

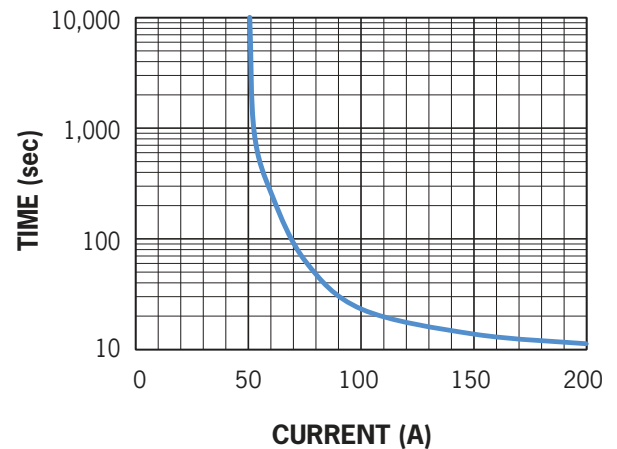
FEATURES

- > Small, lightweight, and cost effective patented design
- > Hermetic seal ensures clean consistent contact environment
- > RoHS2 compliant
- > Make / Break switching to 1200Vdc
- > Can be installed in any position
- > Capable of bi-directional switching
- > Perfect choice for pre-charge, charge, and solar applications

PRODUCT SPECIFICATIONS

Specifications	Units	Data
Contact Arrangement	Form X	SPST-NO
Dielectric at Sea Level	Vdc	6000
Contact Voltage, Operating Max	Vdc	1200
Continuous Current Carry, Max (8 AWG)	A	50
Electrical Life (Resistive Load)		
Make and Break, 1A @ 1200Vdc	Cycles	1000
Make and Break, 5A @ 1000Vdc	Cycles	1000
Make and Break, 10A @ 800Vdc	Cycles	2000
Make and Break, 20A @ 600Vdc	Cycles	5000
Make and Break, 50A @ 300Vdc	Cycles	5000
Make and Break, 50A @ 24Vdc	Cycles	50,000
Mechanical Life	Cycles	1,000,000
Contact Voltage Drop, Max @ 50A	mV	100
Contact Resistance, Max @ 50A (after 30 sec)	mOhms	3.25
Operate Time, Max	ms	25
Release Time, Max	ms	8
Vibration, Sinusoidal (50-200Hz Peak)	G	5
Shock, Operating, 1/2 Sine, 11ms	G	20
Temperature, Operating Range ^{1/}	°C	-40 to +65
Humidity, No Freezing or Condensing at Low Temperature	RH	5% to 85%
Weight	grams	112

CURRENT CARRY RATINGS



COIL RATINGS @ 25°C ^{2/}

Coil P/N Designation	B	C	F
Coil Voltage, Nominal	12 Vdc	24 Vdc	48 Vdc
Coil Voltage, Max	16 Vdc	32 Vdc	64 Vdc
Pick-up Voltage, Max	7.5 Vdc	15 Vdc	30 Vdc
Drop Out Voltage, Max	5 Vdc	9 Vdc	18 Vdc
Drop Out Voltage, Min	0.20 Vdc	0.40 Vdc	0.80 Vdc
Coil Resistance, +/-10%	70 Ohms	280 Ohms	1092 Ohms
Coil Current at Nominal Voltage	0.170 A	0.085 A	0.045 A
Recommended External Coil Suppression (not included)	SMAJ40CA or P6KE47CA-E3/54	SMAJ40CA or P6KE47CA-E3/54	SMAJ100CA or P6KE120CA

DIMENSIONS



Mounting

M4 or 8-32 Screws
Torque 1.3-1.7 Nm [12-15 in-lb]

Case Material

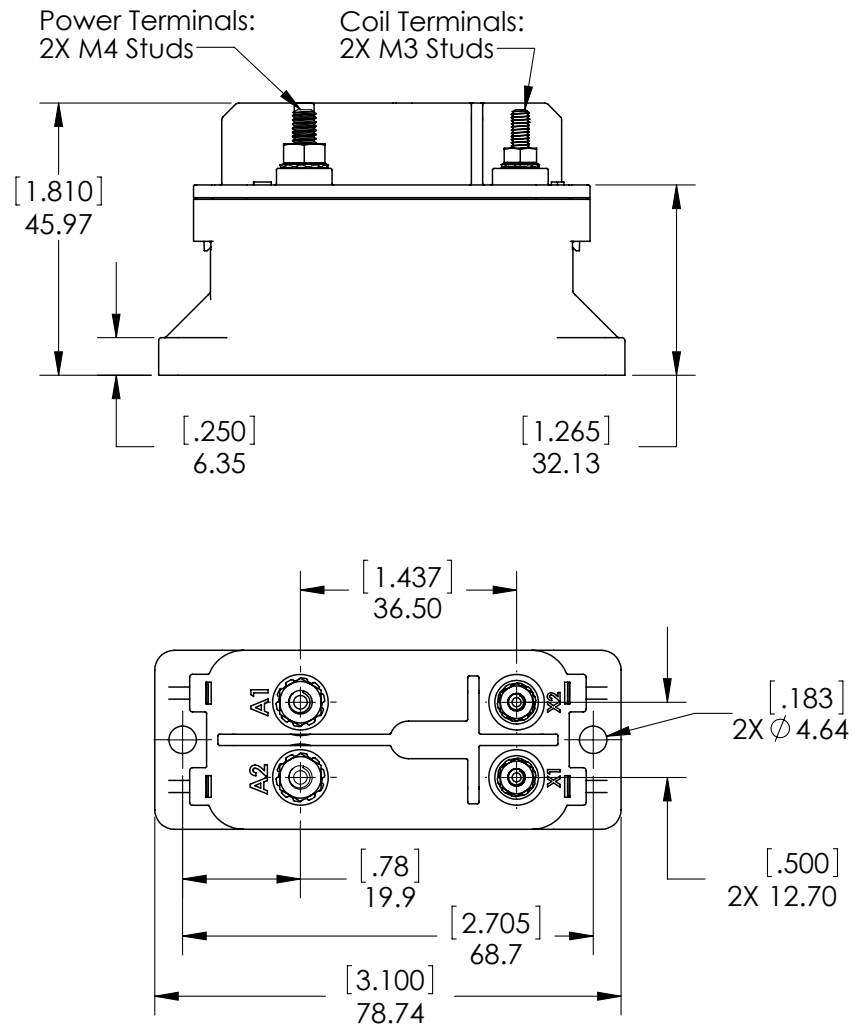
Patented EVOH Blend

Power Connection

M4 Studs
Torque 1.3-1.7 Nm [12-15 in-lb] max

Coil Termination

M3 Studs
Torque 0.5Nm [5in-lb] max



PART NUMBER SYSTEM

P105	B	D	A
Coil Voltage	B=12 Vdc		
	C=24 Vdc		
	F=48 Vdc		
Coil Terminals		D=Studs, M3	
Power Terminals			A=Studs, M4

Notes & Definitions:

1/ Temperature range refers to ambient conditions. Terminal temperature can exceed listed values.

2/ Contactor is operated by a coil that changes resistance with temperature. Since pick-up current, coil current and coil power are specified at nominal voltage, they will be lower than indicated at temperatures above 25°C and higher than indicated at temperatures below 25°C. Similarly, pick-up and drop-out voltages will be higher than indicated at temperatures above 25°C and lower than indicated at temperatures below 25°C.

APPLICATION NOTES

Electrical life rating is based on resistive load with 27μH maximum inductance in circuit. Because your application may be different, we suggest you test the contactor in your circuit to verify life is as required.

Contactor is bi-directional and therefore can carry, make, and break current in both directions.

Contactor is not sensitive to direction of installation and can be mounted in any position or axis.

Datasheets provided by Sensata Technologies, Inc., its subsidiaries and/or affiliates (“Sensata”) are solely intended to assist third parties (“Buyers”) who are developing systems that incorporate Sensata products (also referred to herein as “components”). Buyer understands and agrees that Buyer remains responsible for using its independent analysis, valuation, and judgment in designing Buyer’s systems and products. Sensata datasheets have been created using standard laboratory conditions and engineering practices. Sensata has not conducted any testing other than that specifically described in the published documentation for a particular datasheet. Sensata may make corrections, enhancements, improvements, and other changes to its datasheets or components without notice.

Buyers are authorized to use Sensata datasheets with the Sensata component(s) identified in each particular datasheet. HOWEVER, NO OTHER LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OTHERWISE TO ANY OTHER SENSATA INTELLECTUAL PROPERTY RIGHT, AND NO LICENSE TO ANY THIRD PARTY TECHNOLOGY OR INTELLECTUAL PROPERTY RIGHT, IS GRANTED HEREIN. SENSATA DATASHEETS ARE PROVIDED “AS IS”. SENSATA MAKES NO WARRANTIES OR REPRESENTATIONS WITH REGARD TO THE DATASHEETS OR USE OF THE DATASHEETS, EXPRESS, IMPLIED, OR STATUTORY, INCLUDING ACCURACY OR COMPLETENESS. SENSATA DISCLAIMS ANY WARRANTY OF TITLE AND ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, QUIET ENJOYMENT, QUIET POSSESSION, AND NON-INFRINGEMENT OF ANY THIRD PARTY INTELLECTUAL PROPERTY RIGHTS WITH REGARD TO SENSATA DATASHEETS OR USE THEREOF.

All products are sold subject to Sensata’s terms and conditions of sale supplied at www.sensata.com. SENSATA ASSUMES NO LIABILITY FOR APPLICATIONS ASSISTANCE OR THE DESIGN OF BUYERS’ PRODUCTS. BUYER ACKNOWLEDGES AND AGREES THAT IT IS SOLELY RESPONSIBLE FOR COMPLIANCE WITH ALL LEGAL, REGULATORY, AND SAFETY-ELATED REQUIREMENTS CONCERNING ITS PRODUCTS, AND ANY USE OF SENSATA COMPONENTS IN ITS APPLICATIONS, NOTWITHSTANDING ANY APPLICATIONS-RELATED INFORMATION OR SUPPORT THAT MAY BE PROVIDED BY SENSATA.

Mailing Address: Sensata Technologies, Inc., 529 Pleasant Street, Attleboro, MA 02703, USA

CONTACT US

Regional head offices:

United States of America

Sensata Technologies

Attleboro, MA

Phone: 508-236-3800

E-mail: support@sensata.com

Netherlands

Sensata Technologies Holland B.V.

Hengelo

Phone: +31 74 357 8000

E-mail: support@sensata.com

China

Sensata Technologies China Co., Ltd.

Shanghai

Phone: +8621 2306 1500

E-mail: support@sensata.com

Copyright © 2023 Sensata Technologies, Inc.