

Combination starter Nonreversing DIN/panel mount, IEC SIRIUS
Frame size S3,45 - 63a 120VAC control voltage MSP aux-1 SPDT
NO/NC Contactor auxiliary -1NO Front mount

Product brand name	SIRIUS
Product designation	non-fused motor starter
Design of the product	direct starter
Manufacturer's article number	
• of the supplied contactor	3RT1044-1AK60
• of the supplied circuit-breakers	3RV1041-4JA15
• of the supplied link module	3RA1941-1AA00
• of the supplied standard mounting rail adapter	3RA1942-1AA00

General technical data

Size of the circuit-breaker	S3
Size of load feeder	S3
Product extension	
• Auxiliary switch	Yes
Insulation voltage	
• with degree of pollution 3 rated value	690 V
Degree of pollution	3
Surge voltage resistance rated value	6 kV
Protection class IP	
• on the front	IP20
• of the terminal	IP00
Shock resistance	
• acc. to IEC 60068-2-27	6g / 11 ms
Mechanical service life (switching cycles)	
• of contactor typical	10 000 000
Type of assignment	2
Protection against electrical shock	finger-safe

Ambient conditions

Ambient temperature	
• during operation	-20 ... +60 °C
• during storage	-50 ... +80 °C
• during transport	-55 ... +80 °C

Main circuit

Number of poles for main current circuit	3
Design of the switching contact	electromechanical

Adjustable pick-up value current of the current-dependent overload release	45 ... 63 A
Operating voltage	
• rated value	690 V
• at AC-3 rated value maximum	690 V
Operating frequency rated value	50 ... 60 Hz
Operating current	
• at AC-3	
— at 400 V rated value	55 A
Operating power	
• at AC-3	
— at 400 V rated value	30 000 W
— at 500 V rated value	37 000 W

Control circuit/ Control

Control supply voltage at AC	
• at 50 Hz rated value	110 V
• at 50 Hz rated value	88 ... 121 V
• at 60 Hz rated value	120 V
• at 60 Hz rated value	96 ... 132 V
Apparent holding power of magnet coil at AC	20 V·A
Inductive power factor with the holding power of the coil	0.28

Auxiliary circuit

Number of NC contacts	
• for auxiliary contacts	1
Number of NO contacts	
• for auxiliary contacts	1

Protective and monitoring functions

Trip class	CLASS 10
Design of the overload release	thermal (bimetallic)
Response value current	
• of instantaneous short-circuit trip unit	819 A

UL/CSA ratings

Full-load current (FLA) for three-phase AC motor	
• at 480 V rated value	63 A
• at 600 V rated value	61.5 A
Yielded mechanical performance [hp]	
• for single-phase AC motor	
— at 110/120 V rated value	5 hp
— at 230 V rated value	15 hp
• for three-phase AC motor	

— at 200/208 V rated value	20 hp
— at 220/230 V rated value	25 hp
— at 460/480 V rated value	50 hp
— at 575/600 V rated value	60 hp

Short-circuit protection

Product function Short circuit protection	Yes
Design of the short-circuit trip	magnetic
Conditional short-circuit current (I_q)	
• at 400 V acc. to IEC 60947-4-1 rated value	50 000 A
• at 500 V acc. to IEC 60947-4-1 rated value	50 000 A

Installation/ mounting/ dimensions

Mounting position	vertical
Mounting type	snap-on fastening on 35 mm standard rail
Height	330 mm
Width	70 mm
Depth	207 mm
Required spacing	
• for grounded parts	
— forwards	10 mm
— Backwards	0 mm
— upwards	90 mm
— at the side	12 mm
— downwards	10 mm
• for live parts	
— forwards	10 mm
— Backwards	0 mm
— upwards	90 mm
— downwards	10 mm
— at the side	12 mm

Connections/Terminals

Type of electrical connection	
• for main current circuit	screw-type terminals
Type of connectable conductor cross-sections	
• for main contacts	
— stranded	2.5 ... 70 mm ² , 2x (10 ... 50 mm ²)
• at AWG conductors for main contacts	1x (10 ... 2/0), 2x (10 ... 1/0)
Connectable conductor cross-section for main contacts	
• finely stranded with core end processing	2.5 ... 50 mm ²

Safety related data

B10 value	
• with high demand rate acc. to SN 31920	1 000 000
Proportion of dangerous failures	
• with high demand rate acc. to SN 31920	73 %

Certificates/approvals

General Product Approval		Declaration of Conformity	Marine / Shipping			
 UL		 EAC	 EG-Konf.	 LRS	 RMRS	 DNV-GL DNVGL.COM/AF

other

[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=3RA1145-4JB44-1AK6>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA1145-4JB44-1AK6>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA1145-4JB44-1AK6>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA1145-4JB44-1AK6&lang=en

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