

NEW!

PRODUCT INFORMATION

C310A/..., C310S/...

Bidirectional DC NO contactors
for 150 A, 300 A and 500 A



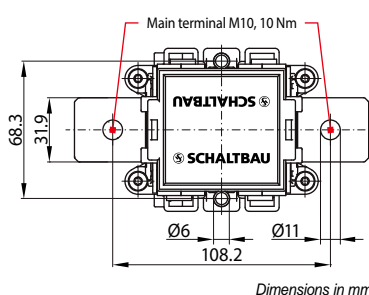
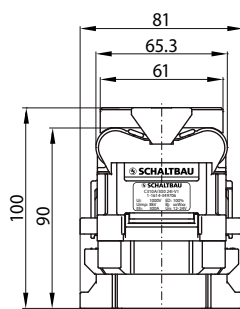
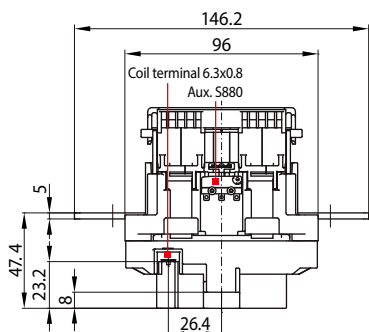
The C310 is a single pole bidirectional DC NO contactor. It was designed to ensure safe switching of high loads and to protect reliably in case of a system malfunction. The new bidirectional contactors are suitable for typical applications such as the DC end of inverters, combiner boxes of photovoltaic installations, battery storage systems and electric vehicles.

The key features and benefits of the C310 series are the compact design, double-break contacts, very efficient newly developed arc chamber as well as the high breaking capacity.

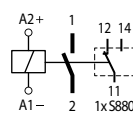
Features

- DC bidirectional with permanent magnetic blowout
- Conventional thermal current 150 A, 300 A or 500 A
- High making and breaking capacity
- High rated short-time withstand current
- High resistance to shock and vibration
- Compact and robust, low weight
- Low energy consumption:
 - standard magnetic drive – optimized thanks to electronic coil controller;
 - bistable magnetic drive – no power consumption in open/closed position

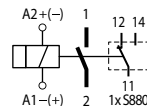
Dimension diagram C310A/300, circuit diagram



Standard magnetic drive



Bistable magnetic drive



Specifications

Series	.../150	.../300	.../500
Type of voltage	DC bidirectional, AC ($f \leq 60$ Hz)		
Main contacts, configuration	1 NO		
Nominal voltage U_e	PD2: C310A: 1,500 V / C310S: 60 V PD3: C310A: 1,000 V / C310S: 60 V		
Rated insulation voltage U_i	PD2: 1,500 V PD3: 1,000 V		
Rated impulse withstand voltage U_{imp}	8 kV		
Pollution degree	PD2, PD3		
Overvoltage category	OV3		
Conv. thermal current I_{th} @ $T_a = 40^\circ$ C	150 A	300 A	500 A
Rated short-time withstand current I_{cw}	3,000 A / 1 sec		
Rated short-circuit breaking capacity I_{cn} @ $L/R = 0.1$ ms, $U_e = 750$ V, $I_e = 500$ A	60 switching cycles		
Auxiliary contacts	1x SPDT, single-break, S880 series, AC-15: 230 VAC / 1.0 A; DC-13: 60 VDC / 0.5 A		
Coil control supply voltage U_c	Standard: 12 ... 24 V DC Bistable: 12 / 24 / 48 V DC		
Mounting orientation	horizontal, vertical exception: do not mount upside down		
Temperature range	-40° C ... $+85^\circ$ C		
Mechanical endurance	2 million op. cycles (standard magnetic drive) 100,000 op. cycles (latch magnetic drive)		