SIEMENS

Data sheet 3RT1466-6AP36

Contactor, AC-1, 400 A 230 (50...60 Hz) / DC operation 220 ... 240 V UC Auxiliary contacts 2 NO + 2 NC 3-pole, Size S10 Busbar connections Drive: conventional



Figure similar

Product brand name	SIRIUS
General technical data	
Size of contactor	S10
Product extension	
 function module for communication 	No
Auxiliary switch	Yes
Insulation voltage	
 of main circuit with degree of pollution 3 rated 	1 000 V
value	
 of auxiliary circuit with degree of pollution 3 	690 V
rated value	
Surge voltage resistance	
 of main circuit rated value 	8 kV
 of auxiliary circuit rated value 	6 kV
Protection class IP	
• on the front	IP00; IP20 on the front with cover / box terminal
of the terminal	IP00

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 electronics- compatible auxiliary switch block typical 	5 000 000
 of the contactor with added auxiliary switch block typical 	10 000 000
Reference code acc. to DIN EN 81346-2	Q
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 during operation	0 95 %
Main aign it	
Main circuit Number of poles for main current circuit	3
Number of NO contacts for main contacts	3
Operating voltage	
• at AC	
— at 50 Hz rated value	240 V
Operating current	
• at AC-1 at 400 V	
— rated value	380 A
• at AC-1	
— up to 690 V at ambient temperature 40 °C rated value	400 A
— up to 690 V at ambient temperature 60 °C rated value	380 A
— up to 1000 V at ambient temperature 40 °C rated value	150 A
t- 4000 \/ -tbit t 60 %0	150 A
 up to 1000 V at ambient temperature 60 °C rated value 	
rated value	138 A

 at 60 °C minimum permissible 	240 mm²
 at 40 °C minimum permissible 	240 mm²
No-load switching frequency	
• at AC	2 000 1/h
• at DC	2 000 1/h
Operating frequency	
• at AC-1 maximum	600 1/h

Control circuit/ Control	
Type of voltage	AC/DC
Type of voltage of the control supply voltage	AC/DC
Control supply voltage at AC	
● at 50 Hz rated value	220 240 V
• at 60 Hz rated value	220 240 V
Control supply voltage at DC	
• rated value	220 240 V
Operating range factor control supply voltage rated	
value of magnet coil at DC	
• initial value	0.8
Full-scale value	1.1
Operating range factor control supply voltage rated	
value of magnet coil at AC	
● at 50 Hz	0.8 1.1
● at 60 Hz	0.8 1.1
Design of the surge suppressor	with varistor
Apparent pick-up power of magnet coil at AC	
● at 50 Hz	590 V·A
Inductive power factor with closing power of the coil	
● at 50 Hz	0.9
Apparent holding power of magnet coil at AC	
● at 50 Hz	6.7 V·A
Inductive power factor with the holding power of the	
coil	
● at 50 Hz	0.9
Closing power of magnet coil at DC	650 W
Holding power of magnet coil at DC	7.4 W
Closing delay	
• at AC	30 95 ms
• at DC	30 95 ms
Opening delay	
• at AC	40 80 ms
• at DC	40 80 ms
Arcing time	10 15 ms

Control version of the switch operating mechanism	Standard A1 - A2	
Auxiliary circuit		
Number of NC contacts for auxiliary contacts	2	
• attachable	4	
• instantaneous contact	2	
 lagging switching 	0	
Number of NO contacts for auxiliary contacts	2	
attachable	4	
• instantaneous contact	2	
leading contact	0	
Operating current at AC-12 maximum	10 A	
Operating 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	
Operating 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	
• 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	
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 fuse link		
 for short-circuit protection of the main circuit 		
— with type of coordination 1 required	gG: 500 A (690 V, 100 kA)	
— with type of assignment 2 required	gR: 500 A (690 V, 100 kA)	
 for short-circuit protection of the auxiliary switch required 	fuse gG: 10 A	
Installation/ mounting/ dimensions		
Mounting position	with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back	
Mounting type	screw fixing	
Side-by-side mounting	Yes	
Height	210 mm	
Width	145 mm	
Depth	202 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	screw-type terminals	
 for auxiliary and control current circuit 	screw-type terminals	
Type of connectable conductor cross-sections		
 at AWG conductors for main contacts 	2/0 500 kcmil	
Connectable conductor cross-section for main		
contacts		
single or multi-stranded	70 240 mm²	
• stranded	70 240 mm²	
Connectable conductor cross-section for auxiliary		
contacts		
• single or multi-stranded	0.5 4 mm²	
 finely stranded with core end processing 	0.5 2.5 mm ²	
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)	
— single or multi-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 conductors for auxiliary contacts 	2x (20 16), 2x (18 14), 1x 12	

Safety related data	
Product function	
 Mirror contact acc. to IEC 60947-4-1 	Yes
• positively driven operation acc. to IEC 60947-5-	No
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Certificates/approvals

General Product Approval

Functional Safety/Safety of Machinery Declaration of Conformity









Type Examination
Certificate



Test Certific-	Marine / Shipping	other
ates		

Special Test Certificate







Miscellaneous

Confirmation

Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT1466-6AP36

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1466-6AP36

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT1466-6AP36

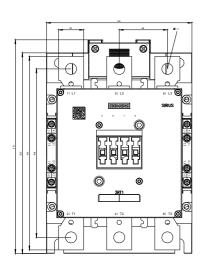
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1466-6AP36&lang=en

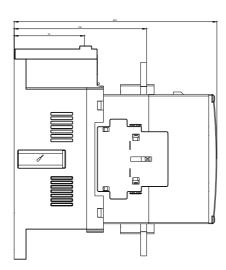
Characteristic: Tripping characteristics, I2t, Let-through current

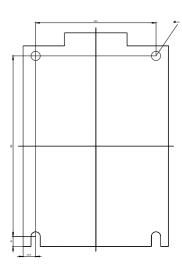
https://support.industry.siemens.com/cs/ww/en/ps/3RT1466-6AP36/char

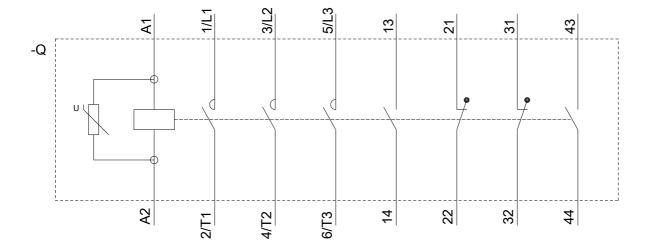
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1466-6AP36&objecttype=14&gridview=view1









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