Technical Information   IQAN-MDM Display Modules

Environmental Protection

EMI
ISO 14982:1998, Radiated emission
EN 55025:2003, Conducted emission
ISO 11452-2:1995, Radiated susceptibility
ISO 11452-4:2001, Conducted susceptibility
ISO 7637-2:2004, Conducted transient
ISO 7637-3:1995, Conducted susceptibility on signal

ESD
ISO 10605:2001, ESD
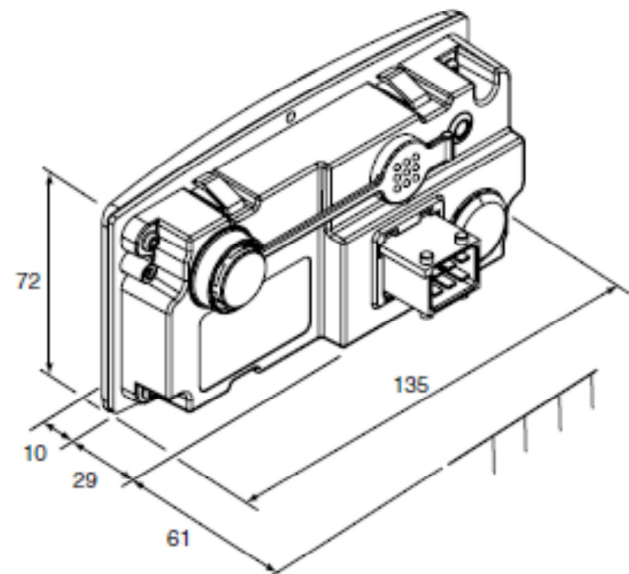
Mechanical environment
IEC 60068-2-64:1993 Fh, Random vibration
IEC 60068-2-29:1987 Eb, Bump

Climate environment
IEC 60529:2001, Water
IEC 60068-2-30:1985 Db, Damp heat cyclic
IEC 60068-2-78:2001, Damp heat, steady state
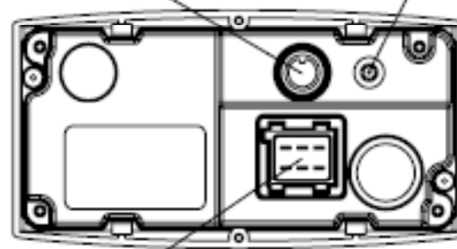IEC 60068-2-14:1984 Nb, Change of temperature

Chemical environment
IEC 60068-2-52:1996 Kb, Salt mist

unit = mm

Diagnostic/modem port   Power/status LED

Power and CAN-bus connection

Technical Information

IQAN-MDM Display Modules

Application

The IQAN-MDM is a master unit that works with the expansion modules in the IQANdevelop platform control system. The IQAN-MDM is fully programmable for use in any machine application. The unit works as a master for controlling applications, as a graphical user interface and as a CAN interface.

Design and function

IQAN-MDM uses an improved 2.8" FSTN, black & white LCD for the best readability in all lighting conditions. The improved display uses Chip-On-Glass technology for higher reliability.

Function buttons and control buttons in combination with a graphical display makes system feedback with user interaction possible. With the three function buttons, a decrease/increase value-button and an escape-button, it is easy to adjust, calibrate and measure the IQAN system. In case of an error the display will alert the operator with a signal and a message on the display.

IQAN-MDM is designed for in-cab as well as outdoor use. It can be used in both 12 and 24 Vdc systems. All inputs and outputs are protected against short circuit to ground, to main power supply and reversed polarity.

The IQAN-MDM is connected to other units by a CAN bus. The CAN bus may be configured as ICP (IQAN CAN Protocol), SAE J1939 or Generic CAN. The RS232 interface is used for connection with PC and for land line or wireless modem (remote diagnostic) connection.

Up to 4 different individual driver modes can be stored in the unit, which are easily selectable. The display also contains a real time clock, an alarm output and can present text in 10 different languages.

A green LED indicator on the back of the module indicates supply voltage and status "heartbeat".

General

Weight	0,2 kg
Rated power supply	12-24 Vdc
Min/max power	9/32 Vdc
Operating temperature	-30°C to +70°C (-30°C to -10°C reduced display update)
Protection	outdoor use
Current consumption	max 100 mA (28 Vdc), max 180 mA (14 Vdc)
Data interface	Parker ICP (IQAN CAN Protocol)

Display

Type	2.8" B/W LCD
Resolution	202x32 pixels

Performance

Processor	16-bit (16 MHz)
Sample time	20-100 ms
Software tools	IQANdevelop family

Communication interfaces

CAN (ISO 11898)	1
Protocols	ICP, SAE J1939, CANopen, etc
RS-232	1
Protocols	AT-Hayes, GSM07.07, GSM07.05, IDP

Outputs

Digital output	1
Type	high side switch
Max load	1,2 A
Buzzer	Sound alarm output

Ordering part no.

IQAN-MDM	5010010