# SIEMENS

#### Data sheet

### 3UG4841-2CA40



Digital monitoring relay cos phi and current monitoring for IO-Link 90...690 V AC, 0.2...10 A 0vershoot and undershoot ON-delay time Tripping delay time Hysteresis 0.1 to 3.0 A 2 change-over contacts, spring-type connection system

| 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 |   |
| <ul> <li>with degree of pollution 2 rated value</li> </ul>             | 690 V   |
| degree of pollution  | 2   |
| 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                     | 10 000 002                                    |
| 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                                    |
| Product Function   |   |
| product function   |   |
| <ul> <li>overcurrent detection 1 phase</li> </ul>                      | Yes   |
| <ul> <li>undercurrent detection 1 phase</li> </ul>                     | Yes   |
| <ul> <li>adjustable open/closed-circuit current principle</li> </ul>   | Yes   |
| external reset   | Yes   |
| Control circuit/ Control   |   |
| type of voltage of the control supply voltage                          | DC  |
| control supply voltage at AC   |   |
| • at 50 Hz rated value   | 0 0 V   |
| • at 60 Hz rated value   | 0 0 V   |
| control supply voltage at DC   |   |
| rated value  | 24 24 V                                       |
| supply voltage frequency for auxiliary and control circuit rated value | 0 0 Hz  |
| operating range factor control supply voltage rated value at DC        |   |
| initial value  | 0.75  |
| • full-scale value   | 1.25  |
|  |   |

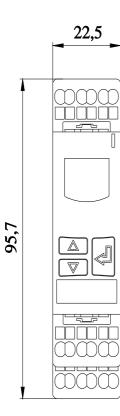
| supply collage frequency read value         00 Hz           Measuring crowth         00 Hz           Immeasuring crowth         0.20 A           injustible current         0.20 A           adjustible current response value current         0.20 A           adjustible current response value current         0.20 A           adjustible current response value current value         0   | Supply voltage   |   |
|--|--|---|
| type of current for monitoring         AC           messarzable current response value current         0.210 A           • 1         0.210 A           adjustable current response value current         0.210 A           adjustable response delay time         0.210 A           • vito nastring         0  | supply voltage frequency rated value                       | 60 Hz                                       |
| type of current for monitoring         AC           messarzable current response value current         0.210 A           • 1         0.210 A           adjustable current response value current         0.210 A           adjustable response delay time         0.210 A           • vito nastring         0  | Measuring circuit  |   |
| measurable current     0.210 A       adjustable current response value current     0.210 A       • 2     0.210 A       • othen starting     0999.9 s       • with lower opper limit violation     0999.9 s       adjustable exponse delay time     0000 mA       • with lower opper limit violation     0000 mA       accurrey of digital display     4/-1 digit       Precision   | type of current for monitoring                             | AC  |
|  |  | 0.2 10 A                                    |
| • 2     0.210 A       adjustable tropped existy time     0999.9 s       • with lower or upper limit violation     0999.9 s       adjustable structuring rysteristic measured current value     0999.9 s       adjustable structuring rysteristic measured current value     0999.9 s       accuracy of digital display     +1 digit       Precision     10 %       Communication Protocol is supported 10-Link protocol     Yes       O-Link transfer rate     COM2 (38 k Baud)       Dinit-Lo-point cycle time between master and IO-Link     10 ms       dift ovinne     4 byte       ord in address range of the inputs with cyclical transfer total     2 byte       total     - of the address range of the inputs with cyclical transfer total       ord the address range of the outputs with cyclical transfer total     0       number of NC contacts delayed switching     0       number of NC contacts delayed switching     0       number of NC contacts delayed switching     0       operating fraquency with SRT2 contactor maximum     5000 1/h       Wain ceruet     1       operating fraquency with SRT2 contactor maximum     5000 1/h       Wain ceruet     1       operating fraquency with SRT2 contactor maximum     5000 1/h       Wain ceruet     3.A       ad 400 vit 5000 1/c     3.A  | adjustable current response value current                  |   |
| adjustable response delay time   |  | 0.2 10 A                                    |
| adjustable response delay time     0   |  |   |
| •••••••••••••••••••••••••••••••••  | adjustable response delay time                             |   |
| Auth lower or upper limit violation         adjustable switching hystoresis for measured current value         adjustable switching         protocol is supported Io-Link protocol         Cohiz (38 4 kBaud)         ported is supported Io-Link protocol         Cohiz (38 4 kBaud)         ported is supported Io-Link protocol         Cohiz (38 4 kBaud)         ported is supported Io-Link master         Adjust or tradition         of the address range of the inputs with cyclical transfer         total         of the address range of the outputs with cyclical transfer         total         of the address range of the outputs with cyclical transfer         total         address range of the output swith cyclical transfer         total         aureber of OC contacts delayed switching         0 18         mumber of DOE soft main current circuit         1         aureber of OC contacts delayed switching         2 to the address range of the output skip stach-15         add 200 the         add 200                        |  | 0 999.9 s                                   |
| accuracy of digital display     +/-1 digit       Procession     10 %       Communication/ Protocol     0 %       Communication/ Protocol     COM2 (38 4 kBaud)       DoLink transfer rate     COM2 (38 4 kBaud)       pottocol is supported Io-Link protocol     10 ms       divice minimum     10 ms       todaw solume     4       • of the address range of the inputs with cyclical transfer total     2 byte       • of the address range of the outputs with cyclical transfer total     2 byte       • of the address range of the outputs with cyclical transfer total     0       • of the address range of the outputs with cyclical transfer total     0       • of the address range of the outputs with cyclical transfer total     0       • of the address range of the outputs with cyclical transfer total     0       • of the address range of the outputs with cyclical transfer total     0       • outputs of NO contacts delayed switching     0       • number of NO contacts delayed switching     0       • output solary at totage rated value     90 680 V       ampacity of the output relay at AC-15     3 A       • at 200 V at 5000 hz     3 A       • at 24 V     1A       • at 25 V     0.2 A       • at 24 V     0.2 A       • at 25 V     0.1 A       • at 24 V     0.1 A <td>-</td> <td>0 999.9 s</td>  | -  | 0 999.9 s                                   |
| accuracy of digital display         +i-1 digit           Practision         10 %           Communication/ Protocol         Yes           IP-Link transfer rate         COM2 (38,4 kBaud)           point-to-goint cycle time between master and IO-Link         10 ms           device minimum         type of voltage supply via input/output link master         COM2 (38,4 kBaud)           of the address range of the inputs with cyclical transfer         4 byte           of the address range of the outputs with cyclical transfer         2 byte           control supply voltage rated value         3015           number of NC contacts delayed switching         0           number of NC contacts delayed switching         0           number of NC contacts delayed switching         0           operating frequency with SRT2 contactor maximum         5000 1/h           Main circuit         1           number of NC contacts delayed switching         2           e at 250 V at 5000 1/z         3 A           at 240 V         1 A           ampacity of the output raisy at DC-13         1           amapacity of the semiconductor output in SIO mode   | adjustable switching hysteresis for measured current value | 0 3 000 mA                                  |
| President relative metering precision relative relative metering precision relative relativ |  | +/-1 digit                                  |
| Communication Protocol         Yes           Inclusive protect OL-link protocol         Yes           IO-Link transfer rate         COM2 (38.4 kBaud)           point-to-point cycle time between master and IO-Link         10 ms           type of voltage supply via input/output link master         Yes           data volume         • of the address range of the inputs with cyclical transfer<br>total         • byte           • of the address range of the outputs with cyclical transfer<br>total         • byte           Auxiliary circuit         2 byte           control supply voltage rated value         30 18           number of NC contacts delayed switching         0           number of NC contacts delayed switching         0           operating frequency with 3RT2 contactor maximum         5 000 1/h           Main circuit         1           number of NC contacts delayed switching         2           operating voltage rated value         90 680 V           ampacity of the output relay at AC-15         3.4           • at 200 V at 5000 hz         3.A           • at 20V at 5000 hz         3.A           • at 24 V         1.A           • at 24 V         0.2 A           • at 25 V         0.2 A           • at 26 V         0.0 mA   |  |   |
| protocol is supported IC-Link protocol     Yes       IO-Link transfer rate     COM2 (38,4 kBaud)       IO-Link transfer rate     COM2 (38,4 kBaud)       print-to-point cycle time between master and IO-Link     10 ms       data volume     0       • of the address range of the inputs with cyclical transfer     4 byte       total     2 byte       • of the address range of the outputs with cyclical transfer     2 byte       total     0     18       number of NC contacts delayed switching     0       number of NC contacts delayed switching     0       number of OC contacts delayed switching     2       operating frequency with 3R12 contactor maximum     5000 1/h       Main circuit     1       operating trequency with 3R12 contactor maximum     5000 1/h       Main circuit     1       operating trequency with 3R12 contactor maximum     5000 1/h       Main circuit     1       operating trequency with 3R12 contactor maximum     500 1/h       anapacting of the output relay at DC-13     3 A       at 260 V at 5000 1/z     3 A       anapacting of the output relay at DC-13     1 A       at 260 V at 5000 1/z     3 A       ampacting of the output relay at DC-13     1 A       at 260 V at 5000 1/z     2 A       at 270 V     0.1 A  | relative metering precision                                | 10 %  |
| IO-Link transfer rate       COM2 (38,4 kBaud)         point-to-point cycle time between master and IO-Link       10 ms         type of voltage supply via input/output link master       Yes         data volume       4         • of the address range of the inputs with cyclical transfer total       2 byte         • of the address range of the outputs with cyclical transfer total       2 byte         • of the address range of the outputs with cyclical transfer total       30 18         • number of NC contacts delayed switching       0         number of CO contacts delayed switching       0         operating frequency with 3RT2 contactor maximum       5000 1/h         Main circuit       1         number of NC contacts delayed switching       9 680 V         ampacity of the output relay at AC-15       4         • at 280 V at 5000 Hz       3 A         • at 280 V at 5000 Hz       3 A         • at 280 V at 5000 Hz       3 A         • at 250 V       0.2 A   | Communication/ Protocol                                    |   |
| IO-Link transfer rate       COM2 (38,4 kBaud)         point-to-point cycle time between master and IO-Link       10 ms         type of voltage supply via input/output link master       Yes         data volume       4         • of the address range of the inputs with cyclical transfer total       2 byte         • of the address range of the outputs with cyclical transfer total       2 byte         • of the address range of the outputs with cyclical transfer total       30 18         • number of NC contacts delayed switching       0         number of CO contacts delayed switching       0         operating frequency with 3RT2 contactor maximum       5000 1/h         Main circuit       1         number of NC contacts delayed switching       9 680 V         ampacity of the output relay at AC-15       4         • at 280 V at 5000 Hz       3 A         • at 280 V at 5000 Hz       3 A         • at 280 V at 5000 Hz       3 A         • at 250 V       0.2 A   |  | Yes   |
| point-to-point cycle time between master and IO-Link       10 ms         type of voltage supply via input/output link master       Yes         data volume       4 byte         • of the address range of the inputs with cyclical transfer       2 byte         total       2 byte         othe address range of the outputs with cyclical transfer       2 byte         total       30 _ 18         number of NC contacts delayed switching       0         number of NC contacts delayed switching       10 ms         dia circuit       1         unmber of poles for main current circuit       1         operating voltage rated value       90 _ 690 V         ampacity of the output relay at AC-15       3 A         • at 250 V at 50060 Hz       3 A         • at 24 V       1 A         • at 250 V       0.1 A         ampacity of the semiconductor output in SIO mode       200 mA         operational current of the DIAZED fuse link of the output tervice       4 A         continuous current of the DIAZED fuse link of the output tervice<  | · · · · ·  |   |
| type of voltage supply via input/output link master         Yes           data volume         • of the address range of the inputs with cyclical transfer total         4 byte           • of the address range of the outputs with cyclical transfer total         2 byte           • of the address range of the outputs with cyclical transfer total         2 byte           Control supply voltage rated value         30 18           number of NC contacts delayed switching         0           number of NC contacts delayed switching         2           operating frequency with 3RT2 contactor maximum         5000 1/h           Main circuit         1           number of poles for main current circuit         1           operating voltage rated value         90680 V           ampacity of the output relay at AC-15         •           • at 250 V at 50/60 Hz         3 A           • at 24 V         1 A           • at 250 V         0.1 A           ampacity of the output relay at DC-13         •           • at 250 V         0.1 A           ampacity of the solution output in SIO mode         200 mA           operational current at 17 V minimm         10 mA           conductore ath surge according to IEC 61000-4-4         2 kV           • due to burst according to IEC 61000-4-2         2 kV  | point-to-point cycle time between master and IO-Link       |   |
| Att volume       • of the address range of the inputs with cyclical transfer total       4 byte         • of the address range of the outputs with cyclical transfer total       2 byte         Auxiliary circuit       2 byte         Auxiliary circuit       30 18         control supply voltage rated value       30 18         number of NC contacts delayed switching       0         operating frequency with SRT2 contactor maximum       5 000 1/h         Main circuit       1         number of Poles for main current circuit       1         operating frequency with SRT2 contactor maximum       5 000 1/h         Main circuit       1         number of voles for main current circuit       1         operating voltage rated value       90 690 V         ampacity of the output relay at AC-15       3 A         • at 260 V at 50/60 hz       3 A         • at 260 V at 50/60 hz       3 A         • at 260 V       0.1 A         ampacity of the output relay at DC-13       1 A         • at 250 V       0.1 A         ampacity of the semiconductor output in SIO mode       200 mA         operation subcurrent of the DIAZED fuse link of the output       4 A         Electromagnetic compatibility       10 km         coute to conductor-ear   |  | Yes   |
| • of the address range of the inputs with cyclical transfer<br>total     4 byte       • of the address range of the outputs with cyclical transfer<br>total     2 byte       Auxiliary circuit     30 18       number of NC contacts delayed switching     0       number of CO contacts delayed switching     0       number of CO contacts delayed switching     2       operating frequency with RT2 contactor maximum     5 000 1/h       Main circuit     1       number of Poles for main current circuit     1       operating voltage rated value     90 800 V       ampacity of the output relay at AC-15     -       • at 250 V at 50/60 Hz     3 A       • at 250 V at 50/60 Hz     3 A       • at 250 V     0.2 A       operating to the output relay at DC-13     -       ampacity of the semiconductor output in SIO mode     200 mA       operating to the semiconductor output in SIO mode     200 mA       operating according to IEC 61000-4-4     2 kV       • due to burst according to IEC 61000-4-5     2 kV       • due to conductor-end to IEC 61000-4-3     10 V/m       electromagnetic conductor surge according to IEC 61000-4-5     2 kV       • due to conductor-conductor surge according to IEC 61000-4-5     2 kV       • due to conductor-conductor surge according to IEC 61000-4-5     2 kV       • due to conductor-conductor   |  |   |
|  | of the address range of the inputs with cyclical transfer  | 4 byte                                      |
| Auxiliary circuit     30 18       number of NC contacts delayed switching     0       number of NC contacts delayed switching     2       operating frequency with 3RT2 contactor maximum     5000 1/h       Main circuit     1       number of poles for main current circuit     1       operating voltage rated value     90 (690 V       ampacity of the output relay at AC-15     •       • at 250 V at 50/60 Hz     3 A       • at 24 V     1 A       • at 250 V     0.2 A       • at 250 V     0.1 A       ampacity of the output relay at DC-13     •       • at 250 V     0.1 A       ampacity of the semiconductor output in SIO mode     200 mA       operational current at 17 V minimum     10 mA       continuous current of the DIAZED fuse link of the output     4 A       • due to burst according to IEC 61000-4-5     2 kV       • due to conductor-earth surge according to IEC 61000-4-5     1 kV       • due to conductor-acting to IEC 61000-4-5     1 kV       • due to burst according to IEC 61000-4-5     1 kV       • due to burst according to IEC 61000-4-5     1 kV       • due to conductor-acting to IEC 61000-4-5     1 kV       • due to burst according to IEC 61000-4-5     1 kV       • due to conductor-acting to IEC 61000-4-2     1 kV       • due to  | of the address range of the outputs with cyclical transfer | 2 byte                                      |
| control supply voltage rated value     30 18       number of NC contacts delayed switching     0       number of NO contacts delayed switching     0       operating frequency with 3RT2 contactor maximum     5 000 1/h       Main circuit     1       operating voltage rated value     90 690 V       ampacity of the output relay at AC-15     3 A       • at 250 V at 50/60 Hz     3 A       ampacity of the output relay at DC-13     1 A       • at 24V V     0.1 A       • at 250 V     0.1 A       ampacity of the semiconductor output in SIO mode     200 mA       operational current at 17 V minimum     10 mA       continuous current of the DIAZED fuse link of the output relay     4 A       electromagnetic compatibility     2 kV       conductor-earth surge according to IEC 61000-4-3     2 kV       • due to conductor-conductor surge according to IEC 61000-4-3     2 kV       • due to conductor-serie according to IEC 61000-4-3     10 V/m       electromagnetic compatibility     10 V/m       conductor-serie according to IEC 61000-4-3     6 kV contact discharge / 8 kV air discharge       davanic isolation     yes       electromagnetic conductor-conductor surge according to IEC 61000-4-3     6 kV contact discharge / 8 kV air discharge       electrostatic discharge according to IEC 61000-4-3     6 kV contact discharge / 8 kV air  |  |   |
| number of NC contacts delayed switching     0       number of NC contacts delayed switching     0       number of CO contacts delayed switching     2       operating frequency with 3RT2 contactor maximum     5000 1/h       Main circuit     1       number of poles for main current circuit     1       operating frequency with 3RT2 contactor 1/h     90690 V       ampacity of the output relay at AC-15     -       • at 250 V at 50/60 Hz     3 A       • at 250 V at 50/60 Hz     3 A       • at 250 V     0.2 A       • at 250 V     0.1 A       ampacity of the semiconductor output in SIO mode     200 mA       operational current at 17 V minimum     10 mA       continuous current of the DIAZED fuse link of the output     4 A       relay     euto to burst according to IEC 61000-4-3     2 kV       • due to burst according to IEC 61000-4-3     10 V/m       electrostatic discharge according to IEC 61000-4-3     10 V/m       electrostatic discharge according to IEC 61000-4-2     6 kV contact discharge / 8 kV air discharge       Gatvanic Isolation     9 Kes       • between the output     Yes  |  | 30 18                                       |
| number of NO contacts delayed switching     0       number of CO contacts delayed switching     5000 1/h       operating frequency with 3RT2 contactor maximum     5000 1/h       Main circuit     1       number of poles for main current circuit     1       operating voltage rated value     90690 V       ampacity of the output relay at AC-15     3A       • at 250 V at 50/60 Hz     3A       • at 250 V at 50/60 Hz     3A       • at 25 V     0.2 A       • at 0 to bust according to IEC 61000-4-2     2 KV       • due to bust according to IEC 61000-4-5     2 KV       • due to conductor-earth surge according to IEC 61000-4-5     1 KV       field-based int   |  |   |
| number of CO contacts delayed switching       2         operating frequency with 3RT2 contactor maximum       5 000 1/h         Main circuit       1         operating voltage rated value       90 690 V         ampacity of the output relay at AC-15       •         • at 260 V at 50/60 Hz       3 A         ampacity of the output relay at AC-15       •         • at 240 V at 50/60 Hz       3 A         ampacity of the output relay at DC-13       •         • at 250 V       0.2 A         • at 250 V       0.1 A         ampacity of the semiconductor output in SIO mode       200 mA         operational current at 17 V minimum       10 mA         continuous current of the DIAZED fuse link of the output relay       4 A         electromagnetic compatibility       2 kV         conductor-earth surge according to IEC 61000-4-5       2 kV         • due to conductor-earth surge according to IEC 61000-4-5       2 kV         • due to conductor-earth surge according to IEC 61000-4-5       1 kV         field-based interference       6 kV contact discharge / 8 kV air discharge         Galvanic isolation       6 kV contact discharge / 8 kV air discharge         galvanic isolation       Yes         • between the outputs       Yes         • between   |  |   |
| operating frequency with 3RT2 contactor maximum     5 000 1/h       Main circuit     1       number of poles for main current circuit     1       operating voltage rated value     90690 V       ampacity of the output relay at AC-15     3 A       • at 250 V at 50/60 Hz     3 A       • at 400 V at 50/60 Hz     3 A       • at 25 V     0.2 A       • at 25 V     0.4 A       ampacity of the semiconductor output in SIO mode     200 mA       operational current at 17 V minimum     10 mA       continuous current of the DIAZED fuse link of the output     4 A       elactromagnetic compatibility     2 kV       conducted interference     2 kV       • due to burst according to IEC 61000-4-4     2 kV       • due to conductor-conductor surge according to IEC 61000-4-5     1 kV       field-based interference according to IEC 61000-4-3     10 V/m       electrostatic discharge according to IEC 61000-4-2     6 kV contact discharge / 8 kV air discharge       Galvanic isolation     4       galvanic isolation     4       • between the outputs     Yes       • between the outputs     Yes       • between the outputs  |  |   |
| Main circuit     1       number of poles for main current circuit     1       operating voltage rated value     90690 V       ampacity of the output relay at AC-15     3 A       • at 250 V at 50/60 Hz     3 A       • at 400 V at 50/60 Hz     3 A       • at 250 V at 50/60 Hz     3 A       • at 250 V at 50/60 Hz     3 A       • at 250 V     1 A       • at 250 V     0.1 A       ampacity of the semiconductor output in SIO mode     200 mA       operational current at 17 V minimum     10 mA       continuous current of the DIAZED fuse link of the output     4 A       relay     2 kV       • due to conductor-centh surge according to IEC 61000-4-4     2 kV       • due to conductor-conductor surge according to IEC 61000-4-5     1 kV       • field-based interference     1 kV       • due to conductor-conductor surge according to IEC 61000-4-5     1 kV       field-based interference according to IEC 61000-4-3     10 V/m       electrostatic discharge according to IEC 61000-4-3     10 V/m       galvanic isolation     6 kV contact discharge / 8 kV air discharge       Galvanic isolation     Yes       • between the outputs     Yes       • between the voltage supply and other circuits     Yes  |  |   |
| number of poles for main current circuit       1         operating voltage rated value       90 690 V         ampacity of the output relay at AC-15       3 A         • at 200 V at 50/60 Hz       3 A         ampacity of the output relay at DC-13       3 A         • at 24 V       1 A         • at 25 V       0.2 A         • at 250 V       0.1 A         ampacity of the semiconductor output in SIO mode       200 mA         operational current at 17 V minimum       10 mA         continuous current of the DIAZED fuse link of the output       4 A         relay       Electromagnetic compatibility         conducted interference       2 kV         • due to burst according to IEC 61000-4-3       10 V/m         electrostatic discharge according to IEC 61000-4-3       10 V/m         electrostatic discharge according to IEC 61000-4-3       6 kV contact discharge / 8 kV air discharge         Galvanic Isolation       yes         ebetween input and output       Yes         • between the voltage supply and other circuits       Yes         Connections/ Terminals       Yes   |  |   |
| operating voltage rated value     90 690 V       ampacity of the output relay at AC-15     3 A       • at 250 V at 50/60 Hz     3 A       ampacity of the output relay at DC-13     3 A       • at 24 V     1 A       • at 25 V     0.2 A       • at 250 V     0.1 A       ampacity of the semiconductor output in SIO mode     200 mA       operational current at 17 V minimum     10 mA       continuous current of the DIAZED fuse link of the output     4 A       relay     Electromagnetic compatibility       conductor interference     2 kV       • due to burst according to IEC 61000-4-5     2 kV       • due to conductor-conductor surge according to IEC 61000-4-5     2 kV       • due to conductor-conductor surge according to IEC 61000-4-5     1 kV       • due to conductor-conductor surge according to IEC 61000-4-5     1 kV       • due to conductor-conductor surge according to IEC 61000-4-3     10 V/m       electrostatic discharge according to IEC 61000-4-2     6 kV contact discharge / 8 kV air discharge       Gelvanic Isolation     yes       • between input and output     Yes       • between the voltage supply and other circuits     Yes       Connections/ Terminals     Yes   |  | 1   |
| ampacity of the output relay at AC-15       3 A         at 250 V at 50/60 Hz       3 A         ampacity of the output relay at DC-13       3 A         ampacity of the output relay at DC-13       1 A         at 24 V       0.2 A         at 250 V       0.1 A         ampacity of the semiconductor output in SIO mode       200 mA         operational current at 17 V minimum       10 mA         continuous current of the DIAZED fuse link of the output       4 A         electromagnetic compatibility       2 kV         conducted interference       2 kV         • due to burst according to IEC 61000-4-4       2 kV         • due to conductor-conductor surge according to IEC 61000-4-5       2 kV         • due to conductor-conductor surge according to IEC 61000-4-5       1 kV         • due to conductor-conductor surge according to IEC 61000-4-5       2 kV         • due to conductor-conductor surge according to IEC 61000-4-5       1 kV         • due to conductor-conductor surge according to IEC 61000-4-5       2 kV         • due to conductor-conductor surge according to IEC 61000-4-5       2 kV         • due to conductor-conductor surge according to IEC 61000-4-2       6 kV contact discharge / 8 kV air discharge <b>Galvanic Isolation</b> • between input and output       Yes         • between t  |  |   |
| • at 250 V at 50/60 Hz         3 A           • at 400 V at 50/60 Hz         3 A           ampacity of the output relay at DC-13         1 A           • at 24 V         1 A           • at 250 V         0.2 A           • at 250 V         0.1 A           ampacity of the semiconductor output in SIO mode         200 mA           operational current at 17 V minimum         10 mA           continuous current of the DIAZED fuse link of the output relay         4 A           relay         2kV           conducted interference         2 kV           • due to conductor-conductor surge according to IEC 61000-4-5         2 kV           • due to conductor-conductor surge according to IEC 61000-4-5         2 kV           • due to conductor-conductor surge according to IEC 61000-4-5         1 kV           electrostatic discharge according to IEC 61000-4-3         10 V/m           electrostatic discharge according to IEC 61000-4-2         6 kV contact discharge / 8 kV air discharge           Galvanic isolation         • between input and output         Yes           • between the outputs         Yes           • between the outputs         Yes   |  |   |
| • at 400 V at 50/60 Hz       3 A         ampacity of the output relay at DC-13       1         • at 24 V       1 A         • at 25 V       0.2 A         • at 250 V       0.1 A         ampacity of the semiconductor output in SIO mode       200 mA         operational current at 17 V minimum       10 mA         continuous current of the DIAZED fuse link of the output relay       4 A         elay       2         Electromagnetic compatibility       2         conducted interference       4 X         • due to burst according to IEC 61000-4-4       2 kV         • due to conductor-conductor surge according to IEC 61000-4-5       2 kV         • due to conductor-conductor surge according to IEC 61000-4-5       1 kV         • field-based interference according to IEC 61000-4-3       10 V/m         electrostatic discharge according to IEC 61000-4-3       10 V/m         electrostatic discharge according to IEC 61000-4-2       6 kV contact discharge / 8 kV air discharge         Galvanic isolation       • between input and output       Yes         • between the outputs       Yes         • between the voltage supply and other circuits       Yes         Connections/ Terminals       Yes   |  | 3 A   |
| ampacity of the output relay at DC-13       1 A         • at 24 V       1 A         • at 125 V       0.2 A         • at 250 V       0.1 A         ampacity of the semiconductor output in SIO mode       200 mA         operational current at 17 V minimum       10 mA         continuous current of the DIAZED fuse link of the output relay       4 A         Electromagnetic compatibility       4 A         conducted interference       2 kV         • due to burst according to IEC 61000-4-4       2 kV         • due to conductor-earth surge according to IEC 61000-4-5       2 kV         • due to conductor surge according to IEC 61000-4-5       2 kV         • due to conductor surge according to IEC 61000-4-5       2 kV         • due to conductor surge according to IEC 61000-4-5       2 kV         • due to conductor surge according to IEC 61000-4-5       2 kV         • due to conductor surge according to IEC 61000-4-5       1 kV         field-based interference according to IEC 61000-4-3       10 V/m         electrostatic discharge according to IEC 61000-4-2       6 kV contact discharge / 8 kV air discharge         Galvanic isolation          • between input and output       Yes         • between the outputs       Yes         • between the outputs       Yes <td></td> <td></td>   |  |   |
| • at 24 V       1 A         • at 125 V       0.2 A         • at 250 V       0.1 A         ampacity of the semiconductor output in SIO mode       200 mA         operational current at 17 V minimum       10 mA         continuous current of the DIAZED fuse link of the output       4 A         elactromagnetic compatibility       4 A         conducted interference       2 kV         • due to burst according to IEC 61000-4-4       2 kV         • due to conductor-conductor surge according to IEC 61000-4-5       2 kV         • due to conductor-conductor surge according to IEC 61000-4-5       1 kV         field-based interference according to IEC 61000-4-3       10 V/m         electrostatic discharge according to IEC 61000-4-3       10 V/m         electrostatic discharge according to IEC 61000-4-2       6 kV contact discharge / 8 kV air discharge         Galvanic isolation       Yes         • between linput and output       Yes         • between the outputs       Yes         • between the voltage supply and other circuits       Yes         Connections/Terminals       Yes   |  |   |
| • at 125 V         0.2 A           • at 250 V         0.1 A           ampacity of the semiconductor output in SIO mode         200 mA           operational current at 17 V minimum         10 mA           continuous current of the DIAZED fuse link of the output relay         4 A           Electromagnetic compatibility         4 A           conducted interference         2 kV           • due to conductor-conductor surge according to IEC 61000-4-5         2 kV           • due to conductor-conductor surge according to IEC 61000-4-5         2 kV           • due to conductor-conductor surge according to IEC 61000-4-5         2 kV           • due to conductor-conductor surge according to IEC 61000-4-5         2 kV           • due to conductor-conductor surge according to IEC 61000-4-5         2 kV           • due to conductor-conductor surge according to IEC 61000-4-5         2 kV           • due to conductor-conductor surge according to IEC 61000-4-2         6 kV contact discharge / 8 kV air discharge           Galvanic isolation            galvanic isolation         Yes           • between the outputs         Yes           • between the outputs         Yes           • between the voltage supply and other circuits         Yes  |  | 1A  |
| • at 250 V       0.1 Å         ampacity of the semiconductor output in SIO mode       200 mÅ         operational current at 17 V minimum       10 mÅ         continuous current of the DIAZED fuse link of the output relay       4 Å         Electromagnetic compatibility       4 Å         conducted interference       4 Å         • due to burst according to IEC 61000-4-4       2 kV         • due to conductor-conductor surge according to IEC 61000-4-5       2 kV         • due to conductor-conductor surge according to IEC 61000-4-5       1 kV         field-based interference according to IEC 61000-4-3       10 V/m         electrostatic discharge according to IEC 61000-4-2       6 kV contact discharge / 8 kV air discharge         Galvanic isolation       Yes         • between the outputs       Yes         • between the outputs       Yes   |  |   |
| ampacity of the semiconductor output in SIO mode     200 mA       operational current at 17 V minimum     10 mA       continuous current of the DIAZED fuse link of the output<br>relay     4 A       Electromagnetic compatibility     4 A       conducted interference     4 V       • due to burst according to IEC 61000-4-4     2 kV       • due to conductor-earth surge according to IEC 61000-4-5     2 kV       • due to conductor-conductor surge according to IEC 61000-4-5     1 kV       field-based interference according to IEC 61000-4-3     10 V/m       electrostatic discharge according to IEC 61000-4-3     10 V/m       electrostatic discharge according to IEC 61000-4-2     6 kV contact discharge / 8 kV air discharge       Galvanic isolation     •       • between input and output     Yes       • between the voltage supply and other circuits     Yes       Connections/ Terminals     Yes   |  |   |
| operational current at 17 V minimum       10 mA         continuous current of the DIAZED fuse link of the output<br>relay       4 A         Electromagnetic compatibility       4 A         conducted interference       2 kV         • due to burst according to IEC 61000-4-4       2 kV         • due to conductor-earth surge according to IEC 61000-4-5       2 kV         • due to conductor-conductor surge according to IEC 61000-4-5       2 kV         • due to conductor-conductor surge according to IEC 61000-4-5       1 kV         field-based interference according to IEC 61000-4-3       10 V/m         electrostatic discharge according to IEC 61000-4-2       6 kV contact discharge / 8 kV air discharge         Galvanic isolation   |  |   |
| continuous current of the DIAZED fuse link of the output relay       4 A         Electromagnetic compatibility       4 A         conducted interference       2 kV         • due to burst according to IEC 61000-4-4       2 kV         • due to conductor-earth surge according to IEC 61000-4-5       2 kV         • due to conductor-conductor surge according to IEC 61000-4-5       2 kV         • due to conductor-conductor surge according to IEC 61000-4-5       1 kV         field-based interference according to IEC 61000-4-3       10 V/m         electrostatic discharge according to IEC 61000-4-2       6 kV contact discharge / 8 kV air discharge         Galvanic isolation  |  |   |
| relay         Electromagnetic compatibility         conducted interference         • due to burst according to IEC 61000-4-4       2 kV         • due to conductor-earth surge according to IEC 61000-4-5       2 kV         • due to conductor-conductor surge according to IEC 61000-4-5       2 kV         • due to conductor-conductor surge according to IEC 61000-4-5       1 kV         field-based interference according to IEC 61000-4-3       10 V/m         electrostatic discharge according to IEC 61000-4-2       6 kV contact discharge / 8 kV air discharge         Galvanic isolation  | •  |   |
| conducted interference          e due to burst according to IEC 61000-4-4         2 kV         e due to conductor-earth surge according to IEC 61000-4-5         e due to conductor-conductor surge according to IEC         field-based interference according to IEC 61000-4-3         field-based interference according to IEC 61000-4-3         field-based interference according to IEC 61000-4-2         feld-based interference according to IEC 61000-4-2         feld/based interference according to IEC 61000-4-2         feld/b   | relay  |   |
| • due to burst according to IEC 61000-4-4       2 kV         • due to conductor-earth surge according to IEC 61000-4-5       2 kV         • due to conductor-conductor surge according to IEC 61000-4-5       1 kV         field-based interference according to IEC 61000-4-3       10 V/m         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   | Electromagnetic compatibility                              |   |
| <ul> <li>due to conductor-earth surge according to IEC 61000-4-5</li> <li>due to conductor-conductor surge according to IEC</li> <li>field-based interference according to IEC 61000-4-3</li> <li>field-based interference according to IEC 61000-4-3</li> <li>field-based interference according to IEC 61000-4-2</li> <li>fkV contact discharge / 8 kV air discharge</li> <li>Galvanic isolation</li> <li>between input and output</li> <li>between the outputs</li> <li>between the voltage supply and other circuits</li> <li>Yes</li> <li>Connections/ Terminals</li> <li>product component removable terminal for auxiliary and</li> <li>Yes</li> </ul>  |  |   |
| • due to conductor-conductor surge according to IEC       1 kV         field-based interference according to IEC 61000-4-3       10 V/m         electrostatic discharge according to IEC 61000-4-2       6 kV contact discharge / 8 kV air discharge         Galvanic isolation  | -  | 2 kV  |
| 61000-4-5         field-based interference according to IEC 61000-4-3       10 V/m         electrostatic discharge according to IEC 61000-4-2       6 kV contact discharge / 8 kV air discharge         Galvanic isolation       •         • between input and output       Yes         • between the outputs       Yes         • between the voltage supply and other circuits       Yes         Connections/ Terminals       Yes   |  | 2 kV  |
| 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       Yes  |  | 1 kV  |
| Galvanic isolation         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       Yes   | field-based interference according to IEC 61000-4-3        |   |
| galvanic isolation     Yes       • 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     Yes  |  | 6 kV contact discharge / 8 kV air discharge |
| between input and output     between the outputs     between the voltage supply and other circuits     Yes Connections/ Terminals product component removable terminal for auxiliary and Yes   | Galvanic isolation   |   |
| between the outputs Yes     between the voltage supply and other circuits Yes Connections/ Terminals product component removable terminal for auxiliary and Yes  | galvanic isolation   |   |
| between the voltage supply and other circuits Yes Connections/ Terminals product component removable terminal for auxiliary and Yes  | <ul> <li>between input and output</li> </ul>               | Yes   |
| Connections/ Terminals product component removable terminal for auxiliary and Yes  | <ul> <li>between the outputs</li> </ul>                    | Yes   |
| product component removable terminal for auxiliary and Yes   | 0  | Yes   |
|  |  |   |
|  |  | Yes   |

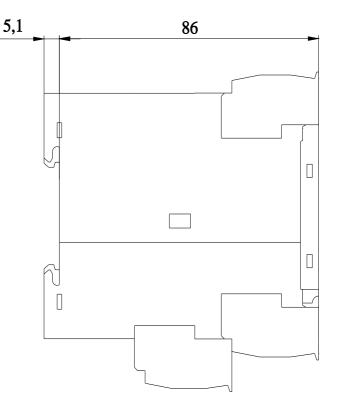
| 0 mm<br>0 mm |
|--|
| 0 mm<br>0 mm<br>0 mm<br>0 mm<br>2 000 m<br>-25 +60 °C<br>-40 +85 °C<br>-40 +85 °C<br>EMC<br>EMC  |
| 0 mm<br>0 mm<br>0 mm<br>0 mm<br>0 mm<br>2 000 m<br>-25 +60 °C<br>-40 +85 °C<br>-40 +85 °C<br>EMC   |
| 0 mm<br>0 mm<br>0 mm<br>0 mm<br>2 000 m<br>-25 +60 °C<br>-40 +85 °C<br>-40 +85 °C  |
| 0 mm<br>0 mm<br>0 mm<br>0 mm<br>2 000 m<br>-25 +60 °C<br>-40 +85 °C  |
| 0 mm<br>0 mm<br>0 mm<br>0 mm<br>2 000 m<br>-25 +60 °C<br>-40 +85 °C  |
| 0 mm<br>0 mm<br>0 mm<br>0 mm<br>2 000 m<br>-25 +60 °C  |
| 0 mm<br>0 mm<br>0 mm<br>0 mm<br>2 000 m  |
| 0 mm<br>0 mm<br>0 mm<br>0 mm   |
| 0 mm<br>0 mm<br>0 mm<br>0 mm   |
| 0 mm<br>0 mm<br>0 mm   |
| 0 mm<br>0 mm   |
| 0 mm   |
|  |
| 0 mm   |
|  |
|  |
| 0 mm   |
| 0 mm<br>0 mm   |
| 0 mm   |
| 0 mm   |
| 0  |
| 0 mm   |
|  |
|  |
| 91 mm  |
| 22.5 mm  |
| 103 mm   |
| snap-on mounting   |
| any  |
| ۷۷ ۱۴<br>  |
| 24 16<br>20 14   |
| 24 16  |
|  |
| 0.25 1.5 mm <sup>2</sup>   |
| 0.25 1.5 mm²   |
| 0.25 1.5 mm²   |
|  |
| 2x (24 16)<br>2x (24 16)   |
| 2x (0.25 1.5 mm²)<br>2x (24 16)  |
| 2 x (0.25 1.5 mm <sup>2</sup> )  |
| 2x (0.25 1.5 mm <sup>2</sup> )   |
|  |
| spring-loaded terminals  |
|  |

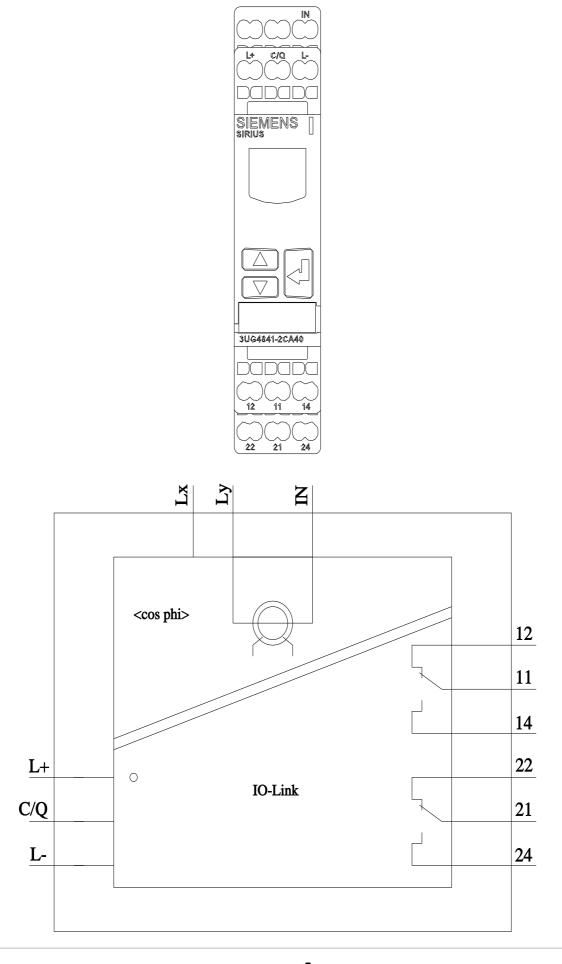
#### Vibration and Shock

| Further information  |
|--|
| Siemens has decided to exit the Russian market (see here).<br>https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business  |
| Siemens is working on the renewal of the current EAC certificates.<br>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<br>EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus). |
| Information on the packaging<br>https://support.industry.siemens.com/cs/ww/en/view/109813875   |
| Information- and Downloadcenter (Catalogs, Brochures,)<br>https://www.siemens.com/ic10   |
| Industry Mall (Online ordering system)<br>https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3UG4841-2CA40  |
| Cax online generator<br>http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UG4841-2CA40  |
| Service&Support (Manuals, Certificates, Characteristics, FAQs,)<br>https://support.industry.siemens.com/cs/ww/en/ps/3UG4841-2CA40  |
| Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros,)<br>http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UG4841-2CA40⟨=en   |
| Characteristic: Derating   |

Characteristic: Derating https://support.industry.siemens.com/cs/ww/en/ps/3UG4841-2CA40/manual







1/8/2021 🖸

## **Mouser Electronics**

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Siemens: 3UG48412CA40