Machine Monitoring Systems

IMR 6000/00 System frame



- Component of the MMS 6000
 Machine Monitoring System
- Slots for adaptation of signal processing periphery Monitors: 10xMMS 6xxx
 *(selection: regarding assembly and functionality) Logic card: e.g. MMS 6740, Interface card:e.g: MMS 6824
- External connection to the periphery via 25-pole Sub-D connectors
- System frame configuration via hardware bridges, solder bridges and configuration of the Dip- switches.
- buildup of RS485 buslines for integration of all monitors
- generation of a master-key signal by a key- monitor at the 1st monitor slot
- change over between closedcircuit and open- circuit mode via solder bridges

Applications:

The system frame **IMR 6000/00** is developed for general use in industrial applications where a reliable adaptation between electronic devices and plant devices is necessary.

With the system frame **IMR 6000/00**, an appropriate adaptation of the signal-processing periphery like:

- alarm signas
- error signals
- connection results
- external signals

can be expensed.

The system frame **IMR 6000/00** offers substantial saving potential with the wiring complexity.

Assembly and functionality:

The system frame **IMR 6000/00** is a component of the epro **MMS 6000** machine monitoring system. This consists of a 19" card frame and comprises the following card slots at the front side:

- 10 monitor slots for MMS 6000 series
- 2 slots for adaptation of one logiccard e.g. MMS 6740
- 1 slot for connection of an interface card e.g. MMS 6830, MMS 6831, MMS 6824 or MMS 6825

The following Monitors are supported of the system frame **IMR 6000/00** with their basic functions: *

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MMS 6110, MMS 6120,
MMS 6125, MMS 6140,
MMS 6210, MMS 6220,
MMS 6310, MMS 6312,
MMS 6410.
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The 1st monitor slot at the system frame offers the possibility to imply a key monitor and to relay these key signal to the other monitors.

The rear of the system frame serves the purpose of:

signal supply

- signal output for further processing
- parameterization of the system frame

The connection to the external periphery on the rear of the system frame is made by 25- pole SubD plugs.

By integration of a corresponding interface card, if necessary, it's possible to build up several RS485 buslines within one system frame. That's the way to connect the monitors to one communication bus.



Technical Data:

voltage supply:

two redundant, diode decoupled Inputs, nominal +24V with common ground +24V UN+, +24V UB+ voltage Input: common around: 0V U-, GND permissible voltage range: +18V ... +31.2V typical power consumption: approx. 100 W max. permissible fuse of the input current: 8A internally generated and galvanically seperated voltage: +24V max. power rating of the internal generated, galvanically seperated voltage:

Ambient conditions:

· application class:

KTF according DIN 40 040

2W

• ambient temperature:

reference temperature: +25°C / 77°F nominal use range : 0 ... +65°C / 32 ... 149°F

temperature range for bearing and transport:

-30...+85°C / -22 ... 185°F

voltage supply inputs: KFT according DIN 40 040

mechanical design:

see drawing

rear element 1 LED yellow for internal voltage OK (+24V)

net weight: approx. 2120g / 74.78oz gross weight: approx. 2680g / 94.53oz

accessories:

connection cable between system frame and screw connection (e.g. Phoenix-terminal block) halogen free, regarding the specifications of the interference immunity:

5...95%, not condensing

98 m/s² / 3858.3 in/s²

regarding IEC 68-2, Part 29

nominal shock duration 16ms

· allowed relative humidity:

• permissible vibration:

Peak value of acceleration

oscillating acceleration:

vibration range:

e.g. cable LiH(St)CH PiMF 12 x 2 x 0,22mm / 12 x 2 x 8.66mil

Screw terminal block for contacting the external periphery (Phoenix clamp block) 25-pole SubD

Connection adapter for contacting the signals at the rear of the system frame: 25-pole SubD plug, male to Phoenix screw contacts

The technical data specifications of monitors, logiccards and interfacecards please find in the appropriate data sheets.

• permissible shock load:

regarding IEC 68-2, part 29

peak value of the acceleration: 98 $\mbox{m/s}^2$ / 3858.3 in/s^2

16 ms

nominal impact load:frame shock duration:

IP 00, open design regarding DIN 40 050

• EMC resistance:

regarding EN50 081-1 /EN50 082-2

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