SIEMENS

Data sheet

3UG4641-1CS20



Digital monitoring relay cos phi and current monitoring from 90-690 V AC 0vershoot and undershoot self-supplied 50 to 60 Hz AC Noise pulses delay 0.1 to 20 s Hysteresis for (I) 0.1 to 2 A 2 change-over contacts with or without fault buffer screw terminal Successor product for 3UG3014

product brand name	SIRIUS		
product designation	Cos phi monitoring relay with digital setting		
product type designation	3UG4		
General technical data			
product function	Active power monitoring relay		
design of the display	LCD		
insulation voltage for overvoltage category III according to IEC 60664			
 with degree of pollution 3 rated value 	690 V		
degree of pollution	3		
surge voltage resistance rated value	6 kV		
protection class IP	IP20		
shock resistance according to IEC 60068-2-27	sinusoidal half-wave 15g / 11 ms		
vibration resistance according to IEC 60068-2-6	1 6 Hz: 15 mm, 6 500 Hz: 2g		
mechanical service life (operating cycles) typical	10 000 000		
electrical endurance (operating cycles) at AC-15 at 230 V typical	100 000		
thermal current of the switching element with contacts maximum	5 A		
reference code according to IEC 81346-2	К		
relative repeat accuracy	1 %		
Substance Prohibitance (Date)	05/01/2012		
SVHC substance name	Blei - 7439-92-1 Bleimonoxid (Bleioxid) - 1317-36-8		
Product Function			
product function			
 overcurrent detection 1 phase 	Yes		
 undercurrent detection 1 phase 	Yes		
 adjustable open/closed-circuit current principle 	Yes		
external reset	Yes		
Control circuit/ Control			
type of voltage of the control supply voltage	AC		
control supply voltage at AC			
• at 50 Hz rated value	90 690 V		
• at 60 Hz rated value	90 690 V		
supply voltage frequency for auxiliary and control circuit rated value	50 60 Hz		
operating range factor control supply voltage rated value at AC at 50 Hz			
• initial value	1		
• full-scale value	1		
operating range factor control supply voltage rated value at			

AC at 6 Hz • Initia value • Initia value 1 • Initia value 1 • Initia value value 050 Hz #searing activation 050 Hz #searing activation 010 A • Initia value 0				
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electrostatic discharge according to IEC 61000-4-2 6 kV contact discharge / 8 kV air discharge Galvanic isolation galvanic isolation • between input and output Yes • between the outputs Yes • between the voltage supply and other circuits Yes Connections/ Terminals Yes product component removable terminal for auxiliary and control circuit Yes type of electrical connection screw-type terminals type of connectable conductor cross-sections 1x (0.5 4 mm2), 2x (0.5 2.5 mm2) • finely stranded with core end processing 1x (0.5 2.5 mm2), 2x (0.5 1.5 mm2) • for AWG cables solid 2x (20 14) • for AWG cables stranded 2x (20 14)		1 kV		
Galvanic isolation galvanic isolation • between input and output • between the outputs • between the outputs • between the voltage supply and other circuits Yes Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection screw-type terminals type of connectable conductor cross-sections • solid 1x (0.5 4 mm2), 2x (0.5 2.5 mm2) • finely stranded with core end processing 1x (0.5 2.5 mm2), 2x (0.5 1.5 mm2) • for AWG cables solid 2x (20 14) • for AWG cables stranded 2x (20 14)	field-based interference according to IEC 61000-4-3	10 V/m		
galvanic isolation Yes • between input and output Yes • between the outputs Yes • between the voltage supply and other circuits Yes Connections/ Terminals Yes product component removable terminal for auxiliary and control circuit Yes type of electrical connection screw-type terminals type of connectable conductor cross-sections screw-type terminals • solid 1x (0.5 4 mm2), 2x (0.5 2.5 mm2) • finely stranded with core end processing 1x (0.5 2.5 mm2), 2x (0.5 1.5 mm2) • for AWG cables solid 2x (20 14) • for AWG cables stranded 2x (20 14)		6 kV contact discharge / 8 kV air discharge		
• between input and outputYes• between the outputsYes• between the voltage supply and other circuitsYesConnections/TerminalsYesproduct component removable terminal for auxiliary and control circuitYestype of electrical connectionscrew-type terminalstype of connectable conductor cross-sections1x (0.5 4 mm2), 2x (0.5 2.5 mm2)• solid1x (0.5 4 mm2), 2x (0.5 1.5 mm2)• finely stranded with core end processing1x (0.5 4 lm2), 2x (0.5 1.5 mm2)• for AWG cables solid2x (20 14)• for AWG cables stranded2x (20 14)	Galvanic isolation			
• between the outputs Yes • between the voltage supply and other circuits Yes Connections/ Terminals Yes product component removable terminal for auxiliary and control circuit Yes type of electrical connection screw-type terminals type of connectable conductor cross-sections screw-type terminals • solid 1x (0.5 4 mm2), 2x (0.5 2.5 mm2) • finely stranded with core end processing 1x (0.5 2 mm2), 2x (0.5 1.5 mm2) • for AWG cables solid 2x (20 14) • for AWG cables stranded 2x (20 14)	galvanic isolation			
• between the voltage supply and other circuitsYesConnections/ TerminalsYesproduct component removable terminal for auxiliary and control circuitYestype of electrical connectionscrew-type terminalstype of connectable conductor cross-sectionsscrew-type terminals• solid1x (0.5 4 mm2), 2x (0.5 2.5 mm2)• finely stranded with core end processing1x (0.5 2 mm2), 2x (0.5 1.5 mm2)• for AWG cables solid2x (20 14)• for AWG cables stranded2x (20 14)	 between input and output 	Yes		
Connections/ Terminals product component removable terminal for auxiliary and control circuit Yes type of electrical connection screw-type terminals type of connectable conductor cross-sections screw-type terminals • solid 1x (0.5 4 mm2), 2x (0.5 2.5 mm2) • finely stranded with core end processing 1x (0.5 2.5 mm2), 2x (0.5 1.5 mm2) • for AWG cables solid 2x (20 14) • for AWG cables stranded 2x (20 14)				
product component removable terminal for auxiliary and control circuit Yes type of electrical connection screw-type terminals type of connectable conductor cross-sections screw-type terminals • solid 1x (0.5 4 mm2), 2x (0.5 2.5 mm2) • finely stranded with core end processing 1x (0.5 2.5 mm2), 2x (0.5 1.5 mm2) • for AWG cables solid 2x (20 14) • for AWG cables stranded 2x (20 14)		Yes		
control circuitscrew-type terminalstype of electrical connectionscrew-type terminalstype of connectable conductor cross-sections1x (0.5 4 mm2), 2x (0.5 2.5 mm2)• solid1x (0.5 4 mm2), 2x (0.5 2.5 mm2)• finely stranded with core end processing1x (0.5 2.5 mm2), 2x (0.5 1.5 mm2)• for AWG cables solid2x (20 14)• for AWG cables stranded2x (20 14)				
type of connectable conductor cross-sections• solid1x (0.5 4 mm2), 2x (0.5 2.5 mm2)• finely stranded with core end processing1x (0.5 2.5 mm2), 2x (0.5 1.5 mm2)• for AWG cables solid2x (20 14)• for AWG cables stranded2x (20 14)		Yes		
• solid 1x (0.5 4 mm2), 2x (0.5 2.5 mm2) • finely stranded with core end processing 1x (0.5 2.5 mm2), 2x (0.5 1.5 mm2) • for AWG cables solid 2x (20 14) • for AWG cables stranded 2x (20 14)	type of electrical connection	screw-type terminals		
• finely stranded with core end processing 1x (0.5 2.5 mm2), 2x (0.5 1.5 mm2) • for AWG cables solid 2x (20 14) • for AWG cables stranded 2x (20 14)	type of connectable conductor cross-sections			
• for AWG cables solid2x (20 14)• for AWG cables stranded2x (20 14)	• solid	1x (0.5 4 mm2), 2x (0.5 2.5 mm2)		
• for AWG cables stranded 2x (20 14)	 finely stranded with core end processing 	1x (0.5 2.5 mm2), 2x (0.5 1.5 mm2)		
	 for AWG cables solid 	2x (20 14)		
connectable conductor cross-section	 for AWG cables stranded 	2x (20 14)		
	connectable conductor cross-section			

 solid 			0.5 4 mm²				
 finely stranded w 	 finely stranded with core end processing 		0.5	2.5 mm ²			
	d connectable conducto	or cross					
section			00				
	• solid		20				
	stranded		20				
tightening torque with se			1.2	0.8 N·m			
Installation/ mounting/ o	dimensions						
mounting position			any				
fastening method			snap-	on mounting			
height			102 n	าท			
width			22.5 mm				
depth			91 mr	n			
required spacing							
 with side-by-side 	mounting						
- forwards			0 mm				
— backwards			0 mm				
— upwards			0 mm				
— downwards			0 mm				
— at the side			0 mm				
 for grounded part 	ts		0 11111				
 for grounded pan forwards 	10		0 mm				
— backwards			0 mm				
— upwards			0 mm				
— at the side			0 mm				
— downwards			0 mm				
 for live parts 							
— forwards			0 mm				
— backwards			0 mm				
— upwards			0 mm				
— downwards			0 mm				
— at the side			0 mm				
Ambient conditions							
installation altitude at he	eight above sea level max	imum	2 000	m			
ambient temperature							
 during operation 			-25 +60 °C				
 during storage 			-40	+85 °C			
 during transport 			-40	+85 °C			
Certificates/ approvals							
			_			Declaration of Con-	
General Product App	roval				EMC	formity	
Confirmation					A	~ ~	
	(m)	(ŲL)		FAL	<i>ا</i> لایک	(
	<u> </u>	<u> </u>		LIIL	<u> </u>		
	CCC	UL			RCM	EG-Konf.	
Deale if the							
Declaration of Con- formity	Test Certificates			Marine / Shipping		other	
ioning							
	Special Test Certific-	Type Test Certif	fic-		STREPHIC AND	Confirmation	
UK	ate	ates/Test Repor		Lloyds			
UK CA				Register	DNVGL		
				LRS	Devisit Common		
Railway							
Vibration and Shock							

Further information
Siemens has decided to exit the Russian market (see here). https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business
Siemens is working on the renewal of the current EAC certificates. Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).
Information on the packaging https://support.industry.siemens.com/cs/ww/en/view/109813875
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