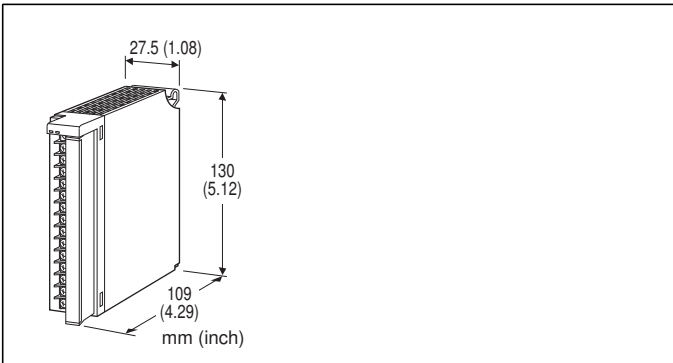


## Remote I/O R3 Series

### AC CURRENT INPUT MODULE

(8 points, isolated, clamp-on current sensor type CLSA use)



### MODEL: R3-CT8A[1][2]

#### ORDERING INFORMATION

- Code number: R3-CT8A[1][2]
- Specify a code from below for each of [1] and [2].  
(e.g. R3-CT8AW/H/Q)
- Specify the specification for option code /Q  
(e.g. /C01/SET)

#### NO. OF CHANNELS

8A: 8 channels, Sensor type CLSA

#### [1] COMMUNICATION MODE

S: Single  
W: Dual

#### [2] OPTIONS (multiple selections)

##### Frequency

blank: 45 - 65 Hz  
/H: 200 Hz - 1.2 kHz

##### Other Options

blank: none  
/Q: Option other than the above (specify the specification)

#### SPECIFICATIONS OF OPTION: Q (multiple selections)

##### COATING (For the detail, refer to M-System's web site.)

/C01: Silicone coating  
/C02: Polyurethane coating  
/C03: Rubber coating

##### EX-FACTORY SETTING

/SET: Preset according to the Ordering Information Sheet  
(No. ESU-8444)

#### RELATED PRODUCTS

- PC configurator software (model: R3CON)
  - Zero/span adjustments for the conversion data are available using the R3CON. Downloadable at M-System's web site.
  - Clamp-on current sensor (model: CLSA-08)
  - Clamp-on current sensor (model: CLSA-12)
  - Clamp-on current sensor (model: CLSA-30)
  - Clamp-on current sensor (model: CLSA-50)
  - Special cable (model: CLSA-08C)
- The clamp-on current sensor, not included in the product package, must be ordered separately.  
Refer to the data sheet for the sensor for more information such as applicable wire diameter.

#### GENERAL SPECIFICATIONS

##### Connection

- Internal bus:** Via the Installation Base (model: R3-BSx)
  - Input:** M3 separable screw terminal (torque 0.5 N·m)
  - Internal power:** Via the Installation Base (model: R3-BSx)
  - Screw terminal:** Nickel-plated steel
  - Isolation:** Input 1 to input 2 to input 3 to input 4 to input 5 to input 6 to input 7 to input 8 to internal bus or internal power
  - Input range:** Selectable with the side DIP SW (per 4 channels)
  - Conversion rate:** Selectable with the side DIP SW
  - RUN indicator:** Bi-color (red/green) LED;  
Red when the bus A operates normally;  
Green when the bus B operates normally;  
Amber when both buses operate normally.
  - ERR indicator:** Bi-color (red/green) LED;  
Red with input abnormality;  
Green in normal operating conditions.
  - Low-end cutout:** Converted as 0 % for the input below 1 % of range
- Note: Change the value of "Zero Base" and "Full Base" with PC configurator software (model: R3CON) to disable low-end cutout.

#### INPUT SPECIFICATIONS

- Frequency:** 45 - 65 Hz  
(200 Hz - 1.2 kHz with Option /H)
- Operational range:** 5 - 115 % of rating
- Max. working voltage:** 440 V AC (primary side)
- Sensor & range:**  
CLSA-08: 0 - 80A AC  
CLSA-12: 0 - 120A AC  
CLSA-30: 0 - 300A AC  
CLSA-50: 0 - 500A AC

## INSTALLATION

**Operating temperature:** -10 to +55°C (14 to 131°F)  
**Operating humidity:** 30 to 90 %RH (non-condensing)  
**Atmosphere:** No corrosive gas or heavy dust  
**Mounting:** Installation Base (model: R3-BSx)  
**Weight:** 250 g (0.55 lb)

## PERFORMANCE

**Conversion accuracy:** Refer to the table at the end of this section.  
**Conversion rate:** 160 / 80 / 40 / 20 msec. selectable  
**Data range:** Engineering unit value × 100 (integer)  
**Data allocation:** 8  
**Current consumption:** 100 mA  
**Temp. coefficient:** ±0.015 %/°C (±0.008 %/°F)  
**Input response time:** ≤ 0.5 sec. (0 - 90 %)  
**Insulation resistance:** ≥ 100 MΩ with 500 V DC  
**Dielectric strength:** 1000 V AC @ 1 minute (input 1 to input 2 to input 3 to input 4 to input 5 to input 6 to input 7 to input 8 to internal bus or internal power)  
 2000 V AC @ 1 minute (power input to FG; isolated on the power supply module)

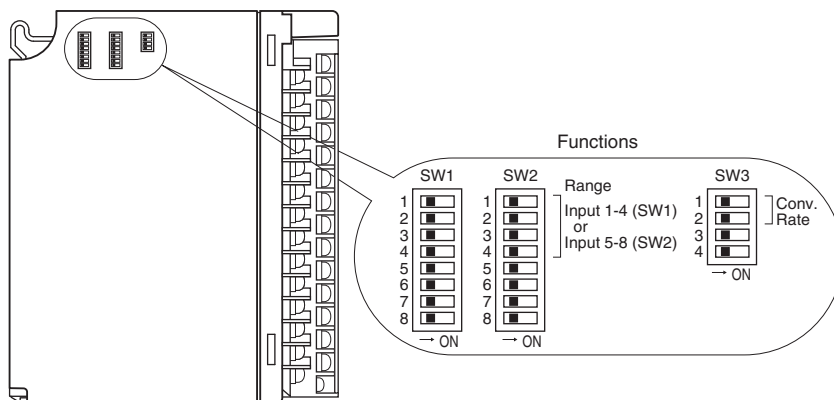
### Conversion accuracy

Rate	160 msec.	80 msec.	40 msec.	20 msec.
Accuracy	±0.5%	±0.5%	±1.0%	±2.0%

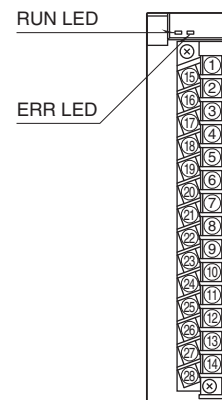
Except the accuracy of the sensor.

## EXTERNAL VIEW

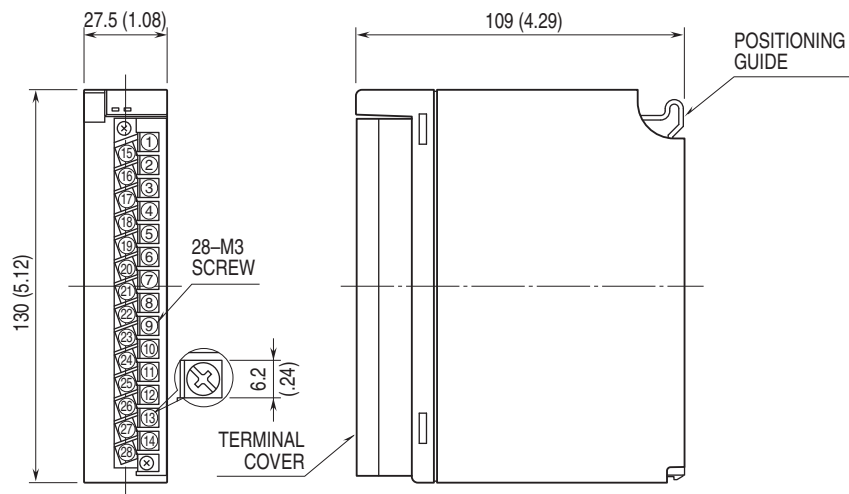
### ■ SIDE VIEW



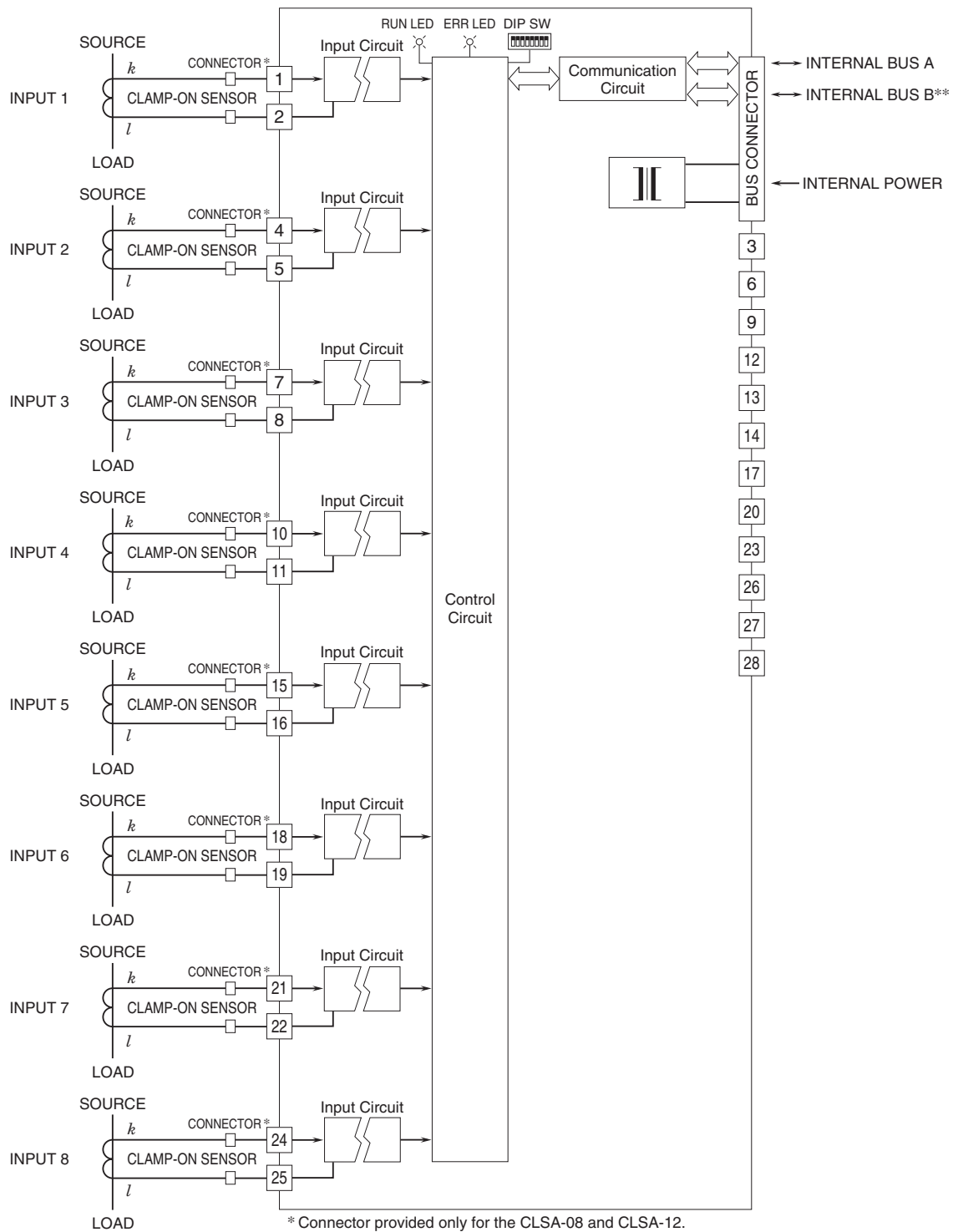
### ■ FRONT VIEW



**EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm (inch)**



## SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



Specifications are subject to change without notice.