

PM32

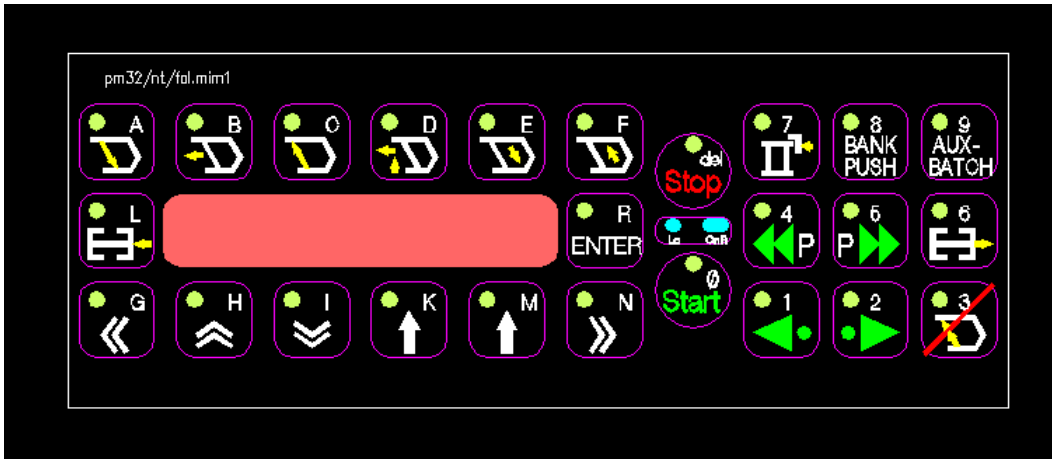
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- Control unit for one shield in underground longwall installations
- Compact and light (1150 g)
- To be fitted into the steel frame *pm3/hlt*
- Reads sensor values e.g. cylinder pressure, ram cylinder stroke, conveyor position and inclination, canopy inclination, rock pressure, shearer or plough position
- Activates hydraulic valves, e.g. from ram cylinders, telescopic props, track adjusting cylinders, side sheet, flippers and slide bars, water spray systems
- Meets all demands made by semi- and complete automation of mining processes in shearer and plough installations
- Communication and 12 V power supply in the network via a 4-wire cable to the adjacent shield; optional Bidi infra red communication with the shearer
- Rock pressure display and convergence analysis with pressure sensors
- Coal/rock analyses with structure-borne sound sensors on the shield canopy, on the sensor plough or shearer supporting arm
- Beeper with 95 dB and optical warning
- Speech and picture transmission possible
- Passive panic stop system

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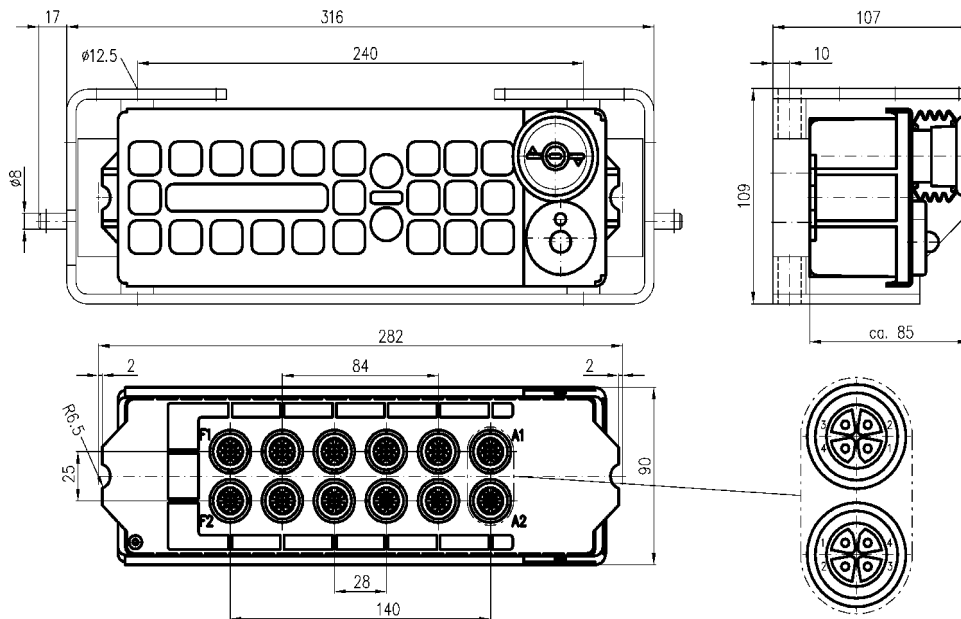
- LED display for 25 keys
- Choice of key assignment
- Choice of key labelling in the language of the respective countries
- 16 character display



- External housing with integrated cable support *pm3/hlt/a2*
- Protects the control unit from mechanical damage.
- A protective lid can be attached

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Features of the *pm32/sg/a* controller

■ Power supply	12 (8..15)VDC, 30-40 mA
■ Main memory	512 kB RAM
■ Program memory	512 kB FLASH
■ Approvals	EX I M2 EEx ib I, IBEExU 03ATEX1071 POCC DE.ГБ05.В01024 NANIO CCVE PPC BA – 13670 Gosgortekhnadzor

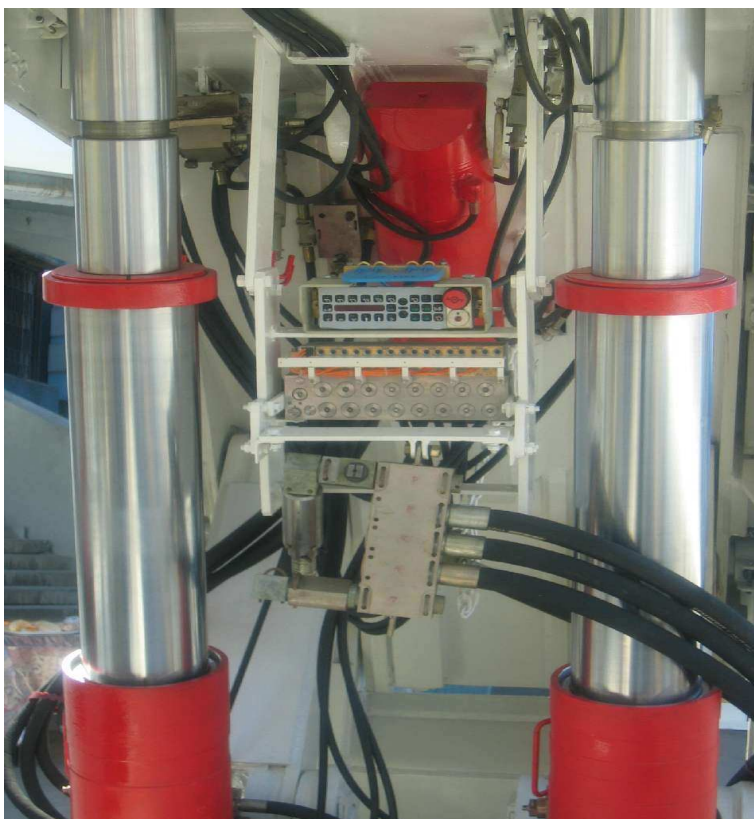
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Connector assignment, rear view (connector side)

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



marco controller and marco block in the shield