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





300 - 600 A DC contractors











## Save time and cost 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
- Low contact wear as a result of nearly arc-free switching
- 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 means fast response

#### Reliable and flexible

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

#### Ideal for a large variety of applications

- Solar power
- 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.

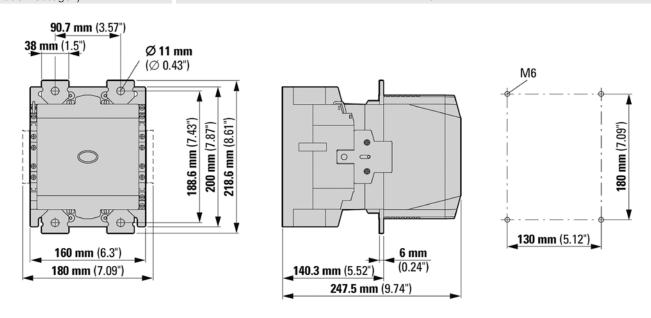
Together with this configuration, a wide-range AC/DC coil makes our DC contactors a maintenance-free and reliable part of any machine or system.

#### **Ordering Information**

Description	Catalog no.	Style no.
DC-1 contactor 300A/1000V	XTCE300DCM22A	MSAA183314
DC-1 contactor 400A/1000V	XTCE400DCM22A	MSAA186872
DC-1 contactor 500A/1000V	XTCE500DCM22A	MSAA186873
DC-1 contactor 600A/1000V	XTCE600DCM22A	MSAA183315

#### **Technical Specifications**

Model series	XTCE300DC	XTCE400DC	XTCE500DC	XTCE600DC
Rated thermal current Ith	300A	400 A	500 A	600A
Standards & Regulations	IEC/EN 60947-4-1 VDE0660, UL, CSA, CCC, GL, DNV			
Voltage type	DC (bi-directional)			
Rated Voltage	1000V			
Actuating coil 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 <sup>6</sup> switching operations			
Mechanical lifespan	1 x 10 <sup>6</sup> switching operations			
Dimensions [mm] (H/W/D)	200/160/247.5			
Weight [kg]	7.5			
Utilization Category	DC-1			



At Eaton, we're energized by the challenge of powering a world that demands more. With over 100 years experience in electrical power management, we have the expertise to see beyond today. From groundbreaking products to turnkey design and engineering services, critical industries around the globe count on Eaton.

We power businesses with reliable, efficient and safe electrical power management solutions. Combined with our personal service, support and bold thinking, we are answering tomorrow's needs today. Follow the charge with Eaton. Visit eaton.com/xtdc.



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