



vacuum contactor AC-3e/AC-3 265 A, 132 kW / 400 V, 3-pole, U_c: 96-127 V AC(50-60 Hz) / DC PLC input 24 V DC drive: electronic auxiliary contacts 2 NO + 2 NC main circuit: busbar control and auxiliary circuit: screw terminal

product brand name	SIRIUS
product designation	Vacuum contactor
product type designation	3RT12
General technical data	
size of contactor	S10
product extension	
• function module for communication	No
• auxiliary switch	Yes
power loss [W] for rated value of the current	
• at AC in hot operating state	36 W
• at AC in hot operating state per pole	12 W
• without load current share typical	3.4 W
type of calculation of power loss depending on pole	quadratic
insulation voltage	
• of main circuit with degree of pollution 3 rated value	1 000 V
• of auxiliary circuit with degree of pollution 3 rated value	500 V
surge voltage resistance	
• of main circuit rated value	8 kV
• of auxiliary circuit rated value	6 kV
maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1	690 V
shock resistance at rectangular impulse	
• at AC	8,5g / 5 ms, 4,2g / 10 ms
• at DC	8,5g / 5 ms, 4,2g / 10 ms
shock resistance with sine pulse	
• at AC	13,4g / 5 ms, 6,5g / 10 ms
• at DC	13,4g / 5 ms, 6,5g / 10 ms
mechanical service life (operating cycles)	
• of contactor typical	10 000 000
• of the contactor with added electronically optimized auxiliary switch block typical	5 000 000
• of the contactor with added auxiliary switch block typical	10 000 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	05/01/2012
SVHC substance name	Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Perfluorobutane sulfonic acid (PFBS) and its salts - -
Weight	7.3 kg
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	

<ul style="list-style-type: none"> during operation during storage 	-25 ... +60 °C -55 ... +80 °C
relative humidity minimum	10 %
relative humidity at 55 °C according to IEC 60068-2-30 maximum	95 %
Main circuit	
number of poles for main current circuit	3
number of NO contacts for main contacts	3
operating voltage	
<ul style="list-style-type: none"> at AC-3 rated value maximum at AC-3e rated value maximum 	1 000 V 1 000 V
operational current	
<ul style="list-style-type: none"> at AC-1 at 400 V at ambient temperature 40 °C rated value at AC-1 <ul style="list-style-type: none"> up to 690 V at ambient temperature 40 °C rated value up to 690 V at ambient temperature 60 °C rated value up to 1000 V at ambient temperature 40 °C rated value up to 1000 V at ambient temperature 60 °C rated value at AC-3 <ul style="list-style-type: none"> at 400 V rated value at 500 V rated value at 690 V rated value at 1000 V rated value at AC-3e <ul style="list-style-type: none"> at 400 V rated value at 500 V rated value at 690 V rated value at 1000 V rated value at AC-4 at 400 V rated value at AC-6a <ul style="list-style-type: none"> up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value up to 1000 V for current peak value n=20 rated value at AC-6a <ul style="list-style-type: none"> up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 1000 V for current peak value n=30 rated value 	330 A 330 A 300 A 330 A 300 A 265 A 265 A 265 A 265 A 265 A 265 A 230 A 265 A 265 A 265 A 265 A 265 A 209 A 209 A 209 A 209 A 209 A 209 A
minimum cross-section in main circuit at maximum AC-1 rated value	185 mm ²
operational current for approx. 200000 operating cycles at AC-4	
<ul style="list-style-type: none"> at 400 V rated value at 690 V rated value 	115 A 115 A
operating power	
<ul style="list-style-type: none"> at AC-3 <ul style="list-style-type: none"> at 230 V rated value at 400 V rated value at 500 V rated value at 690 V rated value at 1000 V rated value at AC-3e <ul style="list-style-type: none"> at 230 V rated value at 400 V rated value 	75 kW 132 kW 160 kW 250 kW 355 kW 75 kW 132 kW

— at 500 V rated value	160 kW
— at 690 V rated value	250 kW
— at 1000 V rated value	355 kW
operating power for approx. 200000 operating cycles at AC-4	
● at 400 V rated value	65 kW
● at 690 V rated value	112 kW
operating apparent power at AC-6a	
● up to 230 V for current peak value n=20 rated value	100 000 kVA
● up to 400 V for current peak value n=20 rated value	180 000 VA
● up to 500 V for current peak value n=20 rated value	220 000 VA
● up to 690 V for current peak value n=20 rated value	310 000 VA
● up to 1000 V for current peak value n=20 rated value	450 000 VA
operating apparent power at AC-6a	
● up to 230 V for current peak value n=30 rated value	80 000 VA
● up to 400 V for current peak value n=30 rated value	140 000 VA
● up to 500 V for current peak value n=30 rated value	180 000 VA
● up to 690 V for current peak value n=30 rated value	250 000 VA
● up to 1000 V for current peak value n=30 rated value	360 000 VA
no-load switching frequency	
● at AC	1 000 1/h
● at DC	1 000 1/h
operating frequency	
● at AC-1 maximum	750 1/h
● at AC-2 maximum	250 1/h
● at AC-3 maximum	750 1/h
● at AC-3e maximum	750 1/h
● at AC-4 maximum	250 1/h
Control circuit/ Control	
type of voltage of the control supply voltage	AC/DC
control supply voltage at AC	
● at 50 Hz rated value	96 ... 127 V
● at 60 Hz rated value	96 ... 127 V
control supply voltage at DC rated value	96 ... 127 V
operating range factor control supply voltage rated value of magnet coil at DC	
● initial value	0.8
● full-scale value	1.1
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
type of PLC-control input according to IEC 60947-1	Type 2
consumed current at PLC-control input according to IEC 60947-1 maximum	20 mA
voltage at PLC-control input rated value	24 V
operating range factor of the voltage at PLC-control input	0.8 ... 1.1
design of the surge suppressor	with varistor
apparent pick-up power	
● at minimum rated control supply voltage at AC	
— at 50 Hz	420 VA
— at 60 Hz	420 VA
● at maximum rated control supply voltage at AC	
— at 60 Hz	570 VA
— at 50 Hz	570 VA
apparent pick-up power of magnet coil at AC	
● at 50 Hz	570 VA
● at 60 Hz	570 VA
inductive power factor with closing power of the coil	
● at 50 Hz	0.8
● at 60 Hz	0.8
apparent holding power	

<ul style="list-style-type: none"> ● at minimum rated control supply voltage at DC 	2.8 VA
<ul style="list-style-type: none"> ● at maximum rated control supply voltage at DC 	3.4 VA
apparent holding power	
<ul style="list-style-type: none"> ● at minimum rated control supply voltage at AC <ul style="list-style-type: none"> — at 50 Hz 	5.5 VA
<ul style="list-style-type: none"> — at 60 Hz 	5.5 VA
<ul style="list-style-type: none"> ● at maximum rated control supply voltage at AC <ul style="list-style-type: none"> — at 50 Hz 	8.5 VA
<ul style="list-style-type: none"> — at 60 Hz 	8.5 VA
inductive power factor with the holding power of the coil	
<ul style="list-style-type: none"> ● at 50 Hz 	0.5
<ul style="list-style-type: none"> ● at 60 Hz 	0.4
closing power of magnet coil at DC	630 W
holding power of magnet coil at DC	3.4 W
closing delay	
<ul style="list-style-type: none"> ● at AC 	45 ... 80 ms
<ul style="list-style-type: none"> ● at DC 	45 ... 80 ms
opening delay	
<ul style="list-style-type: none"> ● at AC 	80 ... 100 ms
<ul style="list-style-type: none"> ● at DC 	80 ... 100 ms
arcing time	10 ... 15 ms
control version of the switch operating mechanism	PLC-IN or Standard A1 - A2 (adjustable)
Auxiliary circuit	
number of NC contacts for auxiliary contacts instantaneous contact	2
number of NO contacts for auxiliary contacts instantaneous contact	2
operational current at AC-12 maximum	10 A
operational current at AC-15	
<ul style="list-style-type: none"> ● at 230 V rated value 	6 A
<ul style="list-style-type: none"> ● at 400 V rated value 	3 A
<ul style="list-style-type: none"> ● at 500 V rated value 	2 A
<ul style="list-style-type: none"> ● at 690 V rated value 	1 A
operational current at DC-12	
<ul style="list-style-type: none"> ● at 24 V rated value 	10 A
<ul style="list-style-type: none"> ● at 48 V rated value 	6 A
<ul style="list-style-type: none"> ● at 60 V rated value 	6 A
<ul style="list-style-type: none"> ● at 110 V rated value 	3 A
<ul style="list-style-type: none"> ● at 125 V rated value 	2 A
<ul style="list-style-type: none"> ● at 220 V rated value 	1 A
<ul style="list-style-type: none"> ● at 600 V rated value 	0.15 A
operational current at DC-13	
<ul style="list-style-type: none"> ● at 24 V rated value 	10 A
<ul style="list-style-type: none"> ● at 48 V rated value 	2 A
<ul style="list-style-type: none"> ● at 60 V rated value 	2 A
<ul style="list-style-type: none"> ● at 110 V rated value 	1 A
<ul style="list-style-type: none"> ● at 125 V rated value 	0.9 A
<ul style="list-style-type: none"> ● at 220 V rated value 	0.3 A
<ul style="list-style-type: none"> ● at 600 V rated value 	0.1 A
contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
<ul style="list-style-type: none"> ● at 480 V rated value 	240 A
<ul style="list-style-type: none"> ● at 600 V rated value 	242 A
yielded mechanical performance [hp]	
<ul style="list-style-type: none"> ● for 3-phase AC motor <ul style="list-style-type: none"> — at 200/208 V rated value 	75 hp
<ul style="list-style-type: none"> — at 220/230 V rated value 	100 hp
<ul style="list-style-type: none"> — at 460/480 V rated value 	200 hp
<ul style="list-style-type: none"> — at 575/600 V rated value 	250 hp
contact rating of auxiliary contacts according to UL	A600 / Q600

Short-circuit protection	
design of the fuse link <ul style="list-style-type: none"> ● for short-circuit protection of the main circuit <ul style="list-style-type: none"> — with type of coordination 1 required — with type of assignment 2 required ● for short-circuit protection of the auxiliary switch required 	gG: 500 A (690 V, 100 kA) gG: 500 A (690 V, 100 kA), aM: 400 A (690 V, 50 kA), BS88: 450 A (415 V, 50 kA) gG: 10 A (500 V, 1 kA)
Installation/ mounting/ dimensions	
mounting position	+/-22,5° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface
fastening method side-by-side mounting	Yes
fastening method	screw fixing
height	210 mm
width	145 mm
depth	206 mm
required spacing <ul style="list-style-type: none"> ● with side-by-side mounting <ul style="list-style-type: none"> — forwards 20 mm — upwards 10 mm — downwards 10 mm — at the side 0 mm ● for grounded parts <ul style="list-style-type: none"> — forwards 20 mm — upwards 10 mm — at the side 10 mm — downwards 10 mm ● for live parts <ul style="list-style-type: none"> — forwards 20 mm — upwards 10 mm — downwards 10 mm — at the side 10 mm 	
Connections/ Terminals	
type of electrical connection <ul style="list-style-type: none"> ● for main current circuit ● for auxiliary and control circuit ● at contactor for auxiliary contacts ● of magnet coil 	Connection bar screw-type terminals Screw-type terminals Screw-type terminals
width of connection bar	25 mm
thickness of connection bar	6 mm
diameter of holes	11 mm
number of holes	1
type of connectable conductor cross-sections <ul style="list-style-type: none"> ● for AWG cables for main contacts 	2/0 ... 500 kcmil
connectable conductor cross-section for main contacts <ul style="list-style-type: none"> ● stranded 	70 ... 240 mm ²
connectable conductor cross-section for auxiliary contacts <ul style="list-style-type: none"> ● solid or stranded ● finely stranded with core end processing 	0.5 ... 4 mm ² 0.5 ... 2.5 mm ²
type of connectable conductor cross-sections <ul style="list-style-type: none"> ● for auxiliary contacts <ul style="list-style-type: none"> — solid 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²), max. 2x (0.75 ... 4 mm²) — solid or 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) ● for AWG cables for auxiliary contacts 2x (20 ... 16), 2x (18 ... 14), 1x 12 	
AWG number as coded connectable conductor cross section <ul style="list-style-type: none"> ● for auxiliary contacts 	18 ... 14
Safety related data	
product function <ul style="list-style-type: none"> ● mirror contact according to IEC 60947-4-1 ● positively driven operation according to IEC 60947-5-1 	Yes No

Electrical Safety	
protection class IP on the front according to IEC 60529	IP00; IP20 with box terminal/cover
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front with box terminal/cover
Approvals Certificates	
General Product Approval	



[Confirmation](#)



[KC](#)

General Product Approval	EMV	Functional Safety	Test Certificates	Marine / Shipping
		Type Examination Certificate	Type Test Certificates/Test Report	Special Test Certificate

Marine / Shipping	other				
				Confirmation	Confirmation

other	Railway	Environment
Miscellaneous	Special Test Certificate	Environmental Conformations

Further information

- Information on the packaging
<https://support.industry.siemens.com/cs/ww/en/view/109813875>
- 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=3RT1265-6NF36>
- Cax online generator
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1265-6NF36>
- Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
<https://support.industry.siemens.com/cs/ww/en/ps/3RT1265-6NF36>
- Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1265-6NF36&lang=en
- Characteristic: Tripping characteristics, I²t, Let-through current
<https://support.industry.siemens.com/cs/ww/en/ps/3RT1265-6NF36/char>
- Further characteristics (e.g. electrical endurance, switching frequency)
<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1265-6NF36&objecttype=14&gridview=view1>



