## **SIEMENS**

Data sheet 3RT2446-1NP30



contactor AC-1, 140 A, 690 V / 40 °C, 3-pole, 175-280 V AC/DC, 50/60 Hz, with integrated varistor, auxiliary contacts: 1 NO + 1 NC, main circuit: box terminal, control and auxiliary circuit: screw terminal size: S3

product brand name	SIRIUS
product designation	Contactor
product type designation	3RT24
General technical data	
size of contactor	S3
product extension	
<ul> <li>function module for communication</li> </ul>	No
auxiliary switch	Yes
power loss [W] for rated value of the current	
<ul> <li>at AC in hot operating state</li> </ul>	29.4 W
<ul> <li>at AC in hot operating state per pole</li> </ul>	9.8 W
without load current share typical	1.8 W
type of calculation of power loss depending on pole	quadratic
insulation voltage	
<ul> <li>of main circuit with degree of pollution 3 rated value</li> </ul>	1 000 V
of auxiliary circuit with degree of pollution 3 rated value	690 V
surge voltage resistance	
of main circuit rated value	8 kV
of auxiliary circuit rated value	6 kV
shock resistance at rectangular impulse	
• at AC	10.3g / 5 ms, 6,.g / 10 ms
• at DC	6.7 g / 5 ms, 4g / 10 ms
shock resistance with sine pulse	
• at AC	16.3g / 5 ms, 10.g / 10 ms
• at DC	10.6 g / 5 ms, 6.3 g / 10 ms
mechanical service life (operating cycles)	
<ul> <li>of contactor typical</li> </ul>	10 000 000
<ul> <li>of the contactor with added electronically optimized auxiliary switch block typical</li> </ul>	5 000 000
of the contactor with added auxiliary switch block typical	10 000 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	03/01/2017
SVHC substance name	Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5
Weight	1.805 kg
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
during operation	-25 +60 °C
during storage	-55 +80 °C

relative humidity minimum	10 %
relative humidity at 55 °C according to IEC 60068-2-30 maximum	95 %
ain circuit	
number of poles for main current circuit	3
number of NO contacts for main contacts	3
number of NC contacts for main contacts	0
type of voltage for main current circuit	AC
operational current	
• at AC-1	
— up to 690 V at ambient temperature 40 °C rated value	140 A
— up to 690 V at ambient temperature 55 °C rated value	130 A
— up to 690 V at ambient temperature 60 °C rated value	130 A
<ul> <li>up to 1000 V at ambient temperature 40 °C rated value</li> </ul>	60 A
<ul> <li>up to 1000 V at ambient temperature 60 °C rated value</li> <li>at AC-3</li> </ul>	60 A
— at 400 V rated value	44 A
— at 690 V rated value	44 A
minimum cross-section in main circuit at maximum AC-1 rated	50 mm²
value	
operational current	
at 1 current path at DC-1	
— at 24 V rated value	130 A
— at 60 V rated value	80 A
— at 110 V rated value	12 A
— at 220 V rated value	2.5 A
— at 440 V rated value	0.8 A
— at 600 V rated value	0.48 A
<ul> <li>with 2 current paths in series at DC-1</li> </ul>	
— at 24 V rated value	130 A
— at 60 V rated value	130 A
— at 110 V rated value	130 A
— at 220 V rated value	13 A
— at 440 V rated value	2.4 A
— at 600 V rated value	1.3 A
with 3 current paths in series at DC-1	
— at 24 V rated value	130 A
— at 60 V rated value	130 A
— at 110 V rated value	130 A
— at 220 V rated value	130 A
— at 440 V rated value	6 A
— at 600 V rated value	3.4 A
at 1 current path at DC-3 at DC-5	
— at 24 V rated value	6 A
— at 60 V rated value	3 A
— at 110 V rated value	1.25 A
— at 220 V rated value	0.35 A
— at 440 V rated value	0.15 A
— at 600 V rated value	0.1 A
with 2 current paths in series at DC-3 at DC-5	
— at 24 V rated value	130 A
— at 60 V rated value	130 A
— at 110 V rated value	130 A
— at 110 V rated value  — at 220 V rated value	1.75 A
— at 440 v rated value	
	0.42 Λ
— at 440 V rated value	0.42 A
	0.42 A 0.27 A

	at CO V rated value	420.4
	— at 60 V rated value	130 A
at 400 V rated value		
— at 600 V rated value  • at AC  • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC • at DC  • at DC  • at DC • at DC  • at DC  • at DC  • at DC  • at DC  • at DC  • at DC  • at DC  • at DC  • at DC  • at DC  • at DC  • at DC  • at DC  • at DC  • at DC  • at DC  • at DC  • at DC  • at DC  • at DC  • at DC  • at DC  • at DC  • at DC  • at DC  • at DC		
no-load switching frequency		
		U.45 A
■ ELC		
Departury   Target   Control		
Special circuit/Control		
Spee of voltage of the control supply voltage   ACIDC		650 1/h
type of voltage of the control supply voltage at AC		10/00
Control supply voltage at AC		
		AC/DC
2001trol supply voltage at DC rated value   175 _ 280 V		
Operating range factor control supply voltage rated value of magnet coil at Value   0.8		
magnet coll at DC		175 280 V
• full-scale value     operating range factor control supply voltage rated value of magnet coil at AC     • at 50 Hz		
operating range factor control supply voltage rated value of magnet coll at AC         0.81.1           • at 50 Hz         0.81.1           design of the surge suppressor         with varistor           Innush current peak         65 A           duration of inrush current peak         5 µs           locked-rotor current peak         1.2 A           duration of locked-rotor current         150 ms           holding current mean value         10 mA           apparent pick-up power of magnet coil at AC         • at 50 Hz           • at 50 Hz         202 VA           • at 50 Hz         202 VA           • at 50 Hz         3.5 VA           • at 50 Hz         5.0 NA           closing power of magnet coil at DC         76 W           holding power of magnet coil at DC         76 W           • at DC         50 70 ms           • at DC         38 57 ms		
magnet coil at AC         at 50 Hz         0.8 1.1           e at 60 Hz         0.8 1.1           design of the surge suppressor         with variator           inrush current peak         65 A           duration of inrush current peak         5 µs           locked-rotor current mean value         0.44 A           locked-rotor current peak         12 A           duration of locked-rotor current         150 ms           holding current mean value         10 mA           apparent pick-up power of magnet coil at AC         202 VA           • at 50 Hz         202 VA           • at 50 Hz         3.5 VA           • at 50 Hz         3.5 VA           • at 60 Hz         3.5 VA           1 closing power of magnet coil at DC         76 W           holding power of magnet coil at DC         1.8 W           closing delay         3.5 VA           • at DC         50 70 ms           opening delay         4 AC         50 70 ms           • at DC         38 57 ms           • at DC		1.1
e at 60 Hz  design of the surge suppressor  minush current peak  duration of inrush current peak  blocked-rotor current mean value  locked-rotor current mean value  10 mA  apparent pick-up power of magnet coil at AC  at 50 Hz  at 60 Hz  202 VA  at 60 Hz  202 VA  apparent holding power of magnet coil at AC  at 50 Hz  at 60 Hz  3.5 VA  at 60 Hz  3.5 VA  closing power of magnet coil at DC  holding power of magnet coil at DC  tolsing power of magnet coil at DC  tolsing power of magnet coil at DC  at AC  at		
design of the surge suppressor   with varistor	● at 50 Hz	0.8 1.1
Innush current peak	● at 60 Hz	0.8 1.1
duration of inrush current peak   5 µs     locked-rotor current mean value   0.44 A     duration of locked-rotor current     duration of locked-rotor current     duration of locked-rotor current     150 ms     holding current mean value     apparent pick-up power of magnet coil at AC     at 50 Hz   202 VA     at 60 Hz   202 VA     at 60 Hz   3.5 VA     closing power of magnet coil at DC     holding power of magnet coil at DC     holding power of magnet coil at DC     closing delay     at AC   50 70 ms     at DC   50 70 ms     at DC   38 57 ms     arcing time   10 20 ms     carcing time   20 20 ms     control version of the switch operating mechanism     carcing time   10 20 ms     control Version of the switch operating mechanism     can be control version of the switch operating mechanism     attachable   2     instantaneous contact   1     number of NO contacts for auxiliary contacts   1     attachable   2     instantaneous contact   1     operational current at AC-15     at 230 V rated value   6 A     at 690 V rated value   3 A     at 690 V rated value   2 A     at 690 V rated value   2 A     at 690 V rated value   1 A     at 690 V rated value   2 A     at 690 V rated value   1 A     at 690 V rated value   2 A     at 690 V rated value   1 A     at 6	design of the surge suppressor	with varistor
locked-rotor current mean value   0.44 A       locked-rotor current peak   1.2 A       duration of locked-rotor current   150 ms     holding current mean value   10 mA       apparent pick-up power of magnet coil at AC       at 80 Hz   202 VA       at 80 Hz   202 VA       apparent holding power of magnet coil at AC       at 80 Hz   3.5 VA       closing power of magnet coil at DC   76 W       holding power of magnet coil at DC   1.8 W       closing delay       at AC   60 70 ms       at AC   38 57 ms       at DC   38 57 ms	inrush current peak	65 A
Iocked-rotor current peak	duration of inrush current peak	5 μs
duration of locked-rotor current   150 ms     holding current mean value   10 mA     apparent pick-up power of magnet coil at AC     • at 50 Hz   202 VA     • at 60 Hz   202 VA     apparent holding power of magnet coil at AC     • at 50 Hz   3.5 VA     • at 60 Hz   3.5 VA     • at 60 Hz   3.5 VA     closing power of magnet coil at DC   76 W     holding power of magnet coil at DC   1.8 W     closing delay     • at AC   50 70 ms     • at DC   50 70 ms     • at DC   38 57 ms     arcing time   10 20 ms     control version of the switch operating mechanism     Auxiliary circuit     number of NC contacts for auxiliary contacts   1     • attachable   2     • instantaneous contact   1     number of NO contacts for auxiliary contacts   1     • attachable   2     • instantaneous contact   1     number of NO contacts for auxiliary contacts   1     • attachable   2     • instantaneous contact   1     number of NO contacts for auxiliary contacts   1     • attachable   2     • instantaneous contact   1     operational current at AC-12 maximum   10 A     operational current at AC-15     • at 230 V rated value   6 A     • at 500 V rated value   3 A     • at 690 V rated value   4     • at 690 V rated value   4     • at 690 V rated value   5     • at 690 V rated value   6     • at	locked-rotor current mean value	0.44 A
holding current mean value   10 mA	locked-rotor current peak	1.2 A
apparent pick-up power of magnet coil at AC	duration of locked-rotor current	150 ms
	holding current mean value	10 mA
■ at 60 Hz     apparent holding power of magnet coil at AC     ■ at 50 Hz     ■ at 60 Hz     3.5 VA     3.5 VA     closing power of magnet coil at DC     holding power of magnet coil at DC     holding power of magnet coil at DC     is W     closing delay     ■ at AC     ■ at DC     opening delay     ● at AC     38 57 ms     ● at DC     arcing time     10 20 ms     control version of the switch operating mechanism     Auxiliary circuit  number of NC contacts for auxiliary contacts     ■ attachable     ● instantaneous contact     1     unther of NO contacts for auxiliary contacts     1     ● attachable     ● instantaneous contact     1     operational current at AC-15     ● at 230 V rated value     ■ at 400 V rated value     • at 4600 V rated value     • at 690 V rated value	apparent pick-up power of magnet coil at AC	
apparent holding power of magnet coil at AC  at 50 Hz  at 60 Hz  5.5 VA  closing power of magnet coil at DC  76 W  holding power of magnet coil at DC  1.8 W  closing delay  at AC  at DC  50 70 ms  poening delay  at AC  50 70 ms  poening delay  at AC  38 57 ms  arcing time  10 20 ms  control version of the switch operating mechanism  Standard A1 - A2  Auxiliary circuit  number of NC contacts for auxiliary contacts  attachable  instantaneous contact  number of NO contacts for auxiliary contacts  attachable  attachable  attachable  binstantaneous contact  1  operational current at AC-12 maximum  10 A  operational current at AC-15  att 230 V rated value  att 690 V rated value  attac coil at DC  76 W	● at 50 Hz	202 VA
	● at 60 Hz	202 VA
● at 60 Hz 3.5 VA  closing power of magnet coil at DC 76 W holding power of magnet coil at DC 1.8 W  closing delay  ● at AC 50 70 ms  ● at DC 50 70 ms  opening delay  ● at AC 38 57 ms  • at DC 38 57 ms  arcing time 10 20 ms  control version of the switch operating mechanism Standard A1 - A2  Auxillary circuit  number of NC contacts for auxiliary contacts 1  • attachable 2  • instantaneous contact 1  number of NO contacts for auxiliary contacts 1  • attachable 2  • instantaneous contact 1  operational current at AC-12 maximum 10 A  operational current at AC-15  • at 230 V rated value 6 A  • at 400 V rated value 3 A  • at 500 V rated value 4 A 600 V rated value 4 A 600 V rated value 5 A 600 V rated value 5 A 600 V rated value 6 A  • at 690 V rated value 1 A		
closing power of magnet coil at DC holding power of magnet coil at DC  closing delay	● at 50 Hz	3.5 VA
holding power of magnet coil at DC	● at 60 Hz	3.5 VA
closing delay       at AC       50 70 ms         at DC       50 70 ms         opening delay       38 57 ms         at AC       38 57 ms         arcing time       10 20 ms         control version of the switch operating mechanism       Standard A1 - A2         Auxiliary circuit       1         number of NC contacts for auxiliary contacts       1         attachable       2         instantaneous contact       1         number of NO contacts for auxiliary contacts       1         attachable       2         instantaneous contact       1         operational current at AC-12 maximum       10 A         operational current at AC-15       41 (20 V rated value)         at 400 V rated value       6 A         at 500 V rated value       3 A         at 690 V rated value       1 A		76 W
■ at AC     ■ at DC     50 70 ms     opening delay     ■ at AC     ■ at DC     38 57 ms     ■ at DC     38 57 ms     arcing time     10 20 ms     control version of the switch operating mechanism     Standard A1 - A2  Auxiliary circuit  number of NC contacts for auxiliary contacts     ■ attachable     ■ instantaneous contact     1 number of NO contacts for auxiliary contacts     □ instantaneous contact     1  operational current at AC-12 maximum     10 A  operational current at AC-15     ■ at 230 V rated value     ■ at 400 V rated value     ■ at 690 V rated value     1 A	holding power of magnet coil at DC	1.8 W
■ at DC     opening delay     ■ at AC      ■ at DC      38 57 ms     arcing time      10 20 ms     control version of the switch operating mechanism     Standard A1 - A2  Auxiliary circuit  number of NC contacts for auxiliary contacts     ■ attachable     ● instantaneous contact     1 number of NO contacts for auxiliary contacts     ■ attachable     ● instantaneous contact     1     operational current at AC-12 maximum     10 A  operational current at AC-15     ● at 230 V rated value     ● at 400 V rated value     ● at 690 V rated value     1 A	closing delay	
opening delay  • at AC  • at DC  38 57 ms  arcing time  10 20 ms  control version of the switch operating mechanism  Standard A1 - A2  Auxiliary circuit  number of NC contacts for auxiliary contacts  • attachable  • instantaneous contact  1  number of NO contacts for auxiliary contacts  • attachable	• at AC	
		50 70 ms
arcing time  arcing time  arcing time  tontrol version of the switch operating mechanism  Standard A1 - A2  Auxiliary circuit  number of NC contacts for auxiliary contacts  attachable  instantaneous contact  number of NO contacts for auxiliary contacts  attachable  attachable  binstantaneous contact  number of NO contacts for auxiliary contacts  attachable  attachable  binstantaneous contact  perational current at AC-12 maximum  poperational current at AC-15  at 230 V rated value  at 400 V rated value  at 690 V rated value		
arcing time control version of the switch operating mechanism Standard A1 - A2  Auxiliary circuit  number of NC contacts for auxiliary contacts	• at AC	
control version of the switch operating mechanism  Standard A1 - A2  Auxiliary circuit  number of NC contacts for auxiliary contacts  • attachable • instantaneous contact  1  number of NO contacts for auxiliary contacts  • attachable • attachable • instantaneous contact  1  operational current at AC-12 maximum  to perational current at AC-15  • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value  • at 690 V rated value  1 A	• at DC	
Auxiliary circuit  number of NC contacts for auxiliary contacts  attachable  instantaneous contact  number of NO contacts for auxiliary contacts  attachable  attachable  instantaneous contact  operational current at AC-12 maximum  operational current at AC-15  at 230 V rated value  at 400 V rated value  at 500 V rated value  at 690 V rated value  1 A		
number of NC contacts for auxiliary contacts  • attachable  • instantaneous contact  1 number of NO contacts for auxiliary contacts  • attachable  • attachable  • instantaneous contact  1 operational current at AC-12 maximum  10 A  operational current at AC-15  • at 230 V rated value  • at 400 V rated value  • at 500 V rated value  • at 690 V rated value		Standard A1 - A2
<ul> <li>attachable</li> <li>instantaneous contact</li> <li>number of NO contacts for auxiliary contacts</li> <li>attachable</li> <li>instantaneous contact</li> <li>instantaneous contact</li> <li>operational current at AC-12 maximum</li> <li>operational current at AC-15</li> <li>at 230 V rated value</li> <li>at 400 V rated value</li> <li>at 500 V rated value</li> <li>at 690 V rated value</li> <li>1 A</li> </ul>		
<ul> <li>instantaneous contact</li> <li>number of NO contacts for auxiliary contacts</li> <li>attachable</li> <li>instantaneous contact</li> <li>operational current at AC-12 maximum</li> <li>operational current at AC-15</li> <li>at 230 V rated value</li> <li>at 400 V rated value</li> <li>at 500 V rated value</li> <li>at 600 V rated value</li> <li>at 690 V rated value</li> <li>at 690 V rated value</li> </ul>	-	
number of NO contacts for auxiliary contacts  • attachable  • instantaneous contact  operational current at AC-12 maximum  operational current at AC-15  • at 230 V rated value  • at 400 V rated value  • at 500 V rated value  • at 690 V rated value  1 A		
<ul> <li>attachable 2</li> <li>instantaneous contact 1</li> <li>operational current at AC-12 maximum 10 A</li> <li>operational current at AC-15</li> <li>at 230 V rated value 6 A</li> <li>at 400 V rated value 3 A</li> <li>at 500 V rated value 2 A</li> <li>at 690 V rated value 1 A</li> </ul>		
<ul> <li>instantaneous contact</li> <li>operational current at AC-12 maximum</li> <li>10 A</li> <li>operational current at AC-15</li> <li>at 230 V rated value</li> <li>at 400 V rated value</li> <li>at 500 V rated value</li> <li>at 500 V rated value</li> <li>at 690 V rated value</li> <li>1 A</li> </ul>	-	
operational current at AC-12 maximum  operational current at AC-15  • at 230 V rated value  • at 400 V rated value  • at 500 V rated value  • at 690 V rated value  1 A		
operational current at AC-15         • at 230 V rated value       6 A         • at 400 V rated value       3 A         • at 500 V rated value       2 A         • at 690 V rated value       1 A		
<ul> <li>at 230 V rated value</li> <li>at 400 V rated value</li> <li>at 500 V rated value</li> <li>at 690 V rated value</li> <li>1 A</li> </ul>	<u> </u>	10 A
<ul> <li>at 400 V rated value</li> <li>at 500 V rated value</li> <li>at 690 V rated value</li> <li>1 A</li> </ul>	•	
<ul> <li>at 500 V rated value</li> <li>at 690 V rated value</li> <li>1 A</li> </ul>		
• at 690 V rated value 1 A		
operational current at DC-13		1 A
	operational current at DC-13	

at 24 V rated value	10 A
• at 48 V rated value	2 A
• at 60 V rated value	2 A
<ul> <li>at 110 V rated value</li> </ul>	1 A
• at 125 V rated value	0.9 A
at 220 V rated value	0.3 A
at 600 V rated value	0.1 A
contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
Short-circuit protection	
product function short circuit protection	No
design of the miniature circuit breaker for short-circuit protection of the auxiliary switch required	gG: 10 A (230 V, 400 A)
design of the fuse link	
<ul> <li>for short-circuit protection of the main circuit</li> </ul>	
<ul> <li>— with type of coordination 1 required</li> </ul>	gG: 250 A (690 V,100 kA)
<ul> <li>— with type of assignment 2 required</li> </ul>	gR: 250 A (690 V, 100 kA)
for short-circuit protection of the auxiliary switch required	gG: 10 A (500 V, 1 kA)
Installation/ mounting/ dimensions	
mounting position	+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface
fastening method side-by-side mounting	Yes
fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
height	140 mm
width	70 mm
depth	152 mm
required spacing	
<ul> <li>with side-by-side mounting</li> </ul>	
— forwards	20 mm
— upwards	10 mm
— downwards	10 mm
— at the side	0 mm
<ul> <li>for grounded parts</li> </ul>	
— forwards	20 mm
— upwards	10 mm
— at the side	10 mm
— downwards	10 mm
for live parts	
— forwards	20 mm
— upwards	10 mm
— downwards	10 mm
— at the side	10 mm
Connections/ Terminals	
type of electrical connection	
• for main current circuit	box terminal
• for auxiliary and control circuit	screw-type terminals
at contactor for auxiliary contacts	Screw-type terminals
• of magnet coil	Screw-type terminals
type of connectable conductor cross-sections for main contacts	
• solid	2x (2.5 16 mm²)
• stranded	2x (2,5 16 mm²), 2x (10 50 mm²), 1x (10 70 mm²)
• solid or stranded	2x (2.5 16 mm²), 2x (10 50 mm²), 1x (10 70 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	2x (2.5 35 mm²), 1x (2.5 50 mm²)
connectable conductor cross-section for main contacts	
• solid	2.5 16 mm²
solid or stranded	4 70 mm²
• stranded	6 70 mm²
finely stranded with core end processing	2.5 50 mm²
connectable conductor cross-section for auxiliary contacts	
• solid or stranded	0.5 2.5 mm²
finely stranded with core end processing	0.5 2.5 mm²
type of connectable conductor cross-sections	
yı	

for auxiliary contacts
 — solid
 — solid or stranded
 — finely stranded with core end processing
 for AWG cables for auxiliary contacts
 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)
 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)
 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)

To AVV C dables for daxillary contacts	ZX (20 10), ZX (10 14)
Safety related data	
product function	
<ul> <li>mirror contact according to IEC 60947-4-1</li> </ul>	Yes
<ul> <li>positively driven operation according to IEC 60947-5-1</li> </ul>	No
suitable for safety function	Yes
suitability for use safety-related switching OFF	Yes; safety-related disconnection via A1 A2
service life maximum	20 a
proportion of dangerous failures	
<ul> <li>with low demand rate according to SN 31920</li> </ul>	40 %
<ul> <li>with high demand rate according to SN 31920</li> </ul>	73 %
B10 value with high demand rate according to SN 31920	1 000 000
failure rate [FIT] with low demand rate according to SN 31920	100 FIT
ISO 13849	
device type according to ISO 13849-1	3
overdimensioning according to ISO 13849-2 necessary	Yes
IEC 61508	
safety device type according to IEC 61508-2	Type A
Electrical Safety	
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front
Approvals Certificates	

## General Product Approval







Confirmation



<u>KC</u>

General Product Approval

**EMV** 

**Test Certificates** 

Marine / Shipping

other





Type Test Certificates/Test Report

Special Test Certificate





Marine / Shipping









Confirmation

Special Test Certificate

Railway

Dangerous goods

Environment

**Transport Information** 

Environmental Confirmations

## Further information

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=3RT2446-1NP30

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2446-1NP30

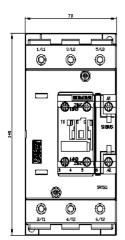
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) <a href="https://support.industry.siemens.com/cs/ww/en/ps/3RT2446-1NP30">https://support.industry.siemens.com/cs/ww/en/ps/3RT2446-1NP30</a>

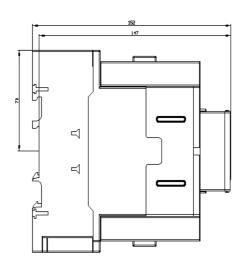
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

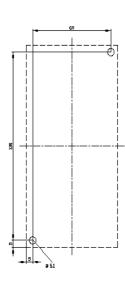
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT2446-1NP30&lang=en

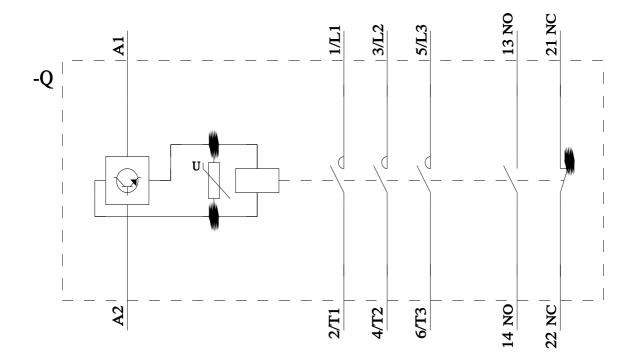
Characteristic: Tripping characteristics, I2t, Let-through current

Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2446-1NP30&objecttype=14&gridview=view1









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