SIEMENS

Data sheet 3RT1034-3AK60



CONTACTOR, AC-3 15 KW/400 V, AC 110 V 50 HZ/ 120 V 60 HZ, 3-POLE, SIZE S2, CAGE CLAMP

Figure similar

product brand name	SIRIUS
Product designation	power contactor

General technical data:		
Size of contactor	S2	
Insulation voltage		
Rated value	690 V	
Surge voltage resistance Rated value	6 kV	
Protection class IP		
• on the front	IP00	
• of the terminal	IP00	
Degree of pollution	3	
Mechanical service life (switching cycles)		
 of the contactor typical 	10 000 000	
 of the contactor with added electronics- 	5 000 000	
compatible auxiliary switch block typical		
 of the contactor with added auxiliary switch 	10 000 000	
block typical		

Ambient conditions:			
Installation altitude at height above sea level	2 000 m		
maximum			
Ambient temperature			
during operation	-25 +60 °C		
during storage	-55 +80 °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	50 A		
• at AC-1 up to 690 V			
— at ambient temperature 40 °C Rated value	50 A		
— at ambient temperature 60 °C Rated value	45 A		
• at AC-3			
— at 400 V Rated value	32 A		
— at 690 V Rated value	20 A		
Connectable conductor cross-section in main circuit			
at AC-1			
• at 60 °C minimum permissible	10 mm²		
• at 40 °C minimum permissible	16 mm²		
Operating current for ≥ 200000 operating cycles at AC-4			
• at 400 V Rated value	15.6 A		
• at 690 V Rated value	11 A		
Operating current			
• with 1 current path at DC-1			
— at 24 V Rated value	45 A		
— at 110 V Rated value	4.5 A		
• with 2 current paths in series at DC-1			
— at 24 V Rated value	45 A		
— at 110 V Rated value	25 A		
• with 3 current paths in series at DC-1			
— at 24 V Rated value	45 A		
— at 110 V Rated value	45 A		
Operating current			
 with 1 current path at DC-3 at DC-5 			
— at 24 V Rated value	35 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	25 A		
— at 24 V Rated value	45 A		
• with 3 current paths in series at DC-3 at DC-5			
— at 110 V Rated value	45 A		
— at 24 V Rated value	45 A		
Operating power			
• at AC-1			
— at 230 V at 60 °C Rated value	18 kW		
— at 400 V Rated value	31 kW		

— at 690 V Rated value	54 kW		
— at 690 V at 60 °C Rated value	54 kW		
• at AC-2 at 400 V Rated value	15 kW		
• at AC-3			
— at 230 V Rated value	7.5 kW		
— at 400 V Rated value	15 kW		
— at 500 V Rated value	18.5 kW		
— at 690 V Rated value	18.5 kW		
Operating power for ≥ 200000 operating cycles at AC-4			
• at 400 V Rated value	8.2 kW		
● at 690 V Rated value	10 kW		
Thermal short-time current restricted to 10 s	320 A		
Active power loss at AC-3 at 400 V for rated value of the operating current per conductor	1.8 W		
No-load switching frequency			
• at AC	5 000 1/h		
Operating frequency			
● at AC-1 maximum	1 200 1/h		
• at AC-2 maximum	750 1/h		
• at AC-3 maximum	1 000 1/h		
• at AC-4 maximum	250 1/h		
Control circuit/ Control:			

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		
Rated value	50 Hz		
Control supply voltage frequency 2 Rated value	60 Hz		
Operating range factor control supply voltage rated value of the magnet coil at AC			
● at 50 Hz	0.8 1.1		
● at 60 Hz	0.8 1.1		
Apparent pick-up power of the magnet coil at AC	120 V·A		
Inductive power factor with closing power of the coil	0.7		
Apparent holding power of the magnet coil at AC	10.1 V·A		
Inductive power factor with the holding power of the coil	0.42		
Closing delay			
• at AC	11 30 ms		
Opening delay			
• at AC	7 20 ms		

Arcing time	10 15 ms			
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 the auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)			
UL/CSA ratings:				
Contact rating of the auxiliary contacts acc. to UL	A600 / Q600			
Short-circuit:				
Design of the fuse link				
for short-circuit protection of the main circuit	f 1/ 0 405 A			
— with type of assignment 1 required	fuse gL/gG: 125 A			
 — with type of assignment 2 required 	fuse gL/gG: 63 A			
• for short-circuit protection of the auxiliary switch	fuse gL/gG: 10 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	112 mm			
Width	55 mm			
Depth Required encoing	115 mm			
Required spacing				
• for grounded parts	6			
— at the side	6 mm			

Connections/ Terminals:	Connections/ Terminals:			
Type of electrical connection				
• for main current circuit	screw-type terminals			
 for auxiliary and control current circuit 	Cage Clamp terminals			
Type of connectable conductor cross-section				
• for main contacts				
— solid	2x (0.75 16 mm²)			
— stranded	2x (0.75 25 mm²)			
 single or multi-stranded 	2x (0,75 16 mm²)			
 finely stranded with core end processing 	2x (0.75 16 mm²)			
 finely stranded without core end processing 	2x (0.75 16 mm²)			
 for AWG conductors for main contacts 	2x (18 2)			
Type of connectable conductor cross-section				
for auxiliary contacts				
— solid	2x (0.25 2.5 mm²)			
 finely stranded with core end processing 	2x (0.25 1.5 mm²)			
 finely stranded without core end processing 	2x (0.25 2.5 mm²)			
• for AWG conductors for auxiliary contacts	2x (24 14)			

Certificates/ approvals:

Functional Declaration of General Product Approval Test Safety/Safety Conformity Certificates of Machinery Baumusterbescheini Typprüfbescheinigu







gung



ng/Werkszeugnis

Test	Shipping Approval				
Certificates					
spezielle Prüfbescheinigunge n	SHIPPING	LÅ	GL®	Lloyd's Register	
	ABS	DNV	GL	LRS	RINA

Shipping	other		
Approval			



Umweltbestätigung

Bestätigungen

sonstig

Further information

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

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

Industry Mall (Online ordering system)

http://www.siemens.com/industrymall

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT10343AK60

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT10343AK60

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT10343AK60&lang=en



