

Features

HIGH CURRENT CARRY AND HIGH VOLTAGE

Inert gas filled arc chamber suitable for high voltage switching

COMPACT STRUCTURE, LOW NOISE

Small, low-profile designs with low noise while carrying or switching loads

COIL ECONOMIZER

Economized coils for low power consumption

SAFE FOR EXPLOSIVE ENVIRONMENTS

No arc leakage due to a hermetically sealed design

HIGH RELIABILITY DESIGN

Hermetic sealing creates a stable environment for high voltage switching

NO SPECIFIC MOUNTING ARRANGEMENT

Mountable in any orientation without reduction of performance

VARIOUS APPLICATIONS

Battery Disconnect, EV Charging, Energy Storage Systems, Photo Voltaic, Power Control, Circuit protection and much more

-Low profile chassis mount power terminals

Sealing Type: Ceramic



Certification Information

1. Meet RoHS (2011/65/EU)
2. CE certified
3. UL pending

Nomenclature

AGX14

B

A

B

Series code:
 "AGX14" = AGX14

Coil Voltage Code:
 "B" = 12VDC
 "C" = 24VDC
 "E" = 48VDC

Coil Termination
 A=Flying leads38cm(15in)
 B=Flying leads61cm(24in)
 C=Flying leads122cm(48in)

Auxiliary Contact:
 Blank=None
 B=SPST, Normally Open
 C=SPST, Normally Closed

Product Data Sheet

MAIN CONTACT		
Contact Arrangement	1 Form X (SPST-NO)	
Rated Operating Voltage	800 VDC	
Rated Current	350 A	
Contact resistance	0.4mohms	
Max Short Circuit Current	2000A@320VDC	
Dielectric Withstanding Voltage (initial)	Between Open Contacts	4000Vms,1min, <1mA
	Between Contacts to Coil	2200Vms,1min, <1mA
Insulation Resistance (Initial)	Terminal to Terminal	New: 100M Ω
	Terminals to Coil	End: 50M Ω

AUX CONTACT	
Aux. Contact Arrangement	1 Form A
Aux. Contact Current Max.	2A@30VDC / 3A@125VAC
Aux Contact Current Min	100mA@8V
Aux. Contact Resistance Max	0.417ohms@30VDC 0.150ohms@125VAC

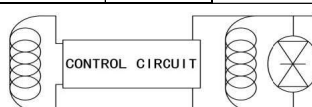
Performance Data

Carry Current Performance (with 85°C terminal Temperature rise):



OPERATE / RELEASE TIME	
Operate Time	20ms
Release Time	12ms

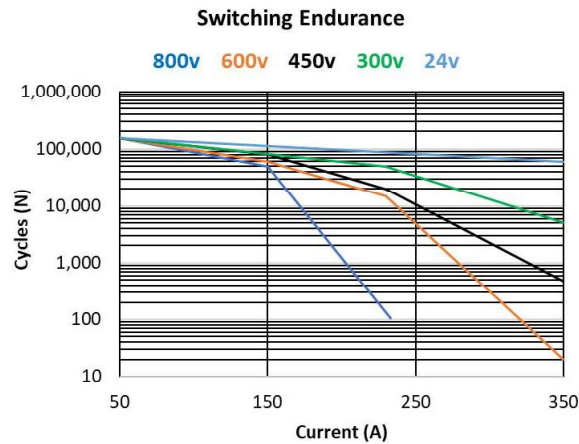
ENVIRONMENTAL DATA		
Shock	Functional	196m/s ² Sine half-wave pulse
	Destructive	490m/s ² Sine half-wave pulse
Operating Temperature	-55°C to +85°C	
Altitude	<4000m	
Weight	1.102Lb (500g)	

COIL DATA			
Nominal Voltage	12VDC	24VDC	48VDC
Coil Voltage (Max.)	16VDC	32VDC	64VDC
Max. Pick-up Voltage	8V	16V	40V
Drop-out Voltage (25°C)	0.5-4V	2-7.5V	4-15V
Pick-Up Current, Max (75 ms)	3.9A	1.6 A	0.97A
Coil current (25°C)	0.23A	0.097A	0.042A
Coil Power (25°C)	2.8W	2.3W	2.0W
Internal Coil Suppression			
Coil Back EMF	55V	55V	125V
Transients, Max(13ms)	±50V	±50V	±75V
Reverse Polarity	16V	32V	64V

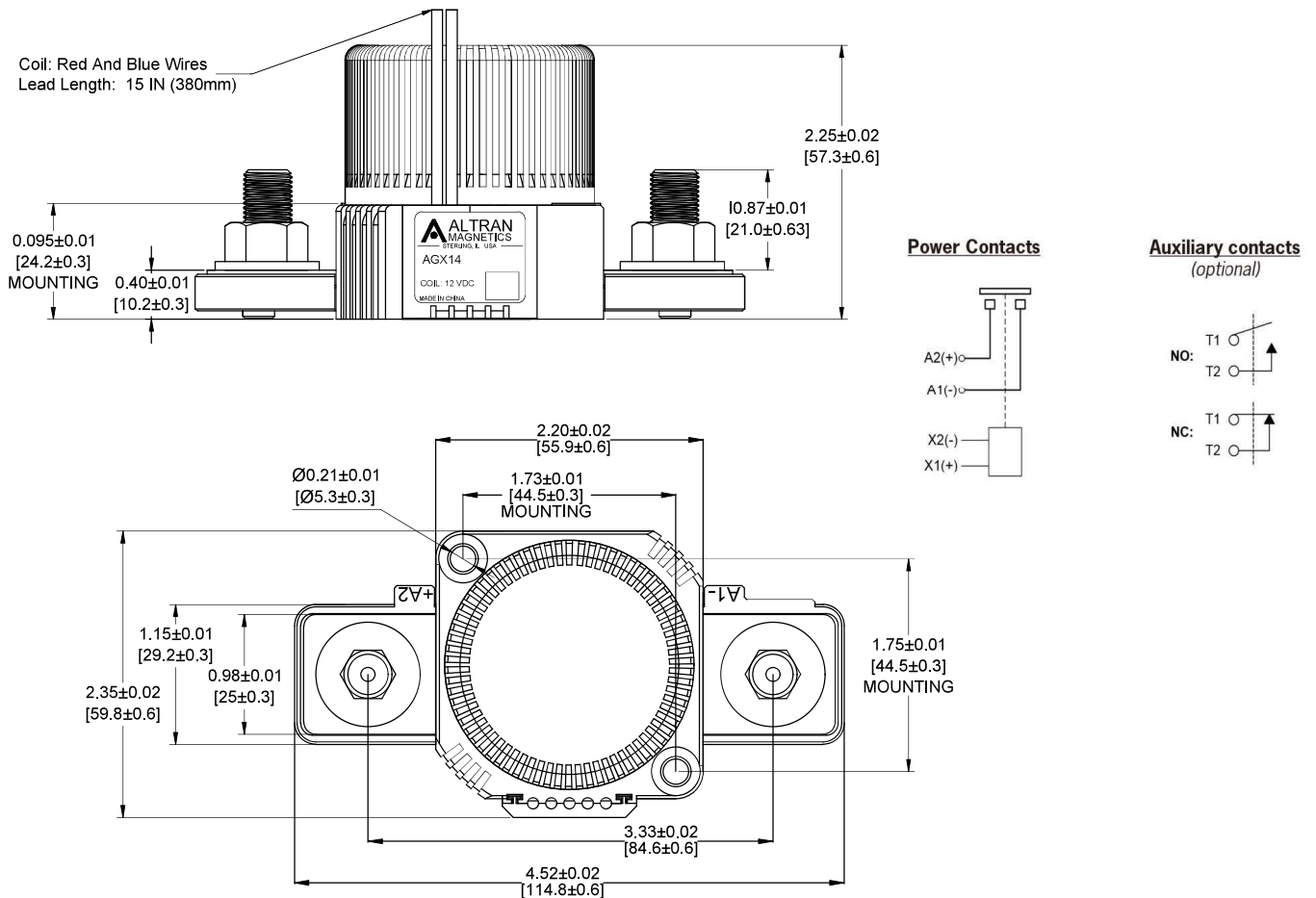
EXPECTED LIFE	
Mechanical Life	200,000 Cycles

Electrical Life

Estimated Make and Break Resistive Load Ratings



Outline Dimensions : inches (mm)



*Note: The wire gage is 20 AWG.

Application Notes

1. Contactors feature internal transorb for coil suppression. No external diodes should be added across the coil. The use of additional external coil suppression can slow the release time and invalidate the life cycle ratings, or can cause the contactor not to be able to interrupt the maximum current specified. If lower coil back EMF is required, please contact Altran for assistance.
2. Power switching lifecycles are based on current flow from A2(+) to A1(-). For best breaking performance, the contactor should be installed so that current flows from A2(+) to A1(-). There are cases where the contactor will interrupt power in the opposite direction but please contact Altran to confirm suitability. Direction of current flow is not relevant during make or when flowing on closed contacts. For bi-directional contactors, please contact Altran.
3. Applications with capacitors will require a pre-charge circuit.
4. Electrical life rating is based on resistive load with 27 μ H 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.
5. End of life is defined as when the dielectric, insulation resistance or contact resistance fails the specifications listed.
6. Supply power must be greater than coil power or it will reduce performance capability.
7. Please do not allow debris and oil to the main terminals; Make sure that the main terminals are in reliable contact with the load conductor, otherwise the temperature rise of the terminal/conductor connection may be too high due to the excessive contact resistance.
8. Do not use if dropped.
9. Avoid mounting the relay in strong magnetic fields (near a transformer or magnet) or close to an object that radiates heat.
10. Is impossible to determine all the performance parameter in each specific application, therefore, customers should choose the products matching them according to their own conditions of use. If in doubt, contact Altran, however, the customer will be responsible for validating that the products meet their application.
11. Altran reserves the right to make changes as needed. Customers should reconfirm the contents of the specification or ask for us to supply a new specification if necessary.

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Battery Disconnect, EV Charging, Energy Storage Systems, Photo Voltaic, Power Control, Circuit protection and much more

-Low profile chassis mount power terminals

-Integrated connector for coil and auxiliary contacts

Sealing Type: Ceramic



Certification Information

1. Meet RoHS (2011/65/EU)
2. CE certified
3. UL pending

Nomenclature

AGX16

B

E

B

Series code:
"AGX16" = AGX16

Coil Voltage Code:
"B" = 12VDC
"C" = 24VDC
"E" = 48VDC

Coil Termination
E = 8 Pin Deutsch Connector

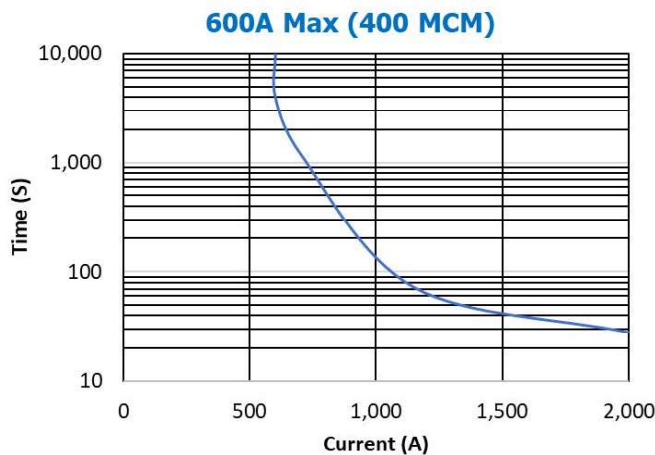
Auxiliary Contact
Blank = None
B = SPST, Normally Open
C = SPST, Normally Closed

Product Data Sheet

MAIN CONTACT		
Contact Arrangement	1 Form X (SPST-NO)	
Rated Operating Voltage	800 VDC	
Rated Current	600 A	
Contact resistance	0.3 Ω	
Max Short Circuit Current	2000A @320VDC	
Dielectric Withstanding Voltage (initial)	Between Open Contacts	4000Vms,1min, <1mA
	Between Contacts to Coil	2200Vms,1min, <1mA
Insulation Resistance (Initial)	Terminal to Terminal	New: 100MΩ
	Terminals to Coil	End: 50MΩ

AUX CONTACT	
Aux. Contact Arrangement	1 Form A
Aux. Contact Current Max.	2A@30VDC / 3A@125VAC
Aux Contact Current Min	100mA@8V
Aux. Contact Resistance Max	0.417ohms@30VDC 0.150ohms@125VAC

Performance Data
Carry Current Performance @85°C Ambient



OPERATE / RELEASE TIME	
Operate Time	20ms
Release Time	7ms

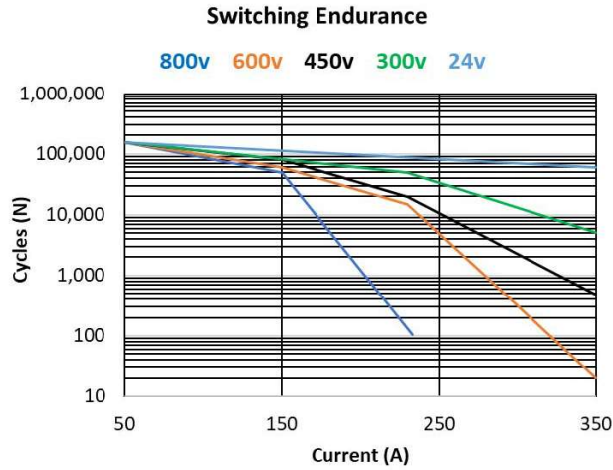
ENVIRONMENTAL DATA		
Shock	Functional	196m/s ² Sine half-wave pulse
	Destructive	490m/s ² Sine half-wave pulse
Operating Temperature	-55°Cto+85°C	
Altitude	<4000m	
Weight	1.984Lb (900g)	

COIL DATA			
Nominal Voltage	12VDC	24VDC	48VDC
Coil Voltage (Max.)	16VDC	32VDC	64VDC
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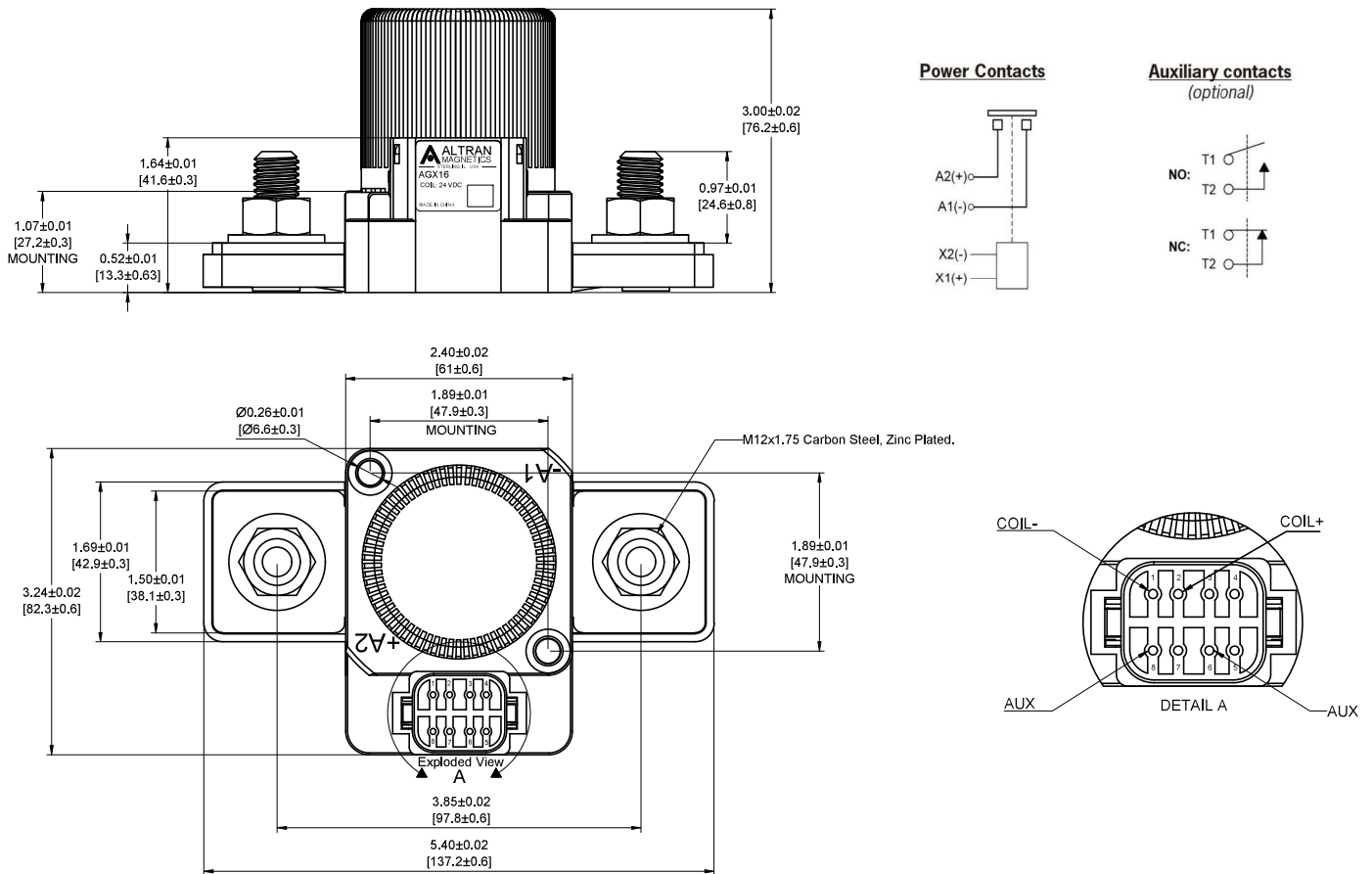
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Electrical Life

Estimated Make and Break Resistive Load Ratings



Outline Dimensions (in) and Pin Schematic



***Note: 8 Pin Deutsch Connector**

Application Notes

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