

*Albright*  
International

# DRAGON SERIES



Our new Dragon Series, which consists of the SE type contactor, are unique and innovative design of compact contactor suitable for applications including UPS and Telecom Power Systems, Electric Vehicles and Frequency Converters. The series offers both Normally Open and Normally Closed Single Pole Single Throw configurations and are rated from 100 to 400 amps continuously. Coil driver options include Standard, Dual Coil and Magnetic Latching options.

Directly compatible with existing contactors within the market, the Dragon Series offers superior performance, size and quality.



**100 AMPS**

SEO100 - Normally Open  
SEC100 - Normally Closed

**200 AMPS**

SEO200 - Normally Open  
SEC200 - Normally Closed

**400 AMPS**

SEO400 - Normally Open  
SEC400 - Normally Closed

# SEO100

100 Amps

Single Pole  
Single Throw  
Normally Open

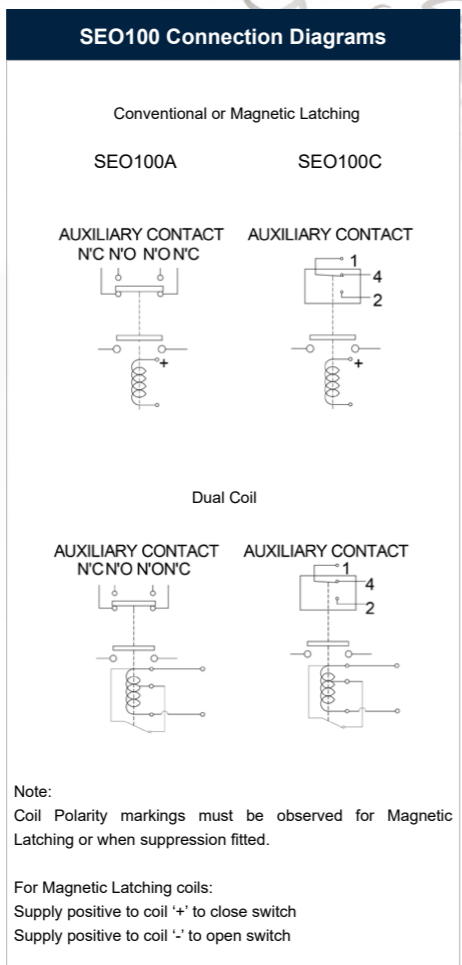
# SEC100

100 Amps

Single Pole  
Single Throw  
Normally Closed



SEO100



### SEO100 & SEC100 Technical Data

Continuous Current Rating (1/th)	100A
Configuration:	
SEO100	Normally Open
SEC100	Normally Closed
Pole	Single
Throw	Single
Ambient Temperature	- 40°C to + 70°C
Main Contact Rated Voltage	Up to 60V D.C.
Typical Voltage Drop across New Contacts at 100A	50mV
Pull-in Voltage	max 66% of nominal
Drop-Out Voltage	10 - 25% of nominal
Pull-In Time:	15ms typical
Drop-Out Time:	
Without Suppression	6ms
With Suppression <sup>1</sup>	35ms
Contact Bounce	3ms typical
Insulation Voltage (Dielectric Strength)	1500V A.C.
Mechanical Life:	
SEO100	>1,000,000 operations
SEC100	>50,000 operations
Electrical Life <sup>2</sup> (100A at 60V):	
SEO100	>10,000 operations
SEC100	>10,000 operations
IP Rating	IP40
Shock	30g acceleration; 18ms; half sinusoidal wave form in accordance with IEC60068-2-27
Vibration	10-500Hz frequency; 5g acceleration; in 3 axes in accordance with IEC60068-2-6
Weight	250gms

Note: Figures are at 20°C

<sup>1</sup> Coil Polarity Markings must be Observed

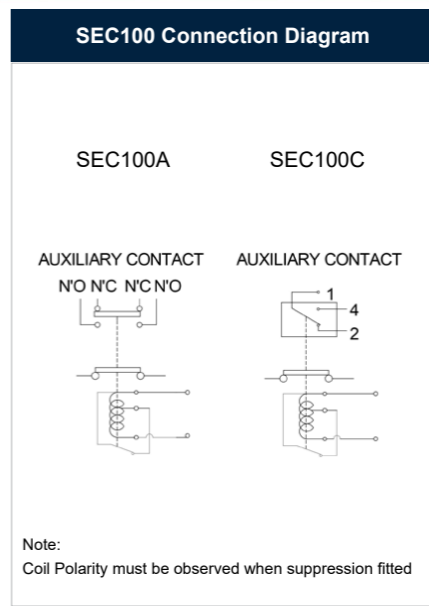
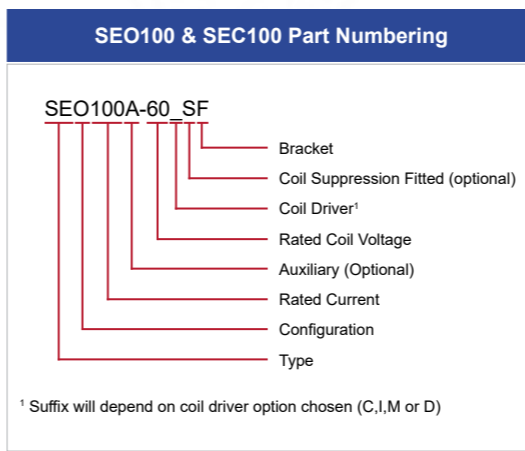
<sup>2</sup> For further advice, please contact Albright Technical at [technical@albrightinternational.com](mailto:technical@albrightinternational.com)

Note: Operational characteristics are with new contacts

### SEO100 & SEC100 Available Coil Voltages

24V	30V	36V	48V	60V
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Further Options Available



SEC100A

### Auxiliary Contact

Auxiliary Thermal Current Rating	5A
Auxiliary Contact Switching Capabilities (Resistive Load):	
SEO/SEC100C	SEO/SEC100A
	5A at 24V D.C.
	1A at 60V D.C.
	0.5A at 120V D.C.
	0.25A at 240V D.C.

### SEO100 Coil Driver

Description	Watts	Suffix
Standard - operates as conventional CO coil	5 - 7W	C
Intermittent	10 - 14W	I
Magnetic Latching <sup>1</sup>	10 - 14W	M
Dual Coil	Starting: Up to 120W	D
	Holding: Up to 4W	

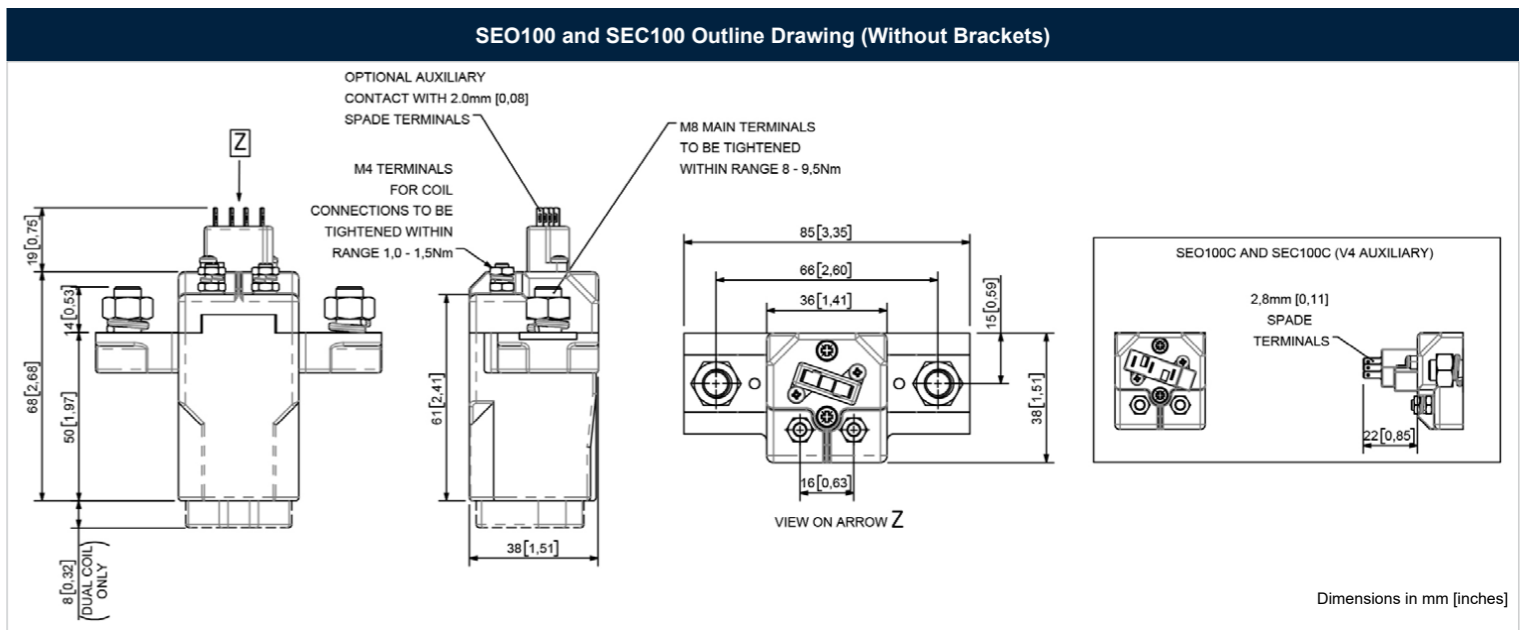
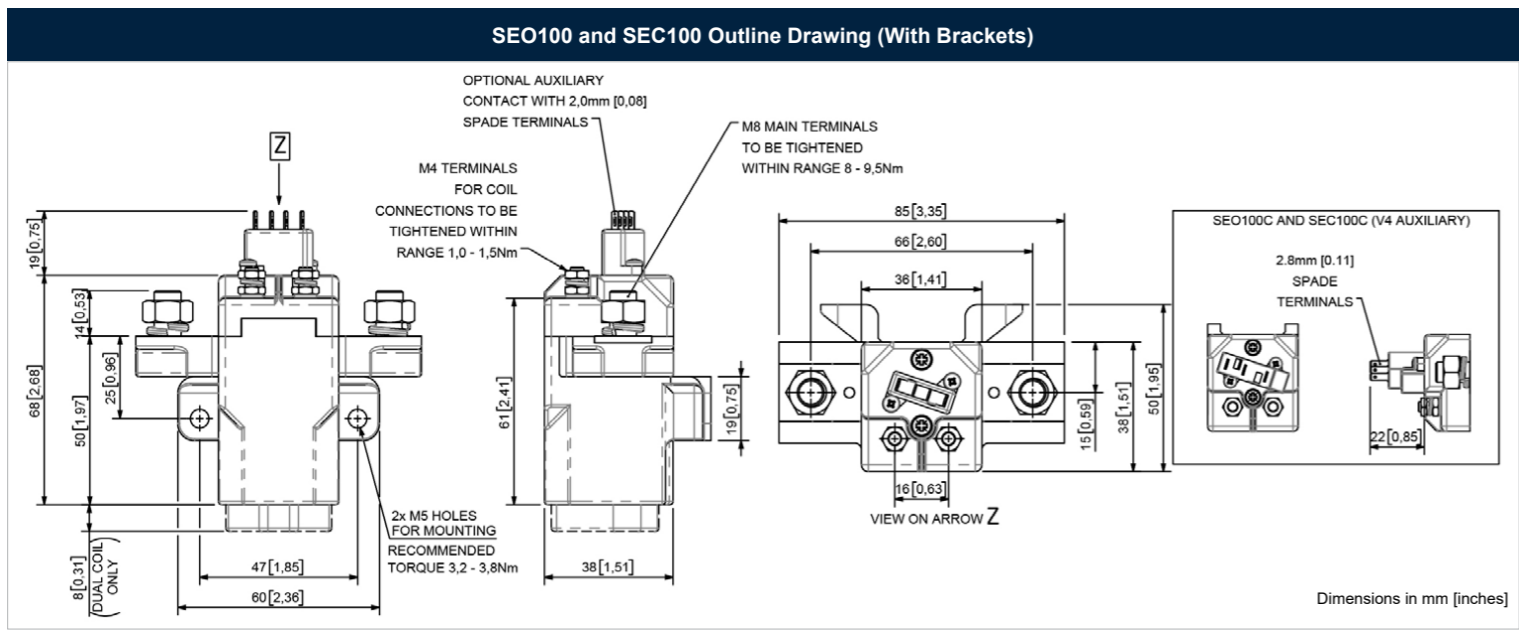
<sup>1</sup> Coil Polarity Markings must be Observed

### SEO100 & SEC100 Options

Option	Note	Suffix
Configuration	Normally Open	O
	Normally Closed	C
Auxiliary	Form Z	A
	Form C (V4)	C
Coil Suppression <sup>1</sup>	Diode	S
Brackets	Please refer to Drawing for Options	F

Note: Silver Plating is provided as standard, but can be removed at the option of the customer. Please consult our Technical Department for further advice.

<sup>1</sup> Coil Polarity markings must be observed



# SEO200

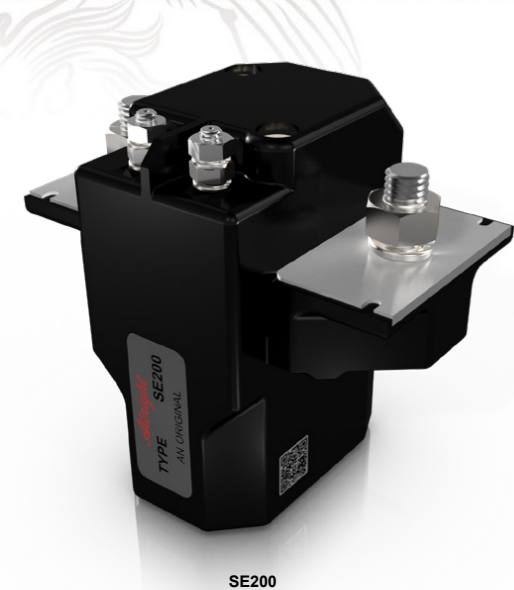
200 Amps

Single Pole  
Single Throw  
Normally Open

# SEC200

200 Amps

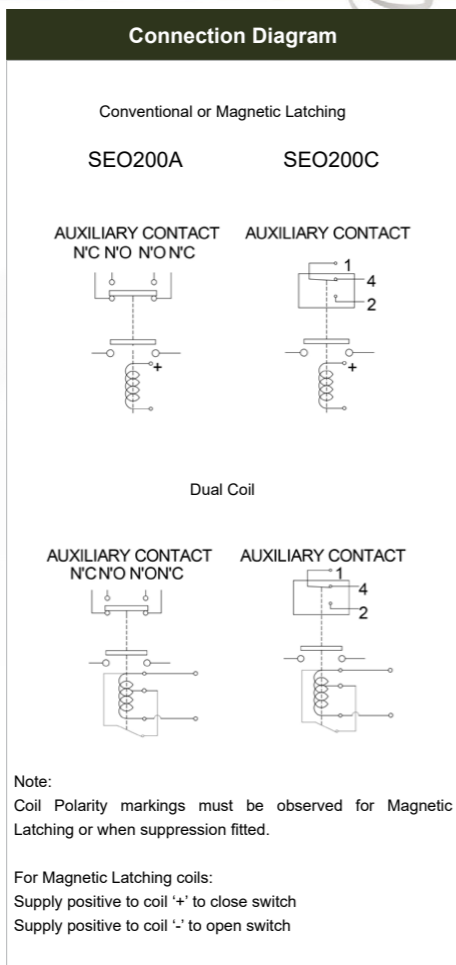
Single Pole  
Single Throw  
Normally Closed



SEO200



SEC200A



### SEO200 & SEC200 Technical Data

Continuous Current Rating (1/th)	200A
Configuration:	
SEO200	Normally Open
SEC200	Normally Closed
Pole	Single
Throw	Single
Ambient Temperature	- 40°C to + 70°C
Main Contact Rated Voltage	Up to 60V D.C.
Typical Voltage Drop per pole across New Contacts at 200A	50mV
Pull-in Voltage	max 66% of nominal
Drop-Out Voltage	10 - 25% of nominal
Pull-In Time:	15ms typical
Drop-Out Time:	
Without Suppression	6ms
With Suppression <sup>1</sup>	35ms
Contact Bounce	3ms typical
Insulation Voltage (Dielectric Strength)	1500V A.C.
Mechanical Life:	
SEO200	>1,000,000 operations
SEC200	>50,000 operations
Electrical Life <sup>2</sup> (200A at 60V):	
SEO200	>10,000 operations
SEC200	>10,000 operations
IP Rating	IP40
Shock	30g acceleration; 18ms; half sinusoidal wave form in accordance with IEC60068-2-27
Vibration	10-500Hz frequency; 5g acceleration; in 3 axes in accordance with IEC60068-2-6
Weight	490gms

Note: Figures are at 20°C

<sup>1</sup> Coil Polarity Markings must be Observed

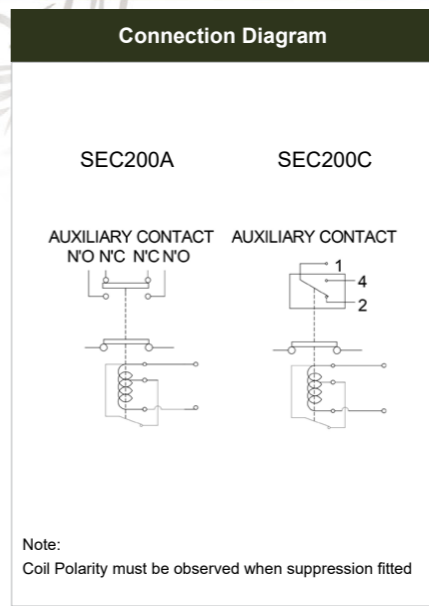
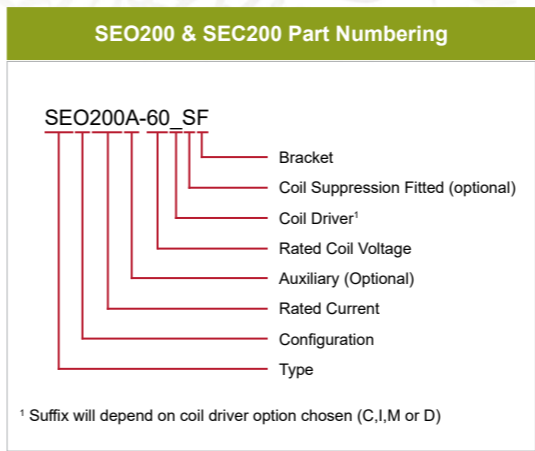
<sup>2</sup> For further advice, please contact Albright Technical at [technical@albrightinternational.com](mailto:technical@albrightinternational.com)

Note: Operational characteristics are with new contacts

### SEO200 & SEC200 Available Coil Voltages

24V	30V	36V	48V	60V
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Further Options Available



### SEO200 Coil Driver

Description	Watts	Suffix
Standard - operates as conventional CO coil	7 - 13W	C
Intermittent	15 - 20W	I
Magnetic Latching <sup>1</sup>	15 - 20W	M
Dual Coil	Starting: Up to 165W	D
	Holding: Up to 7W	

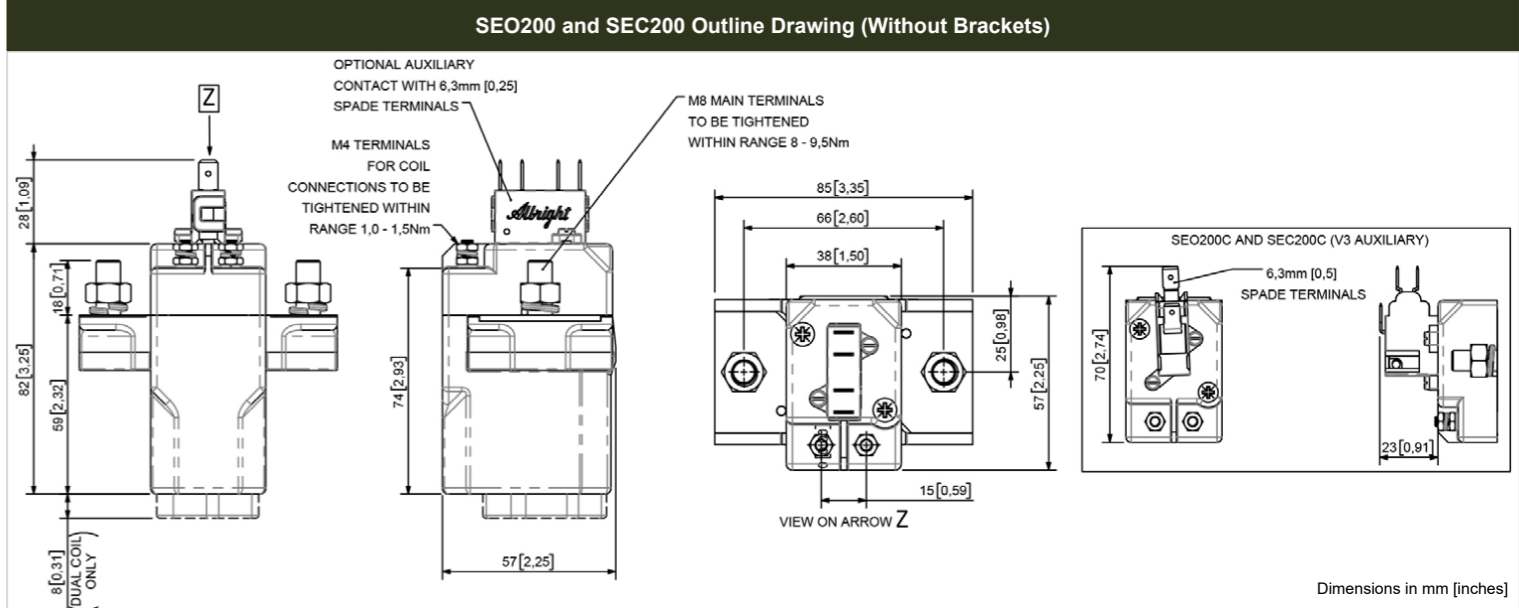
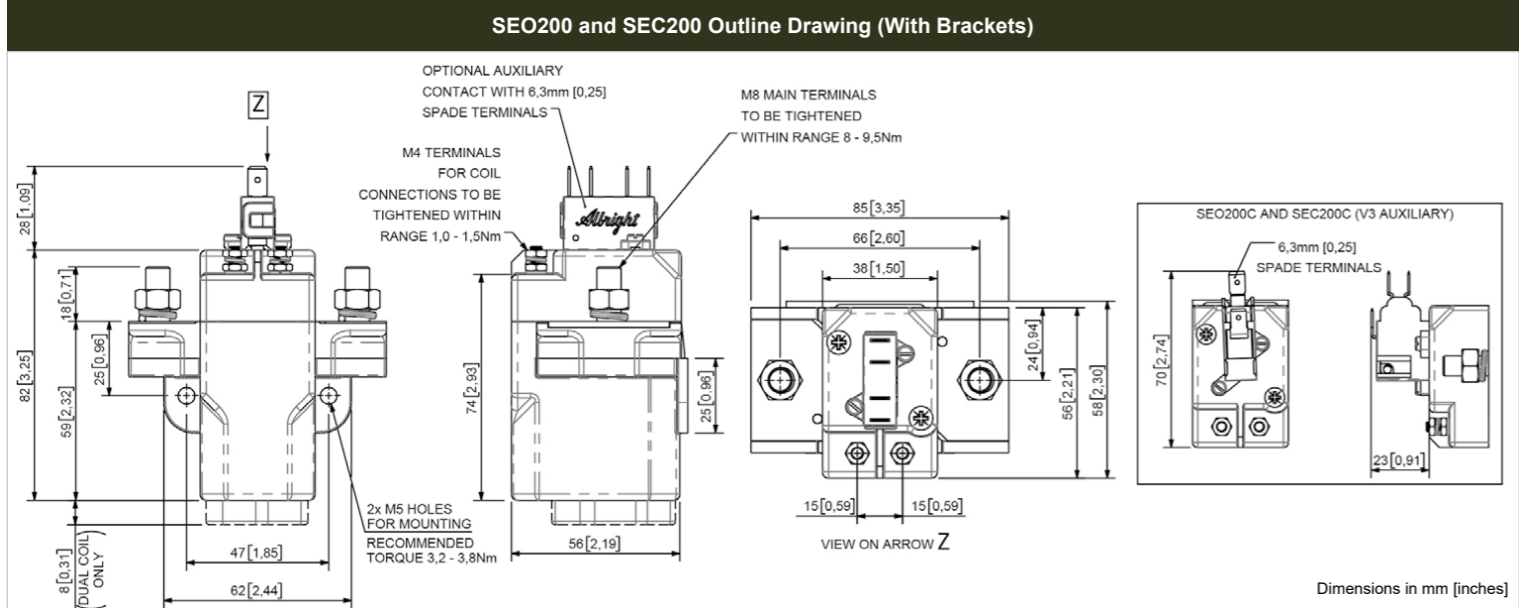
<sup>1</sup> Coil Polarity Markings must be Observed

### Auxiliary Contact

Auxiliary Thermal Current Rating	5A
Auxiliary Contact Switching Capabilities (Resistive Load):	
SEO/SEC200C	SEO/SEC200A
	5A at 24V D.C.
	2A at 48V D.C.
	0.5A at 240V D.C.

### SEC200 Coil Driver

Description	Watts	Suffix
Dual Coil	Starting: Up to 165W	D
	Holding: Up to 7W	



# SEO400

400 Amps

Single Pole  
Single Throw  
Normally Open



SE400



# SEC400

400 Amps

Single Pole  
Single Throw  
Normally Closed

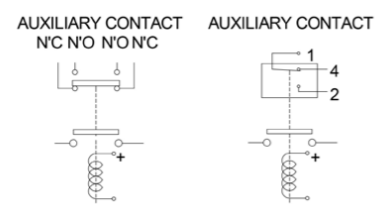


SE400A

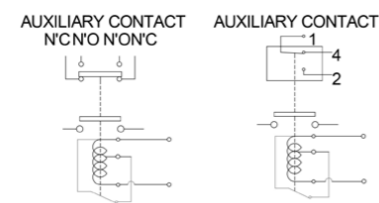
### Connection Diagram

Conventional or Magnetic Latching

SEO400A      SEO400C



Dual Coil



Note:  
Coil Polarity markings must be observed for Magnetic Latching or when suppression fitted.

For Magnetic Latching coils:  
Supply positive to coil '+' to close switch  
Supply positive to coil '-' to open switch

### SEO400 & SEC400 Technical Data

Continuous Current Rating (1th)	400A
Configuration:	
SEO400	Normally Open
SEC400	Normally Closed
Pole	Single
Throw	Single
Ambient Temperature	- 40 °C to + 70 °C
Main Contact Rated Voltage	Up to 60V D.C.
Typical Voltage Drop across New Contacts at 400A	50mV
Pull-in Voltage	max 66% of nominal
Drop-Out Voltage	10 - 25% of nominal
Pull-In Time	15ms typical
Drop-Out Time:	
Without Suppression	6ms
With Suppression <sup>1</sup>	35ms
Contact Bounce	3ms typical
Insulation Voltage (Dielectric Strength)	1500V A.C.
Mechanical Life:	
SEO400	>1,000,000 operations
SEC400	>50,000 operations
Electrical Life <sup>2</sup> (400A at 60V):	
SEO400	>10,000 operations
SEC400	>10,000 operations
IP Rating	IP40
Shock	30g acceleration; 18ms; half sinusoidal wave form in accordance with IEC60068-2-27
Vibration	10-500Hz frequency; 5g acceleration; in 3 axes in accordance with IEC60068-2-6
Weight	830gms

Note: Figures are at 20 °C

<sup>1</sup> Coil Polarity Markings must be Observed

<sup>2</sup> For further advice, please contact Albright Technical at [technical@albrightinternational.com](mailto:technical@albrightinternational.com)

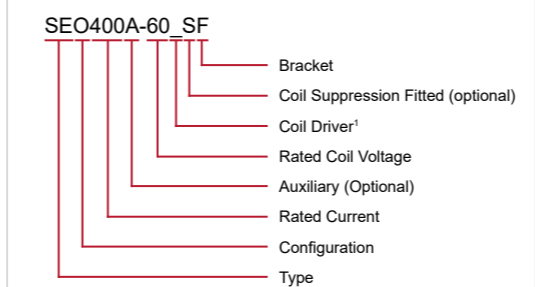
Note: Operational characteristics are with new contacts

### SEO400 & SEC400 Available Coil Voltages

24V	30V	36V	48V	60V
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Further Options Available

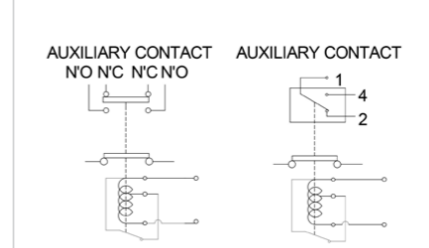
### SEO400 & SEC400 Part Numbering



<sup>1</sup> Suffix will depend on coil driver option chosen (C, I, M or D)

### Connection Diagram

SEC400A      SEC400C



Note:  
Coil Polarity must be observed when suppression fitted

### SEO400 Coil Driver

Description	Watts	Suffix
Standard - operates as conventional CO coil	10 - 15W	C
Intermittent	30 - 40W	I
Magnetic Latching <sup>1</sup>	30 - 40W	M
Dual Coil	Starting: Up to 220W	D
	Holding: Up to 8.5W	

<sup>1</sup> Coil Polarity Markings must be Observed

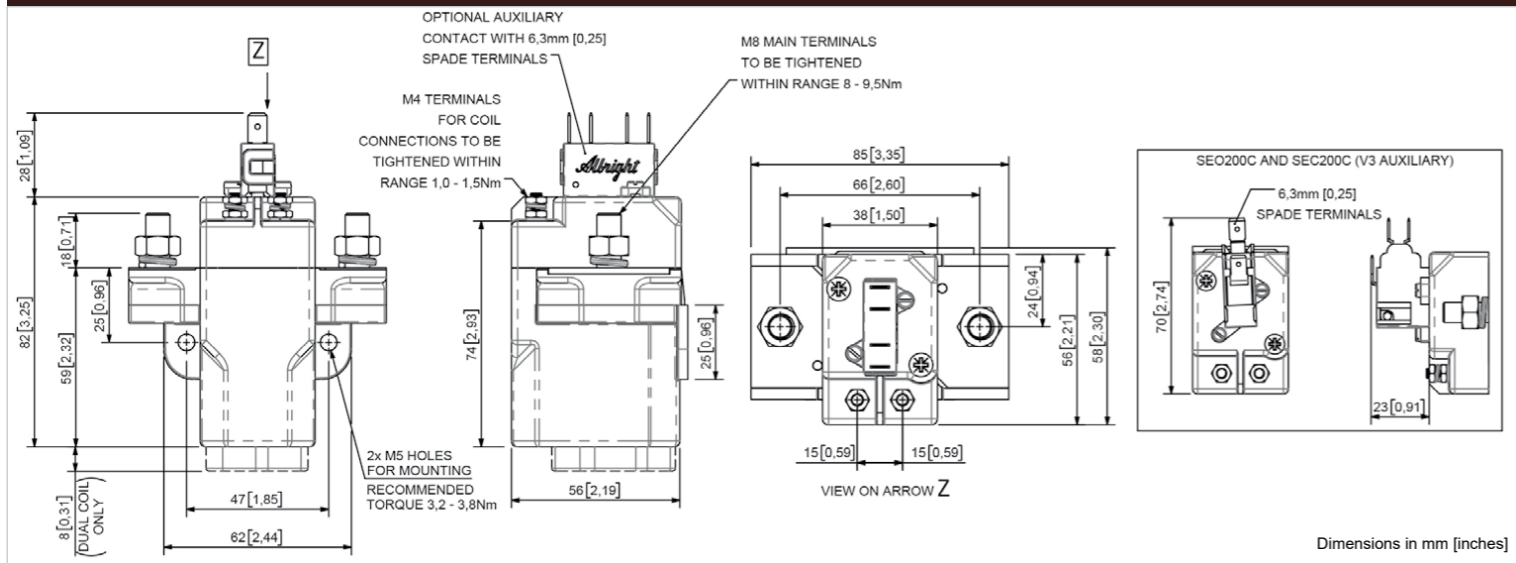
### Auxiliary Contact

Auxiliary Thermal Current Rating	5A
Auxiliary Contact Switching Capabilities (Resistive Load):	
SEO/SEC400C	SEO/SEC400A
	5A at 24V D.C.
	2A at 48V D.C.
	0.5A at 240V D.C.

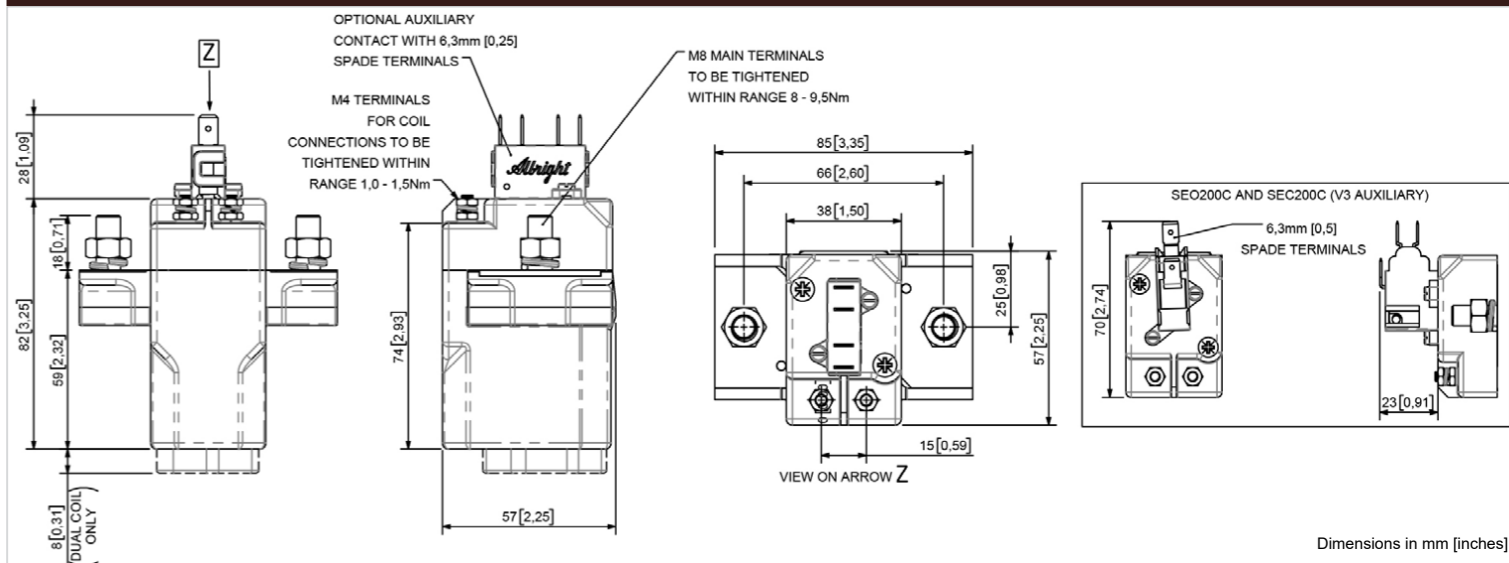
### SEC400 Coil Driver

Description	Watts	Suffix
Dual Coil	Starting: Up to 220W	D
	Holding: Up to 8.5W	

### SEO400 and SEC400 Outline Drawing (With Brackets)



### SEO400 and SEC400 Outline Drawing (Without Brackets)





#### Certifications

CCC: Chinese Compulsory Certification

GB14048.4



Underwriters Laboratories:

E165921 Power Distribution Centre for  
Telecommunications Equipment



#### Please Note:

- Performance data provided should be used as a guide only. Some de-rating or variation from figures may be necessary according to application.
- Thermal current ratings stated are dependant upon the size of conductor being used
- For further technical advice email: [technical@albrightinternational.com](mailto:technical@albrightinternational.com)
- Albright reserve the right to change data without prior notice

[www.albrightinternational.com](http://www.albrightinternational.com)