

Type LOWD IEC Ex d I Mb / Ex d IIB T6/T5/T4 Gb flameproof module is an industrial drill rig control module designed to withstand the rigors of the underground mining industry. The LOWD HMI Drill Rig control module is designed for underground mining machinery applications.

Compliant with IEC 60079.0 and IEC 60079.1, this flameproof HMI drill rig control module is designed for world-wide explosive atmosphere regulatory approval allowing it to be installed into any underground mining environment after certification assessment.

The LOWD module consists of a flameproof enclosure, graphic display, flameproof buttons allowing operation through the polycarbonate material and flameproof connectors allowing easy field replacement of the unit in case of failure.

The HMI drill rig control module is designed to be mounted on the machine in close vicinity of the drill rig itself.



Standards Compliance

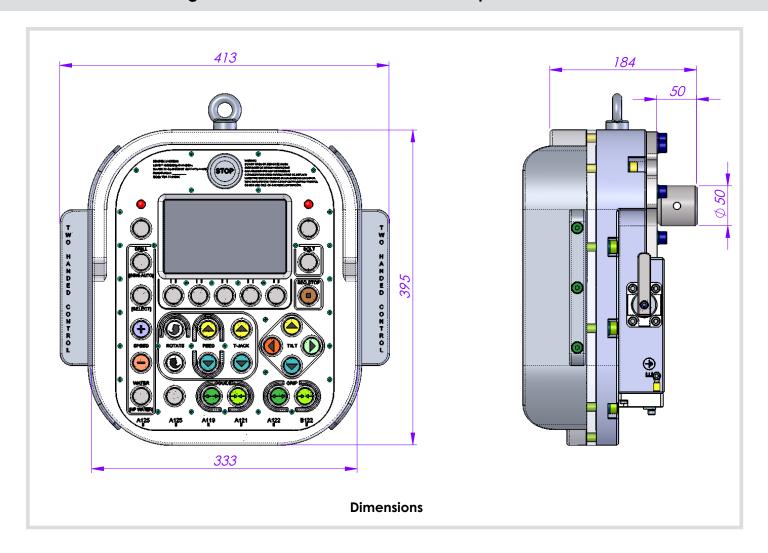
IEC 60079.0:2007 IEC 60079.1:2007 AS/IEC 61508 AS/IEC 62061 AS 4240 MSHA CFR 30 Part 18

Electrical Characteristics

- Supply voltage and input signals are connected to the enclosure through certified flameproof connectors.
- Typical supply current is 3A@24VDC and maximum supply current is 9.0A.
- Typical supply voltage is 24VDC.
- Higher Voltage is permissible but the maximum voltage and current shall not be able to dissipate more than allowed by the certificate of conformity. Please consult Pempek Systems about your particular enclosure model. Typically enclosure rated for operation in temperature range -20 °C to 50 °C can dissipate 156W for group I and 55W for Group II T6 with Glazeguard lense fitted.
- Operating ambient temperature -20 $^{\circ}$ C to 50 $^{\circ}$ C or -20 $^{\circ}$ C to 40 $^{\circ}$ C as defined by certificate of conformity and its corresponding label.
- Enclosure rated to IP 66/67.

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CONNECTOR A119

	Connector A119 BBDN00X	
No	PIN	Name
1	J1-1	24VDC Supplied Internally
2	J1-2	24VDC Supplied Internally
3	J1-3	24VDC Supplied Internally
4	J1-4	CAN ID0
5	J1-5	CAN ID1
6	J1-6	CAN ID2
7	J1-7	N/C



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CONNECTOR A121

	Connector A121 BBDN00X	
No	PIN	Name
1	J1-1	24VDC Supply
2	J1-2	OVDC Supply Return
3	J1-3	CAN4 High
4	J1-4	CAN4 Low
5	J1-5	CAN4 0V Reference
6	J1-6	N/C
7	J1-7	N/C



CONNECTOR A122

	Connector A122 BBDN00X	
No	PIN	Name
1	J1-1	24VDC Supply
2	J1-2	OVDC Supply Return
3	J1-3	Estop-In
4	J1-4	Estop-Out
5	J1-5	Estop-Ref
6	J1-6	N/C
7	J1-7	N/C



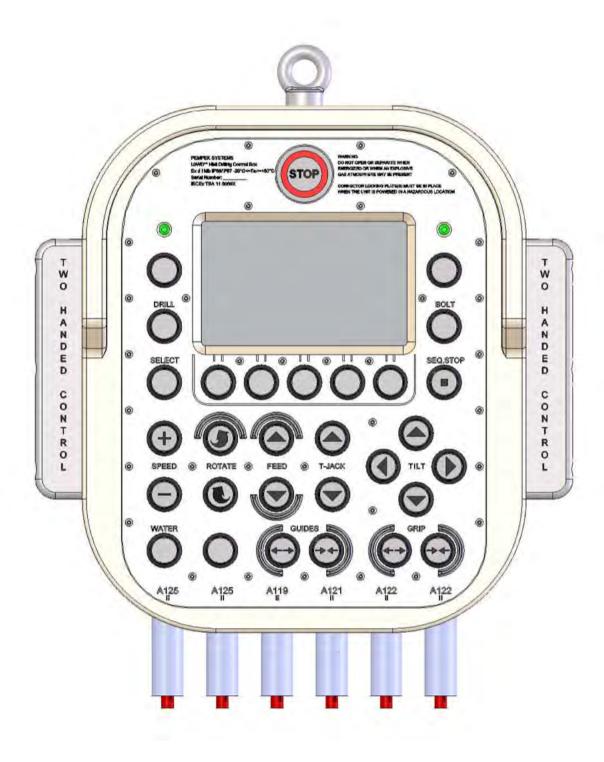
CONNECTOR A125

	Connector A125 BBDN00X	
No	PIN	Name
1	J1-1	N/C
2	J1-2	N/C
3	J1-3	CAN3-High
4	J1-4	CAN3-Low
5	J1-5	CAN3-0V
6	J1-6	N/C
7	J1-7	N/C



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View showing allocations of electrical connectors for electrical cables.

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