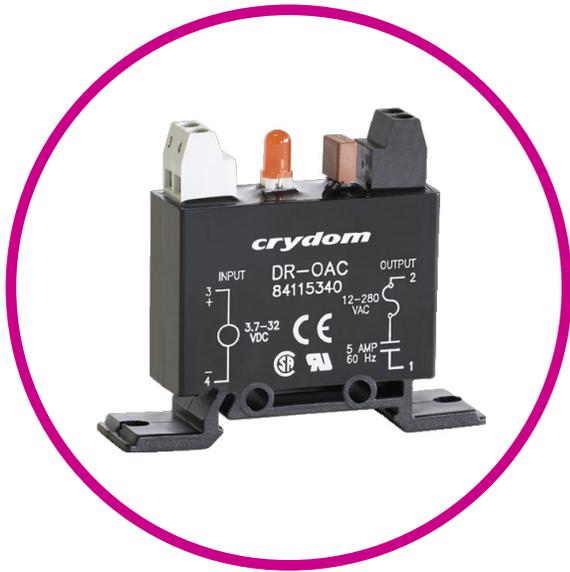


# DR OUTPUT MODULE

## 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 <sup>(1)</sup>

#### Input

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

#### Output

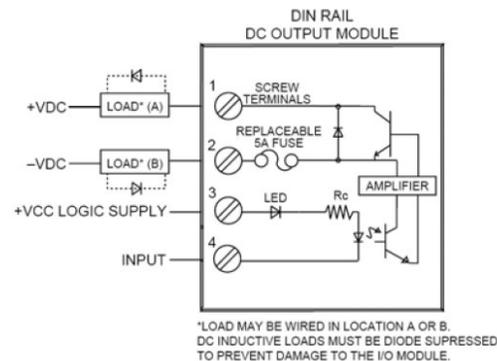
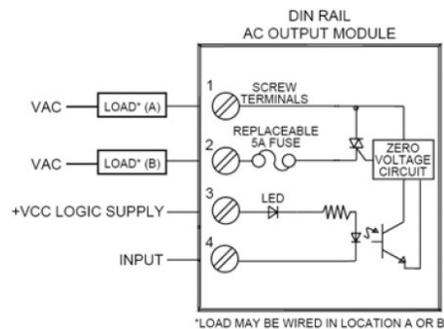
Part Number	DR-OAC	DR-OAC5	DR-OAC24
<b>Nominal Line Voltage</b>	240 VAC	5-48 VDC	5-48 VDC
<b>Minimum Line Voltage</b>	12 VAC	3 VDC	3 VDC
<b>Maximum Line Voltage</b>	280 VAC	60 VDC	60 VDC
<b>Max Off-State Voltage <sup>(4)</sup></b>	600 V <sub>peak</sub>	60 VDC	60 VDC
<b>Max Off-State Leakage <sup>(5)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

## Output (cont.)

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



## EQUIVALENT CIRCUIT BLOCK DIAGRAMS

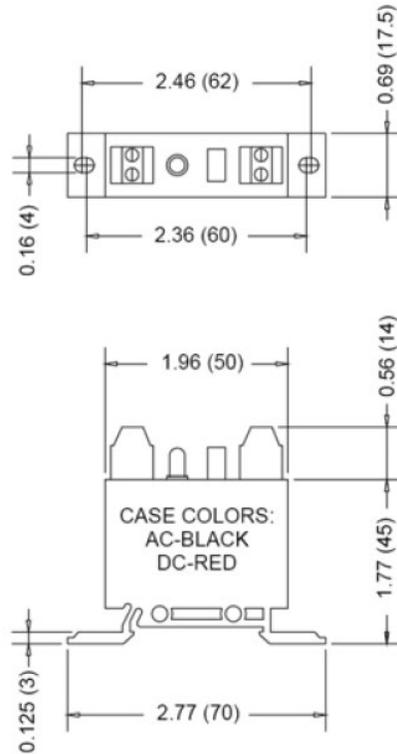




## MECHANICAL SPECIFICATIONS

Tolerances:  $\pm 0.02$  in / 0.5 mm

All dimensions are in inches [millimeters]



## GENERAL NOTES

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



## WARNINGS



### 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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