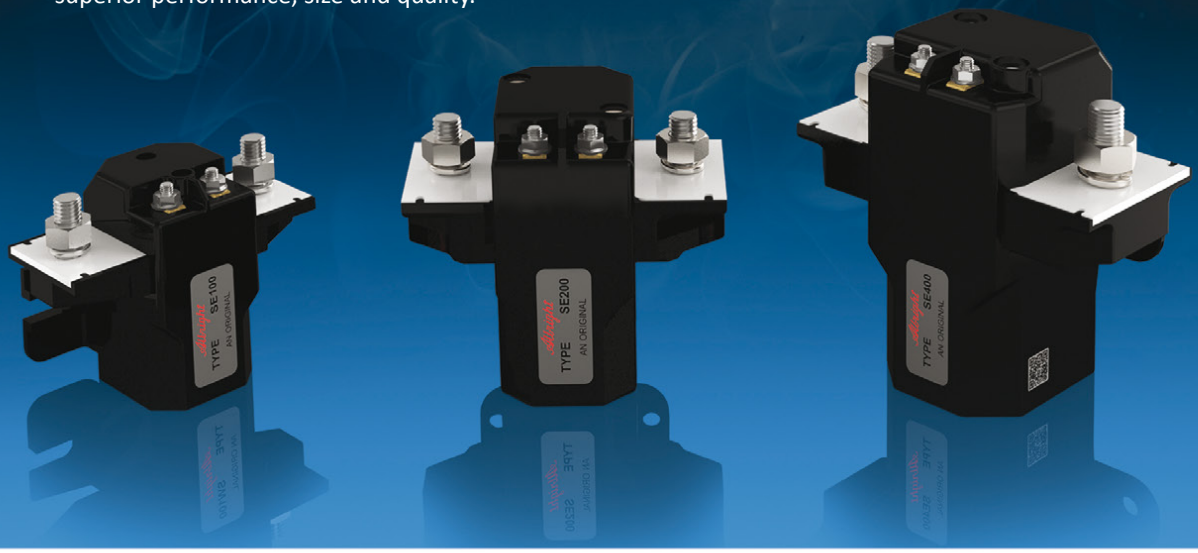
Albright International

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

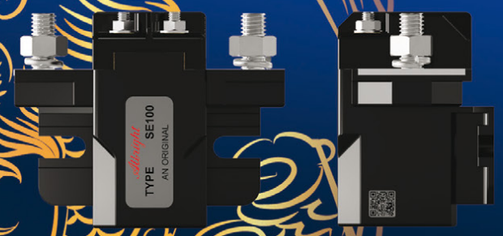
400 AMPS

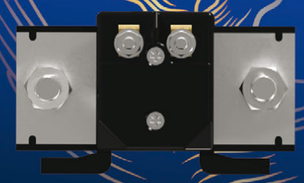
SEO400 - Normally Open
SEC400 - Normally Closed

SEO100

100 Amps

Single Pole
Single Throw
Normally Open





SEC100

100 Amps

Single Pole
Single Throw
Normally Closed

SE100

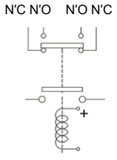
SEO100 Coil Driver

Description	Watts	Suffix
Standard - operates as conventional CO coil	5 - 7W	C
Intermittent	10 - 14W	I
Magnetic Latching[1]	10 - 14W	M
Dual Coil[1]	Starting: up to 100W Holding: 3W	D

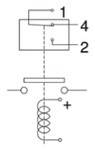
[1] *Coil Polarity Markings must be Observed*

SEO100 Connection Diagrams

SEO100A — AUXILIARY CONTACT (N'C N'O N'O N'C)

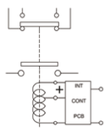


SEO100C — AUXILIARY CONTACT

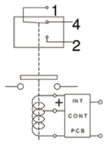


Conventional or Magnetic Latching

AUXILIARY CONTACT (N'C N'O N'O N'C)



AUXILIARY CONTACT



Dual Coil

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

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

SEO100 & SEC100 Technical Data

Continuous Current Rating (I^2th)	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.
mV Drop	30mV at 100A
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[1]	35ms
Contact Bounce	3ms typical
Insulation Voltage (Dielectric Strength)	1000V A.C.
Mechanical Life	>1,000,000 operations
Electrical Life[2] (100A at 60V)	>100,000 operations
Salt Spray Test	48 Hours
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

[1] *Coil Polarity Markings must be Observed*

[2] *For further advice, please contact Albright Technical at technical@albrightinternational.com*

Note: Operational characteristics are with new contacts

SEO100 & SEC100 Available Coil Voltages

12V	24V	30V	36V	48V	60V	72V	120V

Further Options Available

SEO100 & SEC100 Part Numbering

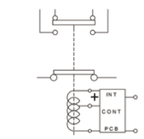
SEO100A-60_SF

- Bracket
- Coil Suppression Fitted (optional)
- Coil Driver[1]
- Rated Coil Voltage
- Auxiliary (Optional)
- Rated Current
- Configuration
- Type

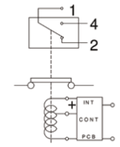
[1] Suffix will depend on coil driver option chosen (C,I,M or D)

SEC100 Connection Diagram

SEC100A — AUXILIARY CONTACT (N'O N'C N'C N'O)



SEC100C — AUXILIARY CONTACT



SE100A

SEC100 Coil Driver

Description	Watts	Suffix
Dual Coil[1]	Starting: up to 100W Holding: 3W	D

[1] *Coil Polarity Markings must be Observed*

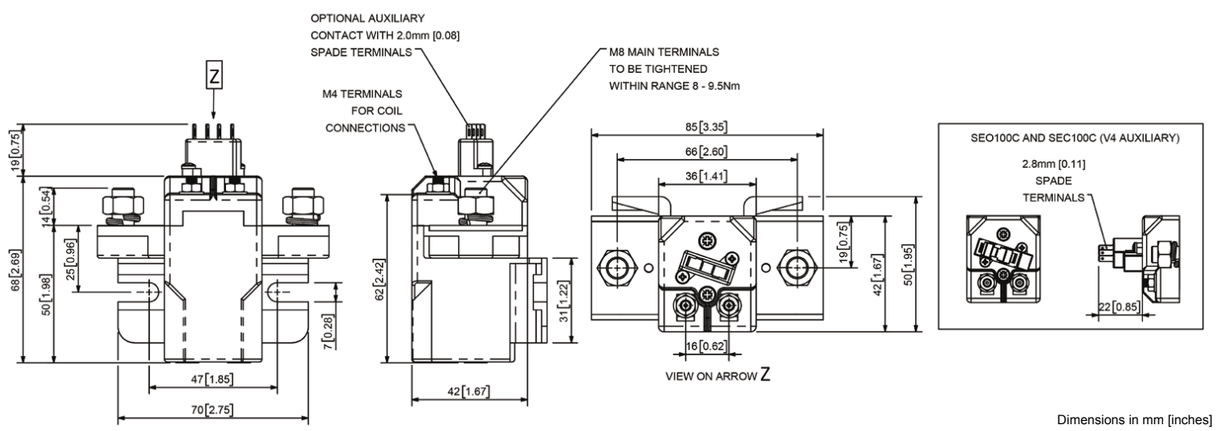
SEO100 & SEC100 Options

SEO100 & SEC100 Options	Note	Suffix
Configuration	Normally Open	O
	Normally Closed	C
Auxiliary	Form Z	A
	Form C (V4)	C
Coil Suppression[1]	Diode or PCB (Dual Coil)	S
Brackets	Please refer to Drawing for Options	F1

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.

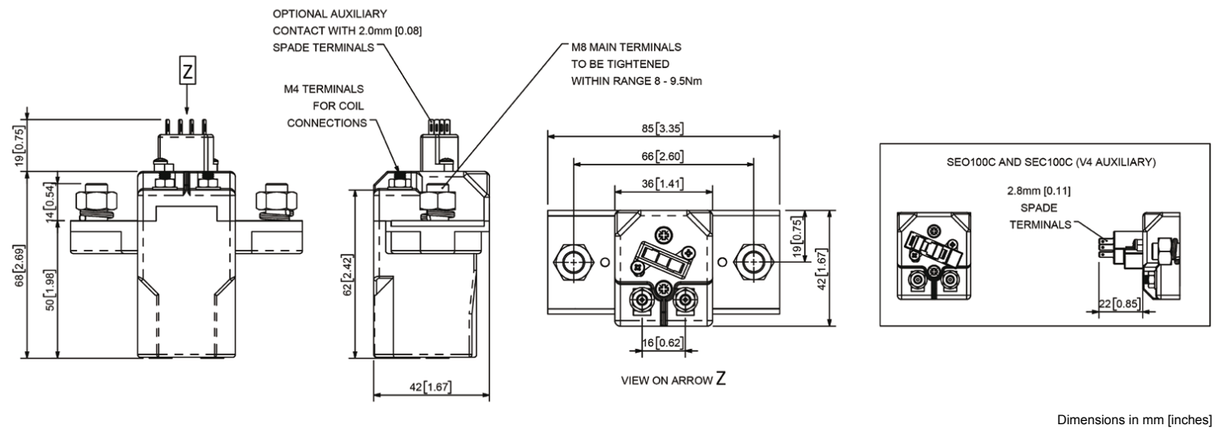
[1] *Coil Polarity markings must be observed*

SEO100 and SEC100 Outline Drawing (With Brackets)



Dimensions in mm [inches]

SEO100 and SEC100 Outline Drawing (Without Brackets)



Dimensions in mm [inches]

SEO200

200 Amps

Single Pole
Single Throw
Normally Open

SEC200

200 Amps

Single Pole
Single Throw
Normally Closed

SE200

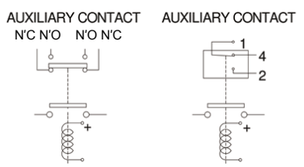
SEO200 Coil Driver

Description	Watts	Suffix
Standard - operates as conventional CO coil	7 - 13W	C
Intermittent	15 - 20W	I
Magnetic Latching[1]	15 - 20W	M
Dual Coil[1]	Starting: up to 200W	D
	Holding: 5W	

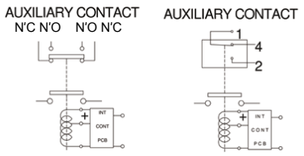
[1] *Coil Polarity Markings must be Observed*

Connection Diagram

SEO200A SEO200C



Conventional or Magnetic Latching



Dual Coil

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

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

SEO200 & SEC200 Technical Data

Continuous Current Rating (¼th)	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.
mV Drop	30mV at 100A
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[1]	35ms
Contact Bounce	3ms typical
Insulation Voltage (Dielectric Strength)	1000V A.C.
Mechanical Life	>1,000,000 operations
Electrical Life[2] (200A at 60V)	>100,000 operations
Salt Spray Test	48 Hours
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

[1] *Coil Polarity Markings must be Observed*

[2] *For further advice, please contact Albright Technical at technical@albrightinternational.com*

Note: Operational characteristics are with new contacts

SEO200 & SEC200 Available Coil Voltages

12V	24V	30V	36V	48V	60V	72V	120V

Further Options Available

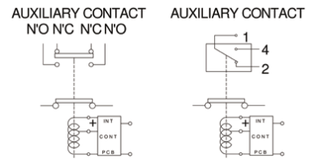
SEO200 & SEC200 Part Numbering

SEO200A-60_SF

- Bracket
- Coil Suppression Fitted (optional)
- Coil Driver[1]
- Rated Coil Voltage
- Auxiliary (Optional)
- Rated Current
- Configuration
- Type

[1] Suffix will depend on coil driver option chosen (C,I,M or D)

Connection Diagram



SE200A

SEC200 Coil Driver

Description	Watts	Suffix
Dual Coil[1]	Starting: up to 200W	D
	Holding: 5W	

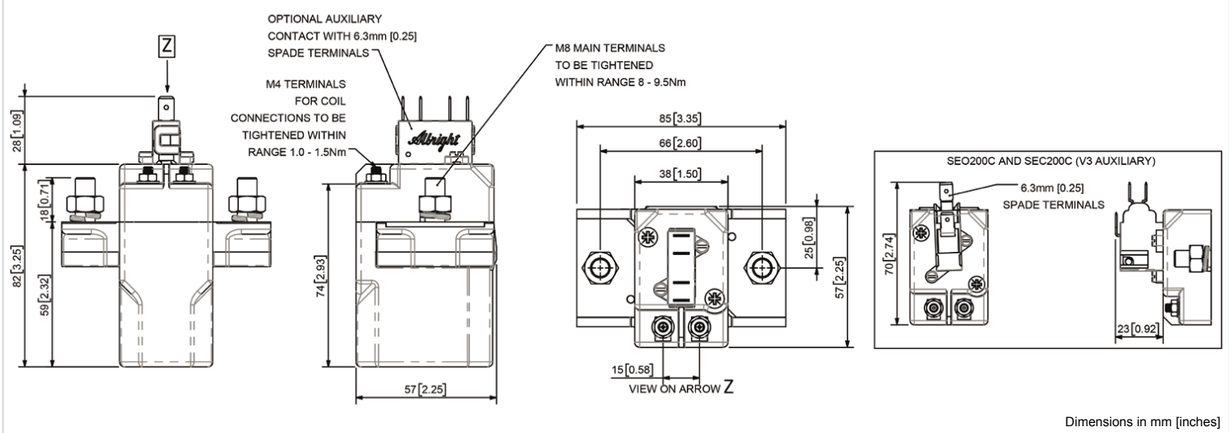
[1] *Coil Polarity Markings must be Observed*

SEO200 & SEC200 Options	Note	Suffix
Configuration	Normally Open	O
	Normally Closed	C
Auxiliary	Form Z	A
	Form C (V3)	C
Coil Suppression[1]	Diode or PCB (Dual Coil)	S
Brackets	Please refer to Drawing for Options	

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.

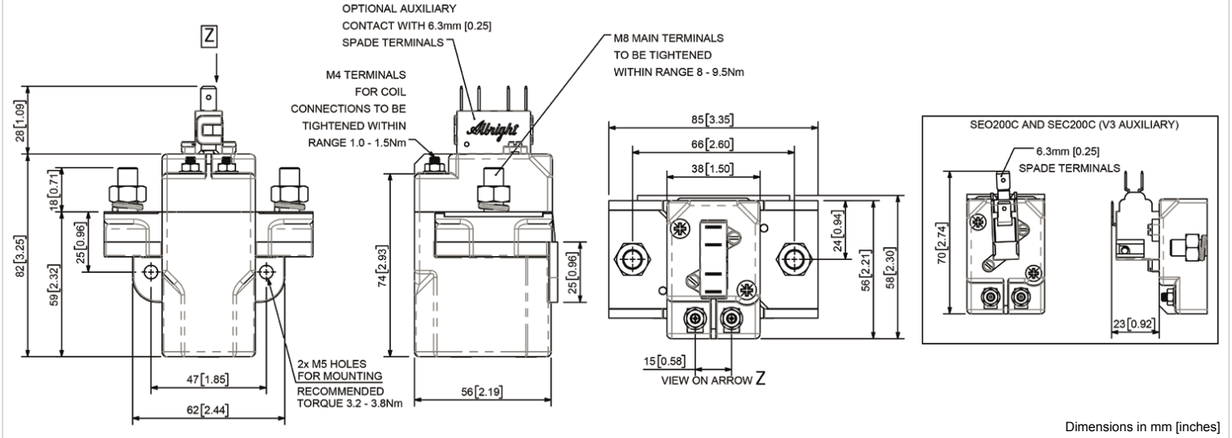
[1] *Coil Polarity markings must be observed*

SEO200 and SEC200 Outline Drawing (With Brackets)



Dimensions in mm [inches]

SEO200 and SEC200 Outline Drawing (Without Brackets)



Dimensions in mm [inches]

SEO400

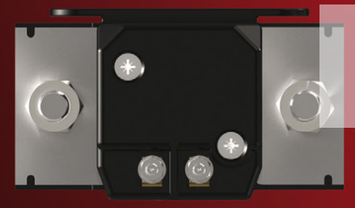
400 Amps

Single Pole
Single Throw
Normally Open

SEC400

400 Amps

Single Pole
Single Throw
Normally Closed

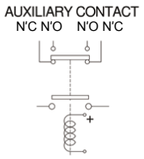


SE400

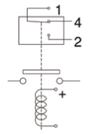
Connection Diagram

SEO400A SEO400C

AUXILIARY CONTACT
N'C N'O N'O N'C

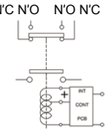


AUXILIARY CONTACT

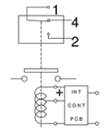


Conventional or Magnetic Latching

AUXILIARY CONTACT
N'C N'O N'O N'C



AUXILIARY CONTACT



Dual Coil

Note:
Coil Polarity markings must be observed for Magnetic Latching and Dual Coil options, 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 (I^2th)	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.
mV Drop	30mV at 100A
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[1]	35ms
Contact Bounce	3ms typical
Insulation Voltage (Dielectric Strength)	1000V A.C.
Mechanical Life	>1,000,000 operations
Electrical Life[2] (400A at 60V)	>100,000 operations
Salt Spray Test	48 Hours
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

[1] *Coil Polarity Markings must be Observed*

[2] *For further advice, please contact Albright Technical at technical@albrightinternational.com*

Note: Operational characteristics are with new contacts

SEO400 & SEC400 Available Coil Voltages

12V	24V	30V	36V	48V	60V	72V	120V

Further Options Available

SEO400 & SEC400 Part Numbering

SEO400A-60_SF

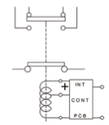
- Bracket
- Coil Suppression Fitted (optional)
- Coil Driver[1]
- Rated Coil Voltage
- Auxiliary (Optional)
- Rated Current
- Configuration
- Type

[1] Suffix will depend on coil driver option chosen (C,I,M or D)

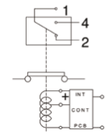
Connection Diagram

SEC400A SEC400C

AUXILIARY CONTACT
N'O N'C N'C N'O



AUXILIARY CONTACT



SE400A

SEO400 Coil Driver

Description	Watts	Suffix
Standard - operates as conventional CO coil	10 - 15W	C
Intermittent	30 - 40W	I
Magnetic Latching[1]	30 - 40W	M
Dual Coil[1]	Starting: up to 330W	D
	Holding: 6W	

[1] *Coil Polarity Markings must be Observed*

SEC400 Coil Driver

Description	Watts	Suffix
Dual Coil[1]	Starting: up to 330W	D
	Holding: 6W	

[1] *Coil Polarity Markings must be Observed*

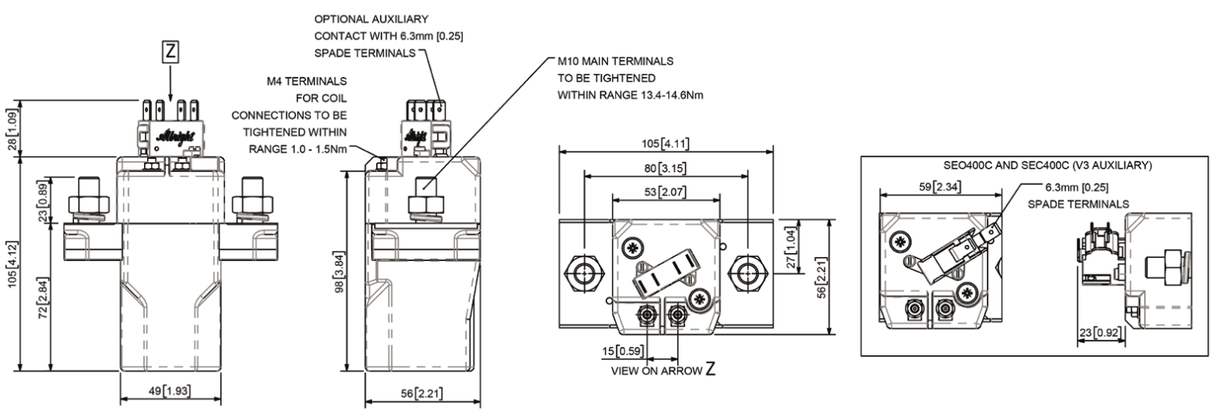
SEO400 & SEC400 Options

SEO400 & SEC400 Options	Note	Suffix
Configuration	Normally Open	O
	Normally Closed	C
Auxiliary	Form Z	A
	Form C (V3)	C
Coil Suppression[1]	Diode or PCB (Dual Coil)	S
Brackets	Please refer to Drawing for Options	

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.

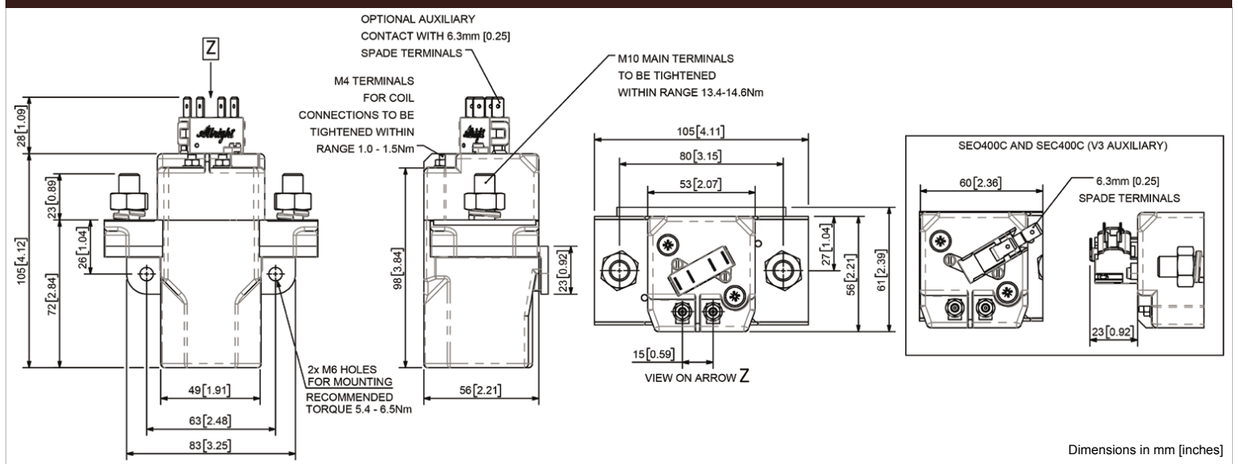
[1] *Coil Polarity markings must be observed*

SEO400 and SEC400 Outline Drawing (With Brackets)



Dimensions in mm [inches]

SEO400 and SEC400 Outline Drawing (Without Brackets)



Dimensions in mm [inches]

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
- Albright reserve the right to change data without prior notice

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