## Data sheet



CONTACTOR, 400A/AC-1 AC(40...60HZ)/DC OPERATION UC 220-240V AUXILIARY CONTACTS 2NO+2NC 3-POLE, SIZE S10 BAR CONNECTIONS CONVENT. OPERATING MECHANISM REUSABLE PACKAGING 1 PACK = 2 UNITS

Figure similar

product brandname	SIRIUS
Product designation	power contactor
General technical data	
Size of contactor	S10
Insulation voltage	
• rated value	1 000 V
Degree of pollution	3
Surge voltage resistance rated value	8 kV
maximum permissible voltage for safe isolation	
<ul> <li>between coil and main contacts acc. to EN</li> </ul>	690 V
60947-1	
Protection class IP	
• on the front	IP00
• 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
• 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)	
<ul> <li>of contactor typical</li> </ul>	10 000 000
<ul> <li>of the contactor with added electronics- compatible auxiliary switch block typical</li> </ul>	5 000 000
<ul> <li>of the contactor with added auxiliary switch block typical</li> </ul>	10 000 000
Ambient conditions	

Ambient conditions	
Installation altitude at height above sea level	2 000 m
maximum	
Ambient temperature	
<ul><li>during operation</li></ul>	-25 +60 °C
during storage	-55 +80 °C
Main 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
Operating current	
● at AC-1 at 400 V	
<ul> <li>at ambient temperature 40 °C rated value</li> </ul>	400 A
• at AC-1	
<ul> <li>up to 690 V at ambient temperature 40 °C rated value</li> </ul>	400 A
<ul> <li>up to 690 V at ambient temperature 60 °C rated value</li> </ul>	380 A
— up to 1000 V at ambient temperature 40 $^{\circ}\text{C}$ rated value	150 A
<ul> <li>up to 1000 V at ambient temperature 60 °C rated value</li> </ul>	150 A
• at AC-3	
— at 400 V rated value	138 A
— at 690 V rated value	138 A
Connectable conductor cross-section in main circuit at AC-1	
• at 60 °C minimum permissible	185 mm²
• at 40 °C minimum permissible	185 mm²
Operating current	
at 1 current path at DC-1	
— at 24 V rated value	380 A

at 110 V rated value  • with 2 current paths in series at DC-1  — at 24 V rated value — at 110 V rated value — with 3 current paths in series at DC-3 at DC-5 — at 110 V rated value — with 3 current paths in series at DC-3 at DC-5 — at 110 V rated value — with 3 current paths in series at DC-3 at DC-5 — at 110 V rated value — with 3 current paths in series at DC-3 at DC-5 — at 110 V rated value — at 24 V rated value — 380 A  Operating power  • at AC-1 — at 230 V at 60 °C rated value — at 690 V rated value — at 600 °C rated value — at 600 °C rated value — at 400 V rated value — at 600 °C rated value — at 230 V rated value — at 690 V r		
	— at 110 V rated value	33 A
— at 110 V rated value     • with 3 current paths in series at DC-1     — at 24 V rated value     — at 110 V rated value     — at 110 V rated value     — at 110 V rated value     — at 24 V rated value     — at 110 V rated value     — at 24 V rated value     — at 250 V at 60 °C rated value     — at 200 V rated value     — at 690 V rated value     — at 1000 V at 60 °C rated value     — at 1000 V at 60 °C rated value     — at 1000 V rated value     — at 400 V rated value     — at 400 V rated value     — at 230 V rated value     — at 230 V rated value     — at 240 V rated value     — at 250 V v rated value     — at 250 V v rated value     — at 690 V rated value     — at 690 V rated value     — at 690 V rated value     — at 200 V rated value      — at 200	<ul> <li>with 2 current paths in series at DC-1</li> </ul>	
with 3 current paths in series at DC-1	— at 24 V rated value	380 A
	— at 110 V rated value	380 A
- at 110 V rated value 380 A  Operating current  • at 1 current path at DC-3 at DC-5  - at 24 V rated value 380 A  • with 2 current paths in series at DC-3 at DC-5  - at 110 V rated value 380 A  • with 2 current paths in series at DC-3 at DC-5  - at 110 V rated value 380 A  • with 3 current paths in series at DC-3 at DC-5  - at 110 V rated value 380 A  • with 3 current paths in series at DC-3 at DC-5  - at 110 V rated value 380 A  • with 3 current paths in series at DC-3 at DC-5  - at 110 V rated value 380 A  Operating power  • at AC-1  - at 230 V at 60 °C rated value 145 kW  - at 400 V rated value 250 kW  - at 690 V at 60 °C rated value 430 kW  - at 690 V at 60 °C rated value 247 W  • at AC-2 at 400 V rated value 75 kW  • at AC-3 at 400 V rated value 75 kW  • at AC-3 at 400 V rated value 97 kW  - at 400 V rated value 99 kW  - at 400 V rated value 132 kW  Thermal short-time current limited to 10 s 2400 A  Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor 100 km Control 100 k	<ul> <li>with 3 current paths in series at DC-1</li> </ul>	
Operating current              • at 1 current path at DC-3 at DC-5	— at 24 V rated value	380 A
• at 1 current path at DC-3 at DC-5  — at 24 V rated value — at 110 V rated value 3 A  • with 2 current paths in series at DC-3 at DC-5 — at 110 V rated value 380 A  • with 3 current paths in series at DC-3 at DC-5 — at 110 V rated value 380 A  • with 3 current paths in series at DC-3 at DC-5 — at 110 V rated value 380 A  • with 3 current paths in series at DC-3 at DC-5 — at 110 V rated value 380 A  Operating power  • at AC-1 — at 230 V at 60 °C rated value — at 400 V rated value — at 400 V rated value — at 690 V rated value — at 690 V at 60 °C rated value — at 1000 V at 60 °C rated value — at 75 kW  • at AC-2 • at AC-3 — at 230 V rated value — at 400 V rated value 97 kW  • at AC-3 — at 230 V rated value — at 690 V rated value — at 690 V rated value — at 690 V rated value — 3500 V rated value — 3600 V rated value — 3600 V rated value — 3600 V rated value — 3700 V rated value — 3	— at 110 V rated value	380 A
- at 24 V rated value 380 A - at 110 V rated value 3 A  • with 2 current paths in series at DC-3 at DC-5 - at 110 V rated value 380 A - at 24 V rated value 380 A  • with 3 current paths in series at DC-3 at DC-5 - at 1110 V rated value 380 A  • with 3 current paths in series at DC-3 at DC-5 - at 1110 V rated value 380 A  Operating power  • at AC-1 - at 230 V at 60 °C rated value 250 kW - at 400 V rated value 250 kW - at 690 V at 60 °C rated value 430 kW - at 690 V at 60 °C rated value 247 W • at AC-2 at 400 V rated value 75 kW • at AC-3 - at 230 V rated value 97 kW - at 400 V rated value 97 kW - at 400 V rated value 97 kW - at 690 V rated value 97 kW - at 690 V rated value 97 kW - at 690 V rated value 90 kW - at 690 V rated value 132 kW  Thermal short-time current limited to 10 s 2400 A  Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor  No-load switching frequency • at AC 2000 1/h cat DC 2000 1/h Coperating frequency • at AC-1 maximum 750 1/h  Control circuit/ Control  Type of voltage of the control supply voltage AC/DC	Operating current	
- at 110 V rated value	• at 1 current path at DC-3 at DC-5	
with 2 current paths in series at DC-3 at DC-5     — at 110 V rated value	— at 24 V rated value	380 A
- at 110 V rated value 380 A  - at 24 V rated value 380 A  • with 3 current paths in series at DC-3 at DC-5  - at 110 V rated value 380 A  - at 24 V rated value 380 A  Operating power  • at AC-1  - at 230 V at 60 °C rated value 250 kW  - at 690 V rated value 430 kW  - at 690 V rated value 247 W  • at AC-2 at 400 V rated value 75 kW  • at AC-3  - at 230 V rated value 97 kW  - at 690 V rated value 97 kW  • at AC-3  - at 230 V rated value 97 kW  - at 690 V rated value 75 kW  • at AC-3  - at 230 V rated value 97 kW  - at 400 V rated value 97 kW  - at 400 V rated value 75 kW  - at 400 V rated value 75 kW  - at 500 V rated value 99 kW  - at 690 V rated value 132 kW  Thermal short-time current limited to 10 s 2 400 A  Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor  No-load switching frequency  • at AC  • at DC  Operating frequency  • at AC-1 maximum 750 1/h  Control circuit/ Control  Type of voltage of the control supply voltage AC/DC	— at 110 V rated value	3 A
— at 24 V rated value     • with 3 current paths in series at DC-3 at DC-5     — at 110 V rated value     — at 24 V rated value     — at 24 V rated value     — at 24 V rated value     — at 230 V at 60 °C rated value     — at 400 V rated value     — at 690 V rated value     — at 690 V rated value     — at 690 V at 60 °C rated value     — at 1000 V at 60 °C rated value     — at 1000 V at 60 °C rated value     — at 400 V rated value     — at 1000 V at 60 °C rated value     — at 1000 V at 60 °C rated value     — at 1000 V rated value     — at 1000 V rated value     • at AC-3     — at 230 V rated value     — at 230 V rated value     — at 400 V rated value     — at 400 V rated value     — at 500 V rated value     — at 690 V rated value	• with 2 current paths in series at DC-3 at DC-5	
with 3 current paths in series at DC-3 at DC-5     — at 110 V rated value	— at 110 V rated value	380 A
- at 110 V rated value 380 A 380 A 380 A 380 A  Operating power	— at 24 V rated value	380 A
— at 24 V rated value 380 A  Operating power	• with 3 current paths in series at DC-3 at DC-5	
Operating power          • at AC-1	— at 110 V rated value	380 A
• at AC-1  — at 230 V at 60 °C rated value — at 400 V rated value — at 690 V rated value — at 690 V at 60 °C rated value — at 1000 V at 60 °C rated value — at 1000 V at 60 °C rated value — at 1000 V at 60 °C rated value  • at AC-2 at 400 V rated value  • at AC-3 — at 230 V rated value — at 400 V rated value — at 400 V rated value — at 400 V rated value — at 500 V rated value — at 500 V rated value — at 690 V rated value  Thermal short-time current limited to 10 s  Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor  No-load switching frequency • at AC • at DC  Operating frequency • at AC-1 maximum  750 1/h  Control circuit/ Control  Type of voltage of the control supply voltage  AC/DC	— at 24 V rated value	380 A
	Operating power	
- at 400 V rated value	• at AC-1	
- at 690 V rated value 430 kW - at 690 V at 60 °C rated value 247 W  • at AC-2 at 400 V rated value 75 kW  • at AC-3 - at 230 V rated value 97 kW - at 400 V rated value 97 kW - at 500 V rated value 90 kW - at 690 V rated value 132 kW  Thermal short-time current limited to 10 s 2 400 A  Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor  No-load switching frequency • at AC • at DC  Operating frequency • at AC-1 maximum  750 1/h  Control circuit/ Control  Type of voltage of the control supply voltage  AC/DC	— at 230 V at 60 °C rated value	145 kW
- at 690 V at 60 °C rated value 430 kW - at 1000 V at 60 °C rated value 247 W  • at AC-2 at 400 V rated value 75 kW  • at AC-3 - at 230 V rated value 97 kW - at 400 V rated value 90 kW - at 500 V rated value 90 kW - at 690 V rated value 132 kW  Thermal short-time current limited to 10 s 2 400 A  Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor  No-load switching frequency • at AC • at DC  Operating frequency • at AC-1 maximum  Type of voltage of the control supply voltage  AC/DC	— at 400 V rated value	250 kW
- at 1000 V at 60 °C rated value 247 W  • at AC-2 at 400 V rated value 75 kW  • at AC-3  - at 230 V rated value 97 kW  - at 400 V rated value 99 kW  - at 690 V rated value 132 kW  Thermal short-time current limited to 10 s 2 400 A  Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor  No-load switching frequency  • at AC 2 000 1/h  • at DC 2 000 1/h  Operating frequency  • at AC-1 maximum 750 1/h  Control circuit/ Control  Type of voltage of the control supply voltage AC/DC	— at 690 V rated value	430 kW
at AC-2 at 400 V rated value  at AC-3  — 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  Thermal short-time current limited to 10 s  Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor  No-load switching frequency  at AC  at DC  Operating frequency  at AC-1 maximum  Total value  75 kW  97 kW  75 kW  90 kW  2400 A  27 W  27 W  Thermal short-time current limited to 10 s  27 W  Thermal short-time current per conductor  No-load switching frequency  at AC  at AC  2000 1/h  Operating frequency  at AC-1 maximum  Total value  AC/DC	— at 690 V at 60 °C rated value	430 kW
at AC-3  — 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  132 kW  Thermal short-time current limited to 10 s  Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor  No-load switching frequency  • at AC  • at DC  Operating frequency  • at AC-1 maximum  Tool 1/h  Control circuit/ Control  Type of voltage of the control supply voltage  AC/DC	— at 1000 V at 60 °C rated value	247 W
- at 230 V rated value 97 kW - at 400 V rated value 75 kW - at 500 V rated value 90 kW - at 690 V rated value 132 kW  Thermal short-time current limited to 10 s 2 400 A  Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor  No-load switching frequency • at AC • at DC  Operating frequency • at AC-1 maximum  Tool 1/h  Control circuit/ Control  Type of voltage of the control supply voltage  AC/DC	• at AC-2 at 400 V rated value	75 kW
- at 400 V rated value 75 kW - at 500 V rated value 90 kW - at 690 V rated value 132 kW  Thermal short-time current limited to 10 s 2 400 A  Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor  No-load switching frequency	• at AC-3	
- at 500 V rated value 90 kW - at 690 V rated value 132 kW  Thermal short-time current limited to 10 s 2 400 A  Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor  No-load switching frequency  • at AC 2 000 1/h  • at DC 2 000 1/h  Operating frequency  • at AC-1 maximum 750 1/h  Control circuit/ Control  Type of voltage of the control supply voltage AC/DC	— at 230 V rated value	97 kW
— at 690 V rated value  Thermal short-time current limited to 10 s  Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor  No-load switching frequency  • at AC  • at DC  Operating frequency  • at AC-1 maximum  Type of voltage of the control supply voltage  132 kW  2 400 A  27 W  27 W  20 00 1/h  2000 1/h  2000 1/h  AC/DC	— at 400 V rated value	75 kW
Thermal short-time current limited to 10 s  Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor  No-load switching frequency  at AC  at DC  Operating frequency  at AC-1 maximum  Type of voltage of the control supply voltage  2 400 A  2 7 W  2 000 1/h  2 000 1/h  2 000 1/h  AC/DC	— at 500 V rated value	90 kW
Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor  No-load switching frequency  • at AC  • at DC  Operating frequency  • at AC-1 maximum  Type of voltage of the control supply voltage  27 W  27 W  20 W  AC/DC	— at 690 V rated value	132 kW
the operating current per conductor  No-load switching frequency  • at AC  • at DC  Operating frequency  • at AC-1 maximum  Type of voltage of the control supply voltage  AC/DC	Thermal short-time current limited to 10 s	2 400 A
No-load switching frequency  • at AC  • at DC  Operating frequency  • at AC-1 maximum  Type of voltage of the control supply voltage  2 000 1/h  2 000 1/h  750 1/h  AC/DC		27 W
<ul> <li>at AC</li> <li>at DC</li> <li>2 000 1/h</li> <li>Operating frequency</li> <li>at AC-1 maximum</li> <li>750 1/h</li> </ul> Control circuit/ Control Type of voltage of the control supply voltage AC/DC		
at DC     2 000 1/h  Operating frequency     at AC-1 maximum     750 1/h  Control circuit/ Control  Type of voltage of the control supply voltage  AC/DC		2 000 4/h
Operating frequency  • at AC-1 maximum  750 1/h  Control circuit/ Control  Type of voltage of the control supply voltage  AC/DC		
at AC-1 maximum     750 1/h  Control circuit/ Control  Type of voltage of the control supply voltage  AC/DC		2 000 1/11
Control circuit/ Control  Type of voltage of the control supply voltage  AC/DC		750 1/h
Type of voltage of the control supply voltage AC/DC	■ at AC-1 maximum	7-00-1/11
	Control circuit/ Control	
Control supply voltage at AC		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
Control supply voltage frequency 1 rated value	50 Hz
Control supply voltage frequency 2 rated value	60 Hz
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
Operating range factor control supply voltage rated value of magnet coil at DC	0.8 1.1
Design of the surge suppressor	with varistor
Apparent pick-up power of magnet coil at AC	590 V·A
Inductive power factor with closing power of the coil	0.9
Apparent holding power of magnet coil at AC	6.7 V·A
Inductive power factor with the holding power of the coil	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
Auxiliary circuit	
Number of NC contacts	
• for auxiliary contacts	
— instantaneous contact	2
Number of NO contacts	
• for auxiliary contacts	
— instantaneous contact	2
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
Operating current at DC-12	
● at 60 V rated value	6 A
● at 110 V rated value	3 A
• at 220 V rated value	1 A

#### Operating current at DC-13

• at 24 V rated value 10 A

• at 60 V rated value 2 A

• at 110 V rated value 1 A

• at 220 V rated value 0.3 A

### **UL/CSA** ratings

Contact rating of auxiliary contacts according to UL A600 / Q600

#### Short-circuit protection

#### Design of the fuse link

• for short-circuit protection of the main circuit

— with type of coordination 1 required fuse gL/gG: 500 A— with type of assignment 2 required fuse gR: 500 A

• for short-circuit protection of the auxiliary switch

required

fuse gL/gG: 10 A

 Installation/ mounting/ dimensions

 Mounting type
 screw fixing

 ◆ Side-by-side mounting
 Yes

 Height
 210 mm

 Width
 145 mm

 Depth
 202 mm

 Required spacing
 Testing the screw fixing the screw fixing

for grounded parts

— at the side

10 mm

# Connections/Terminals

Type of electrical connection	
• for main current circuit	screw-type terminals
<ul> <li>for auxiliary and control current circuit</li> </ul>	screw-type terminals

## Type of connectable conductor cross-sections

• at AWG conductors for main contacts 2/0 ... 500 kcmil

#### 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)

— 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

#### Certificates/approvals

### **General Product Approval**

Declaration of Conformity

Test Certificates











spezielle Prüfbescheinigunge n

### **Shipping Approval**









other

Bestätigungen

Umweltbestätigung

#### other

sonstig

### Further information

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

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

Industry Mall (Online ordering system)

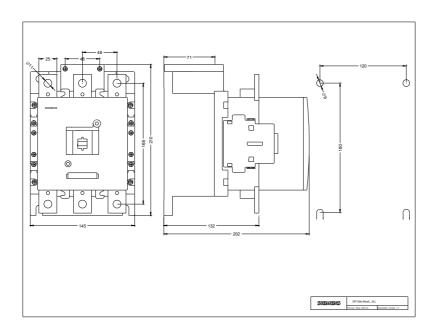
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT1466-6AP36-Z X95

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1466-6AP36-Z X95

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RT1466-6AP36-Z X95

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT1466-6AP36-Z X95&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT1466-6AP36-Z X95&lang=en</a>





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