SIEMENS

Data sheet 3UG4512-1AR20



Analog monitoring relay Phase failure and sequence 3 x 160...690 V 50...60 Hz AC 1 change-over contact screw terminal

Figure similar

product brand name
SIRIUS

product designation
Network monitoring relay with analog setting
design of the product
product type designation
3UG4

product type designation	3UG4
General technical data	
product function	Phase monitoring relay
display version LED	Yes
insulation voltage for overvoltage category III according to IEC 60664	
 with degree of pollution 3 rated value 	690 V
degree of pollution	3
type of voltage	
 for monitoring 	AC
 of the control supply voltage 	AC
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	K
relative repeat accuracy	1 %
Substance Prohibitance (Date)	05/01/2012
Product Function	

relative repeat accuracy	1 %
Substance Prohibitance (Date)	05/01/2012
Product Function	
product function	
 undervoltage detection 	No
 overvoltage detection 	No
 phase sequence recognition 	Yes
 phase failure detection 	Yes
 asymmetry detection 	No
 overvoltage detection 3 phase 	No
 undervoltage detection 3 phases 	No
 voltage window recognition 3 phase 	No
 adjustable open/closed-circuit current principle 	No
• auto-RESET	Yes
Control circuit/ Control	
control supply voltage at AC	
 at 50 Hz rated value 	160 690 V

and to the ratio value provides a rated value at AC at 80 Mz. initial value for control supply voltage rated value at AC at 80 Mz. initial value for control supply voltage rated value at AC at 80 Mz. initial value for control supply voltage rated value at AC at 80 Mz. initial value for control supply voltage rated value at AC at 80 Mz. initial value for supply voltage rated value at AC at 80 Mz. initial value for supply voltage at AC at 80 Mz. initial value for supply voltage at AC at 80 Mz. initial value for NC contacts delayed switching for sumber of NC contacts delayed switching for sumber of OC contacts for supply voltage at AC at 80 Mz. in for sulfilliary contacts for supply voltage at AC at 80 Mz. in for sulfilliary contacts for supply voltage at AC at 80 Mz. in for sulfilliary contacts for supply voltage at AC at 80 Mz. in for sulfilliary contacts for supply voltage at AC at 80 Mz. in for sulfilliary contacts for supply voltage at AC at 80 Mz. in for sulfilliary contacts for supply voltage at AC at 80 Mz. in for sulfilliary contacts for supply voltage at AC at 80 Mz. in for sulfilliary contacts for supply voltage at AC at 80 Mz. in for sulfilliary contacts for supply voltage at AC at 80 Mz. in for sulfilliary contacts for supply voltage at 80 Mz. in for sulfilliary contacts for supply voltage at 80 Mz. in for sulfilliary contacts for supply voltage at 80 Mz. in for sulfilliary contacts for supply voltage at 80 Mz. in for sulfilliary contacts for supply at 60 Mz. in for sulfilliary contacts for supply voltage at 80 Mz. in for sulfilliary contacts for supply voltage at 80 Mz. in for sulfilliary for supply voltage at 80 Mz. in for sulfilliary for supply and other circuits for supply and other circuits for supply and other circuits for sulfilliary		400 0001/
value at AC at 50 Hz • Initial value • Illi-scale value Measuring crecut measurable voltage at AC Availiary crecut mumber of NC contacts delayed switching number of NC contacts delayed switching number of NC contacts delayed switching number of NC contacts • In auxiliary contacts •	at 60 Hz rated value	160 690 V
initial value full-scale value operating range factor control supply voltage rated value at AC at 69 ftz initial value initiali		
* full-scale value operating range factor control supply voltage rated value at AC at 69 Hz		
operating range factor control supply voltage rated value at AC at 50 Hz initial value initial	initial value	1
value at AC at 60 Hz • Initial value Imassuring circuit measurable voltage at AC Auxiliary circuit mumber of NC contacts delayed switching number of NC contacts of contracts • Initial value • Initial val	 full-scale value 	1
Initial value Interest value Intere	operating range factor control supply voltage rated	
Unl-scale value **Measuring circuit** **measurable voltage at AC** **Auxillary circuit** **measurable voltage at AC** **Auxillary circuit** **mumber of NC contacts delayed switching **number of NC contacts delayed switching **number of NC contacts **era voltage of Contacts **	value at AC at 60 Hz	
Measuring circuit measurable voltage at AC Autiliary circuit number of NC contacts delayed switching number of NC contacts delayed switching number of CO contacts • delayed switching operating frequency with 3RT2 contactor maximum Mismicricuit number of poles for main current circuit ampacity of the output relay at AC-15 • at 250 V at 5060 Hz • at 400 V at 5060 Hz • at 250 V • at 2	initial value	1
measurable voltage at AC Auxiliary dreciti unumber of NC contacts delayed switching unumber of NC contacts delayed switching unumber of NC contacts • for auxiliary contacts • at 260 V at 50/60 Nz • at	 full-scale value 	1
measurable voltage at AC Auxiliary dreciti unumber of NC contacts delayed switching unumber of NC contacts delayed switching unumber of NC contacts • for auxiliary contacts • at 260 V at 50/60 Nz • at	Measuring circuit	
Auxiliary circuit number of NC contacts delayed switching number of CO contacts • delayed switching operating frequency with 3RT2 contactor maximum Main circuit number of poles for main current circuit ampacity of the output relay at AC-15 • at 250 V at 50/60 Hz • at 400 V at 50/60 Hz • at 24 V • at 125 V • at 25		160 690 V
number of NC contacts delayed switching number of NC contacts delayed switching number of NC contacts and switching number of CO contacts • for auxiliary contacts • for a		
number of CO contacts • for auxiliary contacts • for auxiliary contacts • delayed switching operating frequency with SRT2 contactor maximum **Sincripit** **Initial SRT2 contactor maximum **Initial SRT2 contactor maximum **Sincripit** **Initial SRT2 contactor maximum **Initial SRT2 co		0
number of CO contacts • for auxiliary contacts • for auxiliary contact		
e for auxiliary contacts oleisyed switching operating frequency with SRT2 contactor maximum 5 0000 1/h Man circuit number of poles for main current circuit ampacity of the output relay at AC-15 • at 250 V at 50/60 Hz • at 240 V at 50/60 Hz • at 125 V • at 250 V operational current at 17 V minimum continuous current of the DIAZED fuse link of the output relay at BC-13 • at 260 V • at 250 V •	, ,	U
e delayed switching operating frequency with SRT2 contactor maximum Main circuit number of poles for main current circuit ampacity of the output relay at AC-15 e at 250 V at 50/60 Hz at 24 V at 400 V at 50/60 Hz at 25 V beta 25 V at 25 V beta 25 V at 25 V beta 25 V beta 25 V at 25 V beta 25 V between the outputs beta 25 V		
Departing frequency with 3RT2 contactor maximum Main circuit ampacity of the output relay at AC-15 a 125 V 3 A an at 250 V 0, at 20/50 Hz at 250 V 0, at 250 V operational current at 17 V minimum continuous current of the DIAZED fuse link of the output relay due to burst according to IEC 61000-4-4 a due to burst according to IEC 61000-4-2 due to burst according to IEC 61000-4-2 field-based interference according to IEC 61000-4-3 field-based		1
Name of poles for main current circuit ampacity of the output relay at AC-15 at 250 V at 50/60 Hz at 240 V at 50/60 Hz at 240 V at 50/60 Hz at 250 V at 250		1
number of poles for main current circuit ampacity of the output relay at AC-15 • at 250 V at 50/60 Hz • at 400 V at 50/60 Hz • at 42 d V • at 425 V • at 250 V • at 250 V operational current at 17 V minimum continuous current of the DIAZED fuse link of the output relay Electromagnetic compatibility conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor-conductor	operating frequency with 3RT2 contactor maximum	5 000 1/h
number of poles for main current circuit ampacity of the output relay at AC-15 • at 250 V at 50/60 Hz • at 400 V at 50/60 Hz • at 42 d V • at 425 V • at 250 V • at 250 V operational current at 17 V minimum continuous current of the DIAZED fuse link of the output relay Electromagnetic compatibility conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor-conductor	Main circuit	
ampacity of the output relay at AC-15 • at 250 V at 50/60 Hz ampacity of the output relay at DC-13 • at 24 V • at 125 V • at 250 V operational current at 17 V minimum continuous current of the DIAZED fuse link of the output relay Electromagnetic compatibility conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to to conductor-conductor surge according to IEC 61000-4-2 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-3 electrostatic of scharge according to IEC 61000-4-3 field-based interference according to IEC 61000-4-3 electrostatic of scharge according to IEC 61000-4-3 electrostatic of scharge according to IEC 61000-4-3 field-based interference according to IEC 61000-4-3 electrostatic of scharge according to IEC 61000-4-3 field-based interference according to IEC 61000-4-3 field-based interference according to IEC 61000-4-3 electrostatic of scharge according to IEC 61000-4-3 field-based interference according to IEC 61000-4-3 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-3 field-based interference according to IEC		3
e at 250 V at 50/60 Hz ampacity of the output relay at DC-13 • at 24V	•	
any active of the output relay at DC-13 at 24 V at 125 V ol 25 O V operational current at 17 V minimum continuous current of the DIAZED fuse link of the output relay Electromagnetic compatibility conducted interference due to burst according to IEC 61000-4-4 edue to conductor-earth surge according to IEC 61000-4-5 due to conductor-conductor surge according to IEC 61000-4-5 field-based interference according to IEC 61000-4-2 folyon-4-5 field-based interference according to IEC 61000-4-2 folyon-6-5 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 folyon-6-5 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-3 folymin in the field interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-3 folymin interference according		3 Δ
ampacity of the output relay at DC-13 • at 125 V • at 125 V • at 125 V 0.2 A • at 125 V 0.1 A 0.2 A 0.1 A 0 operational current at 17 V minimum continuous current of the DIAZED fuse link of the output relay Conducted Interference		
at 25 V at 125 V at 125 V at 250 V operational current at 17 V minimum continuous current of the DIAZED fuse link of the output relay Electromagnetic compatibility conducted interference due to burst according to IEC 61000-4-4 due to conductor-earth surge according to IEC 61000-4-5 edue to conductor-conductor surge according to IEC 61000-4-5 fold-based interference according to IEC 61000-4-2 delectrostatic discharge according to IEC 61000-4-2 fold-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 fold-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 fold-based interference according to IEC 61000-4-3 electrostatic discharge / 8 kV air discharge 8 kV contact discharge / 8 kV air discharge 8 kV contact discharge / 8 kV air discharge 8 kV contact discharge / 8 kV air discharge 8 kV contact discharge / 8 kV air discharge 8 kV contact discharge / 8 kV air discharge 8 kV contact discharge / 8 kV air discharge 8 kV contact discharge / 8 kV air discharge 8 kV contact discharge / 8 kV air discharge 8 kV contact discharge / 8 kV air discharge 8 kV contact discharge / 8 kV air discharge 8 kV contact discharge / 8 kV air discharge 8 kV contact discharge / 8 kV air discharge 8 kV contact discharge / 8 kV air discharge 8 kV contact discharge / 8 kV air discharge 8 kV contact discharge / 8 kV air discharge 8 kV contact discharge / 8 kV air discharge 8 kV contact discharge / 8 kV air discharge 8 kV contact discharge / 8 kV air discharge 8 kV contact discharge / 8		3 A
at 125 V at 250 V at 250 V operational current at 17 V minimum continuous current of the DIAZED fuse link of the output relay Electromagnetic compatibility conducted interference a due to burst according to IEC 61000-4-4 a due to conductor-conductor surge according to IEC 61000-4-5 a due to conductor-conductor surge according to IEC 61000-4-5 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Calvanic isolation yes between input and output between the voltage supply and other circuits between the voltage supply and other circuits connections/Terminals product component removable terminal for auxiliary and control circuit type of electrical connection type of connectable conductor cross-sections solid finely stranded with core end processing at AWG cables stranded connectable conductor cross-section solid finely stranded with core end processing AWG number as coded connectable conductor cross-section solid sitranded tightening torque with screw-type terminals number as coded connectable conductor cross-section solid stranded tightening torque with screw-type terminals number as coded connectable conductor cross-section solid stranded tightening torque with screw-type terminals number as coded connectable conductor cross-section solid stranded tightening torque with screw-type terminals number as coded connectable conductor cross-section solid stranded tightening torque with screw-type terminals number as coded connectable conductor cross-section solid stranded tightening torque with screw-type terminals number as coded connectable conductor cross-section solid stranded tightening torque with screw-type terminals number as coded connectable conductor cross-section solid stranded tightening torque with screw-type terminals number as coded connectable conductor cross-section solid stranded tightening torque with screw-type terminals stranded tightening torque with screw-type terminals		4.4
• at 250 V operational current at 17 V minimum continuous current of the DIAZED fuse link of the output relay Electromagnetic compatibility conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Galvanic isolation alectrostatic discharge according to IEC 61000-4-2 Galvanic isolation alevanic isolation between input and output • between the voltage supply and other circuits between the voltage supply and other circuits yes Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection type of connectable conductor cross-sections • solid • inely stranded with core end processing • at AWG cables solid • at AWG cables stranded connectable conductor cross-section • solid • finely stranded with core end processing • solid • finely stranded with core end processing • solid • finely stranded with core end processing • solid • finely stranded with core end processing • solid • finely stranded with core end processing • solid • finely stranded with core end processing • solid • finely stranded with core end processing • solid • finely stranded with core end processing • solid • finely stranded with core end processing • solid • finely stranded with core end processing • solid • finely stranded with core end processing • solid • finely stranded with core end processing • solid • finely stranded with core end processing • solid • finely stranded with core end processing • solid • finely stranded with core end processing • solid • finely stranded with core end processing • solid • stranded		
operational current at 17 V minimum continuous current of the DIAZED fuse link of the output relay Electromagnetic compatibility conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 6kV contact discharge / 8 kV air discharge Calvanic isolation galvanic isolation • between input and output • between the outputs • between the voltage supply and other circuits Yes • between the voltage supply and other circuits Connections/ Terminals Product component removable terminal for auxiliary and control circuit type of electrical connection type of connectable conductor cross-sections • solid • finely stranded with core end processing • at AWG cables solid • at AWG cables solid • at AWG cables stranded connectable conductor cross-section • solid • finely stranded with core end processing AWG number as coded connectable conductor cross-section • solid • stranded • stranded ightening torque with screw-type terminals nustallation/mounting/ dimensions		
continuous current of the DIAZED fuse link of the output relay conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-centh surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-3 • electrostatic discharge according to IEC 61000-4-3 • electrostatic discharge according to IEC 61000-4-2 Galvanic isolation galvanic isolation • between input and output Yes • between the voltage supply and other circuits Yes Connections/ Torminals product component removable terminal for auxiliary and control circuit type of electrical connection type of connectable conductor cross-sections • solid • at AWG cables stranded • at AWG cables stranded connectable conductor cross-section • solid • finely stranded with core end processing • at AWG cables stranded connectable conductor cross-section • solid • finely stranded with core end processing • solid • finely stranded with core end processing • solid • finely stranded with core end processing • solid • stranded • finely stranded with core end processing AWG number as coded connectable conductor cross-section • solid • stranded ightening torque with screw-type terminals nustallation/ mounting/ dimensions	● at 250 V	0.1 A
Electromagnetic compatibility conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-3 • field-based interference according to IEC 61000-4-2 • de kV contact discharge / 8 kV air discharge Calvanic isolation galvanic isolation • between input and output • between the outputs • between the voltage supply and other circuits Yes • between the voltage supply and other circuits Yes connections/ Torminals product component removable terminal for auxiliary and control circuit type of electrical connection type of connectable conductor cross-sections • solid • finely stranded with core end processing • at ANVG cables solid • at ANVG cables stranded connectable conductor cross-section • solid • finely stranded with core end processing AWG number as coded connectable conductor cross section • solid • stranded in the remarkance of the processing AWG number as coded connectable conductor cross section • solid • stranded in the remarkance of the processing AWG number as coded connectable conductor cross section • solid • stranded in the remarkance of the processing AWG number as coded connectable conductor cross section • solid • stranded in the remarkance of the processing AWG number as coded connectable conductor cross section • solid • stranded in the remarkance of the processing AWG number as coded connectable conductor cross section • solid • stranded in the remarkance of the processing AWG number as coded connectable conductor cross section • solid • stranded in the remarkance of the processing AWG number as coded connectable conductor cross scoton	operational current at 17 V minimum	5 mA
Electromagnetic compatibility conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Galvanic Isolation galvanic Isolation • between input and output Yes • between the outputs Yes • between the voltage supply and other circuits Yes Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection type of connectable conductor cross-sections • solid • finely stranded with core end processing • at AWG cables stranded connectable conductor cross-section • solid • finely stranded with core end processing AWG number as coded connectable conductor cross-section • solid • stranded • stranded itightening torque with screw-type terminals Installation/ mounting/ dimensions		4 A
conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 field-based interference according to IEC 61000-4-2 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 field-based interference according to IEC 61000-4-2 field-based interference according to IEC 61000-4-3 field-based interference according to IEC 61000-4-2 field-based interference according to IEC 61000-4-2 field-based interference according to IV/m field-based interference according	output relay	
 • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-2 field-based interference according to IEC 61000-4-2 detrostatic discharge according to IEC 61000-4-2 delayanic isolation • between input and output • between the voltage supply and other circuits between the voltage supply and other circuits connections/ Terminals product component removable terminal for auxillary and control circuit type of electrical connection type of connectable conductor cross-sections • solid • at AWG cables solid • at AWG cables stranded connectable conductor cross-section • solid • finely stranded with core end processing at AWG cables stranded connectable conductor cross-section • solid • finely stranded with core end processing AWG number as coded connectable conductor cross section • solid •	Electromagnetic compatibility	
• due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Galvanic isolation • between input and output Yes • between the outputs Yes • between the voltage supply and other circuits Yes Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection type of connectable conductor cross-sections • solid 1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) • at AWG cables solid 2x (20 14) • at AWG cables stranded 2x (20 14) connectable conductor cross-section • solid 0.5 4 mm² • finely stranded with core end processing 6.5 2.5 mm² AWG number as coded connectable conductor cross-section • solid 0.5 4 mm² • Solid 0.5 2.5 mm² AWG number as coded connectable conductor cross-section • solid 0.5 4 mm² • solid 0.5 4 mm² • solid 0.5 4 mm² • solid 0.5 2.5 mm² AWG number as coded connectable conductor cross-section • solid 0.5 4 mm² • solid 0.5 4 mm² • solid 0.5 2.5 mm² AWG number as coded connectable conductor cross-section • solid 0.5 4 mm² • solid 0.5 2.5 mm² AWG number as coded connectable conductor cross-section • solid 0.5 4 mm² • solid 0.5 4	conducted interference	
• due to conductor-conductor surge according to IEC • due to conductor-conductor surge according to IEC 61000-4-5 field-based interference according to IEC 61000-4-2 electrostatic discharge according to IEC 61000-4-2 Galvanic isolation galvanic isolation • between input and output • between the outputs • between the voltage supply and other circuits Product component removable terminal for auxillary and control circuit type of electrical connection type of connectable conductor cross-sections • solid • at AWG cables solid • at AWG cables stranded • at AWG cables stranded • finely stranded with core end processing • solid • finely stranded with core end processing • solid • finely stranded with core end processing • solid • finely stranded with core end processing AWG number as coded connectable conductor cross-section • solid • stranded • stra	 due to burst according to IEC 61000-4-4 	2 kV
• due to conductor-conductor surge according to IEC • due to conductor-conductor surge according to IEC 61000-4-5 field-based interference according to IEC 61000-4-2 electrostatic discharge according to IEC 61000-4-2 Galvanic isolation galvanic isolation • between input and output • between the outputs • between the voltage supply and other circuits Product component removable terminal for auxillary and control circuit type of electrical connection type of connectable conductor cross-sections • solid • at AWG cables solid • at AWG cables stranded • at AWG cables stranded • finely stranded with core end processing • solid • finely stranded with core end processing • solid • finely stranded with core end processing • solid • finely stranded with core end processing AWG number as coded connectable conductor cross-section • solid • stranded • stra	due to conductor-earth surge according to IEC	2 kV
field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Galvanic isolation • between input and output • between the outputs • between the voltage supply and other circuits Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection type of connectable conductor cross-sections • solid • finely stranded with core end processing • at AWG cables stranded • at AWG cables stranded connectable conductor cross-section • solid • finely stranded with core end processing • at AWG cables stranded • finely stranded with core end processing • solid • finely stranded with core end processing • at AWG cables stranded connectable conductor cross-section • solid • finely stranded with core end processing AWG number as coded connectable conductor cross-section • solid • finely stranded with core end processing AWG number as coded connectable conductor cross-section • solid • stranded • stranded • stranded tightening torque with screw-type terminals Installation/ mounting/ dimensions	61000-4-5	4 kV
electrostatic discharge according to IEC 61000-4-2 Galvanic isolation galvanic isolation • between input and output • between the outputs • between the voltage supply and other circuits Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection type of connectable conductor cross-sections • solid • finely stranded with core end processing • at AWG cables solid • at AWG cables stranded connectable conductor cross-section • solid • finely stranded with core end processing • at AWG cables stranded connectable conductor cross-section • solid • at AWG cables stranded connectable conductor cross-section • solid • finely stranded with core end processing AWG number as coded connectable conductor cross-section • solid • stranded • stranded • stranded tightening torque with screw-type terminals Installation/ mounting/ dimensions	61000-4-5	
galvanic isolation • between input and output • between the outputs • between the voltage supply and other circuits Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection type of connectable conductor cross-sections • solid • sinely stranded with core end processing • at AWG cables solid • at AWG cables stranded connectable conductor cross-section • solid • solid • finely stranded with core end processing • solid • at AWG cables stranded connectable conductor cross-section • solid • finely stranded with core end processing • solid • solid • finely stranded with core end processing • solid • solid • solid • solid • finely stranded with core end processing AWG number as coded connectable conductor cross section • solid • stranded tightening torque with screw-type terminals Installation/ mounting/ dimensions		
galvanic isolation • between input and output • between the outputs • between the voltage supply and other circuits Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection type of connectable conductor cross-sections • solid • finely stranded with core end processing • at AWG cables solid • at AWG cables stranded connectable conductor cross-section • solid • at AWG cables stranded connectable conductor cross-section • solid • finely stranded with core end processing • solid • solid • finely stranded with core end processing • solid • solid • solid • finely stranded with core end processing AWG number as coded connectable conductor cross section • solid • stranded • stranded tightening torque with screw-type terminals Installation/ mounting/ dimensions	electrostatic discharge according to IEC 61000-4-2	6 kV contact discharge / 8 kV air discharge
between input and output between the outputs between the voltage supply and other circuits Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection type of connectable conductor cross-sections solid	Galvanic isolation	
between the outputs between the voltage supply and other circuits Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection type of connectable conductor cross-sections solid finely stranded with core end processing at AWG cables solid at AWG cables stranded connectable conductor cross-section at AWG cables stranded connectable conductor cross-section solid finely stranded with core end processing solid	galvanic isolation	
between the outputs between the voltage supply and other circuits Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection type of connectable conductor cross-sections solid finely stranded with core end processing at AWG cables solid at AWG cables stranded connectable conductor cross-section at AWG cables stranded connectable conductor cross-section solid finely stranded with core end processing solid	_	Yes
between the voltage supply and other circuits Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection type of connectable conductor cross-sections • solid • finely stranded with core end processing • at AWG cables solid • at AWG cables stranded connectable conductor cross-section • solid • finely stranded with core end processing • at AWG cables stranded connectable conductor cross-section • solid • finely stranded with core end processing AWG number as coded connectable conductor cross section • solid • solid • stranded • stranded • stranded itightening torque with screw-type terminals Installation/ mounting/ dimensions		Yes
product component removable terminal for auxiliary and control circuit type of electrical connection type of connectable conductor cross-sections	·	
product component removable terminal for auxiliary and control circuit type of electrical connection solid finely stranded with core end processing at AWG cables stranded solid at AWG cables stranded finely stranded with core end processing at AWG connectable conductor cross-section solid finely stranded with core end processing at AWG cables stranded connectable conductor cross-section solid finely stranded with core end processing AWG number as coded connectable conductor cross-section solid stranded stranded tightening torque with screw-type terminals Yes screw-type terminals 1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 2x (20 14) 2x (20 14) 0.5 4 mm² 0.5 2.5 mm² 0.5 2.5 mm² 1x (0.5 2.5 mm²) 2x (20 14) 2x (20 14) 2x (20 14) 1x (0.5 2.5 mm²) 1x (0.5 2.5 mm²) 2x (20 14) 2x (20 14) 1x (0.5 2.5 mm²) 1x (0.5 2.5 mm²) 2x (20 14) 2x (20 14) 1x (0.5 2.5 mm²) 2x (20 14) 2x (20 14) 1x (0.5 2.5 mm²) 1x (0.5 2.5 mm²) 1x (0.5 2.5 mm²) 2x (20 14) 2x (20 14) 2x (20 14) 1x (0.5 2.5 mm²) 1x (0.5 2.5 mm²) 2x (20 14) 2x (20 14) 2x (20 14) 1x (0.5 2.5 mm²) 2x (20 14)	<u> </u>	
and control circuit type of electrical connection type of connectable conductor cross-sections • solid • finely stranded with core end processing • at AWG cables solid • at AWG cables stranded • solid • finely stranded with core end processing • at AWG cables stranded • at AWG cables stranded connectable conductor cross-section • solid • finely stranded with core end processing AWG number as coded connectable conductor cross section • solid • solid • solid • stranded • stranded tightening torque with screw-type terminals screw-type terminals 1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 2x (20 14) 2x (20 14) 0.5 4 mm² 0.5 2.5 mm² 20 14 20 14 1x (0.5 2.5 mm²) 2x (20 14)		Voe
type of connectable conductor cross-sections • solid • finely stranded with core end processing • at AWG cables solid • at AWG cables stranded • solid • finely stranded with core end processing • at AWG cables stranded • at AWG cables stranded connectable conductor cross-section • solid • finely stranded with core end processing AWG number as coded connectable conductor cross section • solid • stranded • stranded • stranded tightening torque with screw-type terminals Installation/ mounting/ dimensions		165
 solid finely stranded with core end processing at AWG cables solid at AWG cables stranded at AWG cables cables conductor cross section at AWG cables cab	type of electrical connection	screw-type terminals
 finely stranded with core end processing at AWG cables solid at AWG cables stranded at AWG	type of connectable conductor cross-sections	
 finely stranded with core end processing at AWG cables solid at AWG cables stranded at AWG	• solid	1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)
 at AWG cables solid at AWG cables stranded at AWG cables stranded<!--</td--><td> finely stranded with core end processing </td><td></td>	 finely stranded with core end processing 	
 at AWG cables stranded connectable conductor cross-section solid finely stranded with core end processing AWG number as coded connectable conductor cross section solid stranded stranded tightening torque with screw-type terminals Installation/ mounting/ dimensions 		
connectable conductor cross-section • solid • finely stranded with core end processing AWG number as coded connectable conductor cross section • solid • stranded • stranded tightening torque with screw-type terminals Stranded Str	 at AWG cables stranded 	
 solid finely stranded with core end processing AWG number as coded connectable conductor cross section solid stranded tightening torque with screw-type terminals Installation/ mounting/ dimensions 0.5 4 mm² 0.5 2.5 mm² 20 14 14 10.8 1.2 N·m 		
finely stranded with core end processing AWG number as coded connectable conductor cross section solid stranded stranded tightening torque with screw-type terminals Installation/ mounting/ dimensions 0.5 2.5 mm² 20 14 0.8 14 0.8 1.2 N·m		0.5 4 mm²
AWG number as coded connectable conductor cross section • solid • stranded • stranded tightening torque with screw-type terminals 0.8 1.2 N·m Installation/ mounting/ dimensions		
section		0.0 £.0 IIIII
◆ solid ◆ stranded ◆ stranded tightening torque with screw-type terminals O.8 1.2 N·m Installation/ mounting/ dimensions		
• stranded 20 14 tightening torque with screw-type terminals 0.8 1.2 N·m Installation/ mounting/ dimensions		20 14
tightening torque with screw-type terminals 0.8 1.2 N·m Installation/ mounting/ dimensions		
Installation/ mounting/ dimensions		
	3 3 1	
mounting position any		
	mounting position	any

fastening method snap-on mounting height 83 mm width 22.5 mm depth 91 mm 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 parts — forwards 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 0 mm - upwards - downwards 0 mm - at the side 0 mm **Ambient conditions** installation altitude at height above sea level maximum 2 000 m ambient temperature during operation -25 ... +60 °C

• during storage during transport -40 ... +85 °C

-40 ... +85 °C

Certificates/ approvals

General Product Approval

EMC

Declaration of Conformity

Confirmation











Declaration of Conformity

Test Certificates

Marine / Shipping

other



Special Test Certificate

Type Test Certificates/Test Report





Confirmation

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

Information- and Downloadcenter (Catalogs, Brochures,...)

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3UG4512-1AR20

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG4512-1AR20

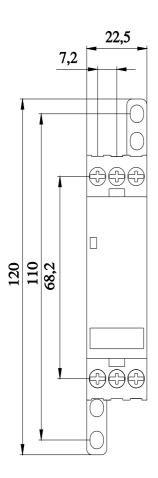
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

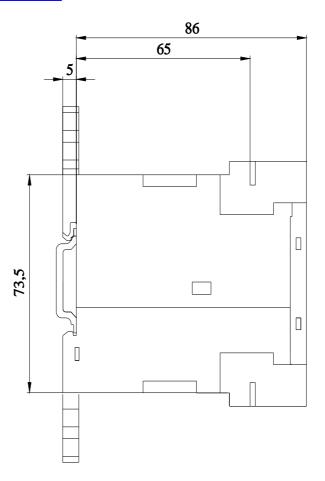
https://support.industry.siemens.com/cs/ww/en/ps/3UG4512-1AR20

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax de.aspx?mlfb=3UG4512-1AR20&lang=en

Characteristic: Derating

https://support.industry.siemens.com/cs/ww/en/ps/3UG4512-1AR20/manual





last modified: 3/22/2023 🖸