

The LORR1201 Obelix Mining PLC Solenoid Driver I/O Module combines PWM - controlled proportional outputs along with digital and analog inputs in a compact housing ideal for mobile mining equipment applications where installation space is limited.

The industry-standard CAN (Controller Area Network) connection provides a host PLC with the ability to control and monitor all outputs and inputs.

Uniquely Keyed Type A and Type B connectors to prevent incorrect machine installation.

- Module Type: Multi-channel Solenoid Driver
- **Supply Input 1:** 24VDC (+/- 10%) / 3 Watts (Max)
- Supply Input 2: 24VDC (+/- 10%) / 550 Watts (Max) (based on output loads)
- Data Communications: Obelix CAN (A2)
- Operating Temperature:  $-20^{\circ c}$  to  $70^{\circ c}$
- Inputs: None
- Outputs: 22 x PWM Current-regulated Outputs (1 A Maximum)
- Connector 1: Obelix A2 (24VDC Input + CAN Bus)
- Connector 2: Obelix C30 (PWM Outputs and 24VDC PWM Supply Input)
- Connector 3: Obelix D30 (PWM Outputs and 24VDC PWM Supply Input)
- Connector 4: Obelix B47 (Inputs)

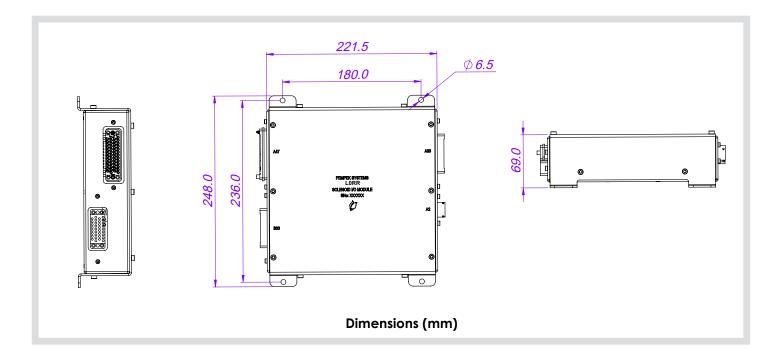


## **Typical Application**

- Continuous Bolter/Miners
- Continuous Haulage
- Long Wall Shearers
- Mobile Bolters
- Mobile Roof Supports
- Remote Control Scoops
- Remote Control Loaders
- Any industrial switching application

Datasheet-LORR1201





### **CONNECTOR A2**

PIN	Connector A2 Burndy Female 8 Way	Signal
A2-A	Supply Input	24VDC Supply Input
A2-B	Supply Input	24VDC Supply Input
A2-C	CAN A (Positive)	Communications
A2-D	CAN A (Positive)	Communications
A2-E	CAN A (Negative)	Communications
A2-F	CAN A (Negative)	Communications
A2-G	Termination Link 1 - 1	Communications
A2-H	Termination Link 1 - 2	Communications





#### **CONNECTOR C30**

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PIN	Connector C30 V35 Female No.	Signal
A30-A	Solenoid 22 Positive	24VDC Switched
A30-B	Solenoid 21 Positive	24VDC Switched
A30-C	Solenoid 22 Negative	24VDC Return
A30-D	Solenoid 21 Negative	24VDC Return
A30-E	CAN Address Modifier 2	24VDC Digital Input
A30-F	Solenoid 20 Positive	24VDC Switched
A30-H	CAN Address Modifier 1	24VDC Digital Input
A30-J	Solenoid 20 Negative	24VDC Return
A30-K	CAN Address Modifier 0	24VDC Digital Input
A30-L	Solenoid 19 Positive	24VDC Switched
A30-M	RS-232 Transmit	Communications
A30-N	Solenoid 19 Negative	24VDC Return
A30-P	RS-232 Receive	Communications
A30-R	Solenoid 18 Negative	24VDC Return
A30-S	RS-232 OVDC Reference	Communications
A30-T	Solenoid 18 Positive	24VDC Switched
A30-U	Solenoid 1 Positive	24VDC Switched
A30-V	Solenoid 17 Negative	24VDC Return
A30-W	Solenoid 12 Negative	24VDC Return
A30-X	Solenoid 17 Positive	24VDC Switched
A30-Y	Solenoid 13 Positive	24VDC Switched
A30-Z	Solenoid 16 Negative	24VDC Return
A30-AA	Solenoid 13 Negative	24VDC Return
A30-BB	Solenoid 16 Positive	24VDC Switched
A30-CC	Solenoid 14 Positive	24VDC Switched
A30-DD	Solenoid 15 Negative	24VDC Return
A30-EE	Solenoid 14 Negative	24VDC Return
A30-FF	Solenoid 15 Positive	24VDC Switched
A30-HH	Solenoid Supply 24VDC	24VDC Supply Input
A30-JJ	Solenoid Supply 24VDC	24VDC Supply Input
A30-KK	Solenoid Supply 24VDC	24VDC Supply Input
A30-LL	Solenoid Supply 24VDC	24VDC Supply Input
A30-MM	Solenoid Supply 24VDC	24VDC Supply Input
A30-NN	Solenoid Supply 24VDC	24VDC Supply Input





Image depict coding pins required



#### **CONNECTOR D30**

PIN	Connector D30 V35 Female No.	Signal
B30-A	Solenoid 33 Positive	24VDC Switched
В30-В	Solenoid 32 Positive	24VDC Switched
B30-C	Solenoid 33 Negative	24VDC Return
B30-D	Solenoid 32 Negative	24VDC Return
B30-E	CAN Address Modifier 2	24VDC Digital Input
B30-F	Solenoid 31 Positive	24VDC Switched
B30-H	CAN Address Modifier 1	24VDC Digital Input
B30-J	Solenoid 31 Negative	24VDC Return
B30-K	CAN Address Modifier 0	24VDC Digital Input
B30-L	Solenoid 30 Positive	24VDC Switched
B30-M	RS-232 Transmit	Communications
B30-N	Solenoid 30 Negative	24VDC Return
B30-P	RS-232 Receive	Communications
B30-R	Solenoid 29 Negative	24VDC Return
B30-S	RS-232 OVDC Reference	Communications
B30-T	Solenoid 29 Positive	24VDC Switched
B30-U	Solenoid 23 Positive	24VDC Switched
B30-V	Solenoid 28 Negative	24VDC Return
B30-W	Solenoid 23 Negative	24VDC Return
B30-X	Solenoid 28 Positive	24VDC Switched
B30-Y	Solenoid 24 Positive	24VDC Switched
B30-Z	Solenoid 27 Negative	24VDC Return
B30-AA	Solenoid 24 Negative	24VDC Return
B30-BB	Solenoid 27 Positive	24VDC Switched
B30-CC	Solenoid 25 Positive	24VDC Switched
B30-DD	Solenoid 26 Negative	24VDC Return
B30-EE	Solenoid 25 Negative	24VDC Return
B30-FF	Solenoid 26 Positive	24VDC Switched
В30-НН	Solenoid Supply 24VDC	24VDC Supply Input
B30-JJ	Solenoid Supply 24VDC	24VDC Supply Input
B30-KK	Solenoid Supply 24VDC	24VDC Supply Input
B30-LL	Solenoid Supply 24VDC	24VDC Supply Input
B30-MM	Solenoid Supply 24VDC	24VDC Supply Input
B30-NN	Solenoid Supply 24VDC	24VDC Supply Input





Image depict coding pins required



#### **CONNECTOR B47**

PIN	Connector B47 V35 Female	Signal
A47-A	CAN IDO	0VDC Input
A47-B	Module Supply	24VDC Supply Input
A47-C	Module Supply Return	0VDC Supply Return
A47-D	Quadrature Encoder A - Counter1	24VDC Input
A47-E	CAN ID1	0VDC Input
A47-F	Quadrature Encoder A – Counter2	24VDC Input
A47-H	0VDC CAN ID Reference	0VDC CAN ID
A47-J	Quadrature Encoder B – Counter3	24VDC Input
A47-K	CAN ID2	0VDC Input
A47-L	Quadrature Encoder B – Counter4	24VDC Input
A47-M	INP2 – Digital Input	24VDC Input
A47-N	INP1 – Digital Input	24VDC Input
A47-P	INP4 – Digital Input	24VDC Input
A47-R	INP3 – Digital Input	24VDC Input
A47-S	INP6 – Digital Input	24VDC Input
A47-T	INP5 – Digital Input	24VDC Input
A47-U	INP8 – Digital Input	24VDC Input
A47-V	INP7 – Digital Input	24VDC Input
A47-W	INP10 – Digital Input	24VDC Input
A47-X	INP9 – Digital Input	24VDC Input
A47-Y	INP12 – Digital Input & Pulse Counter 2	24VDC Input
A47-Z	INP11 – Digital Input & Pulse Counter 1	24VDC Input
A47-a	AN2 – Analog Input	4-20mA Input
A47-b	AN1 – Analog Input	4-20mA Input
A47-c	AN4 – Analog Input	4-20mA Input
A47-d	AN3 – Analog Input	4-20mA Input
A47-e	AN6 – Analog Input	4-20mA Input
A47-f	AN5 – Analog Input	4-20mA Input
A47-h	AN8 – Analog Input	4-20mA Input
A47-i	AN7 – Analog Input	4-20mA Input
A47-k	AN10 – Analog Input	4-20mA Input
A47-m	AN9 – Analog Input	4-20mA Input
A47-111	AN12 – Analog Input	4-20mA Input
A47-11	AN11 – Analog Input	4-20mA Input
A47-p	AN14 – Analog Inpu	4-20mA Input
A47-s	AN13 – Analog Input	4-20mA Input
A47-†	AN15 Analog Input	4-20mA Input
A47-U	AN15 – Analog Input	4-20mA Input
A47-v	AN18 – Analog Input	4-20mA Input
A47-w	AN17 – Analog Input	4-20mA Input
A47-x	Supply Input	110VAC Neutral
A47-y	Analog Supply Output	24VDC Supply Output
A47-z	DGI2 - Digital Input	110VAC Input
A47-AA	DGI1 - Digital Input	110VAC Input
A47-BB	DGI4 - Digital Input	110VAC Input
A47-CC	DG13 - Digital Input	110VAC Input
A47-DD	DGI6 - Digital Input	110VAC Input
A47-EE	DGI5 - Digital Input	110VAC Input
A47-FF	DGI8- Digital Input	110VAC Input
A8-HH	DGI7 - Digital Input	220VAC Digital Input





Image depict coding pins required

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