## **SIEMENS**

Data sheet 5SD7414-1

Lightning arresters, type 1 Requirement class B, UC 350V Pluggable protective modules 4-pole, 3+1 circuit for TN-S and TT systems with remote display



General data	
standard	IEC 61643-11: 2011, EN 61643-11: 2012
product designation	Surge protection device
SPD classification / acc. to EN 61643-11	
<ul> <li>Test Class I, Type 1</li> </ul>	Yes
<ul> <li>Test Class II, Type 2</li> </ul>	Yes
<ul> <li>Test Class III, Type 3</li> </ul>	No
number of SPD ports	1
Product version	Lightning arresters
design of pole	3+N/PE
designation of the protective paths	L-N, L-PE, N-PE
Accessories	3 x 5SD7418-1 + 1 x 5SD7418-0
fastening method	DIN rail NS 35
material / of the enclosure	PBT
size of surge arrester	8 TE
Degree of pollution	2
overvoltage category / acc. to IEC 61010-1	III
protection class IP / at connection all terminals	IP20
shock acceleration	25 gn
vibrational acceleration / at 5 Hz 500 Hz / limited to 2,5 h / per axis	5 gn
Ambient temperature / during operation / minimum permissible ambient temperature / during operation / maximum permissible	-40 °C 80 °C
ambient temperature / during storage and transport	-40 °C 80 °C
relative humidity / during operation	5 % 95 %
installation altitude / at height above sea level / maximum	2 000 m
Width	142.4 mm
Height	95 mm
depth	71.5 mm
net weight	1 433 g
Electrical data	
type of distribution system	TT, TN-S
operating voltage	240 / 415 V AC
operating voltage	230 V
operating frequency	50/60 Hz
continuous operating voltage	
• maximum	350 V

■ between L and (PEN   350 V   360 V	between N and PE	350 V
Idea	● between L and (PE)N	350 V
10 JA (284 V AC)		125 A (< 55°C)
Scharge current	protective conductor current	
between L and (PE)N at (8/20) µs     between L and PE / at (8/20) µs     between L and PE / at (8/20) µs     between N and PE / at (8/20) µs     leghtning impulse current / at (10/350) µs     leghtning current peak value / a between L and PE     leghtning current peak value / between L and PE     leghtning current peak value / between L and N     charge of the flash / at (10/350) µs     charge of the flash / between L and N     charge of the flash / between L and PE     charge of the flash / between L and PE     between L and N     between L and PE     between L and N     between L and PE     between	discharge current	
• between L and N / at (8/20) µs • between N and PE / at (8/20) µs • between N and PE / at (8/20) µs • between N and PE / at (8/20) µs • between N and PE / at (8/20) µs • between N and PE / at (8/20) µs • between N and PE / at (8/20) µs • lighting current peak value / at (10/350) µs • lighting current peak value / between L and PE • lightining current peak value / between L and PE • lightining current peak value / between L and PE • lightining current peak value / between L and PE • lightining current peak value / between L and PE • charge of the flash / teltween L and N • charge of the flash / between L and PE • charge of the flash / between L and PE • between N and PE • between N and PE • between L and N • between L and N • between L and N • between L and PE • between N and PE •	•	25 kA
		50 kA
		25 kA
total lightning impulse current / at (10/350) µs   100 kA     lightning current peak value / at (10/350) µs   100 kA     lightning current peak value / between L and PE   100 kA     lightning current peak value / between L and PE   100 kA     lightning current peak value / between L and PE   100 kA     lightning current peak value / between L and PE   100 kA     lightning current peak value / between L and PE   100 kA     lightning current peak value / between L and N   12.5 As     charge of the flash / between L and PE   12.5 As     charge of the flash / between L and PE   15.6 As     charge of the flash / between L and PE   15.0 As     charge of the flash / between L and PE   160     charge of the flash / between N and PE   2.500     between L and N   160     charge of the flash / between N and PE   2.500     charge of the flash / between N and PE   2.500     charge of the flash / between N and PE   2.500     charge of the flash / between N and PE   2.500     charge of the flash / between N and PE   2.500     charge of the flash / between N and PE   1.5 kV     cheween L and N   1.5 kV     cheween L and N   1.5 kV     cheween N and PE   1.5 kV     cheween N and PE   1.5 kV     cheween N and PE   1.5 kV     cheween L and PE   1.5 kV     cheween		50 kA
Ighthing impulse current / at (107350) µs     Ighthing current peak value / between L and PE     Ighthing current peak value / between L and PE     Ighthing current peak value / between L and PE     Ighthing current peak value / between L and PE     Ighthing current peak value / between L and PE     Ighthing current peak value / between L and PE     Ighthing current peak value / between L and PE     Ighthing current peak value / between L and PE     Ighthing current peak value / between L and PE     Ighthing current peak value / between L and PE     Ighthing current peak value / between L and PE     Ighthing of the flash / at (107350) µs     Ighthing value /	`	100 kA
• lightning current peak value / between \ and PE		100 kA
	lightning current peak value / at (10/350) µs	
• (ightning current peak value / between L and N charge of the flash / tetween L and N charge of the flash / between L and PE charge of the flash / between N and PE charge of the flash / between N and PE charge of the flash / between N and PE charge of the flash / between N and PE charge of the flash / between N and PE charge of the flash / between N and PE charge of the flash / at (10/350) µs cheween N and PE cheween N and N cheween L and PE cheween N and PE cheween N and PE cheween N and L cheween N and L cheween N and PE chewee		25 kA
charge of the flash / at (10/350) µs         • charge of the flash / between L and N         12.5 A·s           • charge of the flash / between L and PE         12.5 A·s           • charge of the flash / between N and PE         50 A·s           specific energy of the flash / between N and PE         50 A·s           specific energy of the flash / between N and PE         160           • between L and N         160           • between N and PE         2500           follow current extinguishing capability         • between N and PE           • between L and N         50 kA           short-circuit rating (SCCR) / at 264 V         50 kA           protection level         • between L and N           • between L and PE         2.5 kV           • between N and PE         1.5 kV           • between N and PE         1.5 kV           • between PE and N and/or L         1.5 kV           • between PE and (PE)N         1.5 kV           • between L and (PE)N         1.5 kV           • between L and PE         2.5 kV           • between N and PE         1.5 kV           • between L and PE         2.5 kV           • between L and PE         1.5 kV           • between N and PE         1.5 kV           • between N and PE         1	<ul> <li>lightning current peak value / between N and PE</li> </ul>	100 kA
	<ul> <li>lightning current peak value / between L and N</li> </ul>	25 kA
• charge of the flash / between N and PE         50 A·s           specific energy of the flash / at (10/350) μs         160           • between L and PE         160           • between N and PE         2 500           follow current extinguishing capability         100 A           • between N and PE         100 A           • between L and N         50 kA           short-circuit rating (SCCR) / at 264 V         50 kA           protection level         1.5 kV           • between L and PE         2.5 kV           • between N and PE         1.5 kV           • between N and PE         1.5 kV           • between N and PE         1.5 kV           • between L and (PE)N         1.5 kV           — at rated value of discharge current / maximum         1.5 kV           • between L and PE         2.5 kV           — at rated value of discharge current / maximum         1.5 kV           • between L and PE         2.5 kV           — at rated value of discharge current / maximum         1.5 kV           • between N and PE         2.5 kV           • between L and PE         2.5 kV           • between L and PE         1.5 kV           • between N and PE         1.5 kV           • between N and PE         100	<ul> <li>charge of the flash / between L and N</li> </ul>	12.5 A·s
between L and PE  • between N and PE  • between L and N  • between N and PE  • between N and PE  • between N and PE  • between L and N  50 kA  short-circuit rating (SCCR) / at 264 V  protection level  • between L and N  • between L and PE  • between N and PE  • response time / between N and PE		12.5 A·s
between L and PE  • between N and PE  • between L and N  • between N and PE  • between N and PE  • between N and PE  • between L and N  50 kA  short-circuit rating (SCCR) / at 264 V  protection level  • between L and N  • between L and PE  • between N and PE  • response time / between N and PE	charge of the flash / between N and PE	50 A·s
• between L and PE         160           • between N and PE         2 500           follow current extinguishing capability         • between N and PE         2 500           • between N and PE         100 A           • between L and N         50 kA           short-circuit rating (SCCR) / at 264 V         50 kA           protection level         • between L and N           • between L and PE         2.5 kV           • between N and PE         1.5 kV           • between N and PE         1.5 kV           • between PE and N and/or L         1.5 kV           residual voilage         • between L and (PE)N           — at rated value of discharge current / maximum         1.5 kV           • between N and PE         1.5 kV           — at rated value of discharge current / maximum         1.5 kV           • between N and PE         1.5 kV           — at rated value of discharge current / maximum         1.5 kV           • between N and PE         1.5 kV           • between L and PE         2.5 kV           • between L and PE         1.5 kV           • between N and PE	-	
● between N and PE         2 500           follow current extinguishing capability         100 A           ● between L and N         50 kA           short-circuit rating (SCCR) / at 264 V         50 kA           protection level         6 between L and N           ● between L and PE         2.5 kV           ● between N and PE         1.5 kV           ● between N and PE         1.5 kV           ● between PE and N and/or L         1.5 kV           residual voltage         e between L and (PE)N           — at rated value of discharge current / maximum         1.5 kV           • between L and PE         2.5 kV           — at rated value of discharge current / maximum         2.5 kV           • between N and PE         1.5 kV           — at rated value of discharge current / maximum         1.5 kV           • between L and N         1.5 kV           • between L and PE         2.5 kV           • between L and PE         1.5 kV           • between L and PE         1.5 kV           • between N and PE         1.5 kV           • between L and PE         1.5 kV           • response time / between L and (PE)N         100 ns           • response time / between L and (PE)N         100 ns           • response tim		160
follow current extinguishing capability	<ul><li>between L and PE</li></ul>	160
• between N and PE         100 A           • between L and N         50 kA           short-circuit rating (SCCR) / at 264 V         50 kA           protection level	<ul><li>between N and PE</li></ul>	2 500
• between L and N  short-circuit rating (SCCR) / at 264 ∨  protection level  • between L and N  • between L and PE  • between N and PE  • between N and PE  • between N and PE  • between PE and N and/or L  1.5 kV  residual voltage  • between L and (PE)N  — at rated value of discharge current / maximum  • between N and PE  — at rated value of discharge current / maximum  • between N and PE  — at rated value of discharge current / maximum  • between N and PE  — at rated value of discharge current / maximum  • between N and PE  — at rated value of discharge current / maximum  • between N and PE  — at rated value of discharge current / maximum  • between N and PE  — at readed value of discharge current / maximum  • between N and PE  • between L and N  • between L and N  • between L and PE  • between L and PE  • between N and PE  • between N and PE  • between N and PE  • 1.5 kV  • response time / between L and (PE)N  • response time / between N and PE  • 100 ns  adjustable response factor / of tripping current  1.6  fuse protection type / at V-shaped connection  fuse protection type / for T-connector  Connections/ Torminals  type of electrical connection  stripped length  tightening torque  • for finely stranded conductor  5.5 25	follow current extinguishing capability	
Short-circuit rating (SCCR) / at 264 V protection level  • between L and N • between L and PE • between N and L • between N and PE • between PE and N and/or L  residual voltage • between L and (PE)N — at rated value of discharge current / maximum • between N and PE — at rated value of discharge current / maximum • between N and PE — at rated value of discharge current / maximum • between N and PE — at rated value of discharge current / maximum • between N and PE — at reade value of discharge current / maximum • between N and PE — at reade value of Mischarge current / maximum • between N and PE — at reade value of Bischarge current / maximum • between N and PE — at reade value of Mischarge current / maximum response value of the surge voltage / at 6 kV / at (1.2/50)  µs • between L and N • between L and PE • between L and PE • between N and PE • 1.5 kV • response time / between N and PE • 1.5 kV • response time / between N and PE 100 ns • response time / between N and PE 1.6  fuse protection type / at V-shaped connection fuse protection type / for T-connector  2 Screw terminal stripped length 18 mm  tightening torque • for finely stranded conductor 2 Sc 25	between N and PE	100 A
protection level  • between L and N  • between N and L  • between N and PE  • between N and PE  • between P and N and/or L  residual voltage  • between L and (PE)N  — at rated value of discharge current / maximum  • between L and PE  — at rated value of discharge current / maximum  • between N and PE  — at rated value of discharge current / maximum  • between N and PE  — at rated value of discharge current / maximum  • between N and PE  — at rated value of discharge current / maximum  • between N and PE  — at read value of the surge voltage / at 6 kV / at (1.2/50)  µs  • between L and N  • between L and PE  • between N and PE  • between N and PE  • between N and PE  1.5 kV  • response time / between L and (PE)N  • response time / between N and PE  adjustable response factor / of tripping current  fuse protection type / at V-shaped connection  fuse protection type / for T-connector  125 A AC (gG)  fuse protection type / for T-connector  Screw terminal  tripped length  tightening torque  • for finely stranded conductor  • for finely stranded conductor  2.5 25	<ul><li>between L and N</li></ul>	50 kA
between L and N     between N and PE     between N and PE     between PE and N and/or L     between L and (PE)N     at rated value of discharge current / maximum     between L and PE     at rated value of discharge current / maximum     between N and PE     at rated value of discharge current / maximum     between N and PE     at rated value of discharge current / maximum     between N and PE     at rated value of discharge current / maximum     between N and PE     at rated value of discharge current / maximum     between N and PE     between L and N     between L and N     between L and PE     between N and PE     1.5 kV     response time / between L and (PE)N     response time / between N and PE     100 ns     adjustable response factor / of tripping current     fuse protection type / at V-shaped connection     125 A AC (gG)     Connections/ Terminals  type of electrical connection     Screw terminal  stripped length     18 mm  tightening torque     4.3 4.7  stripped length     connectable conductor cross-section     of rinely stranded conductor     or finely stranded conductor	short-circuit rating (SCCR) / at 264 V	50 kA
between L and PE     between N and L     between N and PE     between PE and N and PE     between PE and N and/or L  residual voltage     between L and (PE)N     —at rated value of discharge current / maximum     between L and PE     —at rated value of discharge current / maximum     between N and PE     —at rated value of discharge current / maximum     between N and PE     —at rated value of discharge current / maximum     between N and PE     —at rated value of discharge current / maximum     between N and PE     —between L and N     between L and N     between L and PE     between L and PE     between N and PE     1.5 kV      response time / between L and (PE)N     response time / between N and PE     100 ns     response time / between N and PE     100 ns  adjustable response factor / of tripping current     fuse protection type / at V-shaped connection     125 A AC (gG)  Connections/ Torninals  type of electrical connection     Screw terminal  stripped length     18 mm  tightening torque     4.3 4.7  stripped length     connectable conductor cross-section     for finely stranded conductor     for finely stranded conductor	protection level	
between N and P between P and N and/or L between PE and N and/or L  residual voltage between L and (PE)N — at rated value of discharge current / maximum between L and PE — at rated value of discharge current / maximum between N and PE — at rated value of discharge current / maximum between N and PE — at rated value of discharge current / maximum between N and PE — at rated value of discharge current / maximum response value of the surge voltage / at 6 kV / at (1.2/50)  ps between L and N between L and PE between N and PE  response time / between L and (PE)N between N and PE  response time / between N and PE  1.5 kV  response time / between N and PE  1.5 kV  response time / between N and PE  1.5 kV  response time / between N and PE  1.5 kV  response time / between N and PE  1.5 kV  response time / between N and PE  1.5 kV  response time / between N and PE  1.5 kV  response time / between N and PE  1.5 kV  response time / between N and PE  1.5 kV  response time / between N and PE  1.5 kV  response time / between N and PE  1.5 kV  response time / between N and PE  1.5 kV  response time / between N and PE  1.5 kV  response time / between N and PE  1.5 kV  response time / between N and PE  1.5 kV  response time / between N and PE  1.5 kV  response time / between N and PE  1.5 kV  response time / between N and PE  1.5 kV  response time / between N and PE  1.5 kV  response value of ties view of the xirch	<ul><li>between L and N</li></ul>	1.5 kV
between N and PE     • between PE and N and/or L  residual voltage     • between L and (PE)N     — at rated value of discharge current / maximum     • between L and PE     — at rated value of discharge current / maximum     • between N and PE     — at rated value of discharge current / maximum     • between N and PE     — at rated value of discharge current / maximum  response value of the surge voltage / at 6 kV / at (1.2/50)  µs     • between L and N     • between L and PE     • between N and PE     • response time / between L and (PE)N     • response time / between N and PE     • response time / between N and PE     adjustable response factor / of tripping current     fuse protection type / for T-connector     15 A AC (gG)  Connections/ Terminals  type of electrical connection     stripped length     18 mm  tightening torque     • for finely stranded conductor     2.5 25	<ul><li>between L and PE</li></ul>	2.5 kV
between PE and N and/or L  residual voltage	<ul><li>between N and L</li></ul>	1.5 kV
residual voltage  • between L and (PE)N  — at rated value of discharge current / maximum  • between L and PE  — at rated value of discharge current / maximum  • between N and PE  — at rated value of discharge current / maximum  response value of the surge voltage / at 6 kV / at (1.2/50)  ps  • between L and N  • between L and PE  • between N and PE  • response time / between L and (PE)N  • response time / between N and PE  adjustable response factor / of tripping current  fuse protection type / at V-shaped connection  fuse protection type / for T-connector  Connections/ Terminals  type of electrical connection  stripped length  tightening torque  • for finely stranded conductor  • for finely stranded conductor  2.5 25	<ul><li>between N and PE</li></ul>	1.5 kV
between L and (PE)N     — at rated value of discharge current / maximum     between L and PE     — at rated value of discharge current / maximum     between N and PE     — at rated value of discharge current / maximum     response value of the surge voltage / at 6 kV / at (1.2/50)     µs     between L and N     between L and PE     between N and PE     between N and PE     between N and PE     insponse time / between L and (PE)N     response time / between N and PE     adjustable response factor / of tripping current     fuse protection type / at V-shaped connection     fuse protection type / for T-connector  Connections/ Terminals  type of electrical connection     stripped length     its mm     connectable conductor cross-section     of finely stranded conductor     2.5 25	<ul> <li>between PE and N and/or L</li> </ul>	1.5 kV
- at rated value of discharge current / maximum  • between L and PE  - at rated value of discharge current / maximum  • between N and PE  - at rated value of discharge current / maximum  • between N and PE  - at rated value of discharge current / maximum  1.5 kV  response value of the surge voltage / at 6 kV / at (1.2/50)  ps  • between L and N  • between L and PE  • between N and PE  • response time / between L and (PE)N  • response time / between N and PE  1.5 kV  • response time / between N and PE  100 ns  adjustable response factor / of tripping current  fuse protection type / at V-shaped connection  fuse protection type / for T-connector  Connections/ Terminals  type of electrical connection  stripped length  tightening torque  4.3 4.7  stripped length  connectable conductor cross-section  • for finely stranded conductor  2.5 25	residual voltage	
between L and PE     — at rated value of discharge current / maximum     between N and PE     — at rated value of discharge current / maximum  response value of the surge voltage / at 6 kV / at (1.2/50) µs     between L and N     between L and PE     between L and PE     between N and PE     between N and PE     1.5 kV     response time / between L and (PE)N     response time / between N and PE     100 ns     response time / between N and PE     100 ns     adjustable response factor / of tripping current     fuse protection type / at V-shaped connection     125 A AC (gG)  Connections/ Terminals  type of electrical connection     Screw terminal     tipped length     18 mm     tightening torque     4.3 4.7  stripped length     18 mm  connectable conductor cross-section     for finely stranded conductor     2.5 25	<ul><li>between L and (PE)N</li></ul>	
- at rated value of discharge current / maximum  • between N and PE  - at rated value of discharge current / maximum  1.5 kV  response value of the surge voltage / at 6 kV / at (1.2/50)  ps  • between L and N  • between L and PE  • between N and PE  • between N and PE  1.5 kV  • response time / between L and (PE)N  • response time / between N and PE  100 ns  • response time / between N and PE  1.6  fuse protection type / at V-shaped connection  fuse protection type / for T-connector  Connections/ Terminals  type of electrical connection  stripped length  tightening torque  4.3 4.7  stripped length  connectable conductor cross-section  • for finely stranded conductor  • for finely stranded conductor	— at rated value of discharge current / maximum	1.5 kV
between N and PE     — at rated value of discharge current / maximum  response value of the surge voltage / at 6 kV / at (1.2/50) µs      between L and N     between L and PE     between N and PE     between N and PE     1.5 kV      response time / between L and (PE)N     response time / between N and PE     100 ns     response time / between N and PE     100 ns  dijustable response factor / of tripping current fuse protection type / at V-shaped connection fuse protection type / for T-connector  Connections/ Terminals  type of electrical connection     stripped length     18 mm tightening torque     4.3 4.7 stripped length     18 mm connectable conductor cross-section     for finely stranded conductor     2.5 25	<ul><li>between L and PE</li></ul>	
response value of the surge voltage / at 6 kV / at (1.2/50)  ps  • between L and N  • between L and PE  • between N and PE  • response time / between L and (PE)N  • response time / between N and PE  1.5 kV  • response time / between N and PE  100 ns  • response time / between N and PE  1010 ns  adjustable response factor / of tripping current  fuse protection type / at V-shaped connection  fuse protection type / for T-connector  Connections/ Terminals  type of electrical connection  stripped length  tightening torque  • for finely stranded conductor  • for finely stranded conductor	— at rated value of discharge current / maximum	2.5 kV
response value of the surge voltage / at 6 kV / at (1.2/50)  ps  • between L and N  • between L and PE  • between N and PE  • response time / between L and (PE)N  • response time / between N and PE  adjustable response factor / of tripping current  fuse protection type / at V-shaped connection  fuse protection type / for T-connector  Connections/ Terminals  type of electrical connection  stripped length  tightening torque  4.3 4.7  stripped length  tonnectable conductor cross-section  • for finely stranded conductor  2.5 25	<ul><li>between N and PE</li></ul>	
between L and N     between L and PE     between N and PE     between N and PE     1.5 kV      response time / between L and (PE)N     response time / between N and PE     100 ns     response time / between N and PE     100 ns  adjustable response factor / of tripping current fuse protection type / at V-shaped connection fuse protection type / for T-connector  125 A AC (gG)  Connections/ Terminals  type of electrical connection     Screw terminal  stripped length     18 mm  tightening torque     4.3 4.7  stripped length     18 mm  connectable conductor cross-section     of finely stranded conductor     2.5 25	— at rated value of discharge current / maximum	1.5 kV
<ul> <li>between L and N</li> <li>between L and PE</li> <li>between N and PE</li> <li>1.5 kV</li> <li>response time / between L and (PE)N</li> <li>response time / between N and PE</li> <li>100 ns</li> <li>response factor / of tripping current</li> <li>fuse protection type / at V-shaped connection</li> <li>fuse protection type / for T-connector</li> <li>25 A AC (gG)</li> <li>tuse protection type / for T-connector</li> <li>Screw terminal</li> <li>stripped length</li> <li>tightening torque</li> <li>4.3 4.7</li> <li>stripped length</li> <li>the mm</li> <li>connectable conductor cross-section</li> <li>for finely stranded conductor</li> <li>2.5 25</li> </ul>	response value of the surge voltage / at 6 kV / at (1.2/50)	
<ul> <li>between L and PE</li> <li>between N and PE</li> <li>1.5 kV</li> <li>response time / between L and (PE)N</li> <li>response time / between N and PE</li> <li>100 ns</li> <li>adjustable response factor / of tripping current</li> <li>fuse protection type / at V-shaped connection</li> <li>fuse protection type / for T-connector</li> <li>315 A AC (gG)</li> </ul> Connections/ Terminals type of electrical connection <ul> <li>screw terminal</li> <li>stripped length</li> <li>tightening torque</li> <li>4.3 4.7</li> </ul> stripped length <ul> <li>temped length</li> <li></li></ul>	•	
<ul> <li>◆ between N and PE</li> <li>◆ response time / between L and (PE)N</li> <li>◆ response time / between N and PE</li> <li>100 ns</li> <li>adjustable response factor / of tripping current</li> <li>fuse protection type / at V-shaped connection</li> <li>fuse protection type / for T-connector</li> <li>25 A AC (gG)</li> <li>Connections/ Terminals</li> <li>type of electrical connection</li> <li>stripped length</li> <li>tightening torque</li> <li>4.3 4.7</li> <li>stripped length</li> <li>tonnectable conductor cross-section</li> <li>◆ for finely stranded conductor</li> <li>2.5 25</li> </ul>		
<ul> <li>● response time / between L and (PE)N</li> <li>● response time / between N and PE</li> <li>adjustable response factor / of tripping current</li> <li>fuse protection type / at V-shaped connection</li> <li>fuse protection type / for T-connector</li> <li>Connections/ Terminals</li> <li>type of electrical connection</li> <li>stripped length</li> <li>tightening torque</li> <li>stripped length</li> <li>type of electrical conductor cross-section</li> <li>● for finely stranded conductor</li> <li>2.5 25</li> </ul>		
● response time / between N and PE  adjustable response factor / of tripping current  fuse protection type / at V-shaped connection  fuse protection type / for T-connector  215 A AC (gG)  fuse protection type / for T-connector  315 A AC (gG)  Connections/ Terminals  type of electrical connection  stripped length  18 mm  tightening torque  4.3 4.7  stripped length  18 mm  connectable conductor cross-section  • for finely stranded conductor  2.5 25	between N and PE	1.5 kV
adjustable response factor / of tripping current  fuse protection type / at V-shaped connection  fuse protection type / for T-connector  Connections/ Terminals  type of electrical connection  Screw terminal  stripped length  18 mm  tightening torque  4.3 4.7  stripped length  18 mm  connectable conductor cross-section  of or finely stranded conductor  2.5 25	<ul> <li>response time / between L and (PE)N</li> </ul>	100 ns
fuse protection type / at V-shaped connection fuse protection type / for T-connector  Connections/ Terminals  type of electrical connection Screw terminal  stripped length 18 mm  tightening torque 4.3 4.7  stripped length 18 mm  connectable conductor cross-section • for finely stranded conductor  2.5 25	<ul> <li>response time / between N and PE</li> </ul>	100 ns
fuse protection type / for T-connector  Connections/ Terminals  type of electrical connection  Screw terminal  stripped length  18 mm  tightening torque  4.3 4.7  stripped length  18 mm  connectable conductor cross-section  • for finely stranded conductor  2.5 25	adjustable response factor / of tripping current	1.6
type of electrical connection stripped length tightening torque stripped length 18 mm tightening torque 4.3 4.7 stripped length 18 mm connectable conductor cross-section • for finely stranded conductor 2.5 25	fuse protection type / at V-shaped connection	125 A AC (gG)
type of electrical connection  stripped length  tightening torque  stripped length  tightening torque  4.3 4.7  stripped length  tonnectable conductor cross-section  of or finely stranded conductor  2.5 25	fuse protection type / for T-connector	315 A AC (gG)
stripped length tightening torque 4.3 4.7 stripped length tonnectable conductor cross-section of for finely stranded conductor  2.5 25	Connections/ Terminals	
tightening torque 4.3 4.7 stripped length 18 mm  connectable conductor cross-section  • for finely stranded conductor 2.5 25	type of electrical connection	Screw terminal
stripped length  connectable conductor cross-section  of for finely stranded conductor  2.5 25	stripped length	18 mm
connectable conductor cross-section  • for finely stranded conductor  2.5 25	tightening torque	4.3 4.7
• for finely stranded conductor 2.5 25	stripped length	18 mm
	connectable conductor cross-section	
• for rigid conductor 2.5 35	<ul> <li>for finely stranded conductor</li> </ul>	2.5 25
	for rigid conductor	2.5 35

finely stranded	2.5 25
AWG number / as coded connectable conductor cross	13 2
section	
design of the thread / of the connection screw	M5
signal design	Optical, remote signaling contact
Indicator/remote signaling	
switching function / of the remote signaling contacts	PDT contact
operating voltage / of the remote signaling contacts	40 000
• at AC	12 250
at DC     operational current / of the remote signaling contacts	125 V (200 mA DC)
at AC	10 mA 1 A
• at DC	1 A DC (30 V DC)
connection type of remote signaling contact	M2
connectable conductor cross-section	
<ul> <li>for remote signaling contacts / for rigid conductor</li> </ul>	0.14 1.5
<ul> <li>for finely stranded conductor / for remote signaling contacts</li> </ul>	0.14 1.5
AWG number / as coded connectable conductor cross section / for remote signaling contacts / minimum	28
AWG number / as coded connectable conductor cross section / for remote signaling contacts / maximum	15
tightening torque / for remote signaling contacts	0.25 N·m
stripped length / of the cable / for remote signaling	7 mm
contacts	
NEMA/UL - Data	404
type of surge protective device (SPD) / according to UL	4CA 3Y
type of distribution system / according to UL type of distribution system	TT, TN-S
designation of the protective paths / according to UL	L-L, L-N, L-G, N-G
TOV behavior	2 2, 2 14, 2 3, 14 3
at TOV test voltage (L-N)	415 V AC (5 s / withstand mode) / 457 V AC (120 min / withstand mode)
at TOV test voltage (N-PE)	1200 V (200 ms / withstand mode)
Measured Limiting Voltage (MLV) / between L and L	2.45 kV
Measured Limiting Voltage (MLV) / between L and Ground (GND)	1.57 kV
Measured Limiting Voltage (MLV) / between L and N	1.35 kV
Measured Limiting Voltage (MLV) / between N and Ground (GND)	1.08 kV
Maximum Continuous Operating Voltage (MCOV) / between L and L	528 V
Maximum Continuous Operating Voltage (MCOV) / between L and Ground (GND)	528 V
Maximum Continuous Operating Voltage (MCOV) / between L and N	264 V
Maximum Continuous Operating Voltage (MCOV) / between N and Ground (GND)	264 V
leakage current / according to UL	20 kA
leakage current / according to UL	20 kA
leakage current / according to UL	20 kA
leakage current / according to UL	20 kA
sequential current	200 4 (264 \/ 4C)
<ul> <li>between N and Ground (GND) / according to UL</li> <li>between L and N / according to UL</li> </ul>	200 A (264 V AC) 10 kA (264 V AC)
AWG number / as coded connectable conductor cross	30
section / for remote signaling contacts / according to UL /	
minimum	
	14
minimum  AWG number / as coded connectable conductor cross section / for remote signaling contacts / according to UL /	14 6 562 ft 3.56 lb

net weight [lb] / according to UL	3.16 lb
combustibility class acc. to UL 94	V0
standards / according to UL	UL 1449 edition 4
operating voltage / of the remote signaling contacts / according to UL	125 V
operational current / of the remote signaling contacts / at AC / according to UL	1 A
AWG number / as coded connectable conductor cross section / according to UL / minimum	12
AWG number / as coded connectable conductor cross section / according to UL / maximum	2
Further information	

Information- and Downloadcenter (Catalogs, Brochures,...) <a href="http://www.siemens.com/lowvoltage/catalogs">http://www.siemens.com/lowvoltage/catalogs</a>

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=5SD7414-1

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

https://support.industry.siemens.com/cs/ww/en/ps/5SD7414-1

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=5SD7414-1">http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=5SD7414-1</a>

