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# Relion® protection and control

Improved network reliability



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2 RELION® PROTECTION AND CONTROL IMPROVED NETWORK RELIABILITY

#### Relion® protection and control

### Improved network reliability

The Relion® product family offers a full range of native IEC 61850 products for the protection, control, measurement and supervision of power systems.

To ensure interoperable and future-proof solutions, the Relion series products have been designed to implement the core values of the IEC 61850 standard. Using these products, you benefit from ABB's leading-edge technology, global application knowledge and experienced support network.

The Relion technology is a forerunner in the field of protection and control in power systems. Our products are continously improved to meet the market requirements and deeply rooted in our vast experience of developing successful protection and control relays.

The Relion products implement the core values of the IEC 61850 standard and operating with other equipment and systems that conform to this standard, they are capable of running multiple communication tasks, including horizontal GOOSE messaging. Communication also runs smoothly with other manufacturer's products, which comply with the IEC 61850 standard.

ABB also offers a range of complementary products to facilitate power system automation in substations.

**RIO600** is a remote unit to extend the number of input/output ports on the relays (IEC 61850 communication protocol).













	605 series	REX610	REX615 standard	REX615 wide	REX640
pplications					
Feeder protection and control					
Motor protection and control					
Transformer protection and control					
Generator protection and control					
Voltage protection and control					
ine differential protection and control					
Line distance protection					
Busbar protection					
Self-powered feeder protection					
Capacitor bank protection and control					
y features					
Auxiliary source	Self-powered	Auxiliary source (AC/DC)	Auxiliary source (AC/DC)	Auxiliary source (AC/DC)	Auxiliary source (AC/DC)
	or auxiliary source (AC/DC)	, , , ,			
Analog input	Conventional or sensor	Conventional	Conventional or sensor	Conventional or sensor	Conventional or sensor
Case type	Fixed	Withdrawable plug-in unit	Withdrawable plug-in unit	Withdrawable plug-in unit	Optional display
Display		4-line display	10 lines and customizable graphical display	10-line display and customizable graphical display	7-inch color touch screen
		10 programmable LEDs	11 programmable LEDs	11 programmable LEDs	
			(2 colors)	(2 colors)	
Control - Command		Open/close push button	Open/close push button	Open/close push button	Open/close from touch screen
			4 programmable buttons	16 programmable buttons	
Programming Interface	Display	Display	Display	Display	Display
		PCM600 software configuration	PCM600 software configuration	PCM600 software configuration	PCM600 software configuration
			Web browser	Web browser	Web browser
Communication protocols	Modbus serial	Modbus TCP/IP, serial	Modbus TCP/IP, serial	Modbus TCP/IP, serial	IEC 61850
		IEC 61850	IEC 61850	IEC 61850	Modbus TCP/IP, serial
			Profibus DPV1 adapter	Profibus DPV1 adapter	IEC 60870-5-103
			Ethernet redundancy PRP and HSR	Ethernet redundancy PRP and HSR	IEC 60870-5-104
			DNP3 TCP/IP, serial	DNP3 TCP/IP, serial	DNP3 TCP/IP, serial
			IEC 60870-5-103	IEC 60870-5-103	Ethernet redundancy PRP and HSR
A 1 1991 1 1 6 1 1 1 1 1 1 1 1 1 1 1 1 1			Process bus (IEC 61850-9-2 LE)	Process bus (IEC 61850-9-2 LE)	Process bus (IEC 61850-9-2LE)
Additional functionality		Arc fault protection (optional)	Arc fault protection (optional)	Arc fault protection (optional)	Arc fault protection (optional) Petersen coil control
Additional input /output		RIO600	Optional I/O card depending on product version	Optional I/O card depending on product version	Optional I/O card depending on product version
			RIO600	RIO600	