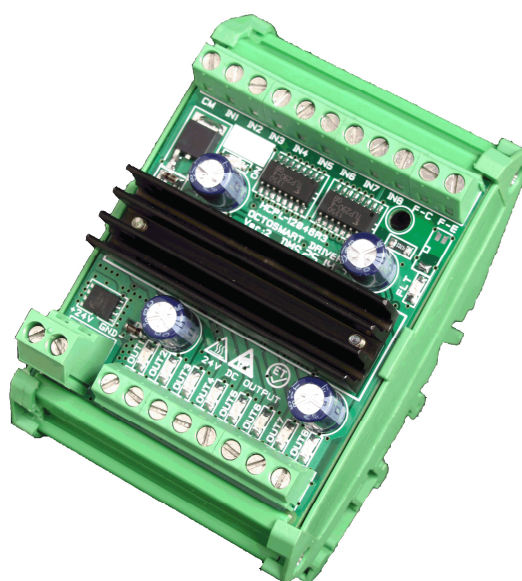


OCTOSMART DRIVER



OCTOSMART DRIVER

8 Channel 24V, Smart Relay/Solenoid Driver

User Manual Ver- 2A

30th July 2014

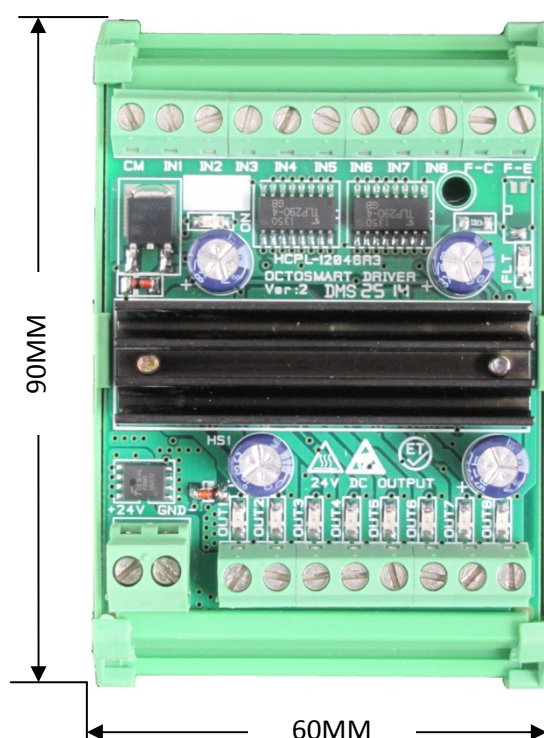
Specifications:

- No of channels - 8
- Supply Voltage - 24VDC
- Supply Current maximum - 8A
- Logic Input Voltage - 12V - 24V DC
- Logic Input Configuration - PNP or NPN opto isolated
- Output Voltage - 24V
- Output current per channel - 4A, total current for all channels limited to 8A
- Protection - Output short circuit, over temperature, Input reverse polarity and Input under voltage.
- Fault feedback - PNP or NPN opto isolated (Optional)
- Indications:
- Power ON Indication - Green LED
- Fault Indication - Red LED
- Output - Yellow LED

Features:

- 24V supply with reverse polarity protection.
- Opto Isolated NPN/PNP compatible 24V (5.5mA) inputs.
- 4A individual Output, limited to 8A total current.
- Built-in freewheeling.
- PWM operation up to 10 kHz.
- 24V/Ground short circuit protection.
- Over temperature protection.
- Input under voltage protection.
- Active high / low opto isolated fault feedback (Optional)
- Common fault indication (LED).
- Fault reset is by power recycling.
- Current limited operation for solenoid/incandescent lamps.
- DIN RAIL Mountable

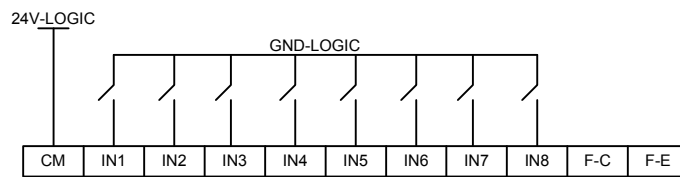
Dimensions and Pin Details:



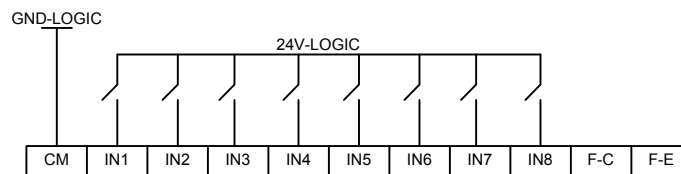
Terminal Name	Description
CM	Opto isolated control input common terminal. Connect to logic 24V for NPN and connect to logic GND for PNP input.
IN1 to IN8	Opto isolated control inputs. NPN/PNP compatible 24V, 5.5mA.
F-C	Opto isolated fault feedback open collector output. (optional) Feedback terminal for active low fault output (External pull-up resistor required). Limit maximum sink / source current to 5mA. Connect to logic 24V for active high fault output.
F-E	Opto isolated fault feedback open emitter output. (optional) Feedback terminal for active high fault output. Limit maximum sink / source current to 5mA. Connect to logic GND for active low fault output.
+24V	+24V DC power supply input. Supply range 5V to 28V DC.
GND	Power GND. Return for +24V DC power supply. All outputs are referred to this GND.
OUT1 to OUT8	24V DC output. This will give 24V output when respective input is active. Otherwise these pins will be internally connected to power GND.

Control Input Connection:

CONTROL INPUT NPN CONNECTION:

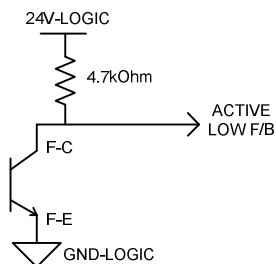


CONTROL INPUT PNP CONNECTION:



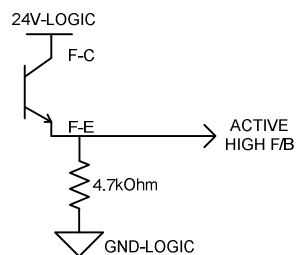
Fault Feedback (optional) Connection:

Active low output:



In this configuration F-C can be used as active low fault feedback. Connect F-E to logic ground. Connect 4.7k Ohm 24V pull up resistor to open collector output F-C.

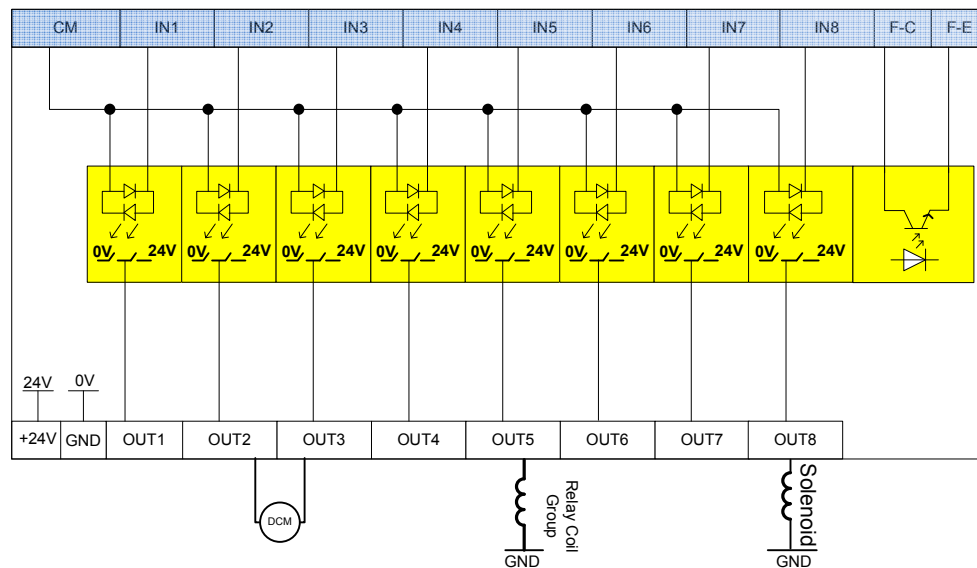
Active high output:



In this configuration F-E can be used as active high fault feedback. Connect 4.7k Ohm pull down resistor to F-E. Connect F-C to logic 24V.

Fault feedback can be configured as active high or low irrespective of control input configuration.

Block Diagram:



DC motor control example:

Forward rotation: PWM signal (Maximum 10kHz) to IN2.

Reverse rotation: PWM signal (Maximum 10kHz) to IN3.

Connect Motor +ve terminal to OUT2 and Motor -ve terminal to OUT3.

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