IMPact CAN-Control-Unit

all-purpose built for hard environmental conditions

- motion-controls
- central-controls
- CAN-I/O-nodes
- axle-controls

Characteristics
- iblos system compatible and also useable as stand-alone unit
- coherent cost-benefit ratio
- easy handling
- freely programmable with embedded-Programming Tool-System (ePTS)
- CANopen based CAN-protocols, SAE J1939 protocols and Free-CAN solutions, standardized CAN-Bus connector
- full protectet, short-circuit-proof, cable break detection
- vehicle power proof
- EMC-proof for mobile machines
- complete sealed unit with IP67 central connector
- integrated clamp system for optimized hydraulic applications
- 12-Bit analog inputs for highresolutions measurements
- current regulated PWM outputs with 12bit resolution
- high efficiency, powerfull 50MHz Microcontroller

Control and I/O-device for vehicles and mobile working machines of the municipal, construction and agricultural technology as well as for commercial vehicle superstructures. Particularly suitable to control complex manifolds and mobile hydraulic blocks or to control small-sized machines and as decentral device in peripheral control systems. Complex diagnostic functions and integrated clamp system for valve coils.
System Description IMPact I/O-modules

The IMPact series is a I/O-System for mobile applications. It contains I/O-units and PLC-devices for controlling mobile machines with a decentral CAN-network System.

The I/O-devices iblos-IMPact-02 and IMPact-01 are especially developed to control complex manifolds. For application as compact control system or for the usage in peripheral dispersed control systems these devices are advantageous applicable. Because of the integrated clamp system for hydraulic valves the wiring of control blocks get simple and less complex. Additional IBL-hydronic offer a simple and easy handle clamp-System for Input-Signals. The IMPact-clamp modules assure a fast and safe wiring of mobile machines. So the advantages of a dispersed control system over CAN get first right effective.

The units are usable as node of a peripheral dispersed control system or as compact control device for controlling jobs in mobile technology. The iblos-IMPact series are fully sealed and fulfill because of its mechanical and electrical construction particularly the mobility requirements of electronic devices.

The extensive functions of the on-board diagnostic system heighten the utility value considerably and afford an assured insight into the machine functions during the operations and at the service.

programming and parametrizing/diagnostics

iblos-AN-Master

For an extensive parametrizing and diagnostic the comfortable adjustment program iblos-CAN-Master under Windows is available. His simple operating and concise surface make it to a application kind service tool. All functions are controlled by CAN-bus. An online access of any devices is possible from each place of the system. The user can configure the iblos-CAN-Master accordant his own requirements.

In/Outputs

digital input protected till 50 VDC (permanent), 30kOhm, input current, plus switching
switch on level approx. 8.7 V, switch off level approx. 3.7 V
protected till 50 VDC (permanent), 30 kOhm
input current, plus switching also usable as digital input, switch on level approx. 8.7 V, switch off level approx. 3.7 V, input frequency 5 kHz
protected till 50 VDC (permanent), also usable as plus switching digital input resolution 12 bit, 0...10 VDC input impedance 30 kOhm
0...20 mA input impedance 250 Ohm
configuration by user software or hardware
PWM-output current regulated for proportional magnets till 3A,
returned to diagnostic, overvoltage protection, overcurrent protection excess temperature protection, adapted for inductive load, also usable for on/off valves, diagnostic function available, 12bit resolution
3 A short-circuit protection, no load protection,
reverse polarity protection, overvoltage protection, overcurrent protection, excess temperature protection, adapted for inductive load, returned to diagnostics
reference voltage 24 V / 12 V vehicle power: 8 V / max 100 mA

Technical Data

electrical connection supply voltage electronic 12/24 VDC
(9-36 VDC max. 100 mA without load)
supply voltage for outputs 24VDC(20-36VDC/10A),
attend to coil specification
supply voltage for outputs 12VDC(9-18VDC/10A),
attend to coil specification
self restore fuse, load-dump-protected, adapted for vehicle power, voltage internal controlled
housing aluminum, IP67 full sealed
M12, 5polig C/A Standard
locking connector with 42-pins AMP-Junior-Power-
screw fastening
CAN and vehicle Power
I/O-connection
locked connector with 42-pins AMP-Junior-Power-
Timer, contacts with single conductor gasket
-40° C...+85° C
ambient temperature vibrations DIN IEC 68-2-6 / mobile devices
perm. shock DIN IEC 68-2-28/Eb 250-6-1000/1 (25g)
shock DIN IEC 68-2-27/Ea 500-6-18/4 (50g)

drawdown, parameterization
EMC-norms fault transmission basic norm (CE) EN61000-6-3:2001
fault resistance basic norm (CE) EN61000-6-2:2001
working machines (technical basic norm) EN13309
agriculture and forestry machines (technical basic norm) EN 14982,

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