SIEMENS

Data sheet 3RT1264-6AP36



vacuum contactor AC-3e/AC-3 225 A, 110 kW / 400 V, 3-pole, Uc: 220-240 V AC(50-60 Hz) / DC drive: conventional 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 	27 W
 at AC in hot operating state per pole 	9 W
 without load current share typical 	8.2 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
Weight	7.257 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	95 %
maximum	
lain circuit	
number of poles for main current circuit	3
number of NO contacts for main contacts	3
operating voltage	
at AC-3 rated value maximum	1 000 V
at AC-3e rated value maximum	1 000 V
operational current	202.4
 at AC-1 at 400 V at ambient temperature 40 °C rated value 	330 A
• at AC-1	
— up to 690 V at ambient temperature 40 °C rated	330 A
value	
— up to 690 V at ambient temperature 60 °C rated	300 A
value	000 A
 up to 1000 V at ambient temperature 40 °C rated value 	330 A
— up to 1000 V at ambient temperature 60 °C rated	300 A
value	•••
• at AC-3	
— at 400 V rated value	225 A
— at 500 V rated value	225 A
— at 690 V rated value	225 A
— at 1000 V rated value	225 A
• at AC-3e	
— at 400 V rated value	225 A
— at 500 V rated value	225 A
— at 690 V rated value	225 A
— at 1000 V rated value	225 A
 at AC-4 at 400 V rated value 	195 A
• at AC-6a	
 up to 230 V for current peak value n=20 rated value 	225 A
 up to 400 V for current peak value n=20 rated value 	225 A
 up to 500 V for current peak value n=20 rated value 	225 A
 up to 690 V for current peak value n=20 rated value 	225 A
— up to 1000 V for current peak value n=20 rated	225 A
value ● at AC-6a	
	200 A
— up to 230 V for current peak value n=30 rated value	209 A
— up to 400 V for current peak value n=30 rated value	209 A
— up to 500 V for current peak value n=30 rated value	209 A
— up to 690 V for current peak value n=30 rated value	209 A
 up to 1000 V for current peak value n=30 rated value 	209 A
minimum cross-section in main circuit at maximum AC-1 rated	185 mm²
value operational current for approx. 200000 operating cycles at AC-4	
at 400 V rated value	97 A
at 690 V rated value	97 A
operating power	
• at AC-3	
— at 230 V rated value	55 kW
— at 400 V rated value	110 kW
— at 500 V rated value	160 kW
— at 690 V rated value	200 kW
— at 1000 V rated value	315 kW
• at AC-3e	
— at 230 V rated value	55 kW
— at 400 V rated value	110 kW
— at 500 V rated value	160 kW
— at 690 V rated value	200 kW

— at 1000 V rated value	315 kW
operating power for approx. 200000 operating cycles at AC-	
4	EE IAN
at 400 V rated value	55 kW
at 690 V rated value	94 kW
operating apparent power at AC-6a	2011/4
up to 230 V for current peak value n=20 rated value	90 kVA
• up to 400 V for current peak value n=20 rated value	150 kVA
• up to 500 V for current peak value n=20 rated value	190 kVA
• up to 690 V for current peak value n=20 rated value	260 kVA
up to 1000 V for current peak value n=20 rated value	390 kVA
operating apparent power at AC-6a	
up to 230 V for current peak value n=30 rated value	80 kVA
• up to 400 V for current peak value n=30 rated value	140 kVA
up to 500 V for current peak value n=30 rated value	180 kVA
up to 690 V for current peak value n=30 rated value	250 kVA
up to 1000 V for current peak value n=30 rated value	360 kVA
no-load switching frequency	
• at AC	2 000 1/h
• at DC	2 000 1/h
operating frequency	
at AC-1 maximum	800 1/h
• at AC-2 maximum	300 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	220 240 V
at 60 Hz rated value	220 240 V
control supply voltage at DC rated value	220 240 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
design of the surge suppressor	with varistor
apparent pick-up power	
 at minimum rated control supply voltage at AC 	
— at 50 Hz	530 VA
— at 60 Hz	530 VA
 at maximum rated control supply voltage at AC 	
— at 60 Hz	630 VA
— at 50 Hz	630 VA
apparent pick-up power of magnet coil at AC	
● at 50 Hz	590 VA
● at 60 Hz	590 VA
inductive power factor with closing power of the coil	
● at 50 Hz	0.9
● at 60 Hz	0.9
apparent holding power	
 at minimum rated control supply voltage at DC 	6.8 VA
 at maximum rated control supply voltage at DC 	8.2 VA
apparent holding power	
apparent holding power ● at minimum rated control supply voltage at AC	
	6.1 VA

at maximum rated control supply voltage at AC	
— at 50 Hz	7.4 VA
— at 60 Hz	7.4 VA
inductive power factor with the holding power of the coil	
• at 50 Hz	0.9
• at 60 Hz	0.9
closing power of magnet coil at DC	700 W
holding power of magnet coil at DC	8.2 W
closing delay	0.2 **
• at AC	30 95 ms
• at DC	30 95 ms
opening delay	30 30 HIS
• at AC	40 80 ms
• at DC	40 80 ms
	10 15 ms
arcing time	Standard A1 - A2
control version of the switch operating mechanism	Standard A1 - A2
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	
• at 230 V rated value	6 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	1A
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	
full-load current (FLA) for 3-phase AC motor	
• at 480 V rated value	180 A
at 600 V rated value	192 A
yielded mechanical performance [hp]	
• for 3-phase AC motor	
— at 200/208 V rated value	60 hp
— at 220/230 V rated value	75 hp
— at 460/480 V rated value	150 hp
— at 575/600 V rated value	200 hp
contact rating of auxiliary contacts according to UL	A600 / Q600
Short-circuit protection	
design of the miniature circuit breaker for short-circuit protection	C characteristic: 10 A; 0.4 kA
of the auxiliary circuit up to 230 V	
design of the fuse link	
 for short-circuit protection of the main circuit 	
— with type of coordination 1 required	gG: 500 A (690 V, 100 kA)

— with type of coordination 2 required	gG: 500 A (690 V, 100 kA), aM: 400 A (690 V, 50 kA), BS88: 450 A (415 V, 50
a for abort circuit protection of the qualities quitab required	kA)
for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions	gG: 10 A (500 V, 1 kA)
mounting position	+/-22,5° rotation possible on vertical mounting surface; can be tilted forward
mounting position	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	
with side-by-side mounting	
— forwards	20 mm
— upwards	10 mm
— downwards	10 mm
— at the side	0 mm
• for grounded parts	20
— forwards	20 mm
— upwards	10 mm
— at the side	10 mm
— downwards	10 mm
• for live parts	20 mm
— forwards	10 mm
— upwards — downwards	10 mm
— at the side	10 mm
Connections/ Terminals	10 111111
type of electrical connection • for main current circuit	Connection bar
for auxiliary and control circuit	
at contactor for auxiliary contacts	screw-type terminals Screw-type terminals
of magnet coil	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	
for AWG cables for main contacts	2/0 500 kcmil
connectable conductor cross-section for main contacts	
• stranded	70 240 mm²
connectable conductor cross-section for auxiliary contacts	
solid or stranded	0.5 4 mm²
finely stranded with core end processing	0.5 2.5 mm²
type of connectable conductor cross-sections	
• for auxiliary contacts	
— 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	
for auxiliary contacts	18 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	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	









<u>KC</u>



EMV

Functional Saftey

Test Certificates

Maritime application



Type Examination Certificate

Special Test Certificate Type Test Certificates/Test Report





Maritime application

other









Confirmation

Miscellaneous

other

Railway

Environment

Confirmation

Special Test Certificate



Environmental Confirmations

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=3RT1264-6AP36

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1264-6AP36

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT1264-6AP36

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

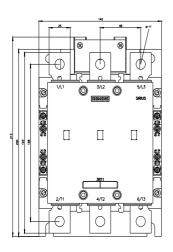
 $\underline{\text{http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1264-6AP36\&lang=en}}$

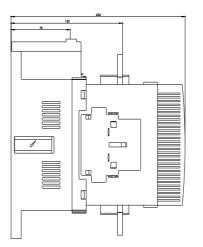
Characteristic: Tripping characteristics, I²t, Let-through current

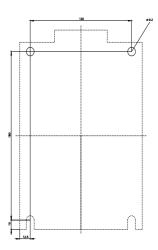
https://support.industry.siemens.com/cs/ww/en/ps/3RT1264-6AP36/char

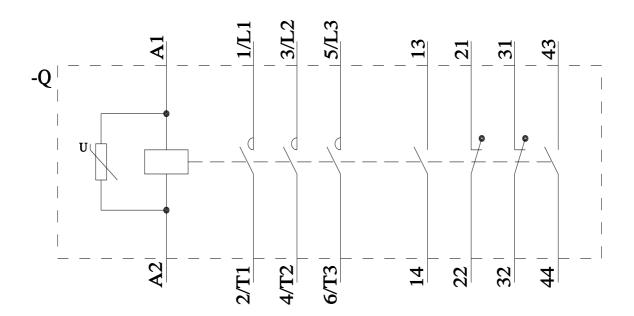
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1264-6AP36&objecttype=14&gridview=view1









last modified:

4/17/2025

