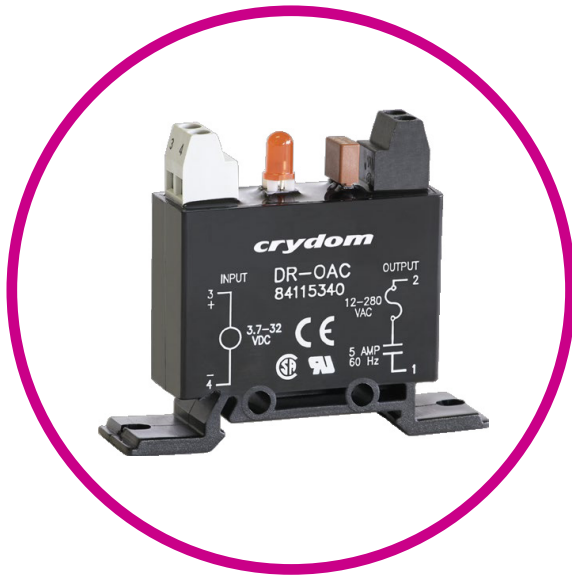


DR OUTPUT MODULE

I/O MODULE



Features

- DIN Rail Mountable Single Point Output Modules (35mm DIN)
- Plug into mounting boards for 0.6" modules
- Zero Voltage Turn-On for AC Modules
- 4kV Optical isolation with LED Indicator
- UL Recognized, CSA Certified, CE Compliant
- Industry standard Color Coding Black (AC Output) Red (DC Output)
- Barrier Strips Accept 14 to 28 AWG Wire.



SPECIFICATIONS ⁽¹⁾

Input

| Part Number | DR-OAC | DR-OAC5 | DR-OAC24 |
|--|--------|---------|----------|
| Nominal Voltage [VDC] | 5-24 | 5.0 | 24.0 |
| Minimum Voltage [VDC] | 3.7 | 3.5 | 18.0 |
| Maximum Voltage [VDC] | 32 | 8.0 | 32.0 |
| Drop-Out Voltage [VDC] | 1.0 | 1.0 | 1.0 |
| Maximum Current [mA] ⁽²⁾ | 18 | 18 | 13 |
| Resistance [Ohms] ⁽³⁾ | NA | 250 | 2000 |

Output

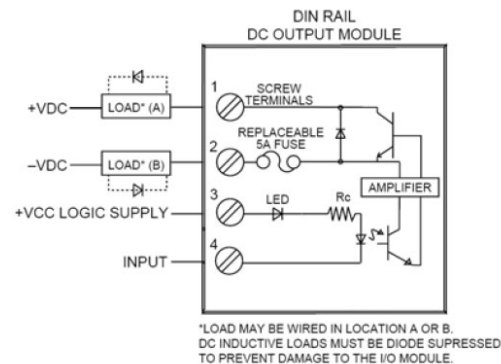
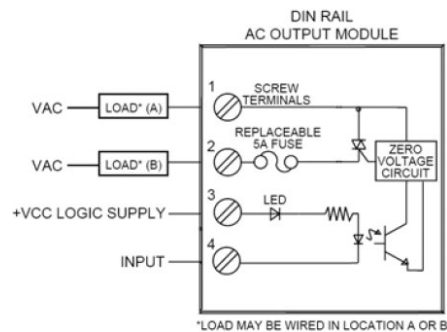
| Part Number | DR-OAC | DR-OAC5 | DR-OAC24 |
|--|-----------------------|----------|----------|
| Nominal Line Voltage | 240 VAC | 5-48 VDC | 5-48 VDC |
| Minimum Line Voltage | 12 VAC | 3 VDC | 3 VDC |
| Maximum Line Voltage | 280 VAC | 60 VDC | 60 VDC |
| Max Off-State Voltage ⁽⁴⁾ | 600 V _{peak} | 60 VDC | 60 VDC |
| Max Off-State Leakage ⁽⁵⁾ | 0.1 mArms | 10 uA | 10 uA |
| Static Off-State dv/dt ⁽⁶⁾ | 200 V/usec | N/A | N/A |
| Maximum Rated On-State Current ⁽⁷⁾ | 5.0 Arms | 3.0 A | 3.0 A |
| Minimum On-State Current | 50 mArms | 10 mA | 10 mA |
| Max Surge Current ⁽⁸⁾ | 250 A _{peak} | 5.0 A | 5.0 A |

Output (cont.)

| Part Number | DR-OAC | DR-OAC5 | DR-OAC24 |
|---|------------------|------------------|------------------|
| On-State Voltage Drop or Resistance ⁽⁹⁾ | 1.6 V | 1.6 V | 1.6 V |
| Horse Power Rating ⁽¹⁰⁾ | 1/2 H.P. | N/A | N/A |
| Fuse ⁽¹¹⁾ | 5 | 5 | 5 |
| Maximum Turn-On Time [msec] ⁽¹²⁾ | 8.33 | 0.1 | 0.1 |
| Maximum Turn-Off Time [msec] ⁽¹²⁾ | 8.33 | 0.75 | 0.75 |
| Input / Output Isolation Voltage ⁽¹³⁾ | 4000 Vrms | 4000 Vrms | 4000 Vrms |
| Input / Output Capacitance | 8 pF | 8 pF | 8 pF |
| Operating Temperature Range | -30 to 80°C | -30 to 80°C | -30 to 80°C |
| Storage Temperature Range | -40 to 80°C | -40 to 80°C | -40 to 80°C |
| Line Frequency Range | 47 to 63 Hz | DC | DC |
| Weight | 1.1 oz. (31.2 g) | 1.1 oz. (31.2 g) | 1.1 oz. (31.2 g) |



EQUIVALENT CIRCUIT BLOCK DIAGRAMS

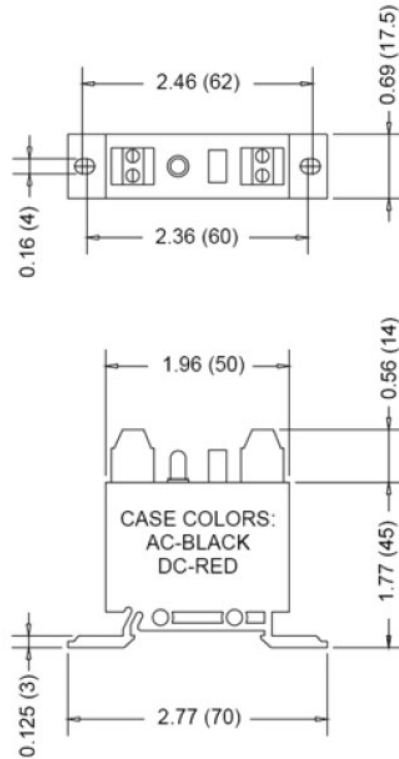




MECHANICAL SPECIFICATIONS

Tolerances: ± 0.02 in / 0.5 mm

All dimensions are in inches [millimeters]



GENERAL NOTES

- ⁽¹⁾ Specifications apply to an ambient temperature of -30 to 80 °C unless otherwise noted.
- ⁽²⁾ At nominal input voltage, without external LED status indicator.
- ⁽³⁾ $\pm 10\%$ at 25 °C.
- ⁽⁴⁾ Maximum 1 minute duration for OAC modules when applied as a DC voltage rather than a peak AC voltage.
- ⁽⁵⁾ At maximum line voltage, 25 °C for OAC modules, at 80 °C for ODC modules.
- ⁽⁶⁾ Minimum DV/DT per EIA/NARM RS433, method RS397, DV/DT ratings do not apply to DC output models
- ⁽⁷⁾ At 70°C, derate OAC modules 58 mA/°C to 80°C, derate ODC, ODCxMC and ODCxML modules 50 mA/°C to 80°C. CSA rating of OAC modules is 3.0 Arms at 40°C.
- ⁽⁸⁾ At 25 °C for 1 second maximum duration: 1 AC cycle for AC modules, 1 second for DC modules.
- ⁽⁹⁾ At maximum rated on-state current and 25 °C.
- ⁽¹⁰⁾ 1/3 H.P. at 240 VAC, 1/8 H.P. at 120 VAC.
- ⁽¹¹⁾ Fuse is BUSS # PCE5.
- ⁽¹²⁾ At maximum line voltage, maximum rated output current, nominal input voltage at 25 °C. Switching speed of OAC modules is based upon 60 Hz line frequency.
- ⁽¹³⁾ At 25°C for 1 second maximum duration.

For additional information or specific questions, contact Sensata Technical Support.



AGENCY APPROVALS & CERTIFICATIONS



- UL: EN46203
- CSA: 38595

**RISK OF MATERIAL DAMAGE AND HOT ENCLOSURE**

- The product's side panels may be hot, allow the product to cool before touching
- Follow proper mounting instructions including torque values
- Do not allow liquids or foreign objects to enter this product

Failure to follow these instructions can result in serious injury, or equipment damage.

**HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH**

- Disconnect all power before installing or working with this equipment
- Verify all connections and replace all covers before turning on power

Failure to follow these instructions will result in death or serious injury.

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