperature during operation       Yes; Available soon				
• ATEX Zone 2Yes; Available soon• ATEX Zone 22Yes; Available soon• IECEx Zone 2Yes; Available soon• IECEx Zone 22Yes; Available soon• FM Class I Division 2Yes; Available soon• Germanischer Lloyd (GL)Yes; Available soon• Germanischer Lloyd (GL)Yes; Available soon• American Bureau of Shipping (ABS)Yes; Available soon• Bureau Veritas (BV)Yes; Available soon• Det Norske Veritas (DNV)Yes; Available soon• Lloyds Register of Shipping (LRS)Yes; Available soon• Nippon Kaiji Kyokai (Class NK)Yes; Available soonAmbient temperature during operationHeritage Soon		CL, LIN 55011, LIN 01000-0-4, LIN 01000-0-2		
ATEX Zone 22Yes; Available soonIECEx Zone 2Yes; Available soonIECEx Zone 22Yes; Available soonFM Class I Division 2Yes; Available soonFM Class I Division 2Yes; Available soonMarine approvalGermanischer Lloyd (GL)Yes; Available soonAmerican Bureau of Shipping (ABS)Yes; Available soonBureau Veritas (BV)Yes; Available soonDet Norske Veritas (DNV)Yes; Available soonLloyds Register of Shipping (LRS)Yes; Available soonNippon Kaiji Kyokai (Class NK)Yes; Available soonAmbient temperature during operation		Vac: Available soon		
IECEx Zone 2Yes; Available soonIECEx Zone 22Yes; Available soonFM Class I Division 2Yes; Available soonMarine approvalGermanischer Lloyd (GL)Yes; Available soonAmerican Bureau of Shipping (ABS)Yes; Available soonBureau Veritas (BV)Yes; Available soonDet Norske Veritas (DNV)Yes; Available soonLloyds Register of Shipping (LRS)Yes; Available soonNippon Kaiji Kyokai (Class NK)Yes; Available soonAmbient conditionsYes; Available soon				
• IECEx Zone 22Yes; Available soon• FM Class I Division 2Yes; Available soonMarine approval• Germanischer Lloyd (GL)Yes; Available soon• American Bureau of Shipping (ABS)Yes; Available soon• Bureau Veritas (BV)Yes; Available soon• Det Norske Veritas (DNV)Yes; Available soon• Lloyds Register of Shipping (LRS)Yes; Available soon• Nippon Kaiji Kyokai (Class NK)Yes; Available soonAmbient conditionsAmbient temperature during operation				
• FM Class I Division 2Yes; Available soonMarine approvalYes; Available soon• Germanischer Lloyd (GL)Yes; Available soon• American Bureau of Shipping (ABS)Yes; Available soon• Bureau Veritas (BV)Yes; Available soon• Det Norske Veritas (DNV)Yes; Available soon• Lloyds Register of Shipping (LRS)Yes; Available soon• Nippon Kaiji Kyokai (Class NK)Yes; Available soonAmbient temperature during operationYes; Available soon				
Marine approval         • Germanischer Lloyd (GL)       Yes; Available soon         • American Bureau of Shipping (ABS)       Yes; Available soon         • Bureau Veritas (BV)       Yes; Available soon         • Det Norske Veritas (DNV)       Yes; Available soon         • Lloyds Register of Shipping (LRS)       Yes; Available soon         • Nippon Kaiji Kyokai (Class NK)       Yes; Available soon         Ambient conditions       Ambient temperature during operation				
• Germanischer Lloyd (GL)       Yes; Available soon         • American Bureau of Shipping (ABS)       Yes; Available soon         • Bureau Veritas (BV)       Yes; Available soon         • Det Norske Veritas (DNV)       Yes; Available soon         • Lloyds Register of Shipping (LRS)       Yes; Available soon         • Nippon Kaiji Kyokai (Class NK)       Yes; Available soon         Ambient conditions       Ambient temperature during operation				
American Bureau of Shipping (ABS) Yes; Available soon     Bureau Veritas (BV) Yes; Available soon     Det Norske Veritas (DNV) Yes; Available soon     Lloyds Register of Shipping (LRS) Yes; Available soon     Nippon Kaiji Kyokai (Class NK) Yes; Available soon     Nippon Kaiji Kyokai (Class NK) Yes; Available soon     Ambient conditions  Ambient temperature during operation		Yes: Available soon		
Bureau Veritas (BV) Yes; Available soon     Det Norske Veritas (DNV) Yes; Available soon     Lloyds Register of Shipping (LRS) Yes; Available soon     Nippon Kaiji Kyokai (Class NK) Yes; Available soon     Ambient conditions     Ambient temperature during operation				
Det Norske Veritas (DNV) Yes; Available soon     Lloyds Register of Shipping (LRS) Yes; Available soon     Nippon Kaiji Kyokai (Class NK) Yes; Available soon     Ambient conditions     Ambient temperature during operation				
Lloyds Register of Shipping (LRS) Yes; Available soon     Nippon Kaiji Kyokai (Class NK) Yes; Available soon     Ambient conditions     Ambient temperature during operation				
Nippon Kaiji Kyokai (Class NK) Yes; Available soon      Ambient conditions      Ambient temperature during operation				
Ambient conditions Ambient temperature during operation				
Ambient temperature during operation				
• min. 0 °C				
	• min.			

• max.	50 °C
Ambient temperature during storage/transportation	
• min.	-20 °C
• max.	60 °C
Altitude during operation relating to sea level	
<ul> <li>Installation altitude above sea level, max.</li> </ul>	3 500 m
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/s <sup>2</sup>
<ul> <li>shock acceleration during storage/transport</li> </ul>	250 m/s <sup>2</sup>
Mechanics/material	
Enclosure material (front)	With neutral design
Aluminum	Yes
<ul> <li>Aluminum casting</li> </ul>	Yes
• Glass	Yes; at front
Enclosure material (rear)	aluminum
Dimensions	
Width of the housing front	464 mm
Height of housing front	294 mm
Mounting cutout, width	448 mm; Tolerance: +1 mm
Mounting cutout, height	278 mm; Tolerance: +1 mm
Overall depth	63.4 mm
Weights	
Weight (without packaging)	5 kg
Weight (with packaging)	7 kg
loot modified.	

last modified:

9/21/2021 🖸