



BASIC INFORMATION

Monitor network stability Line monitoring relays 3UG5

Monitoring and early detection of network and voltage faults is important to ensure smooth operation. This is reflected in the growing market for measurement and monitoring relays. There are additional requirements with regard to safety due to legal requirements. Depending on the type of device, the relays monitor phase sequence, phase failure with or without N-conductor monitoring, phase asymmetry, frequency, undervoltage and overvoltage. In the event of voltage problems, a warning function can either be parameterized or it can be switched off directly. Via IO-Link or the controller, measurement data can be forwarded to higher-level systems for further analysis.



Customer benefit

- Simple and cost-effective solutions to increase plant availability
- Extended frequency range for international use and more flexibility
- Wider measurable voltage range allows lower variance and wide applicability of products
- Certified functional safety (Safety versions)
- IO-Link communication selectable for data management, maintenance, diagnostics
- Easy operation and parameterization thanks to the SIRIUS housing concept with 4 buttons and display
- Teaching function: Specification of limit values and display of the current measured value

Highlights

- Frequency monitoring 15-70 Hz
- Up to 690 V mains possible
- Safety SIL 1 / PL c
- IO-Link communication for data transmission to the controller or cloud solution
- SIRIUS housing concept for ease of use

Conversion predecessor 3UG4 to successor 3UG5

Functions	Connection	predecessor 3UG4	successor 3UG5	Safety Version
Phase failure	Screw terminal	3UG4511-1AN20	3UG5511-1AR20	
		3UG4511-1AP20		
		3UG4511-1AQ20		
		3UG4511-1BN20	3UG5511-1BR20	
		3UG4511-1BP20		
		3UG4511-1BQ20		
	Spring-loaded connection	3UG4511-2AN20	3UG5511-2AR20	
		3UG4511-2AP20		
3UG4511-2AQ20				
3UG4511-2BN20		3UG5511-2BR20		
3UG4511-2BP20				
3UG4511-2BQ20				
Phase sequence, phase failure, phase asymmetry	Screw terminal	3UG4512-1AR20	3UG5512-1AR20	3UG5512-1AR21
		3UG4512-1BR20	3UG5512-1BR20	3UG5512-1BR21
	Spring-loaded connection	3UG4512-2AR20	3UG5512-2AR20	3UG5512-2AR21
		3UG4512-2BR20	3UG5512-2BR20	3UG5512-2BR21
Phase sequence, phase failure, phase asymmetry, Undervoltage	Screw terminal	3UG4513-1BR20	3UG5514-1BR20	
		3UG4614-1BR20*		
	Spring-loaded connection	3UG4513-2BR20	3UG5514-2BR20	
		3UG4614-2BR20*		
Phase sequence, phase failure, phase asymmetry, N-conductor monitoring (adjustable), Frequency, Undervoltage, Overvoltage	Screw terminal	3UG4515-1CR20	3UG5616-1CR20	
		3UG4616-1CR20		
	Spring-loaded connection	3UG4515-2CR20	3UG5616-2CR20	
		3UG4616-2CR20		
Correction of the direction of rotation, phase sequence, phase failure, phase asymmetry, N-conductor monitoring (adjustable), frequency, undervoltage, overvoltage	Screw terminal	3UG4617-1CR20	3UG5618-1CR20	3UG5618-1CR21
		3UG4618-1CR20		3UG5618-2CR20
	Spring-loaded connection	3UG4617-2CR20		
		3UG4618-2CR20		
Phase sequence, phase failure, phase asymmetry, N-conductor monitoring (adjustable), frequency, undervoltage, overvoltage, IO-Link	Screw terminal	3UG4815-1AA40	3UG5816-1AA40	
		3UG4816-1AA40		
	Spring-loaded connection	3UG4815-2AA40	3UG5816-2AA40	
		3UG4816-2AA40		

* Please note: 3UG4614 (predecessor) - digitally adjustable will be replaced by 3UG5514 (successor) - analogue adjustable

Important to know:

- Monitoring of 3-phase or 3-phase +N parameterizable
- New, innovative housing for more efficiency and flexibility:
 - Device change without rewiring due to removable terminals
 - End-of-life dismantling for environmentally friendly disposal
 - Data matrix code for quick access to documentation
 - Hinged lid with lettering
 - Reinforced DIN rail attachment
- Screw and push-in connection technology
- Only one device for all voltage ranges

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