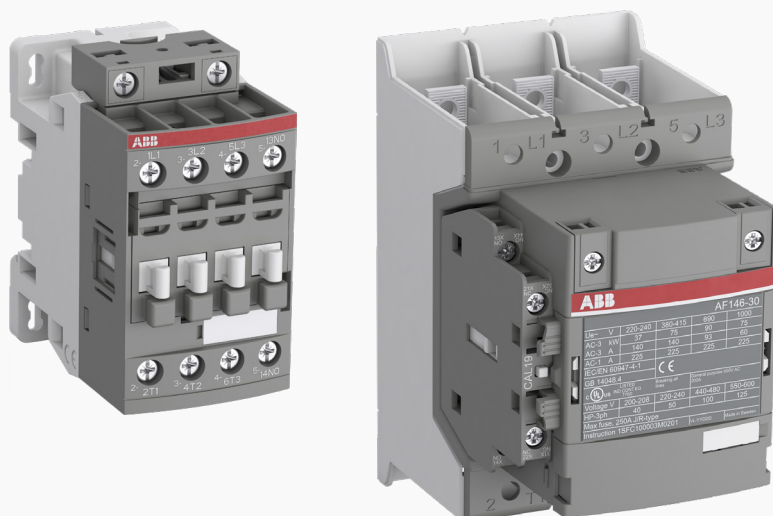


SEMI F47

AF09Z.. AF38Z, AF40...AF750 contactors and NFZ contactor relays



AF09Z ... AF38Z and AF40 ... AF750 contactors, NFZ contactor relays increase the voltage sag immunity and the uptime of semiconductor processing equipment without use of specific accessory.

Definitions according to SEMI F47 (1)

SEMI F47 defines the voltage sag immunity required for semiconductor processing, metrology and automated test equipment, and on subsystems and components which are used in the construction of semiconductor processing equipment including but not limited to:

- Power supplies
- Generators
- Robots and factory interface
- Chillers, pumps, blowers
- AC operated contactors and contactor relays
- ...

Voltage sag immunity

The ability of equipment to withstand momentary electrical power interruptions or sags.

Voltage sag

An rms reduction in the AC voltage, at the power frequency, for durations from a half cycle to a few seconds. The IEC terminology for this phenomenon is voltage dip.

Characteristics

- AF09Z...AF38Z, AF40...AF750 contactors and NFZ contactor relays are compliant to SEMI F47 (1) and withstand voltage sags for :
 - required voltage sag immunity
 - recommended voltage sag immunity (≤ 20 ms)
- Conditions of use:
 - rated control circuit voltages between 24 V to 500 V AC 50 / 60 Hz (see selection table)
 - air ambient temperature $-20^{\circ}\text{C} \leq \theta \leq +60^{\circ}\text{C}$
 - 1-stack and factory-mounted 2-stack contactors (2 stack contactors as AF..-30-11-..., AF..-30-22-..)
 - 1-stack and 2-stack contactor relays
 - no additional accessories.

(1) AF09Z...AF38Z and AF40...AF370 are compliant with SEMI F47-0706, AF400...AF750 are compliant with SEMI F47-0200.

SEMI F47 selection table

Contactor or contactor relay	Rated control circuit voltages	Coil voltage code
AF09Z...38Z, NFZ	24 ... 60 V 50/60 Hz	21
	60 ... 130 V 50/60 Hz	22
	130 ... 250 V 50/60 Hz	23
AF40...AF96	24 ... 60 V 50/60 Hz	11
	60 ... 130 V 50/60 Hz	12
	130 ... 250 V 50/60 Hz	13
AF116...AF370	48 ... 130 V 50/60 Hz	12
	100 ... 250 V 50/60 Hz	13, 33
	250 ... 500 V 50/60 Hz	14, 34
AF400...AF750	48 ... 130 V 50/60 Hz	69
	100 ... 250 V 50/60 Hz	70

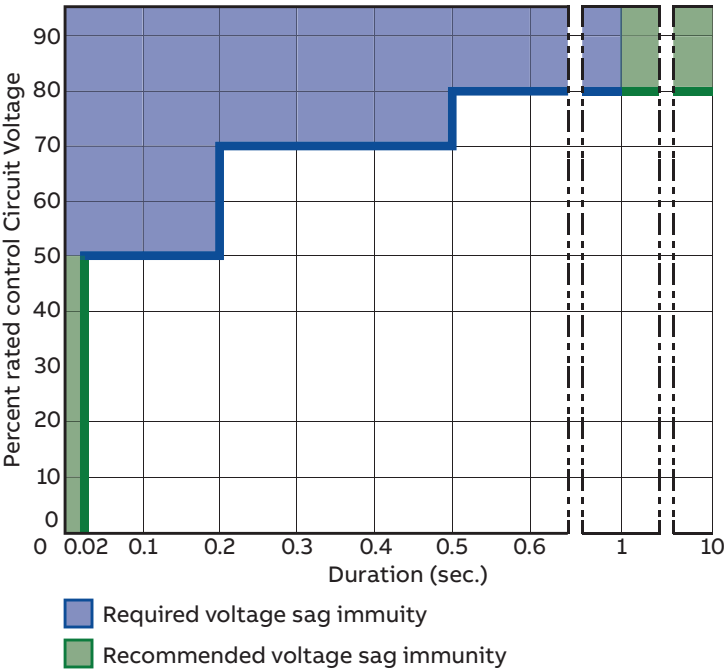


ABB France
Electrification Business
Low Voltage Products and Systems
2 rue d'Arsonval
F-69687 Chassieu cedex / France

ABB AB
Electrification Business
Low Voltage Products and Systems
Protection & Connection
SE-721 61 Västerås / Sweden

abb.com/contacts

We reserve the right to make technical changes or modify the contents of this document without prior notice. With regards to purchase orders, the agreed particulars shall prevail. ABB AG does not accept any responsibility whatsoever for potential errors or possible lack of information in this document.

We reserve all rights in this document and in the subject matter and illustrations contained therein. Any reproduction, disclosure to third parties or utilization of its contents – in whole or in parts – is forbidden without prior written consent of ABB AG.

Copyright© 2020 ABB - All rights reserved