

# Operating and monitoring systems

KVM system SERIES 600

Device platform MANTA

OS IT-687-DVI3-MM

STAHL



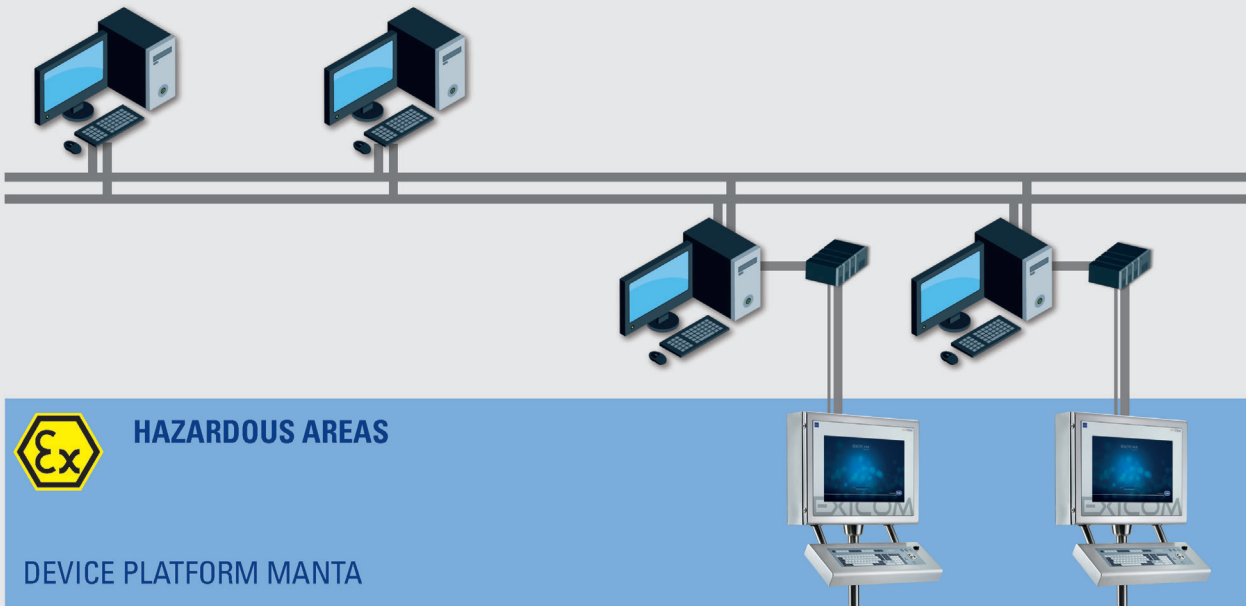
- KVM Operator Station, 24"WU display, 1920 x 1200
- For installation in safe areas
- Optional resistive glass or foil touch screen
- Data transmission via multi-mode fibre optic up to 550 m

## MY R. STAHL IT687A

The OS IT-687-DVI3 HMI series includes KVM Operator Stations for safe areas. Their brilliant 24"WU widescreen displays with a resolution of 1920 x 1200 pixels (format 16:10), and are available with or without touch screen. The stainless steel enclosures (SS304 or SS316L) are available with a front opening or in cleanroom-compliant design and with different mounting options. Country-specific keyboards, pointer instruments and RFID and barcode scanners are useful accessories making work easier and extending functionality. Data is transmitted via multi-mode fibre optic up to 550 m.

## KVM SYSTEMS INTEGRATION

### PC WORKSTATIONS



## Technical Data

### General

Series	Product Series OS IT-687 (discontinued)
Product description	24" KVM system
HMI type	Operator Station
Technology	Remote HMI KVM
WebCode	IT687A

### Explosion Protection

Application range (zones)	Non-Ex
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### Electrical Data

Rated operational voltage DC	24 V
Voltage range DC	20 – 30 V
Rated operational voltage AC	230 V
Voltage range AC	100 – 240 V
Power consumption DC	3 A
Power consumption AC 1	1 A
Protection fuse DC	5 AT
Protection fuse AC	5 AT
Rated operational power	typ. 50 W / 100 W with O30 / max. 150 W (typ. 170 BTU / 341 BTU with O30 / max. 510 BTU)
Transfer technology	KVM-DVI3
Ethernet / Data	FO multi-mode
Data cable	50/125 µm FO cable or 62.5/125 µm FO cable
Data cable length	max. 550 m, with 50 µm FO cable max. 300 m, with 62.5 µm FO cable
Interface medium	Multi-mode optical fibre cable
Frequency range	50 – 60 Hz
Interface USB	2 x USB (Hub) 1 x USB (Root) 2 x USB (Hub) (keyboard, pointing device)
Interface serial	1 x RS-232
Interface audio	1 x Audio Line in / out
WLAN	optional via USB
Connections	via standard plug
Plug version FO	LC duplex connector
Plug version USB	USB-A connector
Max. input voltage $U_m$	250 VAC

### Display

Display version	TFT Colour display
Display version 2	16.7 million colours
Display size inch	24
Display size centimetres	61
Display resolution	WUXGA
Total pixels	1920 x 1200
Display dimensions	16:10

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#### Display

Display brightness	300 cd/m <sup>2</sup>
Display contrast	1000:1
Display viewing angle horizontal	178° at CR ≥5
Display viewing angle vertical	170° at CR ≥5
Display	Glass
Touchscreen	Optional resistive
Touchscreen technology	5-wire glass or membrane touch
Touchscreen activation	Foil touch: low activation pressure (0.1 up to max. 1 N) Glass touch: medium activation pressure (1.8 up to max. 2.5 N)
Touchscreen input method	Finger, gloved finger or stylus
Touchscreen durability	Foil touch: Polyester foil is easily scratched, with high pressure force the spacer dots could be damaged. Glass touch: Quite good, but with high pressure force the spacer dots could be damaged.
Touch screen scratch hardness MoHS	Foil touch: - Glass touch: >5
Touchscreen scratch hardness pencil test ISO15184	Foil touch: 3H Glass touch: 9H
Touchscreen transmissivity / optic	Foil touch: small milky effect due to the foil Glass touch: very good
Touchscreen surface contaminants	unaffected
Touchscreen abrasive resistance	36 million times with a silicone rubber of R8 finger, hitting rate 250 g at 2 times per second
Backlight	LED Technology
Backlight service life	50 000 h at +20 °C
Front plate (display)	Aluminium

#### Ambient Conditions

Ambient temperature operation	-20 °C ... +55 °C
Ambient temperature operation 1	-30 °C ... +55 °C with heater version O30
Storage temperature	-30 °C ... +70 °C
Cold start temperature	-10 °C
Temperature note 1	The O30 version is only available for the AC version devices !
Temperature note 2	Operating temperature +55 °C for a maximum of 5 h, for constant operation (24/7) +50 °C.
Temperature note 3	Cold start temperature: If the HMI device is switched on at a temperature below -10 °C the display will need a certain amount of time to warm up until everything is clearly visible. Depending on how low the temperature is, this process may last up to 3 hours.
Temperature note general	The temperature details apply to a standard device combination with display, keyboard and enclosure. Any additional built-in or added components may have an impact on / change these.
Heat dissipation	about 40 % via the front plate and 60 % via the enclosure
Relative humidity	10 to 90 % at +40 °C, non-condensing

#### Mechanical Data

Dimensions (WxHxD)	740 mm x 872 mm x 400 mm
Material front	Aluminium / stainless steel
Material back	Stainless steel
Ingress protection	IP66
Weight	42.5 kg
Breather	optional

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## Mechanical Data

Mechanical data note	The mechanical data apply to an FR enclosure with display and keyboard. Other enclosure types as well as any additional built-in or added components may have an impact on / change these.
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## Mounting / Installation

Enclosure type	Stainless steel enclosure (FR) optional GMP / clean room (CFR)
Mounting option	Wall, elbow, stand

## Components

Keyboard	optional, 107 keys with trackball / joystick / mouse / touchpad
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