

MA- Series

Three Phase Adjustable Trip Miniature Circuit Breakers/ Manual Motor Controllers



The MA was designed to handle the high inrush loads of 3 phase transformers, power supplies, motors, etc. The MA protects wiring and equipment from damage caused by the three major classes of over-current, yet greatly reduces the number of nuisance trips in high starting and inrush current circuits.

An IEC device with excellent ratings under a UL listing at 480Y/277V (including group ratings) and at 500V under international standards, the Altech/ABL Sursum MA provides short and long term cost effective circuit protection for USA and/or export applications. The short term advantages include: (1) adjustable thermal trip allows finalization of initial designs before procurement of the load equipment is complete; (2) snap-on mounting for readily available, internationally standardized DIN Rail saves panel layout design time as well as installation and change labor; (3) large cage-clamp terminals with screws suitable to power screwdrivers, simplifies and speeds wiring; (4) convenient switched disconnect during factory testing and/or initial start-up saves time and aggravation. The key long term advantage is customer satisfaction and proven over-current protection of wiring and equipment (and the lack of rework/repair costs).

Type Designation

$\frac{MA}{(a)} \quad \frac{\quad}{(b)} \quad \frac{\quad}{(c)} \quad \frac{RT}{(d)}$

- (a) = MA - Manual Motor Controller
- (b) = Rated Current
- (c) = U - US Housing
- (d) = Blank - Standard Terminal
RT - Ring-tongue Terminal

| | |
|---|---|
| Voltage Rating | 480Y/277VAC |
| AIC (Interrupt Capacity) | 0.16A-2.5A: 42kA; 4.0A-16A: 14kA; 20A-40A: 10kA |
| Standard Short Circuit Withstand Rating (UL/CSA Ratings) | 0.16A-2.5A: 42kA; 4.0A-16A: 14kA |
| Group Short Circuit Ratings (UL/CSA Ratings) | see above |
| Typical Life | 6000 on/off operations with 2xRC |
| Calibration Temperature | 25°C, +0°, -5° (77°F, +0° -9°) |
| Standard Pack and Weight | 1/450g (1.0 lb.) |
| Terminal Size Acceptability | Top/Bottom: 18-3 AWG |

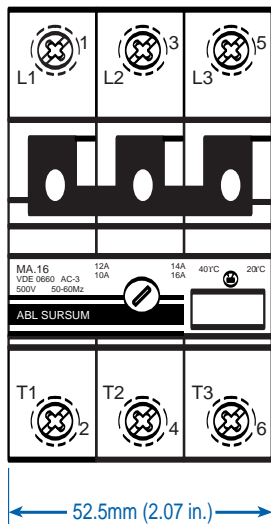
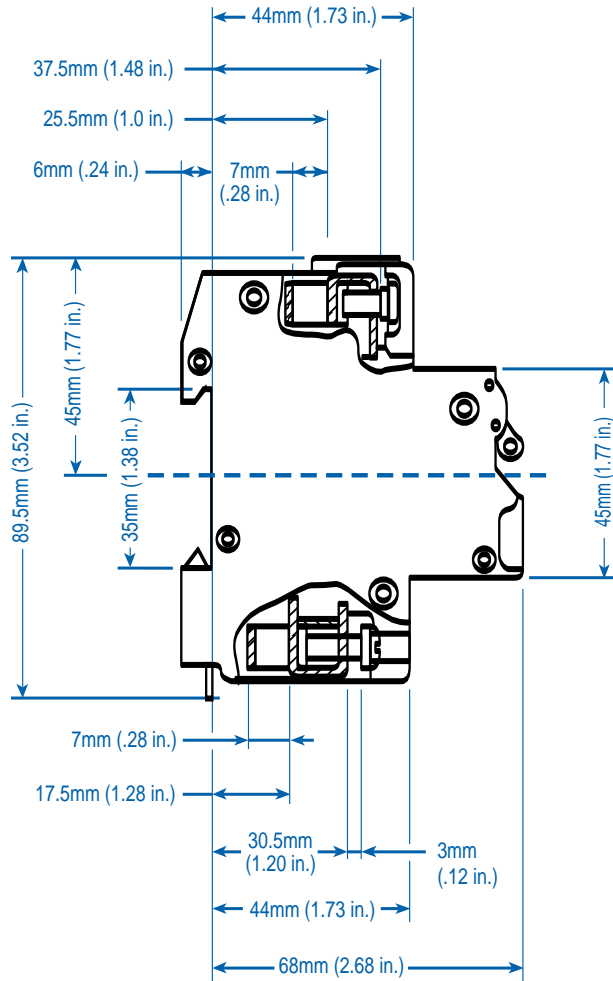
| Type and Rated Current | Cat. No. | FLA Dial Adjustment Markings | GROUP SHORT CIRCUIT RATING AT 480VAC ^a (and BCP size) | 3Ø HORSEPOWER RATINGS AT NOMINAL LINE VOLTAGE (See Note for HEA Definition) | | | | |
|------------------------|----------|------------------------------|--|---|---------------|---------------|-------------------|-------------------|
| | | | | 110-120V HP (HEA) | 200V HP (HEA) | 208V HP (HEA) | 220-240V HP (HEA) | 460-480V HP (HEA) |
| MA0.16U | 15.901U | 0.1/ 0.12/0.14/0.16 | 42kARMS symmetrical (max. 1200A MCCB or RK5) | | | | | |
| MA0.25U | 15.902U | 0.16/0.19/0.22/0.25 | | | | | | |
| MA0.40U | 15.903U | 0.25/0.30/0.35/0.40 | | | | | | |
| MA0.63U | 15.904U | 0.40/0.48/0.56/0.63 | | | | | | |
| MA1.0U | 15.905U | 0.63/0.75/0.87/1.0 | | | | | | |
| MA1.6U | 15.906U | 1.0/1.2/1.4/1.6 | | | | | | |
| MA2.5U | 15.907U | 1.6/1.9/2.2/2.5 | 14kARMS symmetrical (max. 350A MCCB or RK5) | | | | | |
| MA4.0U | 15.908U | 2.5/3.0/3.5/4.0 | | 1/2 (4.0) | 3/4 (3.2) | 3/4 (3.1) | 1 (3.6) | 2 (3.42) |
| MA6.3U | 15.909U | 4.0/4.8/5.6/6.3 | | 3/4 (5.6) | 1 1/2 (6.0) | 1 1/2 (5.7) | 1 1/2 (5.2) | 3 (4.8) |
| MA10U | 15.910U | 6.3/7.5/8.7/10 | | 1 (7.2) | 2 (7.8) | 2 (7.5) | 3 (9.6) | 5 (7.6) |
| MA16U | 15.911U | 10/12/14/16 | | 2 (13.6) | 3 (11.0) | 3 (10.6) | 5 (15.2) | 10 (14.0) |
| MA20U | 15.912U | 16/17/18.5/20 | | 3 (19.2) | 5 (17.5) | 5 (16.7) | 5 (15.2) | 10 (14.0) |
| MA25U | 15.913U | 20/21.5/23/25 | | 3 (19.2) | 5 (17.5) | 7 1/2 (24.2) | 7 1/2 (22.0) | 15 (21.0) |
| MA32U | 15.914U | 25/27/30/32 | | 5 (30.4) | 7 1/2 (25.0) | 7 1/2 (24.2) | 10 (28.0) | 20 (27.0) |
| MA40U | 15.915U | 32/34/37/40 | | 5 (30.4) | 10 (32.0) | 10 (31.0) | 10 (28.0) | 25 (34.0) |

Through MA2.5U, ampere rated for motor circuits having a full-load-ampere (FLA) not exceeding the MA's general purpose rated current (RC, equals maximum dial setting) and a locked rotor current not exceeding 6 times the MA's RC.

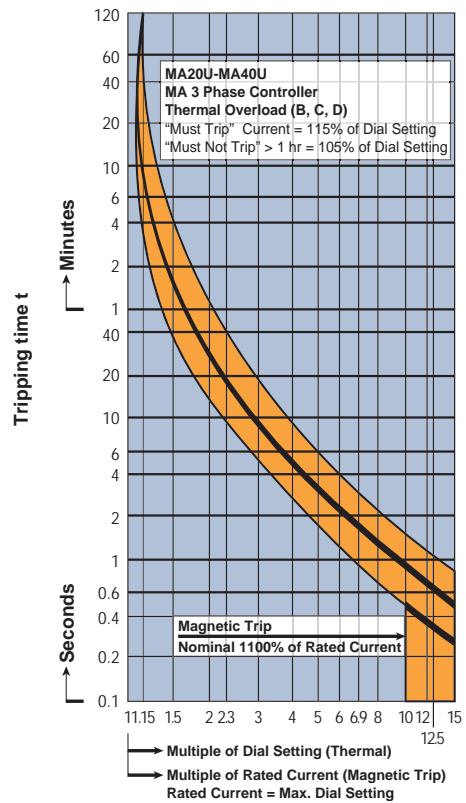
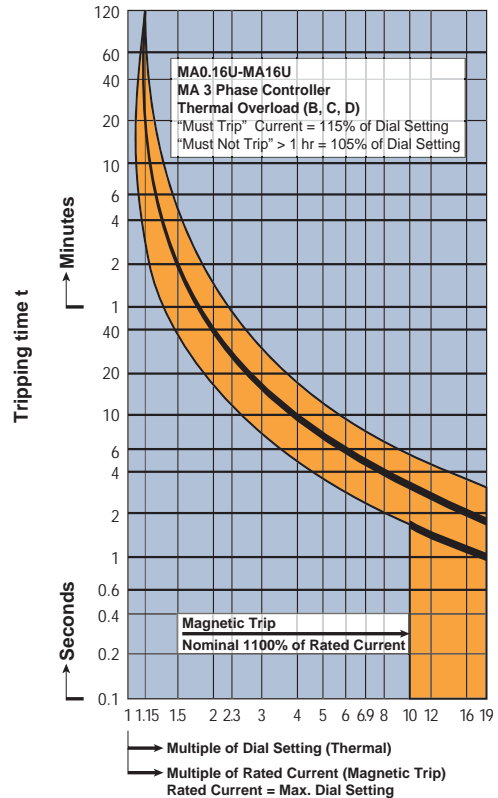
Note: HEA - Horsepower Equivalent Amperes, the nominal amperage assigned to standard motor horsepower ratings in design guide tables such as NFPA-70 Tables 430-248, 430-249, 430-250; UL1077 Table 16.2; CSA - C22.2 No. 235-M89 Tables 44 and 45; CSA-C22.2 No. 14-M91 Table 19, etc. Multiply HEA values (in parenthesis) by 1.1 if power factor is 90%, and by 1.2 if power factor is 80%.

^a The standard-circuit short-circuit rating is 14kA for all types. Group ratings can be used in a standard circuit (e.g., MA1.0U at 42kA), but a higher standard rating cannot be used in a group circuit (e.g., MA40U at 14kA only in standard circuit.)

DIMENSIONS



MA/USA Manual Motor Controller





Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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