## SIEMENS



Reference: 3RT1024-1AK60

CONTACTOR, AC-3 5,5KW/400 V, AC 110V 50HZ/120V 60HZ, 3-POLE, SIZE S0, SCREW CONNECTION

**Buy it at Electric Automation Network** 



product brand name	SIRIUS	
Product designation	power contactor	
General technical data:		
Size of contactor	S0	
Degree of pollution	3	
Protection class IP		
on the front	IP20	
of the terminal	IP20	
Mechanical service life (switching cycles)		
of contactor typical	10 000 000	
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	3	
Number of NC contacts for main contacts	0	
Operating current		
at AC-1 at 400 V		

— at ambient temperature 40 °C rated value	40 A
at AC-1	
— up to 690 V at ambient temperature 40 °C rated value	40 A
— up to 690 V at ambient temperature 60 °C rated value	35 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	35 A
— at 110 V rated value	4.5 A
with 2 current paths in series at DC-1	
— at 24 V rated value	35 A
— at 110 V rated value	35 A
with 3 current paths in series at DC-1	
— at 24 V rated value	35 A
— at 110 V rated value	35 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	2.5 A
with 2 current paths in series at DC-3 at DC-5	
— at 110 V rated value	15 A
— at 24 V rated value	35 A
with 3 current paths in series at DC-3 at DC-5	
— at 110 V rated value	35 A
— at 24 V rated value	35 A
Operating power	
at AC-1	
— at 400 V rated value	23 kW
at AC-2 at 400 V rated value	5.5 kW
at AC-3	
— at 400 V rated value	5.5 kW
— at 500 V rated value	7.5 kW
— at 690 V rated value	7.5 kW
Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor	0.5 W
Control circuit/ Control:	

Type of voltage of the control supply voltage	AC
Control supply voltage at AC	
at 50 Hz rated value	110 V
at 60 Hz rated value	120 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
Apparent pick-up power of magnet coil at AC	69 V·A
Inductive power factor with closing power of the coil	0.76
Apparent holding power of magnet coil at AC	7.5 V·A
Inductive power factor with the holding power of the coil	0.28
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 assignment 2 required fuse gL/gG: 53 A  fuse gL/gG: 10 A  fuse gL/gE: 14  fuse gL/gG: 10 A  fuse gL/g: 10 A  fuse gL/gG: 10 A  fuse gL/gG: 10 A  fuse gL/gG: 10		
for short-circuit protection of the auxiliary switch required  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  85 mm  Witd> 45 mm  Depth  91 mm  Required spacing  for grounded parts  — at the side  6 mm  Connections/Terminals:  Type of electrical connection  for main current circuit  screw-type terminals  Type of connectable conductor cross-sections  for main current  — solid  — innely stranded with core end processing  at AWG conductors for main contacts  — solid  — finely stranded with core end processing  at AWG conductors for main contacts  — solid  — finely stranded with core end processing  at AWG conductors  — finely stranded with core end processing  at AWG conductors for main contacts  — solid  — finely stranded with core end processing  at AWG conductors for main contacts  — solid  — finely stranded with core end processing  at AWG conductors for main contacts  — solid  — finely stranded with core end processing  at AWG conductors for main contacts  — solid  — finely stranded with core end processing  at AWG conductors for main contacts  — solid  — finely stranded with core end processing  at AWG conductors for main contacts  — solid  — finely stranded with core end processing  at AWG conductors for main contacts  — solid  — finely stranded with core end processing  at AWG confluctors for main contacts  — solid  — finely stranded with core end processing  at AWG confluctors for main contacts  — solid  — finely stranded with core end processing  at AWG confluctors for main contacts  — solid  — finely stranded with core end processing  at AWG confluctors for main contacts  — solid  — finely stranded with core end processing  at AWG confluctors for main contacts  — solid  — finely stranded with core end processing	— with type of coordination 1 required	fuse gL/gG: 63 A
required  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  85 mm  Witd> 45 mm  Depth  91 mm  Required spacing  for grounded parts  — at the side  Connections/Terminals:  Type of electrical connection  for main current circuit  screw-type terminals  Type of connectable conductor cross-sections  for main curtest  — solid  2x (1 2.5 mm²), 2x (2.5 6 mm²), max. 2x 10 mm²  — finely stranded with core end processing  at AWG conductors  For auxiliary contacts  — solid  2x (1 2.5 mm²), 2x (2.5 6 mm²)  2x (1 2.5 mm²), 2x (2.5 6 mm²)  2x (1 2.5 mm²), 2x (2.5 6 mm²)  Type of connectable conductor cross-sections  for auxiliary contacts  — solid  2x (1 2.5 mm²), 2x (2.5 6 mm²)  2x (1 2.5 mm²), 2x (2.5 6 mm²)  2x (1 2.5 mm²), 2x (2.5 6 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)  — finely stranded with core end processing  2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 2.5 mm²)	— with type of assignment 2 required	fuse gL/gG: 25 A
Screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022  Side-by-side mounting Yes  Height 85 mm  Witd> 45 mm  Depth 91 mm  Required spacing for grounded parts — at the side 6 mm  Connections/Terminals:  Type of electrical connection for main current circuit screw-type terminals  Type of connectable conductor cross-sections for main contacts — solid — single or multi-stranded — finely stranded with core end processing for auxiliary contacts  — solid  2x (1 2.5 mm²), 2x (2.5 6 mm²), max. 2x 10 mm² 2x (1 2.5 mm²), 2x (2.5 6 mm²) 2x (1 2.5 mm²), 2x (2.5 6 mm²) 3x (2x (1 2.5 mm²), 2x (2.5 6 mm²) 3x (2x (1 2.5 mm²), 2x (2.5 6 mm²) 3x (2x (1 2.5 mm²), 2x (2.5 6 mm²) 3x (2x (1 2.5 mm²), 2x (2.5 6 mm²) 3x (2x (1 2.5 mm²), 2x (2.5 6 mm²) 3x (2x (1 2.5 mm²), 2x (2.5 6 mm²) 3x (2x (1 2.5 mm²), 2x (2.5 6 mm²) 3x (2x (1 2.5 mm²), 2x (2.5 6 mm²) 3x (2x (1 2.5 mm²), 2x (2.5 6 mm²) 3x (2x (1 2.5 mm²), 2x (2x (1 10), 1x 8)  Type of connectable conductor cross-sections 3x (1 2.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 2.5 mm²) 3x (2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 2.5 mm²)		fuse gL/gG: 10 A
side-by-side mounting  Yes  Height  85 mm  Witd> 45 mm  Depth  91 mm  Required spacing  for grounded parts  — at the side  Connections/Terminals:  Type of electrical connection  for auxiliary and control current circuit  screw-type terminals  Type of connectable conductor cross-sections  for main cuntacts  — solid  2x (1 2.5 mm²), 2x (2.5 6 mm²), max. 2x 10 mm²  — finely stranded with core end processing  2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 2x mm²)  — finely stranded with core end processing  2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 2x mm²)	Installation/ mounting/ dimensions:	
Height 85 mm  Witd> 45 mm  Depth 91 mm  Required spacing for grounded parts — at the side 6 mm  Connections/Terminals:  Type of electrical connection for auxiliary and control current circuit screw-type terminals  Type of connectable conductor cross-sections for main contacts — solid 2x (1 2.5 mm²), 2x (2.5 6 mm²), max. 2x 10 mm² — single or multi-stranded 2x (1 2.5 mm²), 2x (2.5 6 mm²), max. 2x 10 mm²  Type of connectable conductor cross-sections  at AWG conductors for main contacts  Type of connectable conductor cross-sections  at AWG conductors for main contacts  Type of connectable conductor cross-sections  for auxiliary contacts  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), max. 2x (0.75 4 mm²)  - finely stranded with core end processing 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²)	Mounting type	
Witd> 45 mm  Depth 91 mm  Required spacing  for grounded parts  — at the side 6 mm  Connections/Terminals:  Type of electrical connection  for main current circuit screw-type terminals  Type of connectable conductor cross-sections  for main contacts  — solid 2x (1 2.5 mm²), 2x (2.5 6 mm²), max. 2x 10 mm²  — single or multi-stranded 2x (1 2.5 mm²), 2x (2.5 6 mm²), max. 2x 10 mm²  — finely stranded with core end processing 2x (1 2.5 mm²), 2x (2.5 6 mm²), max. 2x 10 mm²  2x (1 2.5 mm²), 2x (2.5 6 mm²), max. 2x 10 mm²  2x (1 2.5 mm²), 2x (2.5 6 mm²), max. 2x 10 mm²  2x (1 2.5 mm²), 2x (2.5 6 mm²), max. 2x 10 mm²  2x (1 2.5 mm²), 2x (2.5 6 mm²)  at AWG conductors for main contacts 2x (1 2.5 mm²), 2x (2.5 6 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)  — finely stranded with core end processing 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)	Side-by-side mounting	Yes
Depth 91 mm  Required spacing  for grounded parts  — at the side 6 mm  Connections/Terminals:  Type of electrical connection  for main current circuit screw-type terminals  Type of connectable conductor cross-sections  for main contacts  — solid 2x (1 2.5 mm²), 2x (2.5 6 mm²), max. 2x 10 mm²  — single or multi-stranded 2x (1 2.5 mm²), 2x (2.5 6 mm²)  at AWG conductors for main contacts  Type of connectable conductor cross-sections  for auxiliary and control current circuit screw-type terminals  — solid 2x (1 2.5 mm²), 2x (2.5 6 mm²), max. 2x 10 mm²  — single or multi-stranded 2x (1 2.5 mm²), 2x (2.5 6 mm²), max. 2x 10 mm²  — finely stranded with core end processing 2x (1 2.5 mm²), 2x (2.5 6 mm²)  at AWG conductors for main contacts 2x (16 12), 2x (14 10), 1x 8  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)	Height	85 mm
Required spacing  for grounded parts  — at the side 6 mm  Connections/Terminals:  Type of electrical connection  for main current circuit screw-type terminals  Type of connectable conductor cross-sections  for main contacts  — solid 2x (1 2.5 mm²), 2x (2.5 6 mm²), max. 2x 10 mm²  — single or multi-stranded 2x (1 2.5 mm²), 2x (2.5 6 mm²)  — finely stranded with core end processing 2x (1 2.5 mm²), 2x (2.5 6 mm²)  at AWG conductors for main contacts 2x (1 2.5 mm²), 2x (2.5 6 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)  — finely stranded with core end processing 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²)	Witd>	45 mm
for grounded parts  — at the side 6 mm  Connections/Terminals:  Type of electrical connection  for main current circuit screw-type terminals  Type of connectable conductor cross-sections  for main contacts  — solid 2x (1 2.5 mm²), 2x (2.5 6 mm²), max. 2x 10 mm²  — single or multi-stranded 2x (1 2.5 mm²), 2x (2.5 6 mm²), max. 2x 10 mm²  — finely stranded with core end processing 2x (1 2.5 mm²), 2x (2.5 6 mm²)  at AWG conductors for main contacts 2x (16 12), 2x (14 10), 1x 8  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), max. 2x (0.75 4 mm²)	Depth	91 mm
- at the side 6 mm  Connections/Terminals:  Type of electrical connection  for main current circuit screw-type terminals  Type of connectable conductor cross-sections  for main contacts  - solid 2x (1 2.5 mm²), 2x (2.5 6 mm²), max. 2x 10 mm²  - single or multi-stranded 2x (1 2.5 mm²), 2x (2.5 6 mm²), max. 2x 10 mm²  - finely stranded with core end processing 2x (1 2.5 mm²), 2x (2.5 6 mm²)  at AWG conductors for main contacts 2x (16 12), 2x (14 10), 1x 8  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)	Required spacing	
Type of electrical connection  for main current circuit  for auxiliary and control current circuit  Type of connectable conductor cross-sections  for main contacts  — solid  — single or multi-stranded  — finely stranded with core end processing  for auxiliary contacts  — solid	for grounded parts	
Type of electrical connection  for main current circuit  for auxiliary and control current circuit  Type of connectable conductor cross-sections  for main contacts  — solid  — single or multi-stranded  — finely stranded with core end processing  at AWG conductors for main contacts  Type of connectable conductor cross-sections  2x (1 2.5 mm²), 2x (2.5 6 mm²), max. 2x 10 mm²  2x (1 2.5 mm²), 2x (2.5 6 mm²), max. 2x 10 mm²  2x (1 2.5 mm²), 2x (2.5 6 mm²)  2x (1 2.5 mm²), 2x (2.5 6 mm²)  2x (16 12), 2x (14 10), 1x 8  Type of connectable conductor cross-sections  for auxiliary contacts  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 the side	6 mm
for main current circuit  for auxiliary and control current circuit  Type of connectable conductor cross-sections  for main contacts  — solid  2x (1 2.5 mm²), 2x (2.5 6 mm²), max. 2x 10 mm²  — single or multi-stranded  2x (1 2,5 mm²), 2x (2,5 6 mm²), max. 2x 10 mm²  — finely stranded with core end processing  2x (1 2,5 mm²), 2x (2,5 6 mm²)  2x (1 2,5 mm²), 2x (2.5 6 mm²)  2x (1 2,5 mm²), 2x (2.5 6 mm²)  2x (1 2,5 mm²), 2x (2.5 6 mm²)  2x (1 2,5 mm²), 2x (0.75 2,5 mm²)  4x AWG conductors for main contacts  2x (16 12), 2x (14 10), 1x 8  Type of connectable conductor cross-sections  for auxiliary contacts  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)	Connections/Terminals:	
for auxiliary and control current circuit  Type of connectable conductor cross-sections  for main contacts  — solid  — single or multi-stranded  — finely stranded with core end processing  at AWG conductors for main contacts  Type of connectable conductor cross-sections  for auxiliary contacts  — solid  2x (1 2.5 mm²), 2x (2.5 6 mm²), max. 2x 10 mm²  2x (1 2.5 mm²), 2x (2.5 6 mm²), max. 2x 10 mm²  2x (1 2.5 mm²), 2x (2.5 6 mm²)  2x (16 12), 2x (14 10), 1x 8  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)	Type of electrical connection	
Type of connectable conductor cross-sections  for main contacts  — solid  2x (1 2.5 mm²), 2x (2.5 6 mm²), max. 2x 10 mm²  — single or multi-stranded  2x (1 2,5 mm²), 2x (2,5 6 mm²), max. 2x 10 mm²  — finely stranded with core end processing  2x (1 2.5 mm²), 2x (2.5 6 mm²)  at AWG conductors for main contacts  2x (16 12), 2x (14 10), 1x 8  Type of connectable conductor cross-sections  for auxiliary contacts  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)	for main current circuit	screw-type terminals
for main contacts  — solid  — solid  — single or multi-stranded  — finely stranded with core end processing  at AWG conductors for main contacts  — solid  —	for auxiliary and control current circuit	screw-type terminals
— solid       2x (1 2.5 mm²), 2x (2.5 6 mm²), max. 2x 10 mm²         — single or multi-stranded       2x (1 2,5 mm²), 2x (2,5 6 mm²), max. 2x 10 mm²         — finely stranded with core end processing       2x (1 2.5 mm²), 2x (2.5 6 mm²)         at AWG conductors for main contacts       2x (16 12), 2x (14 10), 1x 8         Type of connectable conductor cross-sections       2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²)         — 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)	Type of connectable conductor cross-sections	
<ul> <li>single or multi-stranded</li> <li>2x (1 2,5 mm²), 2x (2,5 6 mm²), max. 2x 10 mm²</li> <li>finely stranded with core end processing</li> <li>2x (1 2.5 mm²), 2x (2.5 6 mm²)</li> <li>at AWG conductors for main contacts</li> <li>2x (16 12), 2x (14 10), 1x 8</li> <li>Type of connectable conductor cross-sections</li> <li>for auxiliary contacts</li> <li>2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²)</li> <li>finely stranded with core end processing</li> <li>2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)</li> </ul>	for main contacts	
<ul> <li>finely stranded with core end processing</li> <li>2x (1 2.5 mm²), 2x (2.5 6 mm²)</li> <li>at AWG conductors for main contacts</li> <li>2x (16 12), 2x (14 10), 1x 8</li> <li>Type of connectable conductor cross-sections</li> <li>for auxiliary contacts</li> <li>2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²)</li> <li>finely stranded with core end processing</li> <li>2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)</li> </ul>	— solid	2x (1 2.5 mm²), 2x (2.5 6 mm²), max. 2x 10 mm²
at AWG conductors for main contacts  2x (16 12), 2x (14 10), 1x 8  Type of connectable conductor cross-sections  for auxiliary contacts  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)	— single or multi-stranded	2x (1 2,5 mm²), 2x (2,5 6 mm²), max. 2x 10 mm²
Type of connectable conductor cross-sections for auxiliary contacts	— finely stranded with core end processing	2x (1 2.5 mm²), 2x (2.5 6 mm²)
for auxiliary contacts	at AWG conductors for main contacts	2x (16 12), 2x (14 10), 1x 8
- 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)	Type of connectable conductor cross-sections	
— solid       4 mm²)         — finely stranded with core end processing       2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)	for auxiliary contacts	
	— solid	
at AWG conductors for auxiliary contacts 2x (20 16), 2x (18 14), 1x 12	— 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