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Siemens AG Infrastructure & Cities Sector Smart Grid Division Energy Automation Humboldtstr. 59 90459 Nuremberg, Germany www.siemens.com/sicam

For more information, please contact our Customer Support Center.
Phone: +49 180 524 84 37
Fax: +49 180 524 24 71

(Charges depending on the provider) E-mail: support.ic@siemens.com

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The information in this document contains general descriptions of the technical options available, which may not apply in all cases. The required technical options should therefore be specified in the contract.

SIEMENS



SICAM FCM

Keeping a finger on the pulse of your distribution network

Answers for infrastructure and cities.

Feeder condition monitoring: SICAM FCM detects everything

Transparency in the cable network

Short-circuit and earth-fault detection
directional

• Fast fault localization
• High availability

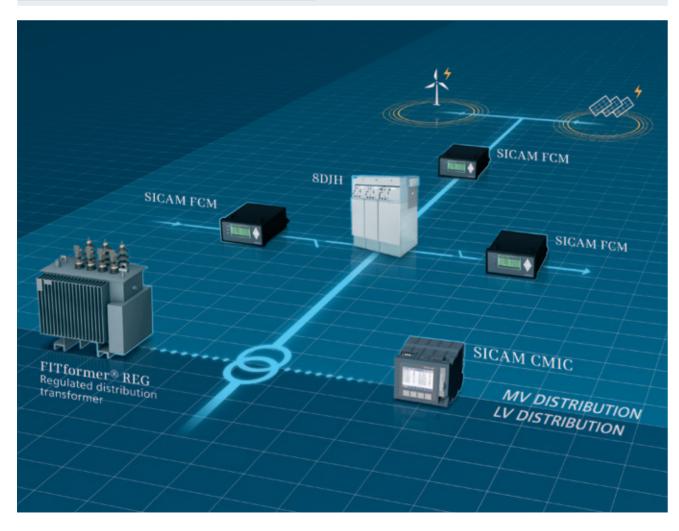
Network condition monitoring
Voltage, current, active/reactive/apparent power, power factor, frequency

Load flow monitoring
Maximum, minimum and mean values every 15 minutes

• Fast fault localization
• High availability

• Early-stage detection of overload situations
• Reliable distribution network operation

• Load curves for planning network expansion
• Optimum investment planning



All facts at a glance: SICAM FCM is always a good fit

Uniformity in the secondary substation

A glance at the various secondary substations reveals: the wide range in terms of power, station size and cable type is reflected in the many different short-circuit indicators and their transducers. SICAM FCM with low-power sensors according to IEC 60044* has it under control. The equipment

fits in every station: It covers all switchgear types up to 1,250 A as well as earthed, isolated and compensated distribution systems. Thanks to low-power sensors and high-quality measuring technology, it supplies reliable values with an accuracy of 1 % – making it a true power meter.

Technical data				
3 (2) MAN (1) MAN FCM	Inputs and outputs	 3 current inputs for phase currents 1 current input for sensitive earth faults Inputs for low-power sensors according to IEC 60044-8 or adapters fo 3 voltage inputs (230 V; 100 V I √3; 3.25 V I √3) 2 output relays for the fault direction (forward I reverse) 1 digital input to reset fault status 		
	Interface and protocol	1 x RS-485, Modbus RTU		
1 LC display 2 4 function keys 3 3 status LEDs	Control elements and displays	LC display and 4 function keys for navigationFault (field fault), run and status LED for communication		
	Archive	 Current values every 15 minutes for 40 days Trailing pointer for 15 minutes / 1 hour / 1 day / 30 days / 1 year 		
	Power supply voltage	 DC 24-60 V / AC 230 V, battery for 2,000 hours Battery service life approx. 20 years 		
	Protection class	IP20		
	Ambient temperature	● -30 to +85 °C		
	Housing, dimensions, assembly and connectors	 Polycarbonate, 96 x 48 x 119.5 mm (W/H/D), panel mounted, screw- and spring-type terminals 		

Order combinations	MLFB Number	Equipment for use			
		with existing sensors	in solid or low- resistance grounded systems	in isolated or compensated systems	with conven- tional trans- formers (1 A)
SICAM FCM Directional short-circuit/earth-fault indicator incl. monitoring	6MD2320-1AA00-1AA0	1 x	1 x	1 x	1 x
Sensor for phase current Low-power sensor 225 mV @ 300 A split-core transformer, 55 mm inside diameter	6MD2320-0GA00-1AA0		3 x	2 x	
Sensitive core-balance sensor Sensitive low-power sensor 225 mV @ 60 A split-core transformer, 110 mm inside diameter	6MD2320-0AF00-1AA0			1 x	
1 A adapter Transformer for 3 inputs (1 A) in low-power signal	6MD2320-0AA10-1AA0				1 x