

# Current sensing unit CSU-2 for Arc Guard TVOC-2™

# Reliable current sensors enhance capabilities



The new CSU-2 current sensing unit brings arc flash supervision to the next level for medium and low voltage applications. The unit's current sensors with Rogowski coil technology make current measuring simpler and faster than ever.

A new HMI and the option of Modbus RTU remote monitoring and control further improve the user experience.



## Continuous operation

#### Keep your installation running

CSU-2 ensures the ABB Arc Guard system only trips when an actual arc flash is happening, eliminating the risk of nuisance tripping. Dual conditioning uses both the light from the arc and circuit's current increase to ensure the Arc Guard TVOC-2 functions accurately and reliably. ABB's Rogowski coil sensors provide current measurement with longer life and less maintenance work.



### Safety and protection

#### Protect your people and plant

The optical connection between TVOC-2 and CSU-2 guarantees total tripping of less than 2 milliseconds, minimizing damage to staff and switchgear.

Dedicated Rogowski coil current sensors, factory calibrated with CSU-2 ensure fast and safe tripping at low as well as high current levels.



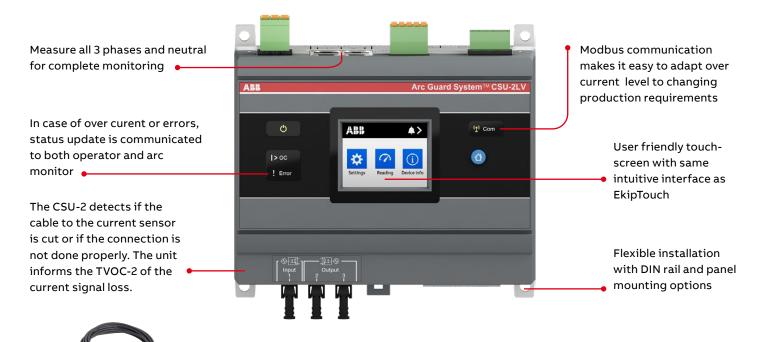
### Easy to install

#### Save installation time

With a single click, Rogowski coil current sensors are quick and easy to install safely. A green light signal confirms when the proper connection is made and the unit carries out continuous diagnostics to ensure proper connection of sensors.

An intuitive touchscreen panel makes settings more precise. Communication with the Modbus RTU makes it possible to configure and monitor the CSU-2 remotely.

#### Simpler, more accurate settings with Modbus or touchscreen





Low voltage current sensor, RC120 and RC200 types

— Medium voltage current sensor, KECA and KEVCD types

#### Benefits of current sensors:

- Open-loop current sensors makes new installations and retrofits quick, easy, and reliable
- RJ45 connection between CSU-2 and current sensor, a green light signal on top of the CSU-2 confirms correct connection
- Fast, reliable tripping with high accuracy,  $\pm 3\%$  of measured current in the entire measurement range
- $\bullet \ \ {\sf Reduced power losses thanks to Rogowski technology of current sensors}\\$
- Significant space savings compared to standard current transformers
- Light weight for improved logistics.

#### Technical data

CSU-2 type		CSU-2LV	CSU-2MV
Inputs	Current sensor inputs (phases L1-L3)	3	·
	Current sensor inputs (neutral)	1	
	Current signal input optical (daisy chain)	1	
Outputs	Current signal output optical	2	
	Signal relay (for over current signal)	1	
Settings L1-L3, Neutral	Nominal current range	250 4000 A	100 4000 A
	Over current setting	250 12000 A	100 12000 A
	Current warning range	250 12000 A	100 12000 A
Current sensor input	Connector	RJ45	
Reaction time		< 1ms	
Supply	Supply voltage	24 240 V AC 50/60 Hz	
	Tolerance	AC -10% +15 %	
	Supply voltage DC	24 250 V DC	
	Tolerance	DC -25% + 30 %	
Interface	Communication protocol	Modbus RTU	
Fits with	Current sensors	RC120 & RC200 types.	KECA & KEVCD types.
		Detailed product types, refer to catalog.	Detailed product types, refer to catalog
Mounting		Wall or DIN-rail	

