

## EM Series

# Rogowski CVT™ Sensors

1% total system accuracy (meter & CVT)  
 For use with Pulse and Protocol Versions of the EM Series Meter  
 Flexible Split-core Rogowski CVT™ Sensors  
 Monitor loads from 30-6000A & 90-600V



### DESCRIPTION

The Current/Voltage Transducer™ (CVT™) measures both voltage and current, communicating the data digitally to the meter via plug-in low voltage connections. This allows the meter to remain a low-voltage device. Each CVT™ uses digital communication with the meter for superior noise immunity. The CVTs™ are individually calibrated and measurement accuracy is independent of the transducer. To complement the CVT™, our metering platform offers two meter options (EM-PULSE & EM-RS485) which are small enough to fit in the palm of your hand, yet powerful enough to self-configure during installation, removing all manual configuration. Virtually a plug and play BACnet meter!

### APPLICATIONS

- Energy Management and performance contracting
- Monitoring for commercial tenants
- Activity-based costing in commercial and industrial facilities
- Real-time power monitoring
- Load shedding
- Audits/temporary monitoring
- Distributed generation



7 year limited warranty

### FEATURES

#### Intelligent CVTs™ boast numerous benefits:

- Digitally calibrated CVTs™ are extremely accurate
- The accuracy is as high as a calibrated system, yet different CVTs™ can be changed from meter to meter and the accuracy is maintained. A big advantage for auditing, since your meter is not size specific.
- Plug and play installation— individual CVTs™ are digitally recognized by the meter base and outputs are automatically scaled—no user set up is required.
- Digital communication offers superior noise immunity compared to traditional induced low-signal Rogowskis
- All the high voltage connections are at the CVT™
- Rogowski CVTs™ are available in 4 sizes from 9" to 36" in circumference and include several rating options from 300A to 6000A and are universally rated for 90-600V



#### Split-core Rogowski CVT™

- Easiest in the industry to install
- Senses both voltage & current
- High accuracy...digitally calibrated; interchangeable
- Available in multiple sizes & ratings to meet any project requirements



Flexible split-core CVT™ sensors are easy to install and more accurate than traditional CTs

*Get in. Get out. Get data.*

## ORDERING



### Type

F = Flex Rogowski

### Coil (Amps/Size)

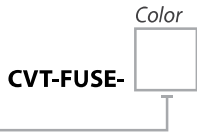
- 03S = 300A/Small
- 08S = 800A/Small
- 08M = 800A/Medium
- 15S = 1500A/Small
- 15M = 1500A/Medium
- 24M = 2400A/Medium
- 24L = 2400A/Large
- 60G = 6000A/Grande

### Lead Length

- Blank = 3' (default)
- L06 = 6'
- L10 = 10'

### Lead Color

- Blank = Black (default)
- C2 = Red
- C6 = Blue
- 3PH = Three CVT Kit (1 Black, 1 Red, 1 Blue)



### Color

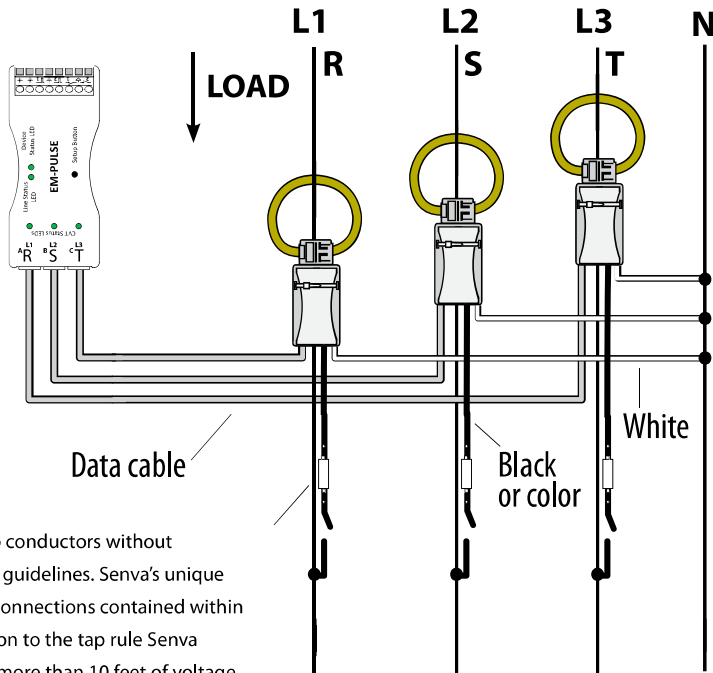
- Blank = black (default)
- C2 = Red
- C6 = Blue
- 3PH = Three Fuse Kit (1 Black, 1 Red, 1 Blue)



## SPECIFICATIONS

Performance	Accuracy	1% System Accuracy (Includes Meter & CVTs) for V, A, KW, kVAR, KVA
Current/Voltage Transducer™	Small Rope Circumference	9"
	Medium Rope Circumference	15"
	Large Rope Circumference	24"
	Grande Rope Circumference	36"
	300A Operating Range <sup>(1)</sup>	+/-1% 30-300A (+/-3% >10A)
800A Operating Range <sup>(1)</sup>	+/-1% 30-800A (+/-3% >10A)	
1500A Operating Range <sup>(1)</sup>	+/-1% 30-1500A (+/-3% >10A)	
2400A Operating Range <sup>(1)</sup>	+/-1% 50-2400A (+/-3% >15A)	
6000A Operating Range <sup>(1)</sup>	+/-1% 120-6000A (+/-3% >40A)	
Operating Environment	Temperature	-4 to 140°F (-20 to 60°C)
	Humidity	0-95% non-condensing
Meter Enclosure	Material	Polycarbonate/ABS
	Dimensions	4.1" h x 1.8" w x 0.9" d
CVT™ Enclosure	Material	Polycarbonate/ABS
	Enclosure Dimensions	3.5" h x 1.6" w x 0.8" d
Fuse specifications (see application note)	Fuse type	1/2 Amp, 600VAC slow blow, 200kA AC Interrupting rating
	Dimensions	4.1" h x 1.8" w x 0.9" d

(1) Accuracy based on reading, not full scale.



Under UL 240.21 Senva CVTs may tap conductors without overcurrent protection under certain guidelines. Senva's unique architecture keeps the high voltage connections contained within the CVT enclosure and in consideration to the tap rule Senva does not ship EM Series meters with more than 10 feet of voltage reference wire on any CVT. If your voltage reference must be longer than 10 feet, proper use of over current protection is required (i.e. appropriate fusing or circuit breakers.) See [www.senvainc.com](http://www.senvainc.com) for additional information.

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