



power contactor, AC-3, 25 A, 11 kW / 400 V, 4-pole, 110 V AC, 50 Hz / 120 V, 60 Hz, main contacts: 2 NO + 2 NC, auxiliary contacts: 1 NO + 1 NC, screw 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	2.7 W
type of calculation of power loss current-dependent	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 AC	8,3 g / 5 ms, 5,3 g / 10 ms
shock resistance with sine pulse	
• at AC	13,5 g / 5 ms, 8,3 g / 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 (day/month/year)	10/01/2009
Net Weight	471 g
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 %

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	
- at AC-1 up to 690 V - at ambient temperature 40 °C rated value - at ambient temperature 60 °C rated value - at AC-2 at AC-3 at 400 V - per NO contact rated value - per NC contact rated value	40 A 35 A 25 A 25 A
minimum cross-section in main circuit at maximum AC-1 rated value	10 mm ²
operational current	
- at 1 current path at DC-1 - 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 - 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 - 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 - 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	
- 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 11 kW 11 kW
short-time withstand current in cold operating state up to 40 °C	
- 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 - limited to 30 s switching at zero current maximum - limited to 60 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 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	
at AC	5 000 1/h

• at DC	1 500 1/h
operating frequency	
• at AC-1 maximum	1 000 1/h
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
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
apparent pick-up power of magnet coil at AC	87 VA
• at 60 Hz	87 VA
inductive power factor with closing power of the coil	0.76
• at 60 Hz	0.76
apparent holding power of magnet coil at AC	9.4 VA
• at 60 Hz	9.4 VA
inductive power factor with the holding power of the coil	0.28
• at 60 Hz	0.28
closing delay	
• at AC	8 ... 40 ms
opening delay	
• at AC	4 ... 16 ms
arcing time	10 ms
residual current of the electronics for control with signal <0>	
• at AC at 230 V maximum permissible	0.007 A
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	
• at 230 V rated value	10 A
• at 400 V rated value	3 A
• at 500 V rated value	2 A
• at 690 V rated value	1 A
operational current at DC-12	
• at 24 V rated value	10 A
• at 48 V rated value	6 A
• at 60 V rated value	6 A
• at 110 V rated value	3 A
• at 125 V rated value	2 A
• at 220 V rated value	1 A
• at 600 V rated value	0.15 A
operational current at DC-13	
• at 24 V rated value	10 A
• at 48 V rated value	2 A
• at 60 V rated value	2 A
• at 110 V rated value	1 A
• at 125 V rated value	0.9 A
• at 220 V rated value	0.3 A
• 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	
yielded mechanical performance [hp]	
• for single-phase AC motor at 230 V rated value	3 hp
• for 3-phase AC motor at 460/480 V rated value	15 hp

contact rating of auxiliary contacts according to UL	A600 / Q600
UL File Number (CCN)	E31519 (NLDX, NLDX7)
Short-circuit protection	
design of the miniature circuit breaker for short-circuit protection of the auxiliary circuit up to 230 V	C characteristic: 10 A; 0.4 kA
design of the fuse link - for short-circuit protection of the main circuit - with type of coordination 1 required - with type of coordination 2 required - for short-circuit protection of the auxiliary switch required	gG: 63 A (690 V, 100 kA) gG: 35 A (690 V, 50 kA) gG: 10 A (690 V, 1 kA)
Installation/ mounting/ dimensions	
mounting position	+/-180° 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 and snap-on mounting onto 35 mm DIN rail according to DIN EN 50022
height	85 mm
width	61 mm
depth	97 mm
required spacing - with side-by-side mounting - forwards - backwards - upwards - downwards - at the side - for grounded parts - forwards - backwards - upwards - at the side - downwards - for live parts - forwards - backwards - upwards - downwards - at the side	0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 6 mm 0 mm 0 mm 0 mm 0 mm 0 mm 6 mm
Connections/ Terminals	
type of electrical connection - for main current circuit - for auxiliary and control circuit - at contactor for auxiliary contacts - of magnet coil	screw-type terminals screw-type terminals Screw-type terminals screw terminal
type of connectable conductor cross-sections - for main contacts - solid - solid or stranded - finely stranded with core end processing - for AWG cables for main contacts	2x (1 ... 2.5 mm²), 2x (2.5 ... 10 mm²) 2x (1 ... 2.5 mm²), 2x (2.5 ... 10 mm²) 2x (1 ... 2.5 mm²), 2x (2.5 ... 6 mm²), 1x 10 mm² 2x (16 ... 12), 2x (14 ... 8)
type of connectable conductor cross-sections - for auxiliary contacts - solid - solid or stranded - finely stranded with core end processing - for AWG cables for auxiliary contacts	2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²) 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²) 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²) 2x (20 ... 16), 2x (18 ... 14)
AWG number as coded connectable conductor cross section for main contacts	16 ... 8
AWG number as coded connectable conductor cross section for auxiliary contacts	20 ... 14
Safety related data	

product function	
• mirror contact according to IEC 60947-4-1	Yes
• positively driven operation according to IEC 60947-5-1	No
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

Environmental Product Declaration	
• global warming potential [CO2 eq] / during manufacturing	1.9 kg
• global warming potential [CO2 eq] / during operation	72.4 kg
• global warming potential [CO2 eq] / after end of life	-0.117 kg
• global warming potential [CO2 eq] / total	74.2 kg
Environment	General Product Approval

[Environmental Confirmations](#)



General Product Approval	EMV	Test Certificates	Maritime application
 EG-Konf.		 RCM	 ABS

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)

Maritime application	other
 BUREAU VERITAS	 DNV
 LRS	 RINA
 RMRS	Confirmation

other	Railway
 产品合格 QC PASS	Miscellaneous Special Test Certificate

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=3RT2526-1AK60>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT2526-1AK60>

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

https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2526-1AK60&lang=en

Cax online generator

<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2526-1AK60>

Characteristic curves

https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP='HAUPT'></mmp_prod_no>



