

XT IEC power control 580–2600A vacuum contactors



XT IEC control for wind power applications



Eaton's Electrical Sector is pleased to meet the needs of wind turbine and wind farm applications by offering **XT** IEC contactors up to 2600A. These high-amperage contactors can be used to control the power circuit in all standard wind power configurations such as fixed speed, doubly fed and permanent magnet types. The XTCE580N–XTCEC26R (580–2600A) contactors offer solutions up to 1000V, including:

- **Vacuum technology**
Efficient, safe and reliable switching at high amperage
- **Extended life**
Up to 1.3 million electrical operations (AC-1 at rated current)
- **Flexible and reliable control**
Low-power switching from a variety of sources
- **Compact design**
Small footprint allows for flexible packaging

Highly efficient switching

The benefits of vacuum technology arise from the contacts being sealed within a system of vacuum tubes. In this air-free chamber, arc extinction and current interruption are completed within a fraction of a cycle, minimizing contact burn and avoiding exhaust gases.

Extended life

No arcing in the vacuum tube minimizes contact burn, resulting in a significantly longer lifespan and lower maintenance costs than typical "air-break" contactors. The **XT** vacuum contactors also have an external suppressor between the main contacts to protect the motor winding and to keep your application running smoothly.

Flexible control scheme

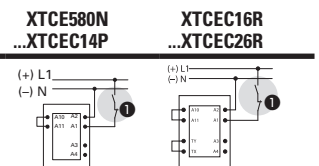
The **XT** contactors use an electronic coil interface design that allows for flexibility in switching and greater reliability. These high-amperage contactors can be switched conventionally with full power to the coil, directly from a PLC output, or from a low-power command device. Low pickup and sealing power generates less heat and reduces the investment in control power transformers.

Compact design

The three switching tubes and electromechanical drive system of the **XT** 580–2600A contactors are arranged in an extremely compact design. This allows for smaller switchgear dimensions, while switching higher currents—up to 2600A.

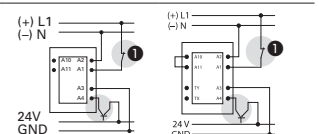
Conventional

A1/A2 are applied to voltage in the usual manner.



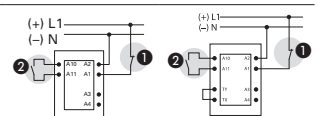
Direct from the PLC

24V output from the PLC can be connected directly to connections A3/A4



From low-consumption command devices

Command devices that can only be subject to minimal loads, such as circuit board relays, control circuit devices or position switches, can be connected directly to A10/A11



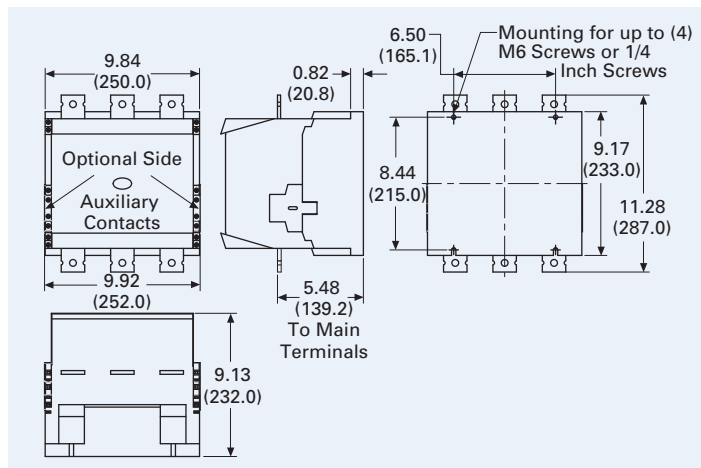
① For emergency-stop.

② Maximum cable capacitance 6 mF.

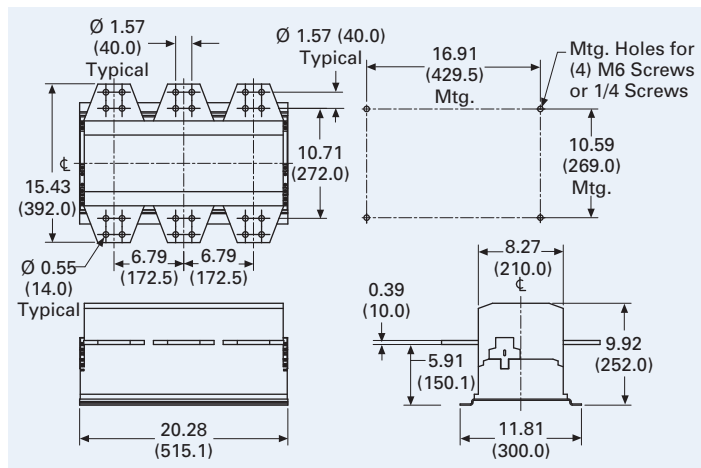
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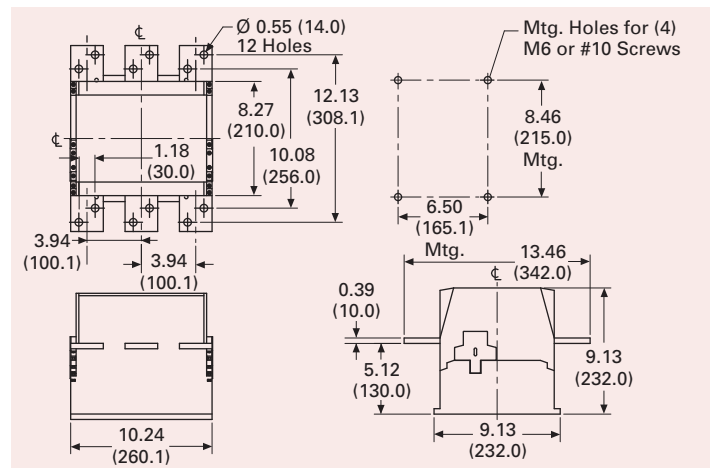
Type	XTCE580N	XTCE650N	XTCE750N	XTCE820N	XTCEC10N	XTCEC14P	XTCEC16R	XTCEC20R	XTCEC22R	XTCEC26R
Electrical Data										
I _e AC-1 at 40°C (A)	980	1041	1102	1225	1225	1714	2200	2450	2700	3185
I _e AC-1 at 60°C (A)	800	850	900	1000	1000	1400	1800	2000	2200	2600
I _e AC-3 / 690V (A)	580	650	750	820	1000	—	1600	—	—	—
Rated voltage U _e (V)	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Electrical life I _e AC-1 (operations)	1,300,000	1,100,000	1,000,000	800,000	800,000	500,000	250,000	250,000	250,000	250,000
Mechanical life I _e (operations)	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000
Magnet Systems										
Rated control voltage (Vac/Vdc)	48–500 –30%/+15%	48–500 –30%/+15%	48–500 –30%/+15%	48–500 –30%/+15%	110–250 –30%/+15%	220–250 –30%/+15%	220–250 –30%/+15%	220–250 –30%/+15%	220–250 –30%/+15%	220–250 –30%/+15%
Power consumption, pull-in (VA)	800	800	800	800	800	800	1600	1600	1600	1600
Power consumption, sealing (VA)	7.5	7.5	7.5	7.5	7.5	7.5	15	15	15	15



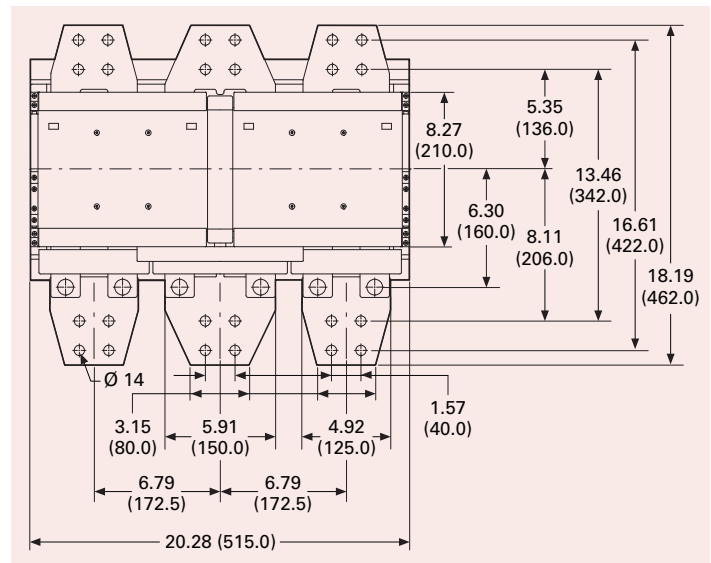
XTCE N-Frame Contactor



XTCE R-Frame Contactor



XTCE P-Frame Contactor



XTCEC26R Contactor

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