

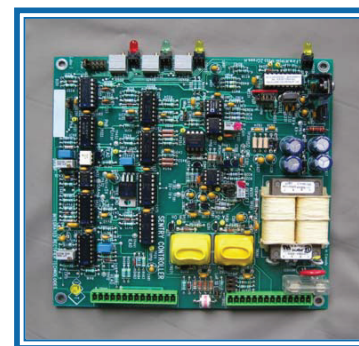
C.P. Sentinel (Air or Oil) Series Cathodic Protection Rectifier

The **IRT C.P. Sentinel Series** is designed and manufactured with high quality materials to provide reliability and longevity in protecting industry assets and our environment.

This series utilizes our **SENTRY** controller to provide precise and stable automatic voltage, current and/or potential control for the most demanding of CP applications. This series is available with either an air-cooled or oil-cooled type enclosure, with numerous optional features and can also be customized for multi-zone type CP applications.

STANDARD FEATURES

- Enclosure type varies based on application requirement; typically an IRT Advantage Air series enclosure is used (if oil-cooled type is required, see Advantage Oil series brochure for enclosure details; for multi-zone type applications, please consult with our Sales team to explore options)
- Electrical hardware is brass or copper with electroless nickel plated finish
- Electrical connections are double-nutted
- Single and three phase AC input available
- Magnetic trip AC input circuit breaker(s)
- Class H transformer with over capacity design
- Electronic Voltage, Current and Structure-to-Reference Electrode Potential ("ON" or "IR-Drop Free") control modes are available
 - Automatic transition between control modes and limits (no manual switching required)
 - Current/voltage control within $\pm 3\%$ of set point / Potential control within ± 5 mV of set point
 - LED indicators for operational mode and power indication
 - Reference electrode input resistance > 20 MOhms
 - Innovative "anti-spiking" feature to prevent current overshoot during DC output interruption
 - Auxiliary "manual" transformer tap type output adjustment mode optional
- AC secondary fusing with spares (additional fusing and/or circuit breakers optional)
- SCR/diode rectification bridge with surge protection
- $3\frac{1}{2}$ " analog meters ($\pm 2\%$ accuracy) (digital meters optional)
- High energy AC and DC lightning/surge protection
- Operating ambient: -40° to $+45^{\circ}\text{C}$ (-40° to $+113^{\circ}\text{F}$)
- NRTL electrical approval (Intertek/ETL)
- Numerous optional features available for customization



Sentry Controller

Products to protect your assets and our environment!



C.P. Sentinel Series Model Coding and Enclosure Dimensions

(enclosure details shown are for typical air-cooled type only)

CPASAS 40-28B

C.P. SENTINEL MODEL

CC - CURRENT CONTROL
CI - IR FREE POTENTIAL CONTROL
CP - ON POTENTIAL CONTROL
CV - VOLTAGE CONTROL

COOLING TYPE

A - AIR-COOLED TYPE
O - OIL-COOLED TYPE

SILICON RECTIFIER TYPE

AC INPUT

A - 115 VAC F - 115/230 VAC
B - 208 VAC G - 230/460 VAC
C - 230 VAC H - 600 VAC
D - 416 VAC Z - OTHER INPUT
E - 460 VAC CONSULT
FACTORY

AC PHASE

S - SINGLE PHASE
T - THREE PHASE

DC VOLTAGE RATING

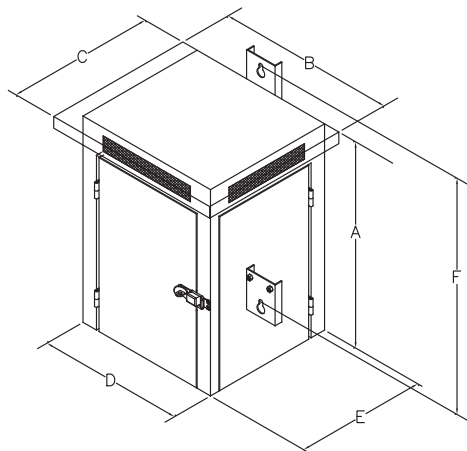
DC CURRENT RATING

COMMON OPTIONAL FEATURES

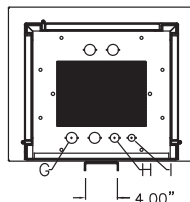
A - ALARM CIRCUIT
B - BASE MOUNTING LEGS (12" Typical)
D - UPGRADED SCR DIODE VOLTAGE (PIV) RATING
E - EFFICIENCY FILTER (CHOKE)
F - NON-STANDARD ENCLOSURE FINISH
G - GFI CONVENIENCE OUTLET
I - INTERRUPTER CIRCUIT
J - NON-STANDARD AC INPUT FREQUENCY (50 Hz.)
L - NON-STANDARD DC LUG TERMINALS
M - EXTRA RECTIFIER METER
N - AUXILIARY NEGATIVE OUTPUT CIRCUIT
O - METER SWITCH
P - AUXILIARY POSITIVE OUTPUT CIRCUIT
Q - NON-STANDARD ADJUSTMENT METHOD
R - POTENTIAL METER (included in potential control units)
Y - SPECIAL TEST, DOCUMENT OR LABEL REQUIREMENT
Z - NON-LISTED OPTIONAL FEATURE (consult factory)

Option details available on our website: irtrectifier.com

TYPICAL A-2 OR A-3 SIZE ENCLOSURE



BOTTOM VIEW



NOTE:
A-2 & A-3 ENCLOSURES ARE SUPPLIED WITH (2) KEYHOLES SIZED FOR A MAXIMUM 5/8 (0.625") MOUNTING BOLT. OPTIONAL BASE MOUNTING IS AVAILABLE.

A-4 ENCLOSURES ARE SUPPLIED WITH BASE MOUNTING INSTEAD OF WALL/POLE MOUNTING BRACKETS.

ENCL. SIZE	Enclosure Dimensions ("")						Conduit Knockout Size		
	A	B	C	D	E	F	G	H	I
A-2	26.625	23.250	19.250	19.000	17.000	30.500	(1) 1KO (1.375")	(1) 3/4KO (1.125")	(1) 1/2KO (0.875")
A-3	32.625	26.250	24.250	22.000	22.000	36.500	(1) 1KO (1.375")	(1) 3/4KO (1.125")	(1) 1/2KO (0.875")
A-4	36.00	36.250	26.250	32.000	24.000	N/A	(1) 1KO (1.375")	(1) 3/4KO (1.125")	(1) 1/2KO (0.875")

NOTE: For A-5 enclosure details, consult with IRT factory.

TYPICAL A-4 SIZE ENCLOSURE

