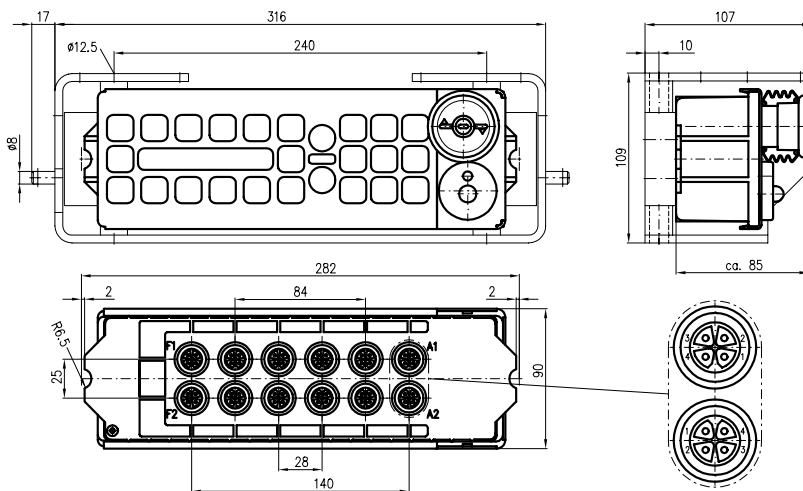




- 16 char LED display
- 25 keys, marking easily changeable, choice of key assignment
- Programmable in C
- Down-line loading
- Hermetically sealed, IP 68
- Internationally I.S. approved
- Passive panic stop system
- 4 conductor *conm* connectors
- Beeper with 95 dB
- Optical warning
- Compact and light
- Mounting with bracket *pm3/hlt*

Photo *pm32/sg/a* Controller mounted in *pm3/hlt*



Picture: Controller in bracket with connector assignment

The *pm32* shield control unit fulfills all requirements in modern fully automated electrohydraulic longwall faces. Programmable hardware enables the device to be used for many different applications. The software is loaded down-line using a PC adapter and *lab/bpu/*. All necessary tasks are performed cost-effectively. A complete product range including the *conm* cable system, *sns* sensors, the *pm3.1/ze* explosion-proof main station and the *xalz* surface station covers all control requirements.

Power Supply	12 (8..15) VDC, 30-40 mA
Memory	512kB FLASH 512kB RAM
Weight	1 kg
ATEX approval	EX I M2 EEx ib I, IBEXU 03ATEX1071
Parameters	see operating instructions
Russian approval	POCC DE.ГБ05.В02014 NANIO CCVE PPC 00-25498 Rostekhnadzor



Connector assignment, rear view (connector side)						
Con-Pin	A_	B_	C_	D_	E_	F_
_2-1	+UB	S12V	S12V	S12V	V12V	V12V
_2-2	TBUSA	B2A	C2A	D2A	E2A	VCLK
_2-3	ZS	B2U	C2U	D2U	E2U	VDAT
_2-4	0V	GND	GND	GND	V0V	V0V
_1-1	+UB	S12V	S12V	S12V	V12V	+UB
_1-2	TBUSA	B1A	C1A	D1A	E1A	TBUSB
_1-3	NBL	B1U	C1U	D1U	E1U	NBR
_1-4	0V	GND	GND	GND	V0V	0V

+UB	power supply +12V
0V	power supply 0V
GND	local ground
S12V	sensor power
VGND/V12V	actuator power
0-10V/3k90 (0-2.5mA)	B1A B2A C1A C2A D1A D2A
0-10V/130k Digital output 5V/2k0	B1U B2U E1A E1U E2A E2U C1U C2U D1U D2U
Digital input	C1A C2A D1A D2A E1A E1U E2A E2U
expandable	16 x at F2
Actuators	E1A E1U E2A E2U F2A F2U
expandable	16 x at F2
BIDI-Com	NBL NBR ZS
TBUSA	TBUS interface
TBUSB	TBUS after panic stop
VCLK	clock for solenoid driver

Applications

The controller is used as a shield controller (SCU) for electrohydraulic longwalls. Each shield has its own control unit and a group of 6 (typically) shields is connected to one power supply. Between power groups a *pm3/pa/11* adapter isolates the power and connects data traffic. A network terminator, *pm3/ack*, which activates the panic stop system is connected at both face ends.

Order Number	Release	Description
pm32/sg/a <i>pm3/hlt/a2</i>	2.3	Controller Mounting Frame for <i>pm32/sg</i>