



Figure similar

motor protection for low-power current transformer, enclosure 1/6 19", 4 x I, 3 x V, 3 BI, 5 BO (2 change-over contacts), 1 live contact, 5 temperature sensors, low-power current transformer input, rated auxiliary power: 24 - 48 V DC, installation enclosure, screw terminals region world, IEC / ANSI, language English (can be changed), front membrane standard, system interface port B (device underside, rear) Modbus, electrical RS485 without system interface Port A, measurement: fault recording, mean value formation, min./max. values, functionality: basic version(*)

| Product details | |
|---|-----|
| number of function keys | 9 |
| number of LEDs | 8 |
| Product Functions | |
| type of measured value detection / of operational measured value / standard | Yes |
| type of measured value detection / expanded / min./max. values, mean values | Yes |
| switching statistics | Yes |
| product feature / logic editor | Yes |
| control | Yes |
| fault recording for analog and digital signals | Yes |
| monitoring | Yes |
| number of parameter sets | 4 |
| parameter set switchover | Yes |
| Protection Functions | |
| three-pole tripping | Yes |
| with blocked rotor (ANSI 14) | Yes |
| undervoltage protection (ANSI 27) | Yes |
| directional power monitoring (ANSI 32) | Yes |
| undercurrent protection (ANSI 37) | Yes |
| temperature monitoring (ANSI 38) | Yes |
| unbalance protection (ANSI 46) | Yes |
| overcurrent-time protection negative sequence system (ANSI 46) | Yes |
| phase-rotation supervision (ANSI 47) | Yes |
| overvoltage protection negative-sequence system (ANSI 47) | Yes |
| blocked rotor monitoring (ANSI 48) | Yes |
| thermal overload protection (ANSI 49) | Yes |
| definite overcurrent-time protection (ANSI 50/50N) | Yes |
| Switch On To Fault (ANSI SOTF) | Yes |
| sensitive ground current protection (ANSI 50Ns) | No |
| circuit breaker failure protection (ANSI 50BF) | Yes |
| load step protection (ANSI 50L) | Yes |
| dependent overcurrent-time protection (ANSI 51/51N) | Yes |
| dynamic response value changeover (ANSI 51C) | Yes |
| power factor (ANSI 55) | Yes |
| overvoltage protection (ANSI 59) | Yes |

| | |
|---|-----|
| overvoltage protection zero-sequence system (ANSI 59N) | Yes |
| measuring voltage failure detection (ANSI 60FL) | Yes |
| reclosing lockout (ANSI 66) | Yes |
| directional ground fault protection (ANSI 67N) | Yes |
| directional sensitive ground-fault detection for resonant-grounded systems and isolated systems (ANSI 67Ns) | Yes |
| trip-circuit supervision (ANSI 74TC) | Yes |
| frequency protection (ANSI 81) | Yes |
| frequency variation protection (ANSI 81R) | Yes |
| closing lock-out (ANSI 86) | Yes |
| inrush current detection | Yes |
| external trip initiation | Yes |

Supply voltage

| | |
|---|-------------|
| supply voltage / at DC | 24 ... 48 V |
| type of voltage / of the supply voltage | DC |

Inputs / Outputs

| | |
|---|-----|
| number of digital inputs / maximum | 3 |
| number of internal RTD inputs / maximum | 5 |
| number of digital outputs / incl. signaling contact / maximum | 6 |
| number of low-power current transformer inputs | 4 |
| number of low-power voltage transformer inputs | 3 |
| product component / with RTD unit connection | No |
| product component / with 20 mA module connection | Yes |

Communication

| | |
|---|-----|
| product component / operating interface (on the front) | Yes |
| software interface version / DIGSI with USB-A port | USB |
| protocol / is supported / IEC 60870-5-103 | No |
| protocol / is supported / IEC 61850-8-1 | No |
| protocol / is supported / Modbus RTU slave | Yes |
| protocol / is supported / DNP 3, serial | No |
| protocol / is supported / PROFIBUS DP slave | No |
| protocol / is supported / PRP | No |
| protocol / is supported / RSTP | No |
| protocol / is supported / HSR | No |
| product function / supports further Ethernet services on Ethernet modules | No |

Time synchronization

| | |
|------------------------------|--------------------------------|
| type of time synchronization | Modbus, pulse via binary input |
|------------------------------|--------------------------------|

Mechanical Design

| | |
|---|----------------------|
| width | 74 mm |
| height | 265.5 mm |
| depth | 228.8 mm |
| design of the display | Text display: 6 rows |
| product feature / plug-in terminal blocks | Yes |

Environmental conditions

| | |
|--|-------|
| ambient temperature / during operation / maximum | 55 °C |
|--|-------|

Further information

Information- and Downloadcenter (catalogues, leaflets,...)

<http://www.siemens.com/energy-automation>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=7SK8163-1EB90-3HE0 L0D>

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

<https://support.industry.siemens.com/cs/ww/en/ps/7SK8163-1EB90-3HE0 L0D>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=7SK8163-1EB90-3HE0 L0D

Tender specifications

<http://www.siemens.com/specifications>

