






COMBO NR STR PNL MT S3 80-100A COMBO NR STR PNL MT S3 80-100A	
product brand name	SIRIUS
product designation	non-fused motor starter 3RA2
design of the product	direct starter
manufacturer's article number	
<ul style="list-style-type: none"> of the supplied contactor of the supplied circuit-breakers of the supplied link module 	3RT2047-1NB30 3RV2041-4MA10 3RA2942-1AA00
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 at AC rated value	690 V
degree of pollution	3
surge voltage resistance rated value	6 kV
shock resistance according to IEC 60068-2-27	6.7 g / 5 ms
mechanical service life (operating cycles) of contactor typical	10 000 000
type of coordination	2
Net Weight	4.88 kg
Ambient conditions	
ambient temperature	
<ul style="list-style-type: none"> during operation during storage during transport 	-20 ... +60 °C -50 ... +80 °C -55 ... +80 °C
Main circuit	
number of poles for main current circuit	3
design of the switching contact	electromechanical
adjustable current response value current of the current-dependent overload release	80 ... 100 A
operating voltage	
<ul style="list-style-type: none"> rated value at AC-3 rated value maximum 	690 V 690 V
operating frequency rated value	50 ... 60 Hz
operational current at AC-3 at 400 V rated value	100 A
operating power at AC-3	
<ul style="list-style-type: none"> at 400 V rated value 	45 kW
Control circuit/ Control	
control supply voltage at AC	
<ul style="list-style-type: none"> at 50 Hz rated value at 60 Hz rated value 	20 ... 33 V 20 ... 33 V
control supply voltage at DC rated value	20 ... 33 V
apparent holding power of magnet coil at AC	3.5 VA
holding power of magnet coil at DC	2.7 W
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	1 300 A
UL/CSA ratings	

full-load current (FLA) for 3-phase AC motor					
• at 480 V rated value	96 A				
• at 600 V rated value	99 A				
yielded mechanical performance [hp]					
• for single-phase AC motor					
— at 110/120 V rated value	10 hp				
— at 230 V rated value	20 hp				
• for 3-phase AC motor					
— at 200/208 V rated value	30 hp				
— at 220/230 V rated value	40 hp				
— at 460/480 V rated value	75 hp				
— at 575/600 V rated value	100 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 according to IEC 60947-4-1 rated value	65 000 A				
Installation/ mounting/ dimensions					
mounting position	vertical				
fastening method	Snap-mounted to DIN rail or screw-mounted with additional push-in lug				
height	332 mm				
width	70 mm				
depth	200 mm				
required spacing					
• for grounded parts					
— forwards	32 mm				
— backwards	0 mm				
— upwards	50 mm				
— at the side	10 mm				
— downwards	10 mm				
• for live parts					
— forwards	32 mm				
— backwards	0 mm				
— upwards	50 mm				
— downwards	10 mm				
— at the side	10 mm				
Connections/ Terminals					
type of electrical connection for main current circuit	screw-type terminals				
type of connectable conductor cross-sections for main contacts stranded	10 ... 70 mm ² , 2x (2.5 ... 50 mm ²)				
connectable conductor cross-section for main contacts finely stranded with core end processing	1 ... 35 mm ²				
Safety related data					
proportion of dangerous failures with high demand rate according to SN 31920	73 %				
B10 value with high demand rate according to SN 31920	1 000 000				
Electrical Safety					
protection class IP on the front according to IEC 60529	IP20				
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front				
Approvals Certificates					
Environment	General Product Approval	For use in hazardous locations			
Environmental Confirmations					
Maritime application					other



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other



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Further information

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

Information for data generation and storage

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

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

<https://www.siemens.com/ic10>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RA2140-4MB47-0NB3>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2140-4MB47-0NB3>

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

https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2140-4MB47-0NB3&lang=en

Cax online generator

<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2140-4MB47-0NB3>

Characteristic curves

[https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP="HAUPT"></mmp_prod_no>](https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP=)

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