

Product Facts

Designed to be the smallest, lightest weight, lowest cost sealed contactor in the industry with its current rating (500+A carry, 2000A interrupt at 320VDC).

Built-in coil economizer - only 1.7W hold power @ 12VDC and it limits back EMF to 0V. Models requiring external economizer also available.

Optional auxiliary contact for easy monitoring of power contact position.

Hermetically sealed - intrinsically safe, operates in explosive/harsh environments with no oxidation or contamination of coils or contacts, including long periods of non-operation.

Performance Data

Parameter	Units	Value for ET200
Contact Arrangement, power contacts		1 Form A (SPST-NO-DM)
Rated Operating Voltage	VDC	12 - 320
Continuous (Carry) Current, Typical	A	500 @ 85°C, 400 mcm conductors <i>Consult Factory for required conductors for higher (500+ A) currents</i>
Make/Break Current at Various Voltages ^{1/} A		See next page
Break Current at 320VDC	A	2,000, 1 cycle ³
Contact Resistance, Typ. (@200A)	mohms	0.2
Load Life	Cycles	See next page
Mechanical Life	Cycles	1 million
Contact Arrangement, auxiliary contacts		1 Form A (SPST-NO)
Aux. Contact Current, Max.	A	2A @ 30VDC / 3A @ 125VAC
Aux. Contact Current, Min.	mA	100mA @ 8V
Aux. Contact Resistance, Max.	ohms	0.417 @ 30VDC / .150 @ 125VAC
Operate Time @ 25°C		
Close (includes bounce), Typ.	ms	15
Bounce (after close only), Max.	ms	7
Release (includes arcing), Max @ 2000A	ms	12
Dielectric Withstanding Voltage	Vrms	2,200 @ sea level (leakage <1mA)
Insulation Resistance @ 500VDC	megohms	100
Shock, 11ms 1/2 sine, peak, operating	G	20
Vibration, sine, 80-2000Hz., peak	G	20
Operating Ambient Temperature	°C	-40 to +85
Weight, Nominal	lb.(kg)	.95 (.43)

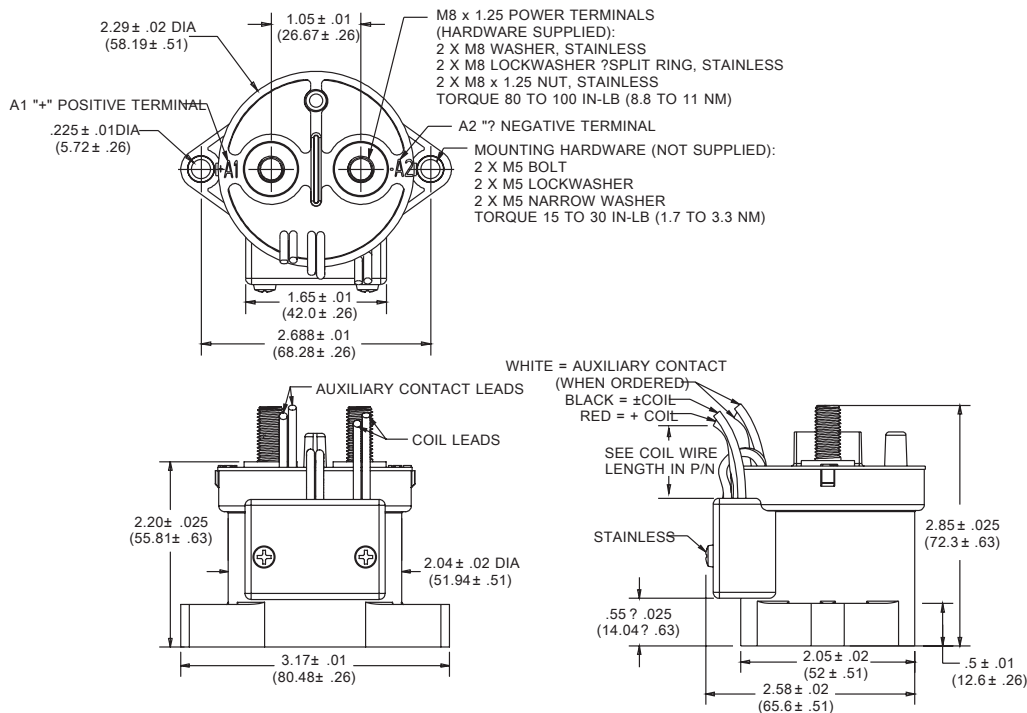
Coil Operating Voltage (valid over temperature range)

Voltage (will operate)	9-36VDC	36-72VDC
Voltage (Max.)	36VDC	72VDC
Pickup (close) Voltage Max.	9VDC	32VDC
Hold Voltage (Min.)	7.5VDC	22VDC
Dropout (open) Voltage (Min.)	6VDC	18VDC
Inrush Current (Max.)	3.8A	1.3A
Holding Current (Avg.)	0.13A@12V, 0.07A@24V	0.03A@48V
Inrush Time (Max.)	130ms	130ms 130ms

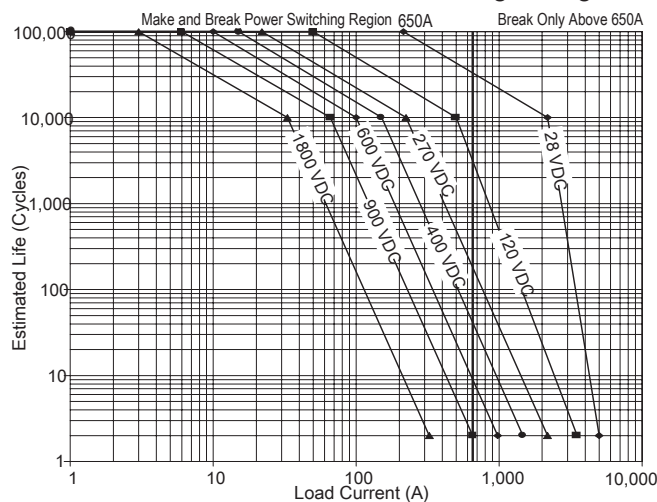
Part Numbering System

Typical Part Number	ET200	A	A
Series:	ET200 = 500+ Amp		
Contact Form:	A = Normally Open		
Coil Voltage:	A = 9-36VDC (1 = requires external coil economizer) D = 36-72VDC (2 = requires external coil economizer)		

Outline Dimensions



Estimated Make & Break Power Switching Ratings



NOTES:

- 1) For resistive loads with 300H maximum inductance. Consult factory for inductive load.
- 2) Estimates based on extrapolated data. User is encouraged to confirm performance in.
- 3) End of life when dielectric strength between terminals falls below 50 megohms @ 50
- 4) The maximum make current is 650A to avoid contact welding.

Electrical Load Life Ratings for Typical ET Applications

Make/Break Life Capacitive & Resistive Loads at 320VDC (1) (2)		
@90% capacitive pre-charge (make only) see chart below	Cycles	50,000
@80% capacitive pre-charge (make only) see chart below	Cycles	50
@200A make/break (2 consecutive, reverse polarity) (1)	Cycles	12
2,000A (break)	Cycles	1*
Mechanical	Cycles	1 million

- (1) Resistive load includes inductance L = 25μH. Load @ 2500A tested @ 200μH.
 (2) Life based on projected Weibull Life with 95% reliability.

* Does not meet dielectric and IR after test.

ET200 Capacitive Make Test Curves for Pre-Charged Motor Controller

