



例图型号: S360



#### ■ AC Power Cord Type

| AC Power Cord | 2/3 pin Euro | 2/3 pin USA | 2/3 Pin China | 2/3 pin UK | 2/3 pin AU | 2/3 pin JP | 2/3 pin KR | 2/3 pin IN | 3 pin South Africa | IEC320-C13/C5 |
|---------------|--------------|-------------|---------------|------------|------------|------------|------------|------------|--------------------|---------------|
| Yes/No        | yes          | yes         | yes           | yes        | yes        | yes        | yes        | yes        | yes                | yes           |

#### ■ KRECO Part List

| Type      | Basic Model | With OLED display |
|-----------|-------------|-------------------|
| KRECO P/N | S360        | S360M             |

#### ■ Features

- Charger for lead-acid batteries (Flooded, Gel, and AGM) and Li-Ion batteries (lithium iron, lithium manganese and lithium nickel cobalt manganese) (Note. 1)
- Universal AC voltage range 90 ~ 264VAC
- Multi-stages smart charging characteristic
- Protections: Short circuit /Overload /Over voltage /Low voltage /Over temperature /Over current /Reverse polarity /Timing /Fully charged shut down /No leaking current drain out of the battery
- High efficiency, Maximum efficiency can be up to 92%
- Class I power, portable type.
- Fan cooling with anti-dust mesh
- 2 color LED loading indicator
- M type with Embed MCU intelligent control, RS485 and CAN2.0B communication for option, OLED display for option, it shows voltage, current, time and SOC percent
- No spark DC plug design when the DC connector plugs into or unplugs from the battery
- No spark design when short circuit protection
- Active zero voltage battery charge input port

#### ■ Applications

- Electric vehicles/ Electric bikes

- Cleaning machines/ Vacuums
- Drone/ Aerospace/Robot
- Agricultural equipment/Motorcycles
- Scooters/ RC boat/Electric toys
- Cars/ Buses/Electric tool
- Libraries/ Hospitals
- Fire departments/ Telecommunications
- Industry Consumer electronic devices



## ■ Output Specifications

(Standard):

| Output | Nominal DC Voltage         | 12V  | 24V                          | 36V       | 48V                      | 60V                      | 72V      |
|--------|----------------------------|--|------------------------------|-----------|--------------------------|--------------------------|----------|
|        | Float/Boost Charge Voltage | 14.6~16.8V   | 25.2~29.4V                   | 42~43.8V  | 54.6~58.8V               | 67.2~73.5V               | 75V~89V  |
|        | Rated Current              | 15A  | 15A                          | 10A       | 8A                       | 6A                       | 5A       |
|        | Part List (reference)      | 14.6v/10-15A   | 29.2v/10-15A<br>29.4v/10-15A | 42v/7-10A | 54.6v/6-8A<br>58.4v/5-7A | 67.2v/5-6A<br>71.4v/5-6A | 84v/4-5A |
|        | Rated Power                | 219W   | 441W                         | 420W      | 408.8W                   | 428.4W                   | 420W     |
|        | LED Indicator              | CC and CV Charging current > Rated current * 10%: <b>RED</b> ;<br>CV Charging current <= Rated current * 10%: <b>GREEN</b> |                              |           |                          |                          |          |

## ■ Technical Specifications

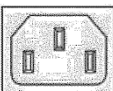
| Input       | Voltage Range    | 90~264VAC  |
|-------------|------------------|--|
|             | Frequency Range  | 47~63HZ  |
|             | Power Factor     | 0.65 at 230VAC   |
|             | Efficiency       | 92%  |
|             | AC Current       | 3A/220VAC  |
|             | Inrush Current   | Cold Start < 60A   |
|             | Leakage Current  | <3.5mA/240VAC  |
| Protections | Short Circuit    | <b>RED</b> LED Fast Flashing and shut down output voltage;<br>Recovers automatically after fault condition is removed. |
|             | Reverse Polarity |  |
|             | Low Voltage      |  |
|             | Over Current     | Shut down output voltage, re-power on to recover.  |
|             | Over Voltage     |  |
|             | Over Load        |  |

|                    |                         |  |
|--------------------|-------------------------|--|
|                    | <b>Over Temperature</b> | 85°C±10°C(RTH2),<br>automatically derate charge current to half max rated current. |
| <b>Interface</b>   | <b>RS485, CAN2.0B</b>   | For option, customized (M type)  |
|                    | <b>OLED Display</b>     | For option, voltage, current, charging time, SOC percent (M type)                  |
|                    | <b>UART</b>             | Baud rate: 9600bps, 8 data bits, no parity, 1 Stop Bit                             |
| <b>Environment</b> | <b>Working Temp.</b>    | -30°C~+60°C  |
|                    | <b>Working Humidity</b> | 20~90% TH non-condensing   |
|                    | <b>Storage Temp.</b>    | -40°C~+85°C,   |
|                    | <b>Humidity</b>         | 10~95% TH  |

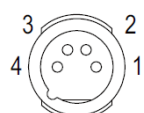
|                         |                             |   |
|-------------------------|-----------------------------|---|
| <b>Safety &amp; EMC</b> | <b>Safety Standards</b>     | UL1012, EN/IEC60335, TUV EN62368, PSE J62368 KC K62368  |
|                         | <b>Withstand Voltage</b>    | I/P-O/P:1.8KVAC, I/P-FG:1.8KVAC, O/P-FG:0.5KVAC   |
|                         | <b>Isolation Resistance</b> | I/P-O/P, I/P-FG, O/P-FG: 100M Ohms/500VDC/25 °C/70% RH  |
|                         | <b>EMC Emission</b>         | Compliance to EN55032 (CISPR32) Class B, EN62233, EN61000-3-2,-3, EAC TP TC 020                 |
|                         | <b>EMC Immunity</b>         | Compliance to EN61000-4-2,3,4,5,6,8,11, EN55014, light industry level, criteria A, EAC TP TC 02 |
| <b>Others</b>           | <b>Dimension(mm)</b>        | 264*120*89 (L*W*H); 210*120*83 (L*W*H)(without bending strip)                                   |
|                         | <b>Packing</b>              | 2.1Kg; pcs/ Kgs/ CBM  |

## ■ Pin Assignment


DC output connector (Standard):

| <b>IEC320-C13</b>   |                |               |
|---|----------------|---------------|
|  | <b>PIN NO.</b> | <b>OUTPUT</b> |
|   | N              | +V            |
|   | L              | -V            |

DC output connector (Optional):

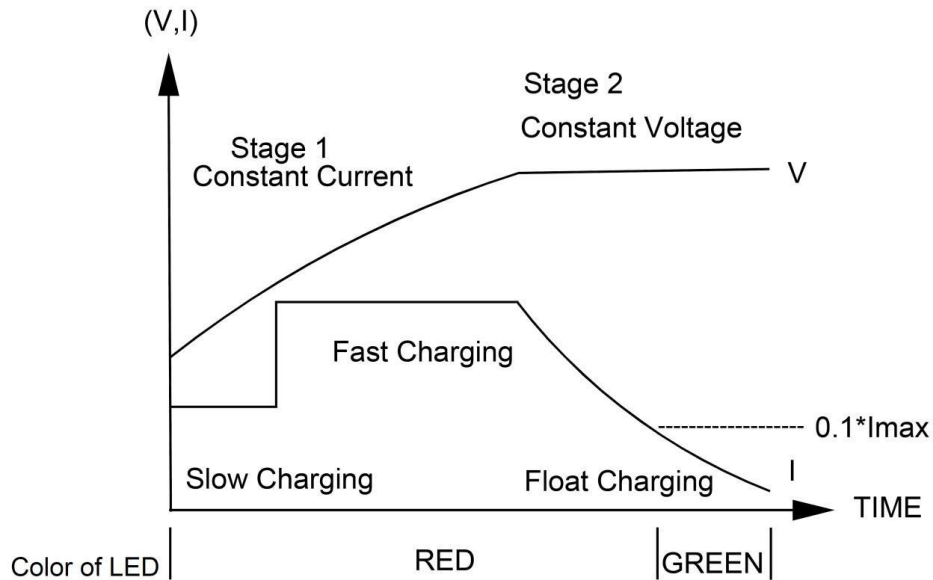
| 4pin XLR<br>UNICABLE 89M103-4P or equivalent   |                |               |
|--|----------------|---------------|
|  | <b>PIN NO.</b> | <b>OUTPUT</b> |
|  | 1,2            | +V            |
|  | 3,4            | -V            |

DC output connector (Optional):

| <b>AD1</b><br>[ housing: Anderson 1327FP(red), 1327G6FP(black)<br>contacts: Anderson 261G2 (45A) or equivalent ] |   |           |
|--|---|-----------|
| Red(+V)  |  | Black(-V) |

\*Note: -V connected to AC FG

■ Charging Curve



\*Note: This charging curve is for Li-Ion battery.

■ Notes

- (1) Modification for charger specification may be required for different battery specification. Please contact battery vendor and KRECO for detail.
- (2) All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C ambient temperature.
- (3) xxx for Output voltage and yyy for output current, what you are going to order, please must specify to sales.
- (4) M for it with OLED display; V for upgrade version.
- (5) Safety model number differs from the order number, part number, and shape number as per respective OEM/ODM factories.

**Disclaimer:** Kreco is not responsible for any error, and reserves the right to make changes without notice.

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