SIEMENS

Data sheet 3RT1476-6LA06



Contactor, AC-1, 690 A/690 V/40 $^{\circ}$ C, S12, 3-pole, without operating mechanism, 2 NO+2 NC, Connection rail/ screw terminal

product brand name	SIRIUS
product designation	Contactor
product type designation	3RT14
General technical data	
size of contactor	S12
product extension	
 function module for communication 	No
auxiliary switch	Yes
power loss [W] for rated value of the current	
 at AC in hot operating state 	185.7 W
 at AC in hot operating state per pole 	61.9 W
insulation voltage	
 of main circuit with degree of pollution 3 rated value 	1 000 V
 of auxiliary circuit with degree of pollution 3 rated value 	500 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	8,5g / 5 ms, 4,2g / 10 ms
• at DC	8,5g / 5 ms, 4,2g / 10 ms
shock resistance with sine pulse	
• at AC	13,4g / 5 ms, 6,5g / 10 ms
• at DC	13,4g / 5 ms, 6,5g / 10 ms
mechanical service life (switching cycles)	
of contactor typical	10 000 000
 of the contactor with added electronically optimized auxiliary switch block typical 	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)	05/01/2012
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 %

Main circuit number of poles for main current circuit 1 number of NO contacts for main contacts 1 number of NO contacts for main contacts 2 number of NC contacts for main contacts 3 number of NC contacts for main current 4 of Contacts for main current circuit 5 operational current 5 of AC-1		
number of NO contacts for main contacts 0	p	3
Number of NC contacts for main contacts O	-	
operational current at AC-1 — up to 690 V at ambient temperature 40 °C rated value — up to 690 V at ambient temperature 55 °C fated value — up to 690 V at ambient temperature 60 °C rated value — up to 690 V at ambient temperature 60 °C rated value at AC-3 — at 400 V rated value — at 690 V rated value — at 690 V rated value — at 690 V rated value minimum cross-section in main circuit at maximum AC-1 rated value no-load switching frequency at AC at DC operating frequency at AC-1 maximum control circuit/ Control closing delay at AC	number of NC contacts for main contacts	0
operational current • at AC-1 — up to 690 V at ambient temperature 40 °C rated value — up to 690 V at ambient temperature 55 °C rated value — up to 690 V at ambient temperature 60 °C rated value — up to 690 V at ambient temperature 60 °C rated value • at AC-3 — at 400 V rated value — at 690 V at rated value — at 690 V rated value — at 690 V rated value minimum cross-section in main circuit at maximum AC-1 rated value no-load switching frequency • at AC • at DC operating frequency at AC-1 maximum control circuit/ Control closing delay • at AC • at DC opening time control version of the switch operating mechanism Auxillary circuit number of NC contacts for auxillary contacts • at atchable • instantaneous contact number of NC contacts for auxillary contacts • at tacbable • instantaneous contact number of NC contacts for auxillary contacts • at tacbable • instantaneous contact number of NC contacts for auxillary contacts • at 230 V rated value • at 400 V rated value • at 690 V rated value	type of voltage for main current circuit	AC
at AC-1 — up to 690 V at ambient temperature 40 °C rated value — up to 690 V at ambient temperature 55 °C rated value — up to 690 V at ambient temperature 60 °C rated value — up to 690 V at ambient temperature 60 °C rated value — at 690 V rated value 170 A 170 A 170 A 170 A 170 A 170 A 480 mm² rated value no-load switching frequency at AC at DC control circuit/ Control closing delay at AC at DC operating frequency at AC-1 maximum at AC at DC opening delay at AC at DC opening delay at AC at DC correl gride at AC at DC opening delay at AC at DC arcing time control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts attachable instantaneous contact operational current at AC-12 maximum operational current at AC-15 at 230 V rated value at 690 A		
rated value — up to 690 V at ambient temperature 55 °C rated value — up to 690 V at ambient temperature 60 °C rated value — at 400 V rated value — at 490 V rated value — at 690 V rated value		
rated value — up to 690 V at ambient temperature 60 °C rated value • at AC-3 — at 400 V rated value — at 690 V rated value — at 690 V rated value — at 690 V rated value — at 690 V rated value — at 690 V rated value 170 A minimum cross-section in main circuit at maximum AC-1 rated value no-load switching frequency • at AC • at DC operating frequency at AC-1 maximum 600 1/h control circuit/ Control closing delay • at AC • at DC opening delay • at AC • at DC arcling time control version of the switch operating mechanism Auxillary circuit number of NC contacts for auxiliary contacts • attachable • instantaneous contact • instantaneous contact operational current at AC-15 • at 230 V rated value • at 600 V rated value		690 A
rated value • at AC-3 — at 400 V rated value — at 690 V rated value minimum cross-section in main circuit at maximum AC-1 rated value no-load switching frequency • at AC • at DC operating frequency at AC-1 maximum Control circuit/ Control closing delay • at AC • at DC opening time control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts • attachable • instantaneous contact 2 operational current at AC-12 maximum operational current at AC-12 m		650 A
		650 A
— at 690 V rated value 170 A minimum cross-section in main circuit at maximum AC-1 rated value 480 mm² no-load switching frequency • at AC 2 000 1/h • at DC 2 000 1/h 600 1/h Operating frequency at AC-1 maximum 600 1/h Control circuit/ Control Control circuit/ Control Closing delay • at AC 45 100 ms • at DC 45 100 ms opening delay • at AC 60 100 ms • at DC 60 100 ms • at DC 60 100 ms • arcing time 10 15 ms control version of the switch operating mechanism Without operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts 2 • attachable 4 4 • instantaneous contact 2 • attachable 4 4 • instantaneous contact 2 operational current at AC-12 maximum 10 A operational current at AC-15 4 • at 230 V rated value 3 A • at 690 V rated value	• at AC-3	
minimum cross-section in main circuit at maximum AC-1 rated value no-load switching frequency • at AC • at DC operating frequency at AC-1 maximum Control circuit/ Control closing delay • at AC • at DC opening delay • at AC • at DC openational contact for auxiliary contacts • attachable • instantaneous contact openational 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	— at 400 V rated value	170 A
rated value no-load switching frequency • at AC • at DC operating frequency at AC-1 maximum 600 1/h Control circuit/ Control closing delay • at AC • at DC opening delay • at AC • at DC • a	— at 690 V rated value	170 A
■ at AC ■ at DC ■ at DC Operating frequency at AC-1 maximum 600 1/h Control circuit/ Control Closing delay ■ at AC ■ at DC ■ at AC ■ at DC ■ at DC ■ at AC ■ a		480 mm ²
at DC operating frequency at AC-1 maximum control circuit/ Control closing delay	no-load switching frequency	
operating frequency at AC-1 maximum Control circuit/ Control closing delay at AC at DC opening delay at AC at DC ot AC	• at AC	2 000 1/h
Closing delay • at AC • at DC opening delay • at AC • at DC opening dime control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts • instantaneous contact • instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 500 V rated value • at 600 V rated value • at CO A S 100 ms 60	• at DC	2 000 1/h
closing delay	operating frequency at AC-1 maximum	600 1/h
	Control circuit/ Control	
■ at AC ■ at DC ■ at DC ■ at AC ■ at AC ■ at AC ■ at AC ■ at DC ■ arcing time ■ arcing time □ arcing toreuit number of NC contacts for auxiliary contacts ■ attachable ■ instantaneous contact □ attachable □ □ attachabl	closing delay	
opening delay • at AC • at DC arcing time control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts • attachable • instantaneous contact number of NO contacts for auxiliary contacts • attachable • instantaneous contact 2 number of NO contacts for auxiliary contacts • attachable • instantaneous contact 2 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 • at AC-12 maximum 1 AC-12 maximum 1 AC-13 maximum 1 AC-14 maximum 1 AC-15 maximum 1		45 100 ms
at AC at DC arcing time 10 15 ms control version of the switch operating mechanism Without operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts attachable instantaneous contact attachable atta	• at DC	45 100 ms
at AC at DC arcing time 10 15 ms control version of the switch operating mechanism Without operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts attachable instantaneous contact attachable atta	opening delay	
arcing time control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts		60 100 ms
control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts • attachable • instantaneous contact 1 attachable • instantaneous contact • attachable • instantaneous contact 2 perational 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	• at DC	60 100 ms
Auxiliary circuit number of NC contacts for auxiliary contacts 2 ● attachable 4 ● instantaneous contact 2 number of NO contacts for auxiliary contacts 2 ● attachable 4 ● instantaneous contact 2 operational current at AC-12 maximum 10 A operational current at AC-15 6 A ● at 230 V rated value 3 A ● at 400 V rated value 3 A ● at 500 V rated value 2 A ● at 690 V rated value 1 A	arcing time	10 15 ms
number of NC contacts for auxiliary contacts • attachable • instantaneous contact number of NO contacts for auxiliary contacts • attachable • instantaneous contact • 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 • at 690 V rated value 1 A	control version of the switch operating mechanism	Without operating mechanism
 attachable instantaneous contact number of NO contacts for auxiliary contacts attachable instantaneous contact 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 	Auxiliary circuit	
 instantaneous contact 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 	number of NC contacts for auxiliary contacts	2
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 • at 690 V rated value 1 A		4
 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 	instantaneous contact	2
 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 NO contacts for auxiliary contacts	2
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	attachable	4
operational current at AC-15	instantaneous contact	2
 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-12 maximum	10 A
 at 400 V rated value at 500 V rated value at 690 V rated value 1 A 	operational current at AC-15	
 at 500 V rated value at 690 V rated value 1 A 	• at 230 V rated value	6 A
at 690 V rated value 1 A	• at 400 V rated value	3 A
	• at 500 V rated value	
operational current at DC-13		1 A
	•	
• at 24 V rated value 10 A		
• at 48 V rated value 2 A		
• at 60 V rated value 2 A	at 60 V rated value	
• at 110 V rated value 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		
design of the miniature circuit breaker for short-circuit protection of the auxiliary switch required gG: 10 A (230 V, 400 A)	protection of the auxiliary switch required	
contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA)	contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
Short-circuit protection	Short-circuit protection	
product function short circuit protection No	product function short circuit protection	No
design of the fuse link	design of the fuse link	
• for short-circuit protection of the main circuit	 for short-circuit protection of the main circuit 	
— with type of coordination 1 required gG: 800 A (690 V, 50 kA)	 — with type of coordination 1 required 	gG: 800 A (690 V, 50 kA)
— with type of assignment 2 required gR: 710 A (690 V, 100 kA)	with tune of accionment 0	gR: 710 A (690 V, 100 kA)

nstallation/ mounting/ dimensions	
mounting position	with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back
fastening method	screw fixing
side-by-side mounting	Yes
height	214 mm
width	160 mm
depth	225 mm
required spacing	
with side-by-side mounting	
— forwards	20 mm
— upwards	10 mm
— downwards	10 mm
— at the side	0 mm
 for grounded parts 	
— 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	Connection bar
 for auxiliary and control circuit 	screw-type terminals
 at contactor for auxiliary contacts 	Screw-type terminals
of magnet coil	Screw-type terminals
width of connection bar	25 mm
thickness of connection bar	6 mm
diameter of holes	11 mm
number of holes	1
type of connectable conductor cross-sections	
 at AWG cables for main contacts 	2/0 500 kcmil
connectable conductor cross-section for main contacts	
solid or stranded	70 240 mm²
• stranded	70 240 mm²
connectable conductor cross-section for auxiliary contacts	
solid or stranded	0.5 4 mm²
 finely stranded with core end processing 	0.5 2.5 mm²
type of connectable conductor cross-sections	
for auxiliary contacts	
— solid	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²)
— solid or stranded	2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²), max. 2x (0,75 4 mm²)
— finely stranded with core end processing	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
at AWG cables for auxiliary contacts	2x (20 16), 2x (18 14), 1x 12
afety related data	
product function	
mirror contact according to IEC 60947-4-1	Yes
 positively driven operation according to IEC 60947- 	No
5-1 protection class IP on the front according to IEC	IP00; IP20 with box terminal/cover
60529 touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front with box terminal/cover
	TIRGOT COTO TOT VOTICOL CONTOCT FROM the trent with hey terminal cover



Confirmation









Functional Safety/Safety of Machinery

Declaration of Conformity

Test Certificates

Marine / Shipping

Type Examination Certificate





Special Test Certificate

Type Test Certificates/Test Report



Marine / Shipping

other

Railway







Confirmation

Miscellaneous

Special Test Certificate

Further information

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=3RT1476-6LA06

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1476-6LA06

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT1476-6LA06

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

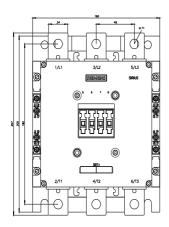
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1476-6LA06&lang=en

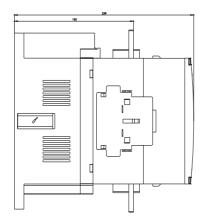
Characteristic: Tripping characteristics, I2t, Let-through current

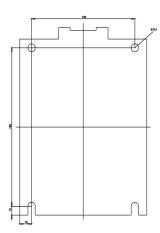
https://support.industry.siemens.com/cs/ww/en/ps/3RT1476-6LA06/char

Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1476-6LA06&objecttype=14&gridview=view1







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