SIEMENS

Data sheet

3RE4122-4CA31-1HF6



STARTER, 3RE41224CA311HY0, WITH MODS

product brand name product designation Non-reversing motor starter special product feature Hand-Off-Auto Selector Switch General technical data weight [ib] Height x Width x Depth [in] 12 x 10 x 6 in Louch protection against electrical shock NA for enclosed products installation altitude [fit] at height above sea level maximum of origin Country		
Special product feature General technical data weight [Ib] Height x Width x Depth [in] 12 x 10 x 6 in touch protection against electrical shock Installation allitude [ft] at height above sea level maximum 6 550 ft country of origin Country of origin Country of origin Country of origin Country of poles for main current circuit 3 type of voltage of the control supply voltage 0 at AC at 50 Hz rated value 110 V 120 V disconnector functionality No yielded mentanical performance [hp] for 3-phase AC motor 0 at 200/208 V rated value 13 hp 14 t20/230 V rated value 15 t5 hp 16 t3 575/600 V rated value 10 hp Contactor number of NO contacts for main contacts operating voltage for main current circuit at AC at 60 Hz maximum operating voltage at AC-3 rated value maximum 600 V maximum operating voltage at AC-3 rated value maximum mechanical service life (operating cycles) of the main contacts typical Auxillary contact number of NO contacts for auxillary contacts 1 number of NO contacts for auxillary co	product brand name	Siemens
Weight [Ib] 15 lb	product designation	Non-reversing motor starter
weight [ib] Height x Width x Depth [in] 12 x 10 x 6 in 12 x 10 x 6 in 12 x 10 x 6 in 13 x 10 x 6 in 14 x 10 x 6 in 15 x 10 x 10 x 6 in 15 x 10 x 10 x 6 in 15 x 10 x 10 x 10 x 10 x 10 x 15 x 10 x 10 x 1	special product feature	Hand-Off-Auto Selector Switch
Height X Width x Depth [in] 12 × 10 × 6 in touch protection against electrical shock NA for enclosed products installation altitude [ft] at height above sea level maximum 6 560 ft country of origin Germany Power and control electronics number of poles for main current circuit 1 10 V 1	General technical data	
touch protection against electrical shock installation altitude (II) at height above sea level maximum country of origin Power and control electronics number of poles for main current circuit 3 type of voltage of the control supply voltage • at AC at 50 Hz rated value 110 V • at AC at 50 Hz rated value 120 V disconnector functionality yielded mechanical performance [In] for 3-phase AC motor • at 200/208 V rated value 3 hp • at 460/480 V rated value 3 hp • at 460/480 V rated value 3 hp • at 455/600 V rated value 10 hp Contactor number of NO contacts for main contacts operating voltage at AC-3 rated value maximum operating voltage at AC-3 rated value maximum mechanical service life (operating cycles) of the main contacts typical Auxiliary contacts number of NO contacts for auxiliary contacts 1 number of NO contac	weight [lb]	15 lb
Installation altitude [ft] at height above sea level maximum 6 560 ft country of origin Germany Power and control electronics number of poles for main current circuit 3 type of voltage of the control supply voltage AC control supply voltage • at AC at 50 Hz rated value 110 V • at AC at 60 Hz rated value 120 V disconnector functionality No vielded mechanical performance [hp] for 3-phase AC motor • at 200/208 V rated value 3 hp • at 250/230 V rated value 3 hp • at 460/480 V rated value 10 hp • at 575/600 V rated value 10 hp contactor number of NO contacts for main contacts 3 operating voltage for main current circuit at AC at 60 Hz maximum operating voltage at AC-3 rated value maximum 600 V mechanical service life (operating cycles) of the main contacts typical Auxiliary contact number of NC contacts for auxiliary contacts 1 number of NC contacts for auxiliary cont	Height x Width x Depth [in]	12 × 10 × 6 in
Country of origin Germany Power and control electronics Inumber of poles for main current circuit Itype of voltage of the control supply voltage • at AC at 50 Hz rated value • at AC at 60 Hz rated value • at AC at 60 Hz rated value 110 V disconnector functionality yielded mechanical performance [hp] for 3-phase AC motor • at 2200/230 V rated value • at 2200/230 V rated value • at 460/480 V rated value • at 460/480 V rated value • at 575/600 V rated value 7.5 hp • at 575/600 V rated value 7.5 hp • at 575/600 V rated value 600 V maximum operating voltage at AC-3 rated value maximum 600 V mechanical service life (operating cycles) of the main contacts yipical Auxiliary contact number of NC contacts for auxiliary contacts 1 number of NC contacts for auxiliary conta	touch protection against electrical shock	NA for enclosed products
Power and control electronics number of poles for main current circuit type of voltage of the control supply voltage • at AC at 50 Hz rated value • at AC at 50 Hz rated value • at AC at 60 Hz rated value 120 V disconnector functionality yielded mechanical performance [hp] for 3-phase AC motor • at 200/208 V rated value • at 220/230 V rated value • at 220/230 V rated value • at 2575/600 V rated value • at 460/480 V rated value • at 575/600 V rated value • at 600 V number of NC contacts for main current circuit at AC at 60 Hz maximum operating voltage for main current circuit at AC at 60 Hz maximum operating voltage at AC-3 rated value maximum mechanical service life (operating cycles) of the main contacts typical Auxiliary contact number of NC contacts for auxiliary contacts 1 number of NC contacts for auxiliary contacts 1 number of NC contacts for auxiliary contacts 1 number of NO contacts for auxiliary contacts 1 number of NO contacts for auxiliary contacts 1 number of NO contacts for auxiliary contacts 2 ontact rating of auxiliary contacts maximum 8 contact rating of auxiliary contacts of contactor according to UL Coil apparent holding power of magnet coil at AC operating range factor control supply voltage rated value of magnet coil ON-delay time 9 38 ms OFF-delay time 4 16 ms	installation altitude [ft] at height above sea level maximum	6 560 ft
number of poles for main current circuit type of voltage of the control supply voltage control supply voltage at AC at 50 Hz rated value 110 V at AC at 60 Hz rated value 120 V disconnector functionality yielded mechanical performance [hp] for 3-phase AC motor at 200/208 V rated value 3 hp at 220/230 V rated value 3 hp at 250/500 V rated value 5 to 575/600 V rated value 7.5 hp at 575/600 V rated value 7.5 hp and of NO contacts for main current circuit at AC at 60 Hz maximum operating voltage for main current circuit at AC at 60 Hz maximum operating voltage at AC-3 rated value maximum mechanical service life (operating cycles) of the main contacts typical Auxiliary contact number of NC contacts for auxiliary contacts 1 number of NC contacts for auxiliary contacts 1 number of NO contacts for auxiliary contacts 2 number of NO contacts for auxiliary contacts 3 number of NO contacts for auxiliary contacts 4 number of NO contacts for auxiliary contacts 5 number of NO contacts for auxiliary contacts 6 of VA apparent pick-up power of magnet coil at AC 6 of VA apparent holding power of magnet coil at AC 6 of VA apparent holding power of magnet coil at AC 6 of VA apparent holding power of magnet coil at AC 6 of VA apparent holding power of magnet coil at AC 0 of Adaptive for the formation of the for	country of origin	Germany
type of voltage of the control supply voltage • at AC at 50 Hz rated value • at 200/208 V rated value • at 250/208 V rated value • at 250/208 V rated value • at 575/600 V rated value • by action of the service of	Power and control electronics	
control supply voltage at AC at 50 Hz rated value 110 V at AC at 60 Hz rated value 120 V disconnector functionality yielded mechanical performance [hp] for 3-phase AC motor at 200/208 V rated value 3 hp at 220/230 V rated value 3 hp at 575/600 V rated value 7.5 hp at 575/600 V rated value 10 hp Contactor number of NO contacts for main contacts operating voltage for main current circuit at AC at 60 Hz maximum operating voltage at AC-3 rated value maximum mechanical service life (operating cycles) of the main contacts typical Auxiliary contact number of NO contacts for auxiliary contacts 1 number of total auxiliary contacts maximum 8 contact rating of auxiliary contacts maximum 8 contact rating of auxiliary contacts maximum 8 contact rating of auxiliary contacts of contactor according to UL Coil apparent pick-up power of magnet coil at AC apparent holding power of magnet coil at AC operating range factor control supply voltage rated value of magnet coil ON-delay time 9 38 ms OFF-delay time	number of poles for main current circuit	3
at AC at 50 Hz rated value at AC at 60 Hz rated value 120 V disconnector functionality yielded mechanical performance [hp] for 3-phase AC motor at 200/208 V rated value at 220/230 V rated value at 460/480 V rated value at 575/600 V rated value to hp rounder of NO contacts for main contacts operating voltage for main current circuit at AC at 60 Hz maximum operating voltage at AC-3 rated value maximum operating voltage at AC-3 rated value maximum operating voltage if (operating cycles) of the main contacts typical Auxiliary contact number of NO contacts for auxiliary contacts 1 number of Occupant auxiliary contacts 1 number of Idal auxiliary contacts of contactor according to UL Coil apparent pick-up power of magnet coil at AC apparent holding power of magnet coil at AC operating range factor control supply voltage rated value of magnet coil ON-delay time 9 38 ms OFF-delay time 110 V 120 V 10 V	type of voltage of the control supply voltage	AC
at AC at 60 Hz rated value disconnector functionality yielded mechanical performance [hp] for 3-phase AC motor at 220/230 V rated value at 220/230 V rated value at 460/480 V rated value at 575/600 V rated value 7.5 hp at 575/600 V rated value 10 hp Contactor number of NO contacts for main contacts operating voltage at AC-3 rated value maximum operating voltage at AC-3 rated value maximum mechanical service life (operating cycles) of the main contacts typical Auxillary contact number of NO contacts for auxilliary contacts number of NO contacts for auxilliary contacts number of total auxiliary contacts for auxiliary contacts apparent pick-up power of magnet coil at AC apparent holding power of magnet coil at AC operating range factor control supply voltage rated value of magnet coil ON-delay time 9 38 ms OFF-delay time 4 16 ms	control supply voltage	
disconnector functionality yielded mechanical performance [hp] for 3-phase AC motor • at 200/208 V rated value • at 220/230 V rated value • at 460/480 V rated value • at 460/480 V rated value • at 4575/600 V rated value 10 hp Contactor number of NO contacts for main contacts operating voltage for main current circuit at AC at 60 Hz maximum operating voltage at AC-3 rated value maximum mechanical service life (operating cycles) of the main contacts typical Auxiliary contact number of NO contacts for auxiliary contacts 1 number of total auxiliary contacts maximum 8 contact rating of auxiliary contacts of contactor according to UL Coil apparent pick-up power of magnet coil at AC operating range factor control supply voltage rated value of magnet coil ON-delay time 9 38 ms OFF-delay time 4 16 ms	 at AC at 50 Hz rated value 	110 V
yielded mechanical performance [hp] for 3-phase AC motor • at 200/208 V rated value • at 220/230 V rated value • at 220/230 V rated value • at 460/480 V rated value • at 55/600 V rated value • at 575/600 V rated value 10 hp Contactor number of NO contacts for main contacts operating voltage for main current circuit at AC at 60 Hz maximum operating voltage at AC-3 rated value maximum activate [ife (operating cycles) of the main contacts typical Auxiliary contact number of NC contacts for auxiliary contacts 1 number of NC contacts for auxiliary contacts 1 number of total auxiliary contacts maximum activate auxiliary contacts of contactor according to UL Coil apparent pick-up power of magnet coil at AC apparent holding power of magnet coil at AC operating range factor control supply voltage rated value of magnet coil ON-delay time 9 38 ms OFF-delay time 4 16 ms	• at AC at 60 Hz rated value	120 V
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at 460/480 V rated value at 575/600 V rated value To hp at 575/600 V rated value To hp Contactor number of NO contacts for main contacts aperating voltage for main current circuit at AC at 60 Hz maximum operating voltage at AC-3 rated value maximum aperating voltage at AC-3 rated value maximum apunitiary contact number of NC contacts for auxiliary contacts number of NC contacts for auxiliary contacts number of total auxiliary contacts number of total auxiliary contacts of contactor according to UL Coil apparent pick-up power of magnet coil at AC apparent pick-up power of magnet coil at AC apparent holding power of magnet coil at AC apparent parage factor control supply voltage rated value of magnet coil ON-delay time 9 38 ms OFF-delay time 4 16 ms	• at 200/208 V rated value	3 hp
• at 575/600 V rated value 10 hp Contactor number of NO contacts for main contacts 3 operating voltage for main current circuit at AC at 60 Hz 600 V	• at 220/230 V rated value	3 hp
number of NO contacts for main contacts operating voltage for main current circuit at AC at 60 Hz maximum operating voltage at AC-3 rated value maximum mechanical service life (operating cycles) of the main contacts typical Auxiliary contact number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of total auxiliary contacts maximum contact rating of auxiliary contacts of contactor according to UL Dagarent pick-up power of magnet coil at AC apparent holding power of magnet coil at AC operating range factor control supply voltage rated value of magnet coil ON-delay time OFF-delay time 3 000 V 400 V	• at 460/480 V rated value	7.5 hp
number of NO contacts for main contacts operating voltage for main current circuit at AC at 60 Hz maximum operating voltage at AC-3 rated value maximum mechanical service life (operating cycles) of the main contacts typical Auxiliary contact number of NC contacts for auxiliary contacts number of NC contacts for auxiliary contacts number of total auxiliary contacts maximum contact rating of auxiliary contacts of contactor according to UL Doll apparent pick-up power of magnet coil at AC apparent holding power of magnet coil at AC operating range factor control supply voltage rated value of magnet coil ON-delay time OFF-delay time 3 000 00 1 00 1 00 4 00 4 00 4 00 4 00 5 00 6 00 1 00 6 00 6 00 7 0A 6 05 8 0A 6 08	• at 575/600 V rated value	10 hp
operating voltage for main current circuit at AC at 60 Hz maximum operating voltage at AC-3 rated value maximum 600 V mechanical service life (operating cycles) of the main contacts typical Auxiliary contact number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts 1 number of total auxiliary contacts maximum contact rating of auxiliary contacts of contactor according to UL Coil apparent pick-up power of magnet coil at AC apparent holding power of magnet coil at AC operating range factor control supply voltage rated value of magnet coil ON-delay time OFF-delay time 600 V 30 000 000 100	Contactor	
maximum operating voltage at AC-3 rated value maximum 600 V mechanical service life (operating cycles) of the main contacts typical Auxiliary contact number of NC contacts for auxiliary contacts 1 number of NO contacts for auxiliary contacts 1 number of total auxiliary contacts maximum 8 contact rating of auxiliary contacts of contactor according to UL Coil apparent pick-up power of magnet coil at AC apparent holding power of magnet coil at AC operating range factor control supply voltage rated value of magnet coil ON-delay time 0 ### OFF-delay time 600 V 30 000 000 10	number of NO contacts for main contacts	3
mechanical service life (operating cycles) of the main contacts typical Auxiliary contact number of NC contacts for auxiliary contacts number of NC contacts for auxiliary contacts number of total auxiliary contacts maximum contact rating of auxiliary contacts of contactor according to UL Coil apparent pick-up power of magnet coil at AC apparent holding power of magnet coil at AC operating range factor control supply voltage rated value of magnet coil ON-delay time 9 38 ms OFF-delay time 4 16 ms	· · · · · · · · · · · · · · · · · · ·	600 V
Auxiliary contact number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of total auxiliary contacts maximum contact rating of auxiliary contacts of contactor according to UL Coil apparent pick-up power of magnet coil at AC apparent holding power of magnet coil at AC operating range factor control supply voltage rated value of magnet coil ON-delay time 9 38 ms OFF-delay time 4 16 ms	operating voltage at AC-3 rated value maximum	600 V
number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of total auxiliary contacts maximum contact rating of auxiliary contacts of contactor according to UL 10A@600V(A600), 2.5A@600V(Q600) Coil apparent pick-up power of magnet coil at AC apparent holding power of magnet coil at AC operating range factor control supply voltage rated value of magnet coil ON-delay time 9 38 ms OFF-delay time 4 16 ms		30 000 000
number of NO contacts for auxiliary contacts number of total auxiliary contacts maximum contact rating of auxiliary contacts of contactor according to UL 10A@600V(A600), 2.5A@600V(Q600) Coil apparent pick-up power of magnet coil at AC apparent holding power of magnet coil at AC operating range factor control supply voltage rated value of magnet coil ON-delay time 9 38 ms OFF-delay time 4 16 ms	Auxiliary contact	
number of total auxiliary contacts maximum contact rating of auxiliary contacts of contactor according to UL 10A@600V(A600), 2.5A@600V(Q600) Coil apparent pick-up power of magnet coil at AC apparent holding power of magnet coil at AC operating range factor control supply voltage rated value of magnet coil ON-delay time 9 38 ms OFF-delay time 4 16 ms	number of NC contacts for auxiliary contacts	1
contact rating of auxiliary contacts of contactor according to UL Coil apparent pick-up power of magnet coil at AC apparent holding power of magnet coil at AC operating range factor control supply voltage rated value of magnet coil ON-delay time OFF-delay time 10A@600V(A600), 2.5A@600V(Q600) 67 VA 6.5 VA 0.8 1.1 9 38 ms 4 16 ms	number of NO contacts for auxiliary contacts	1
apparent pick-up power of magnet coil at AC apparent holding power of magnet coil at AC apparent holding power of magnet coil at AC operating range factor control supply voltage rated value of magnet coil ON-delay time 9 38 ms OFF-delay time 4 16 ms	number of total auxiliary contacts maximum	8
apparent pick-up power of magnet coil at AC apparent holding power of magnet coil at AC operating range factor control supply voltage rated value of magnet coil ON-delay time 9 38 ms OFF-delay time 4 16 ms	contact rating of auxiliary contacts of contactor according to UL	10A@600V(A600), 2.5A@600V(Q600)
apparent holding power of magnet coil at AC operating range factor control supply voltage rated value of magnet coil ON-delay time OFF-delay time 4 16 ms	Coil	
operating range factor control supply voltage rated value of magnet coil ON-delay time 9 38 ms OFF-delay time 4 16 ms	apparent pick-up power of magnet coil at AC	67 VA
magnet coil 9 38 ms ON-delay time 9 38 ms OFF-delay time 4 16 ms	apparent holding power of magnet coil at AC	6.5 VA
OFF-delay time 4 16 ms		0.8 1.1
	ON-delay time	9 38 ms
Overload relay	OFF-delay time	4 16 ms
	Overload relay	

and the found in	
product function	Voo
overload protection toot function	Yes Yes
test function external reset	Yes
reset function	
	Manual, automatic and remote (with optional accessory)
adjustment range of thermal overload trip unit	5.5 8
number of NC contacts of auxiliary contacts of overload relay	1
number of NO contacts of auxiliary contacts of overload relay	
contact rating of auxiliary contacts of overload relay according to UL	5A@600VAC (B600), 1A@250VDC (R300)
Enclosure	
degree of protection NEMA rating of the enclosure	NEMA 3/3R/4/12 enclosure
design of the housing	Dust- & watertight for outdoor use
Mounting/wiring	
mounting position	vertical
fastening method	Surface mounting and installation
type of electrical connection for supply voltage line-side	Screw-type terminals
tightening torque [lbf·in] for supply	18 21 lbf·in
type of connectable conductor cross-sections at line-side for AWG cables single or multi-stranded	2x (16 12), 2x (14 8)
temperature of the conductor for supply maximum permissible	60 °C
material of the conductor for supply	CU
type of electrical connection for load-side outgoing feeder	Screw-type terminals
tightening torque [lbf-in] for load-side outgoing feeder	18 21 lbf-in
type of connectable conductor cross-sections for AWG cables for load-side outgoing feeder single or multi-stranded	2x (16 12), 2x (14 8)
temperature of the conductor for load-side outgoing feeder maximum permissible	60 °C
material of the conductor for load-side outgoing feeder	CU
type of electrical connection of magnet coil	Screw-type terminals
tightening torque [lbf·in] at magnet coil	7 10 lbf-in
type of connectable conductor cross-sections of magnet coil for AWG cables single or multi-stranded	2x (16 12), 2x (14 8)
temperature of the conductor at magnet coil maximum permissible	75 °C
material of the conductor at magnet coil	CU
type of electrical connection for auxiliary contacts	Screw-type terminals
tightening torque [lbf·in] at contactor for auxiliary contacts	7 10 lbf·in
type of connectable conductor cross-sections at contactor for AWG cables for auxiliary contacts single or multi-stranded	2x (20 16), 2x (18 14)
temperature of the conductor at contactor for auxiliary contacts maximum permissible	75 °C
material of the conductor at contactor for auxiliary contacts	CU
type of electrical connection at overload relay for auxiliary contacts	Screw-type terminals
tightening torque [lbf-in] at overload relay for auxiliary contacts	7 10 lbf·in
type of connectable conductor cross-sections at overload relay for AWG cables for auxiliary contacts single or multi-stranded	2x (20 16), 2x (18 14)
temperature of the conductor at overload relay for auxiliary contacts maximum permissible	70 °C
material of the conductor at overload relay for auxiliary contacts	CU
Short-circuit current rating	
design of the fuse link for short-circuit protection of the main circuit required	Class J
design of the short-circuit trip	Thermal magnetic circuit breaker
maximum short-circuit current breaking capacity (Icu)	
• at 240 V	5 kA
• at 480 V	5 kA
• at 600 V	5 kA
certificate of suitability	UL 60947-4-1
Approvals Certificates	
General Product Approval Test Certificates other	Dangerous Good Environment





Further information

Industrial Controls - Product Overview (Catalogs, Brochures,...)

www.usa.siemens.com/iccatalog

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/us/Catalog/product?mlfb=3RE4122-4CA31-1HF6

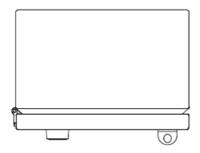
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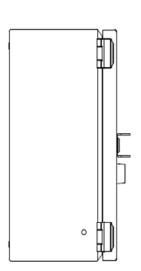
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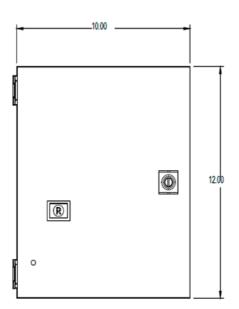
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RE4122-4CA31-1HF6&lang=en

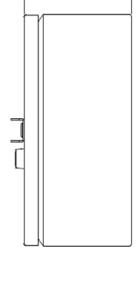
Certificates/approvals

https://support.industry.siemens.com/cs/US/en/ps/3RE4122-4CA31-1HF6/certificate

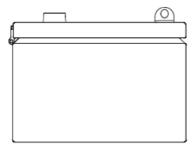








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last modified: 4/15/2021 ☑