



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

**SEC100** 100 Amps

Single Pole Single Throw Normally Closed



SEO100 Coil Driver		
Description	Watts	s
Standard - operates as conventional CO coil	5 - 7W	
Intermittent	10 - 14W	

10 - 14W

Starting: Up to 120W

Holding: Up to 4W

Magnetic Latching<sup>1</sup>

С

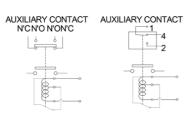
# **SEO100 Connection Diagrams**

Conventional or Magnetic Latching

SEO100A SEO100C

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

Dual Coil



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

Continuous Current Rating (Ith)	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	
10 " 5 1 " 14 11 11	

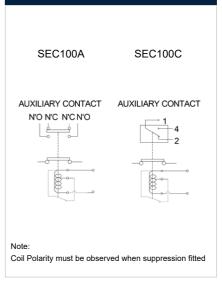
<sup>1</sup> Coil Polarity Markings must be Observed

technical@albrightinternational.com

<sup>2</sup> For further advice, please contact Albright Technical at

SEO100 & SEC100 Technical Data

### SEO100 & SEC100 Available Coil Voltages 24V 30V 36V 48V 60V Further Options Available SEO100 & SEC100 Part Numbering SEO100A-60 SF Coil Suppression Fitted (optional) Coil Driver<sup>1</sup> Rated Coil Voltage Auxiliary (Optional) Rated Current Configuration Type <sup>1</sup> Suffix will depend on coil driver option chosen (C,I,M or D)



**SEC100 Connection Diagram** 



			Auxilia
SEC100 Options	Note	Suffix	
n	Normally Open	0	
	Normally Closed	С	
	Form Z	Α	
	Form C (V4)	С	
ssion <sup>1</sup>	Diode	S	
	Please refer to Drawing for Options	F	
Diating is are ideal as standard	but one he removed at the entire of the event	omer Places consult our	D <sub>4</sub>

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

SEO100 & Configuration

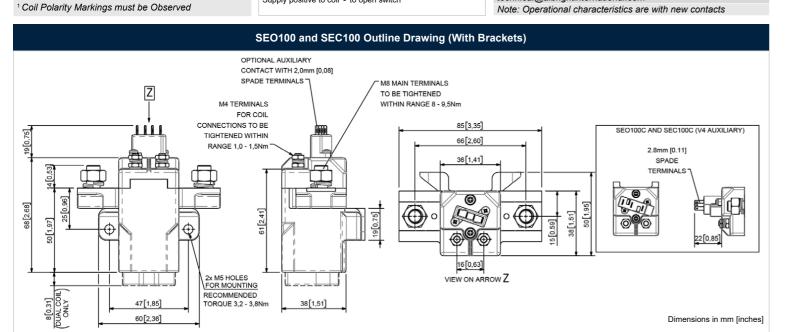
Auxiliary

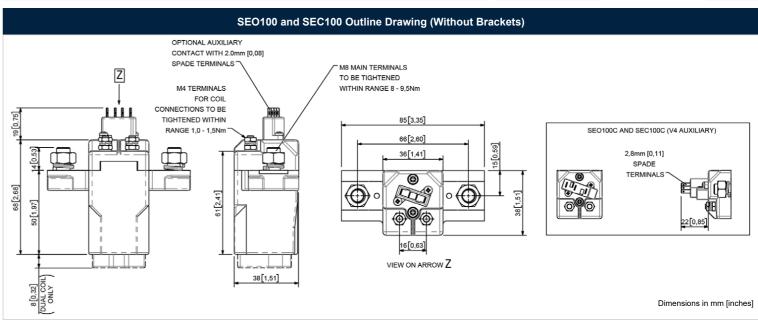
Brackets

Coil Suppress

TYPE AN ORIO			
	E100A		
Auxiliary Contact			
Auxiliary Thermal Current Ratin	ng	5A	
<b>Auxiliary Contact Switching</b>	Capabilities	(Resistive Load):	
SEO/SEC100C	SE	O/SEC100A	
5A at 24V D.C.			
1A at 60V D.C.			
0.5A at 120V D.C.			
0.25A at 240V D.C.			

SEC100 Coil Driver		
Description	Watts	Suffix
Dual Coil	Starting: Up to 120W Holding: Up to 4W	D









*SEC*200

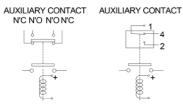
SEO200 Coil Driver		
Description	Watts	Suffix
Standard - operates as conventional CO coil	7 - 13W	С
Intermittent	15 - 20W	1
Magnetic Latching <sup>1</sup>	15 - 20W	М
Dual Coil	Starting: Up to 165W	D
Dual Coll	Holding: Up to 7W	Ъ
<sup>1</sup> Coil Polarity Markings must be Observed		

### **Connection Diagram**

Conventional or Magnetic Latching

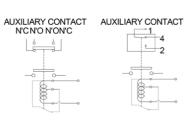
SEO200A





SEO200C

**Dual Coil** 



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

SEO200 & SEC200 Tec	hnical Data
Continuous Current Rating (Ith)	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		

30g acceleration; 18mS; half Shock sinusoidal wave form in accordance with IEC60068-2-27 10-500Hz frequency; 5g acceleration; in 3 axes in Vibration accordance with IEC60068-2-6 490gms Weight

IP40

Note: Figures are at 20°C

IP Rating

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

<sup>2</sup> For further advice, please contact Albright Technical at technical@albrightinternational.com Note: Operational characteristics are with new contacts

24V	30V	36V	48V	60V
Further Option	ons Available	•		
-/1	0.0			
SEO200 & SEC200 Part Numbering				
05000				
SEO200	A-60_SF T TTTT			
		Bracke	-	
	-		uppression Fitt	ed (optional)
		Coil D	river <sup>1</sup>	

Rated Coil Voltage Auxiliary (Optional) Rated Current

Configuration

SEO200 & SEC200 Available Coil Voltages

		o o mgaration
		Туре
¹ Suff	ix will depend on coil driver opt	tion chosen (C,I,M or D)

# **Connection Diagram** SEC200A SEC200C AUXILIARY CONTACT AUXILIARY CONTACT N'O N'C N'C N'O Coil Polarity must be observed when suppression fitted

SEO200 & SEC200 Options	Note	Suffix
Configuration	Normally Open	0
	Normally Closed	C
Auxiliary	Form Z	A
	Form C (V3)	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.

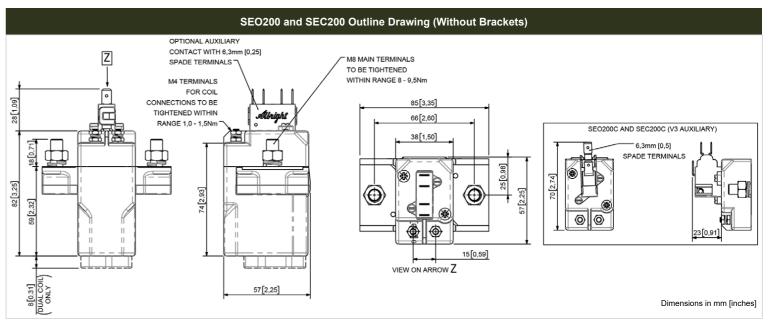
<sup>1</sup> Coil Polarity markings must be observed



Auxiliary Thermal Current Rating		5A	
Auxiliary Contact Switching Capabilities (Resistive Load):			
SEO/SEC200C SE		O/SEC200A	
5A at 24V D.C.			
2A at 48V D.C.			
0.5A at 240V D.C.			
SEC200 Coil Driver			

SEC200 Coil Driver		
Description	Watts	Suffix
Dual Coil	Starting: Up to 165W	D
	Holding: Up to 7W	

### SEO200 and SEC200 Outline Drawing (With Brackets) OPTIONAL AUXILIARY CONTACT WITH 6,3mm [0,25] M8 MAIN TERMINALS SPADE TERMINALS 7 TO BE TIGHTENED WITHIN RANGE 8 - 9.5Nm M4 TERMINALS FOR COIL CONNECTIONS TO BE 85[3,35] SEO200C AND SEC200C (V3 AUXILIARY) RANGE 1,0 - 1,5Nm 66[2,60] 6,3mm [0,25] 38[1,50] 0 0 2x M5 HOLES FOR MOUNTING 15[0,59] RECOMMENDED TORQUE 3,2 - 3,8Nm VIEW ON ARROW Z56[2,19] 47[1,85] 62[2,44] Dimensions in mm [inches]







*SEC*400 400 Amps

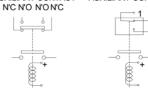
Single Pole Single Throw Normally Closed



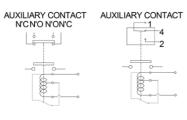
SEO400 Coil Driver		
Description	Watts	Suffix
Standard - operates as conventional CO coil	10 - 15W	С
Intermittent	30 - 40W	1
Magnetic Latching <sup>1</sup>	30 - 40W	М
Dual Coil	Starting: Up to 220W	D
	Holding: Up to 8.5W	D
<sup>1</sup> Coil Polarity Markings must be Observed		

## **Connection Diagram** Conventional or Magnetic Latching SEO400A SEO400C

AUXILIARY CONTACT AUXILIARY CONTACT



Dual Coil



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 (Ith)	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 Ob	served
<sup>2</sup> For further advice, please contact technical@albrightinternational.con	
<u> </u>	

### SEO400 & SEC400 Available Coil Voltages 24V 30V 36V 48V 60V Further Options Available SEO400 & SEC400 Part Numbering SEO400A-60 SF Bracket Coil Suppression Fitted (optional) Coil Driver<sup>1</sup> Rated Coil Voltage Auxiliary (Optional) Rated Current Configuration Type <sup>1</sup> Suffix will depend on coil driver option chosen (C,I,M or D)

Technical Department for further advice.

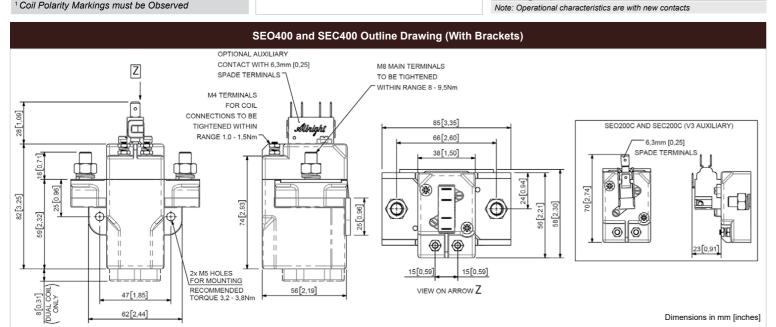
<sup>1</sup> Coil Polarity markings must be observed

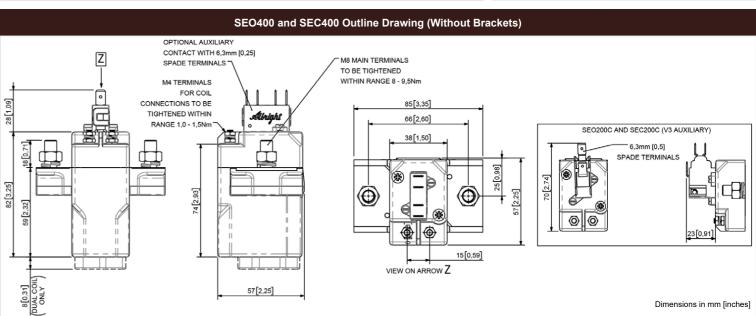
Connectio	n Diagram
SEC400A	SEC400C
AUXILIARY CONTACT NO N'C N'C N'O	AUXILIARY CONTACT
Note: Coil Polarity must be obser	ved when suppression fitte

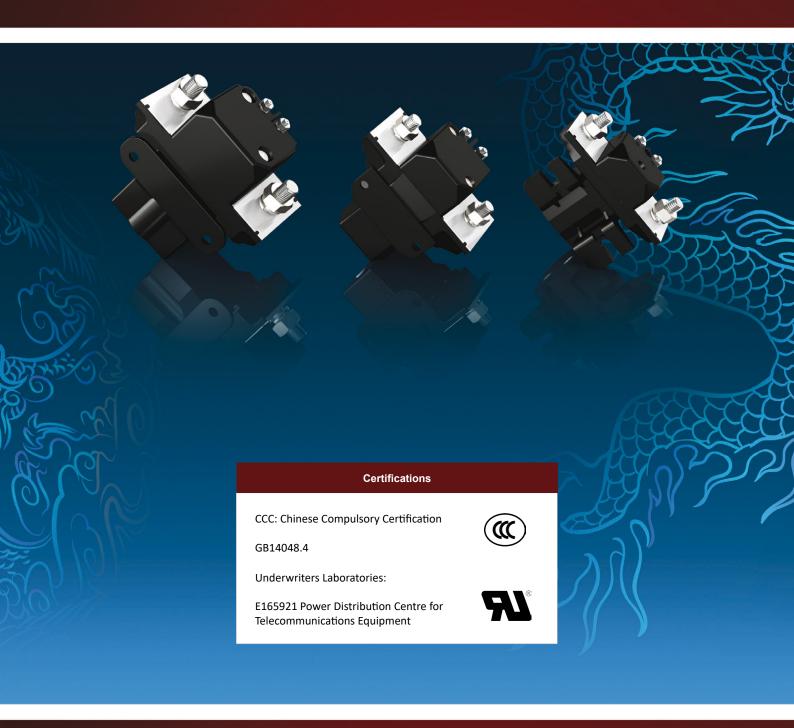
Suffix will depend on coil driver option chos	en (C,I,M or D)	e observed when suppression litted	
SEO400 & SEC400 Options	Note	Suffix	Auxilia Auxil
Configuration	Normally Open	0	
	Normally Closed	С	
Auxiliary	Form Z	Α	
	Form C (V3)	С	
Coil Suppression <sup>1</sup>	Diode	S	
Brackets	Please refer to Drawing for Options	F	
Note: Silver Plating is provided as stand	lard, but can be removed at the option of the	customer. Please consult our	Desc

Auxiliary	/ Contact	
Auxiliary Thermal Current Rating		5A
Auxiliary Contact Switching (	Capabilities	(Resistive Load):
SEO/SEC400C	SEO/SEC400A	
5A at 2	4V D.C.	
2A at 4	8V D.C.	
0.5A at 2	240V D.C.	
SEC400.0	Coil Driver	

SEC400 Coil Driver		
Description	Watts	Suffix
Dual Coil	Starting: Up to 220W	D
	Holding: Up to 8.5W	D







### 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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