The LORR0201 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°C to 70°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)



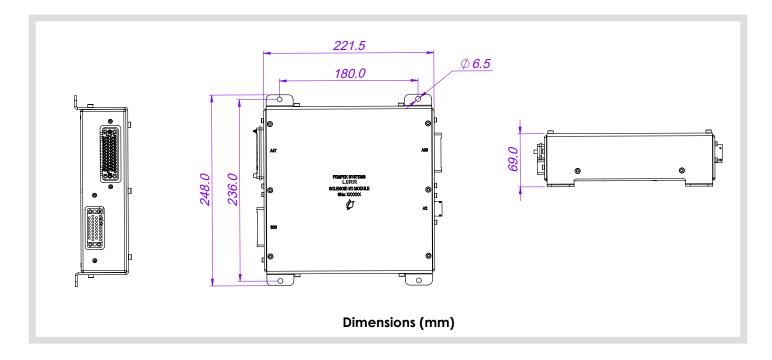
Typical Application

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

Pempek Systems Pty Ltd ACN 622 172 721 (Pempek) is the owner of all intellectual property rights subsisting in all of its products, software and hardware, as well as all product information contained in this document (including without limitation in respect of all copyright, designs and know-how). Your use of Pempek's products and intellectual property is strictly subject to: Pempek's Licence Terms and Conditions, which are accessible here: https://pempek.com.au/terms-and-conditions/#PempekIntellectualPropertyLicenceAgreement

Datasheet

LORR0201 Obelix Module Rexroth Solenoid I/O Module Type B



CONNECTOR A2

PIN	Connector A2 Burndy Female 8 Way	Signal
A2-A	Supply Input	24VDC Supply Input
A2-B	Supply Input	0VDC 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



Datasheet-LORR0201

© Pempek 1985 – 2021 www.pempek.com.au

Pempek Systems Pty Ltd ACN 622 172 721 (Pempek) is the owner of all intellectual property rights subsisting in all of its products, software and hardware, as well as all product information contained in this document (including without limitation in respect of all copyright, designs and know-how). Your use of Pempek's products and intellectual property is strictly subject to: Pempek's Licence Terms and Conditions, which are accessible here: https://pempek.com.au/terms-and-conditions/#PempekIntellectualPropertyLicenceAgreement

CONNECTOR C30

PIN	Connector C30 V35 Female No.	Signal
A30-A	Solenoid 22 Positive	24VDC Switched
А30-В	Solenoid 21 Positive	24VDC Switched
A30-C	Solenoid 22 Negative	24VDC Return
A30-D	Solenoid 21 Negative	24VDC Return
А30-Е	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
А30-К	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 0VDC Reference	Communications
A30-T	Solenoid 18 Positive	24VDC Switched
A30-U	Solenoid 12 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	0VDC Supply Input
А30-КК	Solenoid Supply 24VDC	24VDC Supply Input
A30-LL	Solenoid Supply 24VDC	0VDC Supply Input
A30-MM	Solenoid Supply 24VDC	24VDC Supply Input
A30-NN	Solenoid Supply 24VDC	0VDC Supply Input





Image depict coding pins required

Datasheet-LORR0201 3

© Pempek 1985 – 2021 www.pempek.com.au

Pempek Systems Pty Ltd ACN 622 172 721 (Pempek) is the owner of all intellectual property rights subsisting in all of its products, software and hardware, as well as all product information contained in this document (including without limitation in respect of all copyright, designs and know-how). Your use of Pempek's products and intellectual property is strictly subject to: Pempek's Licence Terms and Conditions, which are accessible here: https://pempek.com.au/terms-and-conditions/#PempekIntellectualPropertyLicenceAgreement

CONNECTOR D30

PIN	Connector D30 V35 Female No.	Signal
B30-A	Solenoid 33 Positive	24VDC Switched
ВЗО-В	Solenoid 32 Positive	24VDC Switched
B30-C	Solenoid 33 Negative	24VDC Return
B30-D	Solenoid 32 Negative	24VDC Return
В30-Е	CAN Address Modifier 2	24VDC Digital Input
B30-F	Solenoid 31 Positive	24VDC Switched
В30-Н	CAN Address Modifier 1	24VDC Digital Input
B30-J	Solenoid 31 Negative	24VDC Return
В30-К	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
B30-HH	Solenoid Supply 24VDC	24VDC Supply Input
B30-JJ	Solenoid Supply 24VDC	0VDC Supply Input
ВЗО-КК	Solenoid Supply 24VDC	24VDC Supply Input
B30-LL	Solenoid Supply 24VDC	0VDC Supply Input
B30-MM	Solenoid Supply 24VDC	24VDC Supply Input
B30-NN	Solenoid Supply 24VDC	0VDC Supply Input





Image depict coding pins required

© Pempek 1985 – 2021 www.pempek.com.au

Pempek Systems Pty Ltd ACN 622 172 721 (Pempek) is the owner of all intellectual property rights subsisting in all of its products, software and hardware, as well as all product information contained in this document (including without limitation in respect of all copyright, designs and know-how). Your use of Pempek's products and intellectual property is strictly subject to: Pempek's Licence Terms and Conditions, which are accessible here: https://pempek.com.au/terms-and-conditions/#PempekIntellectualPropertyLicenceAgreement

CONNECTOR B47

PIN	Connector B47	Signal
	V35 Female	
A47-A	CAN ID0	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
A47-3	INP5 – Digital Input	24VDC Input
A47-1 A47-U	INP8 – Digital Input	24VDC Input
A47-0 A47-V	o ,	
A47-V A47-W	INP7 – Digital Input	24VDC Input
	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
А47-с	AN4 – Analog Input	4-20mA Input
A47-d	AN3 – Analog Input	4-20mA Input
А47-е	AN6 – Analog Input	4-20mA Input
A47-f	AN5 – Analog Input	4-20mA Input
A47-h	AN8 – Analog Input	4-20mA Input
A47-j	AN7 – Analog Input	4-20mA Input
A47-k	AN10 – Analog Input	4-20mA Input
A47-m	AN9 – Analog Input	4-20mA Input
A47-n	AN12 – Analog Input	4-20mA Input
А47-р	AN11 – Analog Input	4-20mA Input
A47-r	AN14 – Analog Inpu	4-20mA Input
A47-s	AN13 – Analog Input	4-20mA Input
A47-t	AN16 – 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-w A47-x		110VAC Neutral
	Supply Input	
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	DGI3 - 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

Datasheet-LORR0201 5

© Pempek 1985 – 2021 www.pempek.com.au

Pempek Systems Pty Ltd ACN 622 172 721 (Pempek) is the owner of all intellectual property rights subsisting in all of its products, software and hardware, as well as all product information contained in this document (including without limitation in respect of all copyright, designs and know-how). Your use of Pempek's products and intellectual property is strictly subject to: Pempek's Licence Terms and Conditions, which are accessible here: https://pempek.com.au/terms-and-conditions/#PempekIntellectualPropertyLicenceAgreement