## SIEMENS



Reference: 3RT1317-1BB40

CONTACTOR, AC-1, 14.5 KW/400V, AC-1 22 A, DC 24 V 4-POLE, 4 NO, SIZE S00, SCREW CONNECTION

**Buy it at Electric Automation Network** 



product brand name	SIRIUS
Product designation	power contactor
General technical data:	
Size of contactor	S00
Degree of pollution	3
Protection class IP	
on the front	IP20
of the terminal	IP20
Mechanical service life (switching cycles)	
of contactor typical	30 000 000
of the contactor with atd>	5 000 000
of the contactor with atd>	10 000 000
Ambient conditions:	
Installation altitude at height above sea level maximum	2 000 m
Ambient temperature	
during operation	-25 +60 °C
Main circuit:	
Number of NO contacts for main contacts	4
Number of NC contacts for main contacts	0
Operating current	
at AC-1 at 400 V	

at anoient temperature 40 °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 14 00 V rated value  at 24 V rated value	at ambient temperature 40 °C reted value	22.4
- up to 690 V at ambient temperature 40 °C rated value 22 A  - up to 690 V at ambient temperature 60 °C rated value at AC-3  - at 400 V rated value 12 A  Operating current at 1 current path at DC-1 - at 24 V rated value 22 A - at 110 V rated value 23 A - at 110 V rated value 24 A - at 110 V rated value 25 A - at 24 V rated value 26 A - at 110 V rated value 27 A - at 24 V rated value 28 A - at 110 V rated value 29 A - at 110 V rated value 20 A - at 24 V rated value 20 A - at 400 V rated value 20 A - at 400 V rated value 21 A: S kW 22 A - at 400 V rated value 23 A 24 A 25 S kW 25 S kW 26 A 27 A 28 A 29 A 29 A 20 A 20 A 20 A 20 A 20 A 21 A 21 A 22 A 23 A 24 A 25 S K 26 S K 27 S K 28 S K 28 S K 28 S K 29 S K 20	— at ambient temperature 40 °C rated value	22 A
value 22 A  - up to 690 V at ambient temperature 60 °C rated value 20 A  at AC-3  - at 400 V rated value 12 A  Operating current at 1 current path at DC-1  - at 24 V rated value 22 A  - at 110 V rated value 22 A  - at 110 V rated value 12 A  with 2 current paths in series at DC-1  - at 24 V rated value 22 A  - at 110 V rated value 22 A  Operating current at 1 Current path at DC-3 at DC-5  - at 24 V rated value 20 A  - at 110 V rated value 0.15 A  with 2 current paths in series at DC-3 at DC-5  - at 110 V rated value 0.35 A  - at 24 V rated value 20 A  with 3 current paths in series at DC-3 at DC-5  - at 110 V rated value 20 A  - at 24 V rated value 20 A  - at 24 V rated value 20 A  - at 24 V rated value 30 A  - at 24 V rated value 5.5 kW  operating power 34 AC-1  - at 400 V rated value 14.5 kW  at AC-2 at 400 V rated value 5.5 kW  Power loss IWI at AC-3 at 400 V for rated value of the operating current per conductor  Control circuit/ Control:  Type of voltage of the control supply voltage DC		
value         20 A           at ACO3         12 A           — at 400 V rated value         12 A           Operating current         21 A           at 1 current path at DC-1         22 A           — at 24 V rated value         2.1 A           with 2 current paths in series at DC-1         22 A           — at 24 V rated value         12 A           — at 110 V rated value         22 A           — at 110 V rated value         22 A           — at 110 V rated value         22 A           Operating current         22 A           at 1 current path at DC-3 at DC-5         20 A           — at 24 V rated value         20 A           — at 110 V rated value         0.15 A           with 2 current paths in series at DC-3 at DC-5         35 A           — at 110 V rated value         20 A           — at 24 V rated value         20 A           — at 110 V rated value         20 A           — at 110 V rated value         20 A           — at 24 V rated value         20 A           — at 24 V rated value         20 A           — at 400 V rated value         5.5 kW           at AC-3         400 V rated value         5.5 kW           at AC-3 at 400 V rated value		22 A
The strategy of the control supply voltage of the control supply v		20 A
Operating current at 1 current path at DC-1  — at 24 V rated value — at 110 V rated value — at 210 V rated value — at 110 V rated value — at 110 V rated value — at 24 V rated value — at 24 V rated value — at 27 V rated value — at 28 V rated value — at 29 A — at 110 V rated value — at 110 V rated value — at 110 V rated value — at 20 A — at 24 V rated value — at 24 V rated value — at 27 V rated value — at 28 V rated value — at 29 A — at 29 A — at 29 V rated value — at 20 A — at 24 V rated value — at 20 A — at 24 V rated value — at 27 V rated value — at 29 V rated value — at 29 V rated value — at 24 V rated value — at 20 A — at 24 V rated value — at 20 A — at 24 V rated value — at 20 A — at 40 V rated value  5.5 kW at AC-2 — at 400 V rated value  5.5 kW Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor Control circuit/ Control: Type of voltage of the control supply voltage  DC	at AC-3	
at 1 current path at DC-1  — at 24 V rated value  — at 110 V rated value  with 2 current paths in series at DC-1  — at 24 V rated value  — at 110 V rated value  22 A  — at 110 V rated value  12 A  with 3 current paths in series at DC-1  — at 24 V rated value  22 A  — at 110 V rated value  22 A  — at 110 V rated value  22 A  Operating current  at 1 current path at DC-3 at DC-5  — at 24 V rated value  20 A  — at 110 V rated value  31 A  with 2 current paths in series at DC-3 at DC-5  — at 110 V rated value  32 A  — at 24 V rated value  335 A  — at 24 V rated value  30 A  — at 400 V rated value  41.5 kW  at AC-2  at 400 V rated value  5.5 kW  Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor  Control circuit/ Control:  Type of voltage of the control supply voltage  DC	— at 400 V rated value	12 A
- at 24 V rated value 22 A with 2 current paths in series at DC-1 - at 24 V rated value 22 A at 110 V rated value 12 A with 3 current paths in series at DC-1 - at 24 V rated value 22 A 22 A 23 A 24 V rated value 22 A 25 A 26 A 27 A 28 A 29 A 20 A 20 A 20 A 20 A 21 10 V rated value 20 A 21 A 21 10 V rated value 20 A 20 A 21 10 V rated value 20 A 21 10 V rated value 20 A 20 A 21 110 V rated value 20 A 21 10 V rated value 20 A 20 A 21 10 V rated value 20 A 20 A 21 10 V rated value 20 A 20 A 21 10 V rated value 20 A 20 A 21 10 V rated value 20 A 20 A 21 10 V rated value 20 A 20 A 21 10 V rated value 20 A 20 A 21 10 V rated value 20 A 20 A 21 10 V rated value 20 A 25 5 kW 26 A 27 5 5 kW 27 5 5 kW 28 A C-3 28 A 400 V rated value 29 5.5 kW 20 A 20 A 20 A 20 A 21 400 V rated value 20 A 21 5 5 kW 21 5 5 kW 22 A 23 A 24 W rated value 25 5 kW 26 A C-3 27 5 5 kW 27 5 5 kW 28 A C-3 28 A 400 V rated value 29 Control circuit/ Control: 29 Fower loss [W] at AC-3 at 400 V for rated value of the operating current per conductor 20 Control circuit/ Control: 20 Fower loss [W] at AC-3 at 400 V for rated value of the operating current per conductor 20 Fower loss [W] at AC-3 at 400 V for rated value of the operating current per conductor 20 Fower loss [W] at AC-3 at 400 V for rated value of the operating current per conductor 20 Fower loss [W] at AC-3 at 400 V for rated value of the operating current per conductor 20 Fower loss [W] at AC-3 at 400 V for rated value of the operating current per conductor	Operating current	
with 2 current paths in series at DC-1  — at 24 V rated value 22 A  — at 110 V rated value 12 A  with 3 current paths in series at DC-1  — at 24 V rated value 22 A  — at 110 V rated value 22 A  — at 110 V rated value 22 A  Operating current path at DC-3 at DC-5  — at 24 V rated value 20 A  — at 110 V rated value 20 A  with 2 current paths in series at DC-3 at DC-5  — at 110 V rated value 20 A  with 3 current paths in series at DC-3 at DC-5  — at 110 V rated value 20 A  with 3 current paths in series at DC-3 at DC-5  — at 110 V rated value 20 A  Operating power  at AC-1  — at 400 V rated value 14.5 kW  at AC-2 at 400 V rated value 5.5 kW  Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor  Control circuit/ Control:  Type of voltage of the control supply voltage DC	at 1 current path at DC-1	
with 2 current paths in series at DC-1  — at 24 V rated value — at 110 V rated value — at 22 A  with 3 current paths in series at DC-1  — at 24 V rated value — at 110 V rated value — at 110 V rated value  Operating current at 1 current path at DC-3 at DC-5 — at 24 V rated value — at 110 V rated value — at 24 V rated value — at 20 A  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 20 A  Operating power at AC-1 — at 400 V rated value  14.5 kW  at AC-2 at 400 V rated value  5.5 kW  Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor  Control circuit/ Control:  Type of voltage of the control supply voltage  DC	— at 24 V rated value	22 A
at 24 V rated value 22 A  with 3 current paths in series at DC-1  at 24 V rated value 22 A  Operating current at 1 current path at DC-3 at DC-5  at 24 V rated value 20 A  at 110 V rated value 20 A  with 2 current paths in series at DC-3 at DC-5  at 110 V rated value 0.15 A  with 2 current paths in series at DC-3 at DC-5  at 110 V rated value 0.35 A  at 24 V rated value 20 A  with 3 current paths in series at DC-3 at DC-5  at 110 V rated value 20 A  with 3 current paths in series at DC-3 at DC-5  at 110 V rated value 20 A  with 3 current paths in series at DC-3 at DC-5  at 110 V rated value 20 A  with 3 current paths in series at DC-3 at DC-5  at 100 V rated value 5.5 kW  at AC-1  at 400 V rated value 5.5 kW  Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor  Control circuit/ Control:  Type of voltage of the control supply voltage DC	— at 110 V rated value	2.1 A
with 3 current paths in series at DC-3  — at 24 V rated value  — at 110 V rated value  — at 110 V rated value  — at 110 V rated value  22 A  Operating current  at 1 current path at DC-3 at DC-5  — at 24 V rated value  — at 110 V rated value  — at 24 V rated value  — at 24 V rated value  — 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 400 V rated value  14.5 kW  at AC-2  — at 400 V rated value  5.5 kW  Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor  Control circuit/ Control:  Type of voltage of the control supply voltage  DC	with 2 current paths in series at DC-1	
with 3 current paths in series at DC-1  — at 24 V rated value 22 A  — at 110 V rated value 22 A  Operating current  at 1 current path at DC-3 at DC-5  — at 24 V rated value 20 A  — at 110 V rated value 0.15 A  with 2 current paths in series at DC-3 at DC-5  — at 110 V rated value 20 A  with 3 current paths in series at DC-3 at DC-5  — at 110 V rated value 20 A  with 3 current paths in series at DC-3 at DC-5  — at 110 V rated value 20 A  Operating power 20 A  Operating power 3t AC-1  — at 400 V rated value 14.5 kW  at AC-2 at 400 V rated value 5.5 kW  Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor  Control circuit/ Control:  Type of voltage of the control supply voltage DC	— at 24 V rated value	22 A
- at 24 V rated value 22 A  Operating current at 1 current path at DC-3 at DC-5  - at 24 V rated value 20 A  - at 110 V rated value 20 A  with 2 current paths in series at DC-3 at DC-5  - at 110 V rated value 20 A  with 3 current paths in series at DC-3 at DC-5  - at 110 V rated value 20 A  with 3 current paths in series at DC-3 at DC-5  - at 110 V rated value 20 A  with 3 current paths in series at DC-3 at DC-5  - at 110 V rated value 20 A  Operating power 20 A  at AC-1  - at 400 V rated value 14.5 kW  at AC-2 at 400 V rated value 5.5 kW  Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor 1.24 W  Control circuit/ Control:  Type of voltage of the control supply voltage DC	— at 110 V rated value	12 A
— at 110 V rated value 22 A  Operating current  at 1 current path at DC-3 at DC-5  — at 24 V rated value 20 A  — at 110 V rated value 0.15 A  with 2 current paths in series at DC-3 at DC-5  — at 110 V rated value 20 A  — at 24 V rated value 20 A  with 3 current paths in series at DC-3 at DC-5  — at 110 V rated value 20 A  with 3 current paths in series at DC-3 at DC-5  — at 110 V rated value 20 A  Operating power 20 A  at AC-1  — at 400 V rated value 14.5 kW  at AC-2 at 400 V rated value 5.5 kW  Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor 1.24 W  Control circuit/ Control:  Type of voltage of the control supply voltage DC	with 3 current paths in series at DC-1	
Operating current at 1 current path at DC-3 at DC-5  — at 24 V rated value  — at 110 V rated value  O.15 A  with 2 current paths in series at DC-3 at DC-5  — at 110 V rated value  0.35 A  — at 24 V rated value  20 A  with 3 current paths in series at DC-3 at DC-5  — at 110 V rated value  20 A  — at 24 V rated value  20 A  Operating power  at AC-1  — at 400 V rated value  14.5 kW  at AC-2 at 400 V rated value  5.5 kW  Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor  Control circuit/ Control:  Type of voltage of the control supply voltage  DC	— at 24 V rated value	22 A
at 1 current path at DC-3 at DC-5  — at 24 V rated value 20 A  — at 110 V rated value 0.15 A  with 2 current paths in series at DC-3 at DC-5  — at 110 V rated value 0.35 A  — at 24 V rated value 20 A  with 3 current paths in series at DC-3 at DC-5  — at 110 V rated value 20 A  with 3 current paths in series at DC-3 at DC-5  — at 110 V rated value 20 A  Operating power at AC-1  — at 400 V rated value 14.5 kW  at AC-2 at 400 V rated value 5.5 kW  Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor 1.24 W  Control circuit/ Control:  Type of voltage of the control supply voltage DC	— at 110 V rated value	22 A
<ul> <li>at 24 V rated value</li> <li>at 110 V rated value</li> <li>0.15 A</li> <li>with 2 current paths in series at DC-3 at DC-5</li> <li>at 110 V rated value</li> <li>0.35 A</li> <li>at 24 V rated value</li> <li>20 A</li> <li>with 3 current paths in series at DC-3 at DC-5</li> <li>at 110 V rated value</li> <li>20 A</li> <li>at 24 V rated value</li> <li>20 A</li> <li>Operating power</li> <li>at AC-1</li> <li>at 400 V rated value</li> <li>14.5 kW</li> <li>at AC-2 at 400 V rated value</li> <li>5.5 kW</li> <li>at AC-3</li> <li>at 400 V rated value</li> <li>5.5 kW</li> <li>Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor</li> <li>Control circuit/ Control:</li> <li>Type of voltage of the control supply voltage</li> <li>DC</li> </ul>	Operating current	
with 2 current paths in series at DC-3 at DC-5  - at 110 V rated value 0.35 A  - at 24 V rated value 20 A  with 3 current paths in series at DC-3 at DC-5  - at 110 V rated value 20 A  with 3 current paths in series at DC-3 at DC-5  - at 110 V rated value 20 A  Operating power  at AC-1  - at 400 V rated value 14.5 kW  at AC-2 at 400 V rated value 5.5 kW  Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor  Control circuit/ Control:  Type of voltage of the control supply voltage DC	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  20 A  with 3 current paths in series at DC-3 at DC-5  — at 110 V rated value  20 A  Operating power  at AC-1  — at 400 V rated value  14.5 kW  at AC-2 at 400 V rated value  5.5 kW  Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor  Control circuit/ Control:  Type of voltage of the control supply voltage  DC	— at 24 V rated value	20 A
<ul> <li>at 110 V rated value</li> <li>at 24 V rated value</li> <li>with 3 current paths in series at DC-3 at DC-5</li> <li>at 110 V rated value</li> <li>at 24 V rated value</li> <li>at 20 A</li> <li>Operating power</li> <li>at AC-1</li> <li>at 400 V rated value</li> <li>at AC-2 at 400 V rated value</li> <li>at AC-3</li> <li>at 400 V rated value</li> <li>at AC-3 at 400 V for rated value of the operating current per conductor</li> <li>Control circuit/ Control:</li> <li>Type of voltage of the control supply voltage</li> <li>DC</li> </ul>	— at 110 V rated value	0.15 A
<ul> <li>at 24 V rated value</li> <li>with 3 current paths in series at DC-3 at DC-5</li> <li>at 110 V rated value</li> <li>20 A</li> <li>Operating power</li> <li>at AC-1</li> <li>at 400 V rated value</li> <li>14.5 kW</li> <li>at AC-2 at 400 V rated value</li> <li>at AC-3</li> <li>at 400 V rated value</li> <li>5.5 kW</li> <li>at AC-3</li> <li>at 400 V rated value</li> <li>5.5 kW</li> <li>Description</li> <li>Description</li></ul>	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 20 A  — at 24 V rated value 20 A  Operating power  at AC-1  — at 400 V rated value 14.5 kW  at AC-2 at 400 V rated value 5.5 kW  at AC-3  — at 400 V rated value 5.5 kW  Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor 1.24 W  Control circuit/ Control:  Type of voltage of the control supply voltage DC	— at 110 V rated value	0.35 A
- at 110 V rated value 20 A  - at 24 V rated value 20 A  Operating power at AC-1  - at 400 V rated value 14.5 kW  at AC-2 at 400 V rated value 5.5 kW  at AC-3  - at 400 V rated value 5.5 kW  Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor 1.24 W  Control circuit/ Control:  Type of voltage of the control supply voltage DC	— at 24 V rated value	20 A
- at 24 V rated value 20 A  Operating power  at AC-1  - at 400 V rated value 14.5 kW  at AC-2 at 400 V rated value 5.5 kW  at AC-3  - at 400 V rated value 5.5 kW  Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor 1.24 W  Control circuit/ Control:  Type of voltage of the control supply voltage DC	with 3 current paths in series at DC-3 at DC-5	
Operating power  at AC-1  — at 400 V rated value  at AC-2 at 400 V rated value  5.5 kW  at AC-3  — at 400 V rated value  5.5 kW  Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor  Control circuit/ Control:  Type of voltage of the control supply voltage  DC	— at 110 V rated value	20 A
at AC-1  — at 400 V rated value  at AC-2 at 400 V rated value  5.5 kW  at AC-3  — at 400 V rated value  5.5 kW  Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor  Control circuit/ Control:  Type of voltage of the control supply voltage  DC	— at 24 V rated value	20 A
— at 400 V rated value 14.5 kW  at AC-2 at 400 V rated value 5.5 kW  at AC-3  — at 400 V rated value 5.5 kW  Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor 1.24 W  Control circuit/ Control:  Type of voltage of the control supply voltage DC	Operating power	
at AC-2 at 400 V rated value 5.5 kW  at AC-3  — at 400 V rated value 5.5 kW  Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor 1.24 W  Control circuit/ Control:  Type of voltage of the control supply voltage DC	at AC-1	
at AC-3  — at 400 V rated value 5.5 kW  Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor 1.24 W  Control circuit/ Control:  Type of voltage of the control supply voltage DC	— at 400 V rated value	14.5 kW
- at 400 V rated value 5.5 kW  Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor 1.24 W  Control circuit/ Control:  Type of voltage of the control supply voltage DC	at AC-2 at 400 V rated value	5.5 kW
Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor  Control circuit/ Control:  Type of voltage of the control supply voltage  DC	at AC-3	
operating current per conductor  Control circuit/ Control:  Type of voltage of the control supply voltage  DC	— at 400 V rated value	5.5 kW
Type of voltage of the control supply voltage DC		1.24 W
	Control circuit/ Control:	
Control supply voltage at DC	Type of voltage of the control supply voltage	DC
	Control supply voltage at DC	

rated value	24 V
Operating range factor control supply voltage rated value of magnet coil at DC	0.85 1.1
Closing power of magnet coil at DC	3.3 W
Holding power of magnet coil at DC	3.3 W
Auxiliary circuit:	
Number of NC contacts	
for auxiliary contacts	
— instantaneous contact	0
Number of NO contacts	
for auxiliary contacts	
— instantaneous 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
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
Contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
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: 35 A
— with type of assignment 2 required	fuse gL/gG: 20 A
for short-circuit protection of the auxiliary switch required	fuse gL/gG: 10 A
Installation/ mounting/ dimensions:	
Mounting type	screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022
Side-by-side mounting	Yes
Height	57.5 mm
Witd>	45 mm

Depth	72 mm
Required spacing	
for grounded parts	
— at the side	6 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	
for main 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 main contacts	2x (20 16), 2x (18 14), 1x 12
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