SIEMENS

Data sheet 3RW4454-2BC45



SIRIUS soft starter Values at 500 V, 40 °C standard: 615 A, 400 kW Inside-delta: 1065 A, 710 kW 400-600 V AC, 230 V AC spring-type terminals !!! Phased-out product !!! Successor is SIRIUS 3RW5, Preferred successor type is >>3RW5552-2HA16<<

General technical data		
product brand name		SIRIUS
product feature	_	
 integrated bypass contact system 		Yes
thyristors		Yes
product function	_	
 intrinsic device protection 		Yes
 motor overload protection 		Yes
 evaluation of thermistor motor protection 		Yes
 external reset 		Yes
 adjustable current limitation 		Yes
inside-delta circuit		Yes
product component motor brake output		Yes
insulation voltage rated value	V	690
degree of pollution		3, acc. to IEC 60947-4-2
reference code acc. to DIN EN 61346-2		Q
reference code acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750		G
Power Electronics		
product designation		Soft starter
operational current		
 at 40 °C rated value 	Α	615
 at 50 °C rated value 	Α	551
at 60 °C rated value	А	489
operational current for 3-phase motors at inside-delta circuit		
 at 40 °C rated value 	Α	
	, ,	1 065
at 50 °C rated value	A	1 065 954
at 50 °C rated value	А	954
at 50 °C rated valueat 60 °C rated value	А	954
at 50 °C rated value at 60 °C rated value yielded mechanical performance for 3-phase motors	А	954
 at 50 °C rated value at 60 °C rated value yielded mechanical performance for 3-phase motors at 400 V 	A A	954 847
 at 50 °C rated value at 60 °C rated value yielded mechanical performance for 3-phase motors at 400 V at standard circuit at 40 °C rated value 	A A W	954 847 355 000
at 50 °C rated value at 60 °C rated value yielded mechanical performance for 3-phase motors at 400 V at standard circuit at 40 °C rated value at inside-delta circuit at 40 °C rated value	A A W	954 847 355 000
at 50 °C rated value at 60 °C rated value yielded mechanical performance for 3-phase motors at 400 V at standard circuit at 40 °C rated value at inside-delta circuit at 40 °C rated value at 500 V	A A W W	954 847 355 000 630 000
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display version for fault signal Mechanical data width mm 510 height depth mm 640 depth mm 290 fastening method screw fixing mounting position required spacing with side-by-side mounting • upwards • at the side • downwards wire length maximum m500 number of poles for main current circuit Connections/ Terminals type of electrical connection • for auxiliary and control circuit number of NO contacts for auxiliary contacts number of CO contacts for auxiliary contacts number of pone connectable conductor cross-sections for DIN cable lug for main contacts		%	-15
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depth fastening method mounting position required spacing with side-by-side mounting	width	mm	510
fastening method mounting position screw fixing with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back required spacing with side-by-side mounting upwards at the side at the side adomnwards mm 5 wire length maximum mm 500 number of poles for main current circuit 3 Connections/ Terminals type of electrical connection a for auxiliary and control circuit number of NO contacts for auxiliary contacts number of CO contacts for auxiliary contacts number of CO contacts for auxiliary contacts type of connectable conductor cross-sections for DIN cable lug for main contacts	height	mm	640
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type of electrical connection • for main current circuit • for auxiliary and control circuit number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts 1 type of connectable conductor cross-sections for DIN cable lug for main contacts	wire length maximum	m	500
type of electrical connection • for main current circuit • for auxiliary and control circuit number of NC contacts for auxiliary contacts number of CO contacts for auxiliary contacts number of CO contacts for auxiliary contacts type of connectable conductor cross-sections for DIN cable lug for main contacts	number of poles for main current circuit		3
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 for main current circuit for auxiliary and control circuit number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of CO contacts for auxiliary contacts type of connectable conductor cross-sections for DIN cable lug for main contacts 	type of electrical connection		
number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of CO contacts for auxiliary contacts type of connectable conductor cross-sections for DIN cable lug for main contacts			busbar connection
number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of CO contacts for auxiliary contacts type of connectable conductor cross-sections for DIN cable lug for main contacts	 for auxiliary and control circuit 		spring-loaded terminals
number of NO contacts for auxiliary contacts number of CO contacts for auxiliary contacts type of connectable conductor cross-sections for DIN cable lug for main contacts			1 1
number of CO contacts for auxiliary contacts type of connectable conductor cross-sections for DIN cable lug for main contacts			3
type of connectable conductor cross-sections for DIN cable lug for main contacts			1
• finely stranded 50 240 mm ²	type of connectable conductor cross-sections for DIN		
	 finely stranded 		50 240 mm²
• stranded 70 240 mm ²	stranded		70 240 mm²

type of connectable conductor cross-sections for auxiliary contacts		
• solid		2x (0.25 1.5 mm²)
 finely stranded with core end processing 		2x (0.25 1.5 mm²)
type of connectable conductor cross-sections at AWG cables		
 for main contacts 		2/0 500 kcmil
 for auxiliary contacts 		2x (24 16)
Ambient conditions		
installation altitude at height above sea level	m	5 000
environmental category		
 during transport acc. to IEC 60721 		2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m)
• during storage acc. to IEC 60721		1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4
 during operation acc. to IEC 60721 		3K6 (no formation of ice, no condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6
ambient temperature		
 during operation 	°C	60
 during storage 	°C	-25 +80
derating temperature	°C	40
• .		

Certificates/ approvals

General Product Approval

EMC

Declaration of Conformity













Test Certificates

Marine / Shipping

other

Special Test Certificate







Confirmation

UL/CSA ratings		
yielded mechanical performance [hp] for 3-phase AC motor		
• at 460/480 V		
 at standard circuit at 50 °C rated value 	hp	450
 at inside-delta circuit at 50 °C rated value 	hp	850
● at 575/600 V		
 at standard circuit at 50 °C rated value 	hp	600
 at inside-delta circuit at 50 °C rated value 	hp	1 050
contact rating of auxiliary contacts according to UL		B300 / R300
Fth. a: infa ati a		

Further information

Simulation Tool for Soft Starters (STS)

https://support.industry.siemens.com/cs/ww/en/view/101494917

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=3RW4454-2BC45

Cax online generator

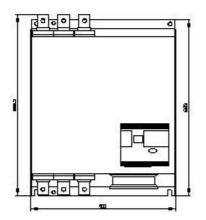
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW4454-2BC45

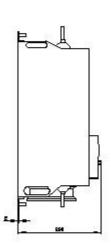
 ${\bf Service \& Support~(Manuals,~Certificates,~Characteristics,~FAQs,...)}$

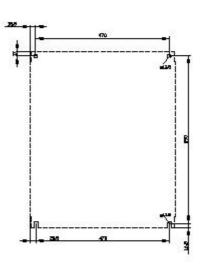
https://support.industry.siemens.com/cs/ww/en/ps/3RW4454-2BC45

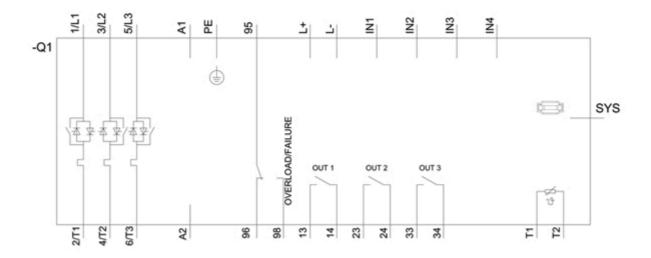
 $Image\ database\ (product\ images,\ 2D\ dimension\ drawings,\ 3D\ models,\ device\ circuit\ diagrams,\ EPLAN\ macros,\ ...)$

 $\underline{\text{http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW4454-2BC45\&lang=en}$









last modified: 1/18/2021 **C**