



power contactor, AC-3, 25 A, 11 kW / 400 V, 4-pole, 83-155 V AC/DC, 50/60 Hz, with integrated varistor, main contacts: 2 NO + 2 NC, auxiliary contacts: 1 NO + 1 NC, spring-loaded terminal, size: S0

product brand name	SIRIUS
product designation	contactor
product type designation	3RT25
General technical data	
size of contactor	S0
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 per pole	1.9 W
• without load current share typical	1.4 W
type of calculation of power loss depending on pole	quadratic
insulation voltage	
• of main circuit with degree of pollution 3 rated value	690 V
• of auxiliary circuit with degree of pollution 3 rated value	690 V
surge voltage resistance	
• of main circuit rated value	6 kV
• of auxiliary circuit rated value	6 kV
maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1	400 V
shock resistance at rectangular impulse	
• at DC	10g / 5 ms, 7,5g / 10 ms
shock resistance with sine pulse	
• at DC	15g / 5 ms, 10g / 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)	10/01/2009
SVHC substance name	Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8
Weight	0.675 kg
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
• during operation	-25 ... +60 °C
• during storage	-55 ... +80 °C
relative humidity minimum	10 %

relative humidity at 55 °C according to IEC 60068-2-30 maximum	95 %
Environmental footprint	
Environmental Product Declaration(EPD)	Yes
global warming potential [CO2 eq] total	59.7 kg
global warming potential [CO2 eq] during manufacturing	3.7 kg
global warming potential [CO2 eq] during operation	56.6 kg
global warming potential [CO2 eq] after end of life	-0.626 kg
Main circuit	
number of poles for main current circuit	4
number of NO contacts for main contacts	2
number of NC contacts for main contacts	2
operational current	
<ul style="list-style-type: none"> ● at AC-1 up to 690 V <ul style="list-style-type: none"> — at ambient temperature 40 °C rated value — at ambient temperature 60 °C rated value ● at AC-2 at AC-3 at 400 V <ul style="list-style-type: none"> — per NO contact rated value — per NC contact rated value 	 40 A 35 A 25 A 20 A
minimum cross-section in main circuit at maximum AC-1 rated value	10 mm ²
operational current	
<ul style="list-style-type: none"> ● at 1 current path at DC-1 <ul style="list-style-type: none"> — at 24 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value ● with 2 current paths in series at DC-1 <ul style="list-style-type: none"> — at 24 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value ● at 1 current path at DC-3 at DC-5 <ul style="list-style-type: none"> — at 24 V per NC contact rated value — at 24 V per NO contact rated value — at 110 V per NC contact rated value — at 110 V per NO contact rated value — at 220 V per NC contact rated value — at 220 V per NO contact rated value — at 440 V per NC contact rated value — at 440 V per NO contact rated value ● with 2 current paths in series at DC-3 at DC-5 <ul style="list-style-type: none"> — at 24 V per NC contact rated value — at 24 V per NO contact rated value — at 110 V per NC contact rated value — at 110 V per NO contact rated value — at 220 V per NC contact rated value — at 220 V per NO contact rated value — at 440 V per NC contact rated value — at 440 V per NO contact rated value 	 35 A 4.5 A 1 A 0.4 A 35 A 35 A 5 A 1 A 20 A 20 A 1.25 A 2.5 A 0.5 A 1 A 0.045 A 0.09 A 35 A 35 A 7.5 A 15 A 1.5 A 3 A 0.135 A 0.27 A
operating power at AC-2 at AC-3	
<ul style="list-style-type: none"> ● at 230 V per NC contact rated value ● at 230 V per NO contact rated value ● at 400 V per NC contact rated value ● at 400 V per NO contact rated value 	 5.5 kW 5.5 kW 7.5 kW 11 kW
short-time withstand current in cold operating state up to 40 °C	
<ul style="list-style-type: none"> ● limited to 1 s switching at zero current maximum ● limited to 5 s switching at zero current maximum ● limited to 10 s switching at zero current maximum 	 200 A; Use minimum cross-section acc. to AC-1 rated value 200 A; Use minimum cross-section acc. to AC-1 rated value 200 A; Use minimum cross-section acc. to AC-1 rated value

<ul style="list-style-type: none"> limited to 30 s switching at zero current maximum limited to 60 s switching at zero current maximum 	128 A; Use minimum cross-section acc. to AC-1 rated value
	106 A; Use minimum cross-section acc. to AC-1 rated value
power loss [W] at AC-3 at 400 V for rated value of the operational current per conductor	1.9 W
power loss [W] at AC-3e at 400 V for rated value of the operational current per conductor	1.9 W
no-load switching frequency	
<ul style="list-style-type: none"> at AC at DC 	1 500 1/h
	1 500 1/h
operating frequency	
<ul style="list-style-type: none"> at AC-1 maximum 	1 000 1/h
Control circuit/ Control	
type of voltage of the control supply voltage	AC/DC
control supply voltage at AC	
<ul style="list-style-type: none"> at 50 Hz rated value at 60 Hz rated value 	95 ... 130 V
	95 ... 130 V
control supply voltage at DC rated value	95 ... 130 V
operating range factor control supply voltage rated value of magnet coil at DC	
<ul style="list-style-type: none"> initial value full-scale value 	0.8
	1.1
operating range factor control supply voltage rated value of magnet coil at AC	
<ul style="list-style-type: none"> at 50 Hz at 60 Hz 	0.8 ... 1.1
	0.8 ... 1.1
inrush current peak	15 A
duration of inrush current peak	30 µs
locked-rotor current mean value	0.13 A
locked-rotor current peak	0.19 A
duration of locked-rotor current	180 ms
holding current mean value	19 mA
apparent pick-up power of magnet coil at AC	11.9 VA
<ul style="list-style-type: none"> at 50 Hz at 60 Hz 	11.9 VA
	12 VA
inductive power factor with closing power of the coil	0.98
<ul style="list-style-type: none"> at 50 Hz at 60 Hz 	0.98
	0.98
apparent holding power of magnet coil at AC	1.6 VA
<ul style="list-style-type: none"> at 50 Hz at 60 Hz 	1.6 VA
	1.8 VA
inductive power factor with the holding power of the coil	0.79
<ul style="list-style-type: none"> at 50 Hz at 60 Hz 	0.79
	0.74
closing power of magnet coil at DC	10.2 W
holding power of magnet coil at DC	1.3 W
closing delay	
<ul style="list-style-type: none"> at AC at DC 	50 ... 80 ms
	50 ... 80 ms
opening delay	
<ul style="list-style-type: none"> at AC at DC 	30 ... 50 ms
	30 ... 50 ms
arcing time	10 ... 10 ms
Auxiliary circuit	
number of NC contacts for auxiliary contacts instantaneous contact	1
number of NO contacts for auxiliary contacts instantaneous contact	1
operational current at AC-12 maximum	10 A
operational current at AC-15	
<ul style="list-style-type: none"> at 230 V rated value at 400 V rated value 	10 A
	3 A

<ul style="list-style-type: none"> • at 500 V rated value • at 690 V rated value 	<p>2 A</p> <p>1 A</p>
operational current at DC-12 <ul style="list-style-type: none"> • at 24 V rated value • at 48 V rated value • at 60 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 600 V rated value 	<p>10 A</p> <p>6 A</p> <p>6 A</p> <p>3 A</p> <p>2 A</p> <p>1 A</p> <p>0.15 A</p>
operational current at DC-13 <ul style="list-style-type: none"> • at 24 V rated value • at 48 V rated value • at 60 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 600 V rated value 	<p>10 A</p> <p>2 A</p> <p>2 A</p> <p>1 A</p> <p>0.9 A</p> <p>0.3 A</p> <p>0.1 A</p>
contact reliability of auxiliary contacts	<p>1 faulty switching per 100 million (17 V, 1 mA)</p>
UL/CSA ratings	
yielded mechanical performance [hp] <ul style="list-style-type: none"> • for single-phase AC motor at 230 V rated value • for 3-phase AC motor at 460/480 V rated value 	<p>3 hp</p> <p>15 hp</p>
contact rating of auxiliary contacts according to UL	<p>A600 / Q600</p>
Category Control Number (CCN)	<p>E31519 (NLDX, NLDX7)</p>
Short-circuit protection	
design of the miniature circuit breaker for short-circuit protection of the auxiliary circuit up to 230 V	<p>C characteristic: 10 A; 0.4 kA</p>
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 coordination 2 required • for short-circuit protection of the auxiliary switch required 	<p>gG: 63 A (690 V, 100 kA)</p> <p>gG: 35 A (690 V, 50 kA)</p> <p>gG: 10 A (690 V, 1 kA)</p>
Installation/ mounting/ dimensions	
mounting position	<p>+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface</p>
fastening method side-by-side mounting	<p>Yes</p>
fastening method	<p>screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 50022</p>
height	<p>102 mm</p>
width	<p>61 mm</p>
depth	<p>107 mm</p>
required spacing <ul style="list-style-type: none"> • with side-by-side mounting <ul style="list-style-type: none"> — forwards — backwards — upwards — downwards — at the side • for grounded parts <ul style="list-style-type: none"> — forwards — backwards — upwards — at the side — downwards • for live parts <ul style="list-style-type: none"> — forwards — backwards — upwards — downwards 	<p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>6 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p>

— at the side

6 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 	spring-loaded terminals spring-loaded terminals Spring-type terminals Spring-type terminals
type of connectable conductor cross-sections <ul style="list-style-type: none"> • for main contacts <ul style="list-style-type: none"> — solid — solid or stranded — finely stranded with core end processing — finely stranded without core end processing • for AWG cables for main contacts 	2x (1 ... 10 mm ²) 2x (1 ... 10 mm ²) 2x (1 ... 6 mm ²) 2x (1 ... 6 mm ²) 2x (18 ... 8)
type of connectable conductor cross-sections <ul style="list-style-type: none"> • for auxiliary contacts <ul style="list-style-type: none"> — solid — solid or stranded — finely stranded with core end processing — finely stranded without core end processing • for AWG cables for auxiliary contacts 	2x (0.5 ... 2.5 mm ²) 2x (0.5 ... 2.5 mm ²) 2x (0.5 ... 1.5 mm ²) 2x (0.5 ... 1.5 mm ²) 2x (20 ... 14)
AWG number as coded connectable conductor cross section for main contacts	18 ... 8
AWG number as coded connectable conductor cross section for auxiliary contacts	20 ... 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
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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

General Product Approval	EMV
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Test Certificates **Maritime application**

Type Test Certificates/Test Report	Special Test Certificate				
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Maritime application **other**

			Miscellaneous		Confirmation
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Railway **Dangerous goods** **Environment**

Special Test Certificate	Transport Information		Environmental Confirmations
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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=3RT2526-2NF30>

Cax online generator

<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2526-2NF30>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT2526-2NF30>

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

https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2526-2NF30&lang=en

Characteristic: Tripping characteristics, I²t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RT2526-2NF30/char>

Further characteristics (e.g. electrical endurance, switching frequency)

<https://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2526-2NF30&objecttype=14&gridview=view1>



