SIEMENS

Data sheet

6AV7863-7MA00-2AA0

SIMATIC IFP2400 V2, 24" 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, standard design



Figuresimilar

Concernation	
General information	
Product type designation	IFP2400 V2
Short designation	SIMATIC IFP2400 V2
Display	
Design of display	TFT widescreen display, LED backlighting
Screen diagonal	23.8 in; 24"
Screen diagonal [cm]	60.47 cm
Display width	527 mm
Display height	296 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 	0.2745 mm
Pixel size, vertical	0.2745 mm
General features	
 Brightness/contrast 	250 cd/m ² / 1 000:1
 non-reflective and tempered mineral glass screen 	Yes
 Detachable from computer unit 	5 m
Luminance	250 cd/m ²
Backlighting	
 Type of backlighting 	LED
 MTBF backlighting (at 25 °C) 	50 000 h; At 25°C
Backlight dimmable	Yes; 0-100 %
Control elements	
Control elements	multi-touch screen
Input device	
 Integrated mouse cursor control 	Yes; Also externally via USB
Touch operation	
Design as touch screen	Yes; Projective-capacitive
Design as multi-touch screen	Yes; Projective-capacitive
Monitor keyboard	Yes; If supported by operating system
Installation type/mounting	
Design	Built-in unit
Front mounting	Yes
VESA mounting	Yes; VESA 100 x 100 integrated

Automics in According to Construct mode possible Yesi Butis in Init Yesi Butis in Init costage to mark possible Yesi markum permitted forward thrappe from vertical 35' Supply voltage DC Type of supply voltage DC Rade value (CC) 24 V, PELV / SELV foot foot foot foot foot foot foot foo	Mounting in portrait format possible	Yes
Built- unit: Yes: Portest mode possible maximum permitted backward itt angle from vertical 35' Supply vortage 5' Supply vortage DC Parted value, (CC) 24 V; FELV / SELV footing permissible range, lower limit, (CC) 28 B V permissible range, oupper limit, (CC) 28 B V Parted value, (CC) 28 B V Current consumption (rated value) 15 A Current consumption (rated value) 15 A Current consumption (rated value) 0.5 At a Power foss, typ. 38 W Power fors, the typ. Yes, typ. Power fors, typ. Yes		
maxmum permitted forwalt it angle from vertical SP Supply voltage DC Type of supply voltage DC Rader value (Cryc) 24 X V permissible range, lower finit (CC) 28 X V Imperformation (CC) 28 X V		
Transmitted backward tilt angle from vertical 35° Supply violage DC Rand value (UC) 24 V; PELV / SELV floating pernissible range, lover (Init (UC) 28 8 V pernissible range, lover (Init (UC) 28 8 V Current consumption (Init (UC) 28 8 V Current consumption, Init (UC) 28 8 V Power loss, typ. 56 Ath Power loss, typ. 56 W Power loss, typ. 20 88 2.0 Appe A VSB on the rear Ves.2 conband Connectificaes USB • OV-D Yes • Supplay port V1.2 Consumption • Could interfaces USB • OV-D Yes • Supplay Port Yes • Cool interfaces USB • Cool interfaces USB • Cool interfaces USB • Cool interfaces		
Supply voltage DC Type of supply voltage DC Permissible range, lower finit (DC) 19.2 V permissible range, lower finit (DC) 19.2 V permissible range, lower finit (DC) 28.8 V Imput consumption, finited value) 1.5 A Current consumption, finited value) 1.5 A Current consumption, finited value) 0.5 A*s Power loss, lyp. 9 W Power loss, lyp. 9 W Power loss, max. 41 W Number of USB Interfaces 2.USB 2.0 type A USB on the rear Yes, 2x omboard OVD-D Yes • Ovda bendences		
Type of supply voltage DC Red value (DC) 24V, PELV SELV Proving permissible range, uover limit (DC) 28.8 V permissible range, uover limit (DC) 28.8 V Current consumption (inder value) 1.5 A Current consumption (inder value) 0.5 A*s Power loss 90.9 A Starting current timush Pt 0.5 A*s Power loss, max. 41 W Interfaces 2. USB 2.0 type A USB on the rear Yes, 2.comband Connection for keyscandrouse USB Vision therease 2. USB 2.0 type A USB on the rear Yes, 2.comband Connection for keyscandrouse USB Vision timefaces - • USB on the reare Yes • USB conte metalese - • USB on the reare Yes • USB on the reare Yes • Display Port VI 2 - Tack interfaces - • USB on the reare Yes • Display Port VI 2 - Tack interfaces - <tr< td=""><td></td><td>35</td></tr<>		35
Rated value (DC) 24 V. PELV / SELV Heating permissible range, lower limit (DC) 19.2 V permissible range, lower limit (DC) 28.8 V Imput corrent Unrent consumption, max. Current consumption, max. 19.4 A Starting current inputs P 0.5 A*s Power loss, typ. 36 W Power loss, typ. 96 W Concent for keyboardmouse USB Video interfaces USB • UVI 0 Yes • Staff so f protection Yes P for the fromt Peds P (rasr) IPeds • Enclosure Type 4 at the front Yes		20
permissible range. upper limit (DC) 19.2 V permissible range. upper limit (DC) 28.8 V Imput current consumption (nator value) 1.5 A Current consumption (nator value) 0.6 AP is Power loss, hp. 36 W Power loss, nax. 41 W Power loss, nax. 41 W Power loss, nax. 41 W Power loss, nax. 41 W Interfaces USB on the read Connection for keyboardimouse USB Voteo interfaces • USB on the read • Ext the front Yes the the roat • Enclosure Type 4 at the front Yes Standards, sporovala, currificates • Enclosure Type 4 at the front Yes Standards, sporovala, currificates • Enclosure Type 4 at the front Yes Standards, sporovala, currificates • Enclosure Type 4 at the front Yes Standards, sporovala, currificates • Enclosure Type 4 at the front Yes Standards, sporovala, currificates • Enclosure Type 4 at the front Yes Standards, sporovala, currificates • Enclosure Type 4 at the front Yes Standards, sporovala, currificates • Enclosure Type 4 at the front Yes Standards, sporovala, currificates • En		
permissible range, upper limit (BC) 28.8 V Input current. Current consumption, frated value) 1.5 A Current consumption, max. 1.9 A Starting current innolsh Pt 0.5 A*s Power loss, typ. 0.8 W Power loss, typ. 0.8 W Power loss, max. 41 W Interfaces Variable 2. USB 2.0 type A USB on the rear Yes; 2.4 onboard Connection for keyboard/mouse USB Visite interfaces Ves; Display port V1.2 Objolgs/Port Yes; Display port V1.2 Touch interface USB P (at the front) IP86 IP (at the front) IP86 IP (at the front) IP20 NEMA (front) IP20 Inclosure Type 4 at the front Yes Standards, approvals, certificates Ves Certificate 0 stabelly Yes Standards, approvals, certificates Ves Certificate 0 stabelly Nearytous zone 2/22, shpbuilding Certificate 0 stabelly Yes Standards, approvals, certificates		
Imput current 15.A Current consumption, max. 1.9.A Starting current inrush Pt 0.5.A*s Power loss, typ. 9.WW Power loss, max. 41.W Interfaces 21.USB 2.0 type A USB on the rear Yes, 2.x onboard Concretions, max. 41.W Interfaces 2.USB 2.0 type A USB on the rear Yes, 2.x onboard Concols for keyboard/mouse USB Video Interfaces 1.9.A • DV-D Yes • DV-D Yes • DSB Yes • Drobe of the front Yes • Drobe of the front IP65 IP (at the front) Yes • Enclosure Type 4 at the front Yes <		
Current consumption (rated value) 1.5 A Current consumption, max. 1.9 A Starting current numb IP 0.5 A*s Power loss Power loss, typ. Power loss, typ. 36 W Power loss, typ. 41 W Interfaces Vumber of USB interfaces USB on the rear Yes, 2x onboard Connection for keyboard/mouse USB Viction interfaces Yes • DisplayPort Yes • DisplayPort Yes • USB on the rear Yes. Display port V1.2 Touch interfaces * • USB on protection Yes • USB on protection IP 20 NEMA (front) IP20 NEMA (front) IP20 • Enclosure Type 4 at the front Yes Certificat of suitability Inazardous an		28.8 V
Current consumption, max. 19.A Starting current inrush Pt 0.5 A*s Power loss, typ. 36 W Power loss, max. 41 W Interfaces 41 W Number of USB interfaces 2: USB 2.0 type A USB on the rear Yes; 2x onboard Connection for keyboardmouse USB Video Interfaces USB • VVD Yes; • DisplayPort Yes; • USB on the rear Yes; • USB on the rear Yes; • USB on the rear Yes; • DisplayPort Yes; • DisplayPort Yes; • USB on the rear Yes; • USB on the rear Yes; • USB on the rear Yes; • DisplayPort Yes; • DisplayPort Yes; • DisplayPort Yes; • Enclosure Type 4 at the front Yes;		
Starting current invash Pt 0.5 A* s Power loss, typ. 36 W Instantion of USB interfaces 2: USB 2.0 type A USB on the rear Yes; 2x othobard ObvPo Yes • DisplayPort Yes • USB Yes • DisplayPort Yes • USB Yes • Drobotion IP65 IP (at the front) IP65 IP (rear) IP20 NEMA (front) IP20 • Enclosure Type 4 at the front Yes • Enclosure Type 4 at the front		
Power loss 96 Power loss, max. 36 W Power loss, max. 41 W Interfaces 90 Number of USB interfaces 2: USB 2.0 type A USB on the rear Yes; 2x ontocard Connection for keyboardmouse USB Video interfaces - • DisplayPort Yes: Display port V1.2 Totch interfaces - • USB Yes: Display port V1.2 Totch interfaces - • USB Yes: Display port V1.2 Papers and class of protection - • Preat IP20 NEMA (front) IP20 • Enclosure Type 4 at the front Yes CEfficient of subability hazardous area		
Power loss, typ. 36 W Power loss, max. 41 W Prover loss, max. 41 W Number of USB interfaces 2. USB 2.0 type A. USB on the rear Yes: 2x onboard Connection for keyboard/mouse USB VUVD Yes • DV-D Yes • DV-D Yes • DisplayPort Yes • USB Yes Pagnes and class of protection IP20 Protein form IP20 NEMA (front) IP20 • Enclosure Type 4 at the front Yes • Enclosure Type 4.at the front Yes		0.5 A ² ·s
Power loss, max. 41 W Interfaces 2, USB 2.0 type A USB on the rear Yes, 2x onboard Connection for keyboard/mouse USB • UND Yes • DisplayPort Yes, 2x onboard • DisplayPort Yes, 2x onboard • DisplayPort Yes, 2x onboard • USB Yes • USB of protection Yes • USB of protection Yes If the front) IP65 IP (rear) IP20 NEMA (ront) PB6 • Enclosure Type 4 at the front Yes Us approval Yes (Ulus, cUL UL approval Yes Enclosure Type 12 at the front Yes Us approval Yes Us approval Yes Us approval Yes Enclosure Type 4 at the front Yes Us approval Yes Us approval Yes Enclosure Type 4 at the front Yes Us approval Yes <td>Power loss</td> <td></td>	Power loss	
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 Yes • USB Yes • USB Yes • USB Yes Degree and class of protection IP20 IP (at the front) IP26 IP (at the front) IP20 NEMA (front) IP20 • Enclosure Type 4 at the front Yes • Certificate of suitability Nazardous zone 2/22; shipbuilding CE mark Yes	Power loss, typ.	36 W
Number of USB Interfaces 2; USB 2.0 type A USB on the rear Yes, X onboard Connection for keyboard/mouse USB Video Interfaces USB • DVI-D Yes • DisplayPort Yes, Display port V1.2 Touch Interfaces • • USB Yes • USB Yes DisplayPort Yes Touch Interfaces • • USB Yes Degree and class of protection • IP (ath front) IPB5 IP (rear) IP20 NEMA (front) • • Enclosure Type 4 at the front Yes Certificate of suitability hazardous zone 2/32; shipbuilding CE mark Yes UL approval Yes; Class I Div .2 RCM (dromerly C-TICK) Yes EAC (formerly Gest-R) Yes EMC CE; EN 55011, EN 61000-6-2 Use in hazardous areas • <t< td=""><td>Power loss, max.</td><td>41 W</td></t<>	Power loss, max.	41 W
USB on the rear Yes; 2k onboard Connection for keyboard/mouse USB • DV-D • DisplayPort Yes; Display port V1.2 • Touch interfaces • USB Yes; Display port V1.2 • Duch interfaces • USB of protection • P (at the fron) • P (at the fron) • Enclosure Type 4 at the front	Interfaces	
Connection for keyboard/mouse USB Video interfaces UD/D Yes DisplayPort Yes: Display port V1.2 Totuch interfaces USB Yes Degree and class of protoction IP (at the front) IP65 IP (at the front) IP20 NEMA (front) • Enclosure Type 4 at the front Yes • Maproval Yes; Cllus, clll • Eleclesure at the front<	Number of USB interfaces	2; USB 2.0 type A
Video interfaces Ves UV-D DisplayPort Yes USB Yes USB Yes DisplayPort IP (at the front) IP (at the front) IP65 IP (rear) IP 20 NEMA (front) IP20 Enclosure Type 4 at the front Yes Enclosure Type 12 at the front Yes Enclosure Type 12 at the front Yes Enclosure Type 12 at the front Yes Lit approval Yes Cettinte of suitability Nessedue sone sone sone sone sone so	USB on the rear	Yes; 2x onboard
• DVI-D Yes • DisplayPort Yes • DisplayPort • UsB Ves Degree and class of protection IP (at the front) Ves Enclosure Type 4 at the front Yes Enclosure Type 12 at the front Yes Standards, approvals, certificates Cartificate of suitability Lapproval Certificate of suitability Lapproval Ves Cutus, cutu, cutu, Cutus Ves IL approval Ves Cutus, cutu, cutu, Cutus Ves EAC (formerly C-TiCK) Yes EAC (formerly C-TiCK) Yes EAC Cording C-TiCK) Yes EAC (formerly C-TiCK) Yes EAC (formerly C-TiCK) Yes EAC (formerly C-TiCK) Yes EAC (formerly C-TiCK) Yes EAC (formerly C-TiCK) Yes EAC (formerly C-TiCK) Yes EAC (formerly C-TiCK) Yes EAC (formerly C-TiCK) Yes EAC (formerly C-TiCK) Yes EAC (formerly C-TiCK) Yes ATEX Zone 2 Yes ATEX Zone 2 Yes ATEX Zone 2 Yes ATEX Zone 2 Yes Ves Ves Ves EAC (formerly Cost-R) Yes Use in hazardous areas Ves Ves Ves EAC (formerly Cost-R) Yes Ves Ves Ves EAC (formerly Cost-R) Yes Ves	Connection for keyboard/mouse	USB
• DisplayPort Yes; Display port V1.2 Totach interfaces · • USB Yes Degree and class of protection · IP (at the front) IP65 IP (rear) IP20 NEMA (front) · • Enclosure Type 4 at the front Yes • Enclosure Type 4 at the front Yes • Enclosure Type 4 at the front Yes • Enclosure Type 1 at the front Yes Standards, approvals, certificates · Certificate of suitability hazardous zone 2/22; shipbuilding CE mark Yes UL approval Yes; Class I Div. 2 RCM (formerly C-TICK) Yes EAC (formerly Gost-R) Yes EAC (formerly C-TICK) Yes <th< td=""><td>Video interfaces</td><td></td></th<>	Video interfaces	
Touch interfaces Ves Degree and class of protection IP (at the front) IP (at the front) IP65 IP (at the front) IP20 NEMA (front) IP20 • Enclosure Type 4 at the front Yes • Enclosure Type 4 at the front Yes • Enclosure Type 12 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, culL Culus Yes FM approval Yes; Class I Div. 2 RCM (formerly Cost-R) Yes EMC CE, EN 55011, EN 61000-64, EN 61000-6-2 Use in hazardous areas Yes • ATEX Zone 2 Yes • LECEX Zone 22 Yes • IECEX Zone 2 Yes • IECEX IDIVision 2 No Marine approval Yes <	• DVI-D	Yes
• USB Yes Degree and class of protection IP IP (at the front) IP65 IP (ren') IP20 NEMA (front) IP20 • Enclosure Type 4x at the front Yes • Enclosure Type 4x at the front Yes Centricate of suitability hazardous zone 2/22; shipbuilding Cettricate of suitability hazardous zone 2/22; shipbuilding CE mark Yes UL approval Yes; Cllus, cllL Odlus Yes CA (formerly C-TICK) Yes EAC (formerly Gost-R) Yes EAC (ass 1 Division 2 Yes • ATEX Zone 2 Yes • IECEx Zone 2 Yes • IECE Xane 22 Yes • IECE Xane 24 Yes	DisplayPort	Yes; Display port V1.2
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 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 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 • Certificate of suitability hazardous zone 2/22; shipbuilding CE mark Yes UL approval Yes; CULus, cUL cUlusi Yes FM Approval Yes; Clus, cUL cUlusi Yes In hazardous areas Yes • ATEX Zone 2 Yes • ECE Xone 2 Yes • ECE Xone 2 Yes <t< td=""><td>Touch interfaces</td><td></td></t<>	Touch interfaces	
IP (at the front) IP65 IP (rear) IP20 NEMA (front) Enclosure Type 4 at the front Yes Enclosure Type 12 at the front Yes Standards, approvals, certificates Certificate of suitability hazardous zone 2/22; shipbuilding CE mark Yes Outload of the suitability hazardous zone 2/22; shipbuilding CE mark Yes UL approval Yes; Cluus, cUL cULus Yes CE (formerly C-TICK) Yes EAC (formerly C-TICK) Yes EAC (formerly C-TICK) Yes EAC (formerly C-TICK) Yes CE, EN 55011, EN 61000-6-2 Use in hazardous areas ATEX Zone 2 Yes ATEX Zone 22 Yes ATEX Zone 2 Yes Attex Zone 2 Yes Attex Zone 2 Yes Attex Zone 2 Yes Yes Use an anischer Lloyd (GL) Yes Yes Use and a Shipping (ABS) Yes Use and Yes Use and Yes Use and Yes Yes Use and Yes Use and Yes Yes Use and Yes Anderican Bureau of Shipping (ABS) Yes<td>• USB</td><td>Yes</td>	• USB	Yes
IP (rear) IP20 NEMA (front) Yes Enclosure Type 4 at the front Yes Enclosure Type 12 at the front Yes Certificate of suitability hazardous zone 2/22; shipbuilding CErtificate of suitability Yes UL approval Yes; cULus, cUL CULus Yes UL approval Yes; cULus, cUL CULus Yes RCM (formerly C-TICK) Yes EAC (formerly Gost-R) Yes EAC (formerly Gost-R) Yes EAC (formerly Gost-R) Yes • ATEX Zone 2 Yes • ATEX Zone 2 Yes • ATEX Zone 2 Yes • ECCEX Zone 22 Yes • ECEX Zone 22 Yes • ECEX Zone 22 Yes • FM class I Division 2 No Marrican Bureuou of Shipping (ABS) Yes • Bureau Veritas (BV) Yes • Bureau Veritas (BV) Yes • Use Narie Calsen Shipping (LFS) Yes • Nippon Kaiji Kyokai (Class NK) Yes • Nippin	Degree and class of protection	
NEMA (ront) Yes Enclosure Type 4 at the front Yes Enclosure Type 4 at the front Yes Standards, approvals, certificates Yes Certificate of suitability hazardous zone 2/22; shipbuilding CE mark Yes UL approval Yes; Ollus, oUL Culus Yes FM approval Yes; Class I Div. 2 RCM (formerly C-TICK) Yes EAC (formerly Gost-R) Yes EAC (formerly Gost-R) Yes EAC (formerly Gost-R) Yes e ATEX Zone 2 Yes • ECCEX Zone 2 Yes • ECEX Zone 2 Yes • Ede Workse Ver	IP (at the front)	IP65
• Enclosure Type 4 at the frontYes• Enclosure Type 4x at the frontYes• Enclosure Type 12 at the frontYesStandards, approvals, certificatesYesCertificate of suitabilityhazardous zone 2/22; shipbuildingCE markYesUL approvalYes; cULus; cULcUusYesFM 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 areasYes• ATEX Zone 2Yes• ECEX Zone 2Yes• ENC Lody GL)Yes• Enclose I Division 2NoMarine approvalYes• Enclose Environ 4Yes• Environ Bureau of Shipping (ABS)Yes• Environse Veritas (DNV)Yes• Environ Kaiji Kyokai (Clase NK) <td>IP (rear)</td> <td>IP20</td>	IP (rear)	IP20
• Enclosure Type 4x at the frontYes• Enclosure Type 12 at the frontYesStandards, approvals, certificateshazardous zone 2/22; shipbuildingCertificate of suitabilityhazardous zone 2/22; shipbuildingCE markYesUL approvalYes; cULus, cULcULusYesFM 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 areasYes• ATEX Zone 2Yes• ECEx Zone 2Yes• IECEx Zone 22Yes• FM class I Division 2NoMarine approvalYes• Germanischer Lloyd (GL)Yes• Germanischer Lloyd (GL)Yes• Datorske Veritas (DNV)Yes• Loyds Register of Shipping (LRS)Yes• Nippon Kaiji Kyokai (Class NK)Yes• Nippon Kaiji Kyokai (Class NK)Yes• Ambient temperature during operation0 °C• min.0 °C• max.45 °C	NEMA (front)	
• 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 cULus Yes FM approval Yes; Class I Div. 2 RCM (formerly C-TICK) Yes EAC (and the context of the content of the context of the context of the cont	 Enclosure Type 4 at the front 	Yes
Standards, approvals, certificates Certificate of suitability hazardous zone 2/22; shipbuilding CE mark Yes UL approval Yes; cULus, cUL cULus 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	• Enclosure Type 4x at the front	Yes
Standards, approvals, certificates Certificate of suitability hazardous zone 2/22; shipbuilding CE mark Yes UL approval Yes; cULus, cUL cULus 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	Enclosure Type 12 at the front	Yes
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 • ATEX Zone 2 Yes • ATEX Zone 2 Yes • IECEx Zone 2 Yes • FM Class I Division 2 No Marine approval Yes • Germanischer Lloyd (GL) Yes • Bureau Veritas (BV) Yes • Bureau Veritas (BV) Yes • Det Norske Veritas (DNV) Yes • Nippon Kaiji Kyokai (Class NK) Yes • Nippon Kaiji Kyokai (Class NK) Yes • Nippon Kaiji Kyokai (Class NK) Yes Ambient temperature during operation 0 °C • max. 45 °C		
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 • ATEX Zone 2 Yes • IECE x Zone 2 Yes • IECE x Zone 2 Yes • IECE x Zone 22 Yes • FM Class I Division 2 No Marine approval • Germanischer Lloyd (GL) Yes • Bureau of Shipping (ABS) Yes • Bureau Veritas (BV) Yes • Det Norske Veritas (DNV) Yes • Lloyds Register of Shipping (LRS) Yes • Nippon Kaiji Kyokai (Class NK) Yes • Nippon Kaiji Kyokai (Class NK) Yes Ambient conditions 0 °C Ambient conditions 0 °C • max. 45 °C		hazardous zone 2/22: shipbuilding
UL approvalYes; cULus, cULcULusYesFM 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• ATEX Zone 22Yes• IECEx Zone 2Yes• IECEx Zone 2Yes• FM Class I Division 2NoMarine approval-• Germanischer Lloyd (GL)Yes• Bureau of Shipping (ABS)Yes• Bureau Veritas (BV)Yes• Lloyds Register of Shipping (LRS)Yes• Nipon Kaiji Kyokai (Class NK)YesAmbient temperature during operation0 °C• min.0 °C• max.45 °C		
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 • ATEX Zone 2 Yes • ATEX Zone 2 Yes • IECEX Zone 2 Yes • IECEX Zone 2 Yes • IECEX Zone 2 Yes • FM Class I Division 2 No Marine approval Yes • Germanischer Lloyd (GL) Yes • Bureau Veritas (BV) Yes • Bureau Veritas (DNV) Yes • Lloyds Register of Shipping (LRS) Yes • Nippon Kaiji Kyokai (Class NK) Yes Ambient conditions 0 °C Ambient temperature during operation 0 °C • max. 45 °C		
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 • ATEX Zone 2 Yes • IECEx Zone 22 Yes • IECEx Zone 22 Yes • FM Class I Division 2 Yes • FM Class I Division 2 No Marine approval Yes • Germanischer Lloyd (GL) Yes • Bureau Veritas (BV) Yes • Bureau Veritas (DNV) Yes • Lloyds Register of Shipping (LRS) Yes • Nippon Kaiji Kyokai (Class NK) Yes • Nippon Kaiji Kyokai (Class NK) Yes Ambient conditions 0 °C • max. 45 °C		
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 • ATEX Zone 22 Yes • IECEx Zone 2 Yes • IECEx Zone 2 Yes • FM Class I Division 2 No Marine approval • Germanischer Lloyd (GL) Yes • Bureau Veritas (BV) Yes • Det Norske Veritas (DNV) Yes • Lloyds Register of Shipping (LRS) Yes • Nippon Kaiji Kyokai (Class NK) Yes Ambient temperature during operation 0 °C • min. 0 °C • max. 45 °C		
EAC (formerly Gost-R) Yes EMC CE, EN 55011, EN 61000-6-4, EN 61000-6-2 Use in hazardous areas Yes • ATEX Zone 2 Yes • ATEX Zone 22 Yes • IECEx Zone 2 Yes • IECEx Zone 22 Yes • FM Class I Division 2 No Marine approval Yes • Germanischer Lloyd (GL) Yes • Bureau Veritas (BV) Yes • Det Norske Veritas (DNV) Yes • Nippon Kaiji Kyokai (Class NK) Yes Ambient conditions O °C Ambient temperature during operation 0 °C • max. 45 °C	· · ·	
EMC CE, EN 55011, EN 61000-6-4, EN 61000-6-2 Use in hazardous areas • ATEX Zone 2 • ATEX Zone 2 Yes • ATEX Zone 22 Yes • IECEx Zone 2 Yes • IECEx Zone 2 Yes • IECEx Zone 22 Yes • FM Class I Division 2 No Marine approval Ves • Germanischer Lloyd (GL) Yes • American Bureau of Shipping (ABS) Yes • Bureau Veritas (BV) Yes • Det Norske Veritas (DNV) Yes • Lloyds Register of Shipping (LRS) Yes • Nippon Kaiji Kyokai (Class NK) Yes Ambient conditions 0 °C • min. 0 °C • max. 45 °C		
Use in hazardous areas • ATEX Zone 2 Yes • ATEX Zone 22 Yes • IECEx Zone 2 Yes • IECEx Zone 22 Yes • IECEx Zone 22 Yes • FM Class I Division 2 No Marine approval Yes • Germanischer Lloyd (GL) Yes • American Bureau of Shipping (ABS) Yes • Bureau Veritas (BV) Yes • Det Norske Veritas (DNV) Yes • Lloyds Register of Shipping (LRS) Yes • Nippon Kaiji Kyokai (Class NK) Yes Ambient conditions 0 °C • min. 0 °C • max. 45 °C	· · · · · · · · · · · · · · · · · · ·	
ATEX Zone 2YesATEX Zone 22YesIECEx Zone 2YesIECEx Zone 22YesFM Class I Division 2NoMarine approvalYesGermanischer Lloyd (GL)YesAmerican Bureau of Shipping (ABS)YesBureau Veritas (BV)YesDet Norske Veritas (DNV)YesLloyds Register of Shipping (LRS)YesNippon Kaiji Kyokai (Class NK)YesAmbient temperature during operation0 °C• max.45 °C		
ATEX Zone 22YesIECEx Zone 2YesIECEx Zone 22YesFM Class I Division 2NoMarine approvalYesGermanischer Lloyd (GL)YesAmerican Bureau of Shipping (ABS)YesBureau Veritas (BV)YesDet Norske Veritas (DNV)YesLloyds Register of Shipping (LRS)YesNippon Kaiji Kyokai (Class NK)YesAmbient temperature during operationO °C• min.0 °C• max.45 °C		Yes
• IECEx Zone 2Yes• IECEx Zone 22Yes• FM Class I Division 2NoMarine approvalYes• Germanischer Lloyd (GL)Yes• American Bureau of Shipping (ABS)Yes• Bureau Veritas (BV)Yes• Det Norske Veritas (DNV)Yes• Det Norske Veritas (DNV)Yes• Lloyds Register of Shipping (LRS)Yes• Nippon Kaiji Kyokai (Class NK)YesAmbient conditionsYesAmbient temperature during operation0 °C• min.0 °C• max.45 °C		
• IECEx Zone 22 Yes • FM Class I Division 2 No Marine approval		
• FM Class I Division 2 No Marine approval		
Marine approval • Germanischer Lloyd (GL) Yes • American Bureau of Shipping (ABS) Yes • Bureau Veritas (BV) Yes • Det Norske Veritas (DNV) Yes • Lloyds Register of Shipping (LRS) Yes • Nippon Kaiji Kyokai (Class NK) Yes Ambient conditions 0 °C • min. 0 °C • max. 45 °C		
• Germanischer Lloyd (GL) Yes • American Bureau of Shipping (ABS) Yes • Bureau Veritas (BV) Yes • Det Norske Veritas (DNV) Yes • Lloyds Register of Shipping (LRS) Yes • Nippon Kaiji Kyokai (Class NK) Yes Ambient conditions 0 °C • min. 0 °C • max. 45 °C		
 American Bureau of Shipping (ABS) Bureau Veritas (BV) Det Norske Veritas (DNV) Ves Lloyds Register of Shipping (LRS) Nippon Kaiji Kyokai (Class NK) Yes Ambient conditions Ambient temperature during operation • min. 0 °C • max. 45 °C		Vec
Bureau Veritas (BV) Yes Det Norske Veritas (DNV) Yes Lloyds Register of Shipping (LRS) Yes Nippon Kaiji Kyokai (Class NK) Yes Ambient conditions Ambient temperature during operation e min. e max. 0 °C		
• Det Norske Veritas (DNV) Yes • Lloyds Register of Shipping (LRS) Yes • Nippon Kaiji Kyokai (Class NK) Yes Ambient conditions Ambient temperature during operation • min. • max. 0 °C		
Lloyds Register of Shipping (LRS) Yes Nippon Kaiji Kyokai (Class NK) Yes Ambient conditions Ambient temperature during operation o min. o min. o °C o max. 45 °C		
Nippon Kaiji Kyokai (Class NK) Yes Ambient conditions Ambient temperature during operation o min. o max. 45 °C		
Ambient conditions Ambient temperature during operation • min. 0 °C • max. 45 °C		
Ambient temperature during operation • min. • max. 45 °C		res
• min. 0 °C • max. 45 °C		
• max. 45 °C		
	• min.	
Ambient temperature during storage/transportation		45 °C
	Ambient temperature during storage/transportation	

• min.	-20 °C
• max.	60 °C
Altitude during operation relating to sea level	
 Installation altitude above sea level, max. 	3 500 m
Relative humidity	
• Operation, max.	90 %; no condensation
Vibrations	
 Vibration load in operation 	10 m/s ²
 Vibration load during transport/storage 	10 m/s ²
Shock testing	
 Shock load during operation 	150 m/s²
 shock acceleration during storage/transport 	250 m/s²
Mechanics/material	
Enclosure material (front)	
Aluminum	Yes
Aluminum casting	Yes
• Glass	Yes; at front
Enclosure material (rear)	aluminum
Dimensions	
Width of the housing front	585 mm
Height of housing front	363 mm
Mounting cutout, width	569 mm; Tolerance: +1 mm
Mounting cutout, height	347 mm; Tolerance: +1 mm
Overall depth	63.4 mm
Weights	
Weight (without packaging)	7.9 kg
Weight (with packaging)	9.9 kg
	_

last modified:

6/14/2023 🖸