

Maintenance-Free. Reliable. Cost-Effective.
High DC switching made simple



DC contactors
in current range 300 A and 600 A



Powering Business Worldwide



Save time and costs with our DC-contactors

Efficient and compact

- With up to 150,000 operations, these units have a lifespan that is six times longer than that of comparable devices
- No maintenance costs, resulting in lower operating costs
- Lower switching contact wear as a result of extremely short arcing times
- Convenient to switch on and off: either conventionally or directly with a programmable logic controller (PLC)
- Compact frame size designed to save space
- Very short opening and closing times of main contacts

Reliable and flexible

- Wide control voltage range of 110V–250V AC, 110V–350V DC
- Globally certified: UL, CSA, CCC, GL, DNV
- Bi-directional operation (polarity insensitivity) ensures ease of use
- Wide temperature range of -40 °C to +70 °C

Ideal for a large variety of applications

- Rail traffic
- Marine & Offshore
- Energy storage
- Automotive charging infrastructure
- DC grids

Designed for industrial use

- Universal concept
- Fast and easy to install thanks to tried-and-true terminal types
- Based on Eaton's well-known contactor technology



Clever use of a proven technology

Thanks to the use of proven hybrid technology, the contacts in Eaton DC contactors have a long lifespan and low contact wear. Hybrid contactors feature two mechanical contacts – a extinguishing contact and a break contact – that are connected in series.

Moreover, they have an IGBT power semiconductor switch connected in parallel with the extinguishing contact. When one of these contactors is switched off, the first thing that happens is that the IGBT is switched on. After this, the extinguishing contact opens mechanically, commutating the current to the IGBT so that it can be interrupted by the power electronics. Finally, the break contact is opened in a de-energized state, achieving the required potential isolation.

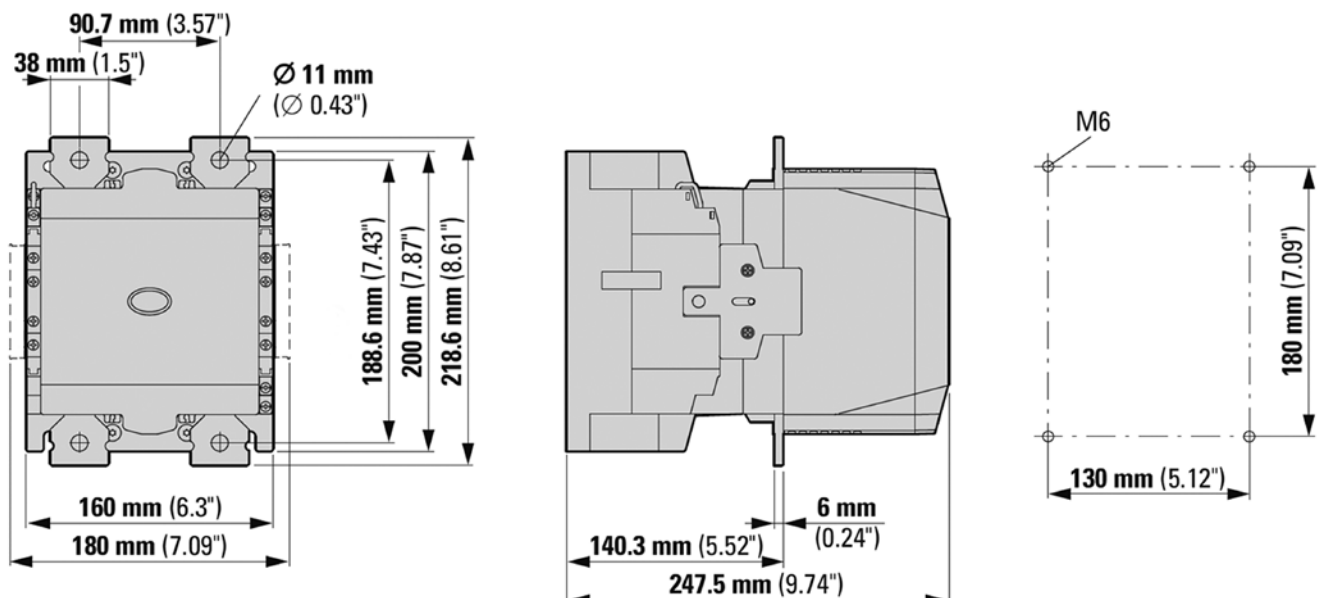
Together with this configuration, a wide-range coil for DC and AC voltages makes our DC contactors a maintenance-free and reliable part of any machine or system.

Ordering Information

Description	Part no.	Article no.
DILDC300/22(RDS250)	DC-1 contactor 300A/1000V	183314
DILDC400/22(RDS250)	DC-1 contactor 400A/1000V	186872
DILDC500/22(RDS250)	DC-1 contactor 500A/1000V	186873
DILDC600/22(RDS250)	DC-1 contactor 600A/1000V	183315

Technical Specifications

Model series	DIL DC300	DIL DC600
Rated thermal current I _{th}	300A	600A
Standards & Regulations	IEC/EN 60947-4-1 VDE0660, UL CSA, CCC, GL, DNV	
Voltage type	DC (bi-directional)	
Rated Voltage	1000V	
Actuating voltage	110V -30% to 250V AC +15% 110V -30% to 350V DC +15%	
Main contacts: number / type	2 normally open contacts (NO)	
Auxiliary contacts: number / type	2 normally open contacts (NO), 2 normally closed contacts (NC)	
Operating frequency	100/h	
Ambient air temperature	-40 °C to +70 °C	
Electrical lifespan	0.15 x 10 ⁶ switching operations	
Mechanical lifespan	1 x 10 ⁶ switching operations	
Dimensions [mm] (H/W/D)	200/160/247.5	
Weight [kg]	7.5	
Utilization Category	DC-1	



Eaton's mission is to improve the quality of life and the environment through the use of power management technologies and services. We provide sustainable solutions that help our customers effectively manage electrical, hydraulic, and mechanical power – more safely, more efficiently, and more reliably. Eaton's 2020 revenues were \$17.9 billion, and we sell products to customers in more than 175 countries. We have approximately 92,000 employees. For more information, visit [Eaton.com](https://www.eaton.com).



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