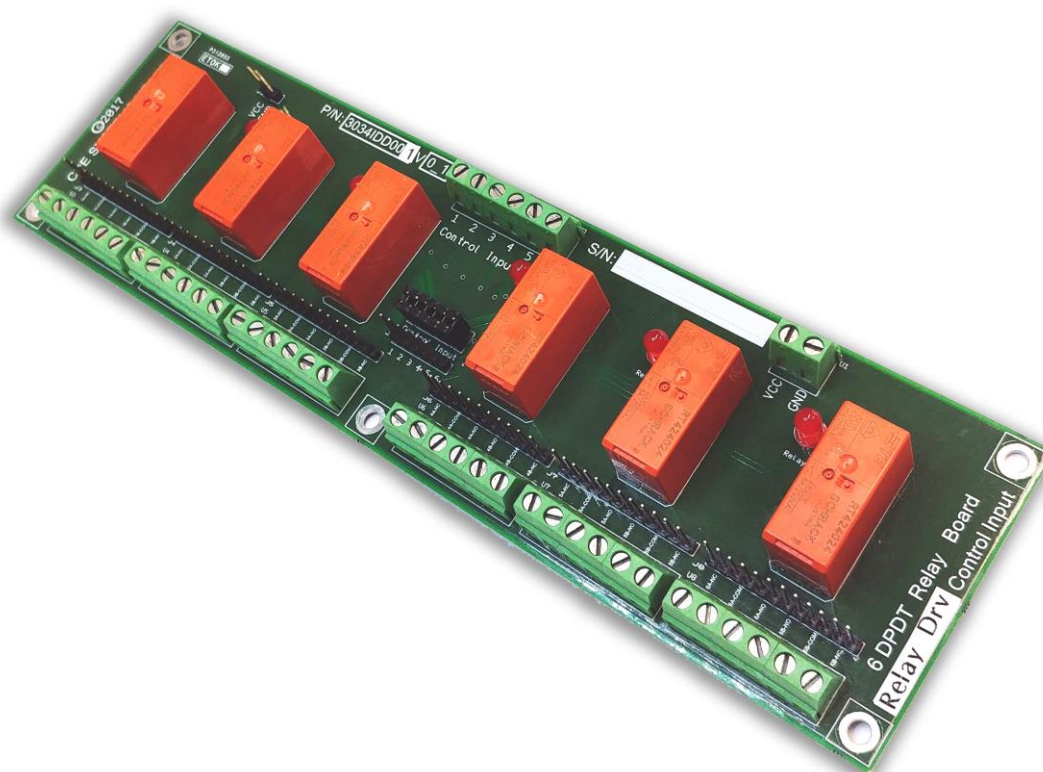

DATA SHEET

6 Channel Mechanical Relay Board 3034 Series

DESCRIPTION

The 3034 Series is a six channel relay board series with a choice of supply voltages and relay driving methods



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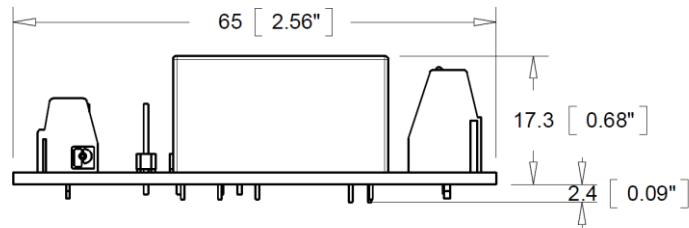
Date: 12/7/2021

Version: 0-2

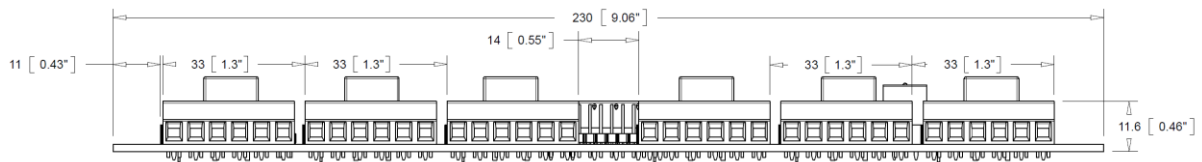
Dimensions and Board Layout

UNITS: mm [inch]

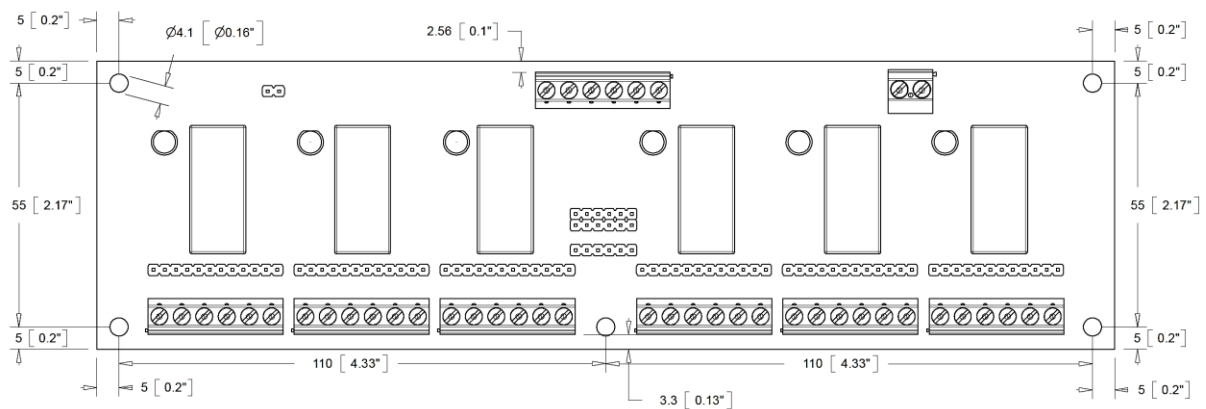
Side View



Front View



Top View



General Specifications

Mechanical		
Board Length	230mm	
Board Width	65mm	
Board Height	19.7mm	
Mounting Holes	5 @ 4.1mm Dia.	
PCB Thickness	1.6mm	
PCB Material	FR-4	
Electrical		
Screw Terminal Conductor	Tin	
PCB Header Conductor	Tin Coated Brass	
Relay Contact Arrangement	2 form A (NO)	
Relay Type	Mechanical	
Board and Relay Switching Ratings	Maximum Rated Power	2kVA
	Maximum Switching Voltage	400VAC
	Rated Voltage	250VAC
	Maximum Constant Current	8A
	Minimum Wetting Current	10 μ A
	Operate/ Release Time Max	8ms
	Bounce Time Max	4ms
	Contact Material	Silver Nickel Alloy
	Mechanical Endurance	>10x10 ⁶ Operations
Ambient Temperature	-40°C to +85°C	
Shock Resistance (destructive)	980 m/s ² (100G)	
Vibration Resistance (functional)	30 to 300 Hz, double amplitude 3 mm(20G)	

Series Specifications

Order Code		3034IDD001
Description Code (Refer Key in Page 6)		24-ME-DPDT-06-D
Board Voltage Input		24V
Max. Board Power Required @ 24V All Channels ON		4.50 W
Leakage Current (All Channels Off)		Leakage Current of Driving Device * 6 Channels
Require Min. Driving Current per Channel @ Rated Coil Input Voltage (24V)		31.3mA (Sinking)
Relay Coil	Rated Voltage	24V
	Operate Voltage	16.8V
	Release Voltage	2.4V
	Resistance	1440 ohms
	Rated Power	400mW

Order Code		3034IDD002
Description Code (Refer Key in Page 6)		24-ME-DPDT-06-T
Board Voltage Input		24V
Max. Board Power Required @ 24V All Channels ON		4.36 W
Leakage Current (All Channels Off)		500µA per Channel 4mA Total (8 Channel Driver)
Require Min. Input Current per Channel @ Rated Coil Input Voltage (24V)		30.2mA (Sinking)
TTL Driving Signal Requirements		I _{ON} = 1mA V _I = 3.85V
Relay Coil	Rated Voltage	24V
	Operate Voltage	16.8V
	Release Voltage	2.4V
	Resistance	1440 ohms
	Rated Power	400mW

Order Code		3034IDD003
Description Code (Refer Key in Page 6)		12-ME-DPDT-06-D
Board Voltage Input		12V
Max. Board Power Required @ 12V All Channels ON		3.45 W
Leakage Current (All Channels Off)		Leakage Current of Driving Device * 6 Channels
Require Min. Driving Current per Channel @ Rated Coil Input Voltage (12V)		47.9mA (Sinking)
Relay Coil	Rated Voltage	12V
	Operate Voltage	8.4V
	Release Voltage	1.2V
	Resistance	360 ohms
	Rated Power	400mW

Order Code		3034IDD004
Description Code (Refer Key in Page 6)		12-ME-DPDT-06-T
Board Voltage Input		12V
Max. Board Power Required @ 12V All Channels ON		3.29 W
Leakage Current (All Channels Off)		500µA per Channel 4mA Total (8 Channel Driver)
Require Min. Input Current per Channel @ Rated Coil Input Voltage (12V)		45.8mA (Sinking)
TTL Driving Signal Requirements		I _{ON} = 1mA
		V _I = 3.85V
Relay Coil	Rated Voltage	12V
	Operate Voltage	8.4V
	Release Voltage	1.2V
	Resistance	360 ohms
	Rated Power	400mW

Order Code		3034IDD005
Description Code (Refer Key in Page 6)		05-ME-DPDT-06-D
Board Voltage Input		5V
Max. Board Power Required @ 5V All Channels ON		2.87 W
Leakage Current (All Channels Off)		Leakage Current of Driving Device * 6 Channels
Require Min. Driving Current per Channel @ Rated Coil Input Voltage (5V)		95.6 mA (Sinking)
Relay Coil	Rated Voltage	5V
	Operate Voltage	3.5V
	Release Voltage	0.5V
	Resistance	62 ohms
	Rated Power	403mW

Order Code		3034IDD006
Description Code (Refer Key in Page 6)		05-ME-DPDT-06-T
Board Voltage Input		5V
Max. Board Power Required @ 5V All Channels ON		2.51 W
Leakage Current (All Channels Off)		500µA per Channel 4mA Total (8 Channel Driver)
Require Min. Input Current per Channel @ Rated Coil Input Voltage (5V)		83.5mA (Sinking)
TTL Driving Signal Requirements		I _{ON} = 1mA
		V _I = 3.85V
Relay Coil	Rated Voltage	5V
	Operate Voltage	3.5V
	Release Voltage	0.5V
	Resistance	62 ohms
	Rated Power	403mW

Relay Boards Description Code Key

CODE	Relay Control Voltage	Relay Type	Relay Configuration	Number of Relays per board	Relay Control Signal Type	Additional Options
5 V	05					
12 V	12					
24 V	24					
Mechanical	ME					
Solid State	SS*					
Low Voltage Reed	LR*					
High Voltage Reed	HR*					
Single Pole Single Throw - Normally Closed	SPNC*					
Single Pole Single Throw - Normally Open	SPNO*					
Single Pole Double Throw	SPDT*					
Double Pole Single Throw - Normally Closed	DPNC*					
Double Pole Single Throw - Normally Open	DPNO*					
Double Pole Double Throw	DPDT					
6 Relays	06					
8 Relays	08*					
TTL / DIO Controlled	T					
Relay Driver Controlled	D					
None						
Conformal Coated	CC					
Custom Modifications / Features (On Order)	CM					

* Not available in the Mechanical Relay (ME) version of the product

CONTROL LINES

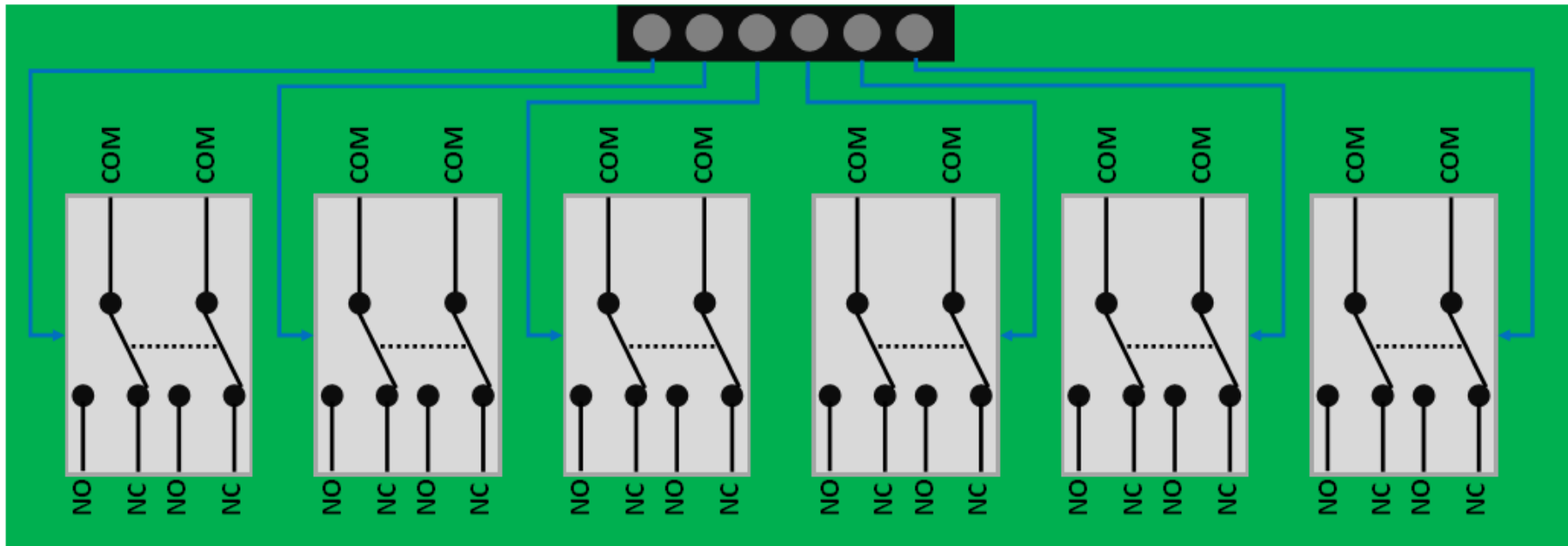


Figure 1 - Block Diagram of Mechanical DPDT Relay Board Functionality